promised to provide incentives to EV industry (both transportation and infrastructure), however no implementation steps have been taken in this regard and growth rate of 10% considered by the DISCOMs is not justified since the implementation on ground is far from realty.

DISCOMs replies

3.2.8 The sales projections for H2 of FY 2021-22 and FY 2022-23 have been made by considering the appropriate CAGR for the respective DISCOM for over a period from 1 year to 5 year as projecting sales only on the basis of last year's growth would not give a realistic picture. Thus, CAGR methodology is followed which takes care of the historical trend. Accordingly, TSSPDCL has considered a nominal growth rate of 7% and TSNPDCL has considered 3-year CAGR of 7.44% for projecting LT Domestic sales.

3.2.9 The category-wise actual sales for FY 2018-19, FY 2019-20, FY 2020-21, estimated sales for FY 2021-22 (H1 actuals, H2 projections) and projected sales for FY 2022-23 have been submitted in the Petitions. The detailed category-wise justifications have also been elaborated in the write-up submitted in the Petitions. The major reason for such a significant increase in the energy requirement of FY 2022-23 over FY 2021-22 is due to the expected additional loads of LIS. DISCOMs have considered the best approach to project the sales for H2 of FY 2021-22 and FY 2022-23 considering the past growth rates and additional upcoming loads.

3.2.10 The assessment of agricultural consumption is being done every month as per the ISI methodology approved by the Commission and the same are submitted to the Commission. The sudden growth in agriculture consumption is mainly due to the efforts to provide reliable and quality supply to the consumers. DISCOMs have always strived to provide connections to the consumers and supply power with minimum breakdown/ power cuts. At the time of formation of State, DISCOMs were facing challenges to supply power to all consumers leading to power deficits. Over the years DISCOMs have overcome the challenges and are now able to supply the required power to the consumers. Additionally, DISCOMs had started supplying 24 hours power to all agricultural consumers w.e.f. 01.01.2018. This has resulted in significant increase in agricultural sales over the previous years.

3.2.11 Currently there is no provision of revenue true-up in the Regulations. Provisions for revenue true-up take care of the variation in sales mix and hence the resultant revenue variation along with the variation in the actual costs vis-à-vis the approved costs are trued-up on a regular basis. Such variation in the actual revenue vis-à-vis the approved revenue severely affects the financial condition of DISCOMs. DISCOMs are in the process of filing a Petition requesting amendments in the existing Regulations in this regard. The LIS sales projections have been considered based on the inputs received from the irrigation department projects. Any variation in the actuals sales from the approved sales has to be passed on to the consumers and not borne by DISCOMs as the variation in sales is beyond the control of the DISCOMs. DISCOMs have adopted two-part tariff for LIS consumers to enable recovery of fixed costs. Due to the significantly higher quantum of LIS sales projections in FY 2022-23 (~19% of total sales), DISCOMs requested the Commission for an exception in FY 2022-23 in this regard.

3.2.12 The sales of agriculture category are expected to decrease with upcoming LIS Loads as these two are complementary. Projecting LIS sales consist of high amount of unpredictability, availability of water is an important factor. However, LIS sales are projected by considering the current pumping stations loads on Krishna and Godavari rivers and any upcoming additional loads. These loads are further considered to be operating only at a 60% load factor. DISCOMs have submitted detailed information about LIS in terms of scheme-wise and voltage- wise consumption for FY 2022-23. The LIS consumption is carefully determined and a separate team dedicatedly works on LIS sales projections. Conservation of energy is one of the prime aims of DISCOMs. DISCOMs always try to use energy effectively and always try to save energy for their major consumer categories.

3.2.13 Under Telangana EV & ESS policy 2020-30, Telangana has already committed to attract investments worth USD 4.0 Billion and create employment for 120,000 persons by year 2030; Generate demand for battery storage solutions by driving EV adoption incentives and supply side incentives for battery manufacturing; To proactively support creation of EV charging Infrastructure in the initial phase and eventually create market for commercially viable EV

Charging business. In addition to above Telangana have provisions for huge demand side incentive, charging infrastructure incentives and EV manufacturing incentives. Many EV charging stations have been developed by the service providers with/without support of Central and State level schemes. Recently there was an order determining landed tariff for EV charging stations at Rs.12.06/unit in Telangana. Additionally, DISCOMs have made efforts to identify and provide their land around substations to install EV charging stations on rental basis. The 10% growth for EV category sales was considered on nominal basis. Since historical EV sales data is not available and difficulty in predicting the future sales a nominal growth of 10% has been assumed.

Commission's View

3.2.14 With regard to the proposed amendment of Regulation 4 of 2005, the Commission opines that the current proceedings are for determination of tariff and accordingly has not dealt with such issue. The Commission has projected the consumer category wise sales for FY 2022-23 taking into consideration the actual sales recorded in the previous years and the anticipated load growth for some of the categories. The Commission's approach in approving the consumer category wise sales for FY 2022-23 has been elaborated in Chapter 4 of this Order.

3.3 LOSSES

Stakeholders' submissions

3.3.1 Despite the huge investments to the tune of Rs.31968 crore invested for improvement of distribution and transmission infrastructure, the proposed transmission and distribution (T&D) losses viz. 11.71% for TSSPDCL and 10.43% for TSNPDCL are on higher side and have not significantly improved from loss levels approved by the Commission in FY 2018-19 viz., 13.77% for TSSPDCL and 13.62% for TSNPDCL. On average the reduction works out to 0.50% for TSSPDCL and 0.80% for TSNPDCL. Further, some portion of losses on account of theft and pilferage might have been included under agricultural consumption since the same is supplied free of cost as per the policy of the government. There is a scope for reducing the T&D losses. The DISCOMs may submit the compliance status to loss reduction targets as committed under Ujjwal DISCOM Assurance Yojana (UDAY) scheme.

3.3.2 As per TSSPDCL's Energy Audit for the period 01.07.2021 to 30.09.2021 the T&D losses in four divisions viz. Mehadipatnam, Asmangadh, Begumbazar and Charminar are ranging from 22% to 38%. These divisions are not located far or are at remote corner of the supply area to act upon but are located in the heart of Hyderabad and near to TSSPDCL's head office. In these divisions, 20% to 40% of electricity input is not metered. The Commission may not allow T&D losses above 5% and direct the DISCOMs to bear the burden of the remaining losses from its own resources as it is not fair to burden the sincere consumers with the losses due to theft/illegal activity of other consumers. TSNPDCL may be directed to furnish the Energy Audit Reports.

3.3.3 The losses in case of an agricultural consumption are very high. These losses, however are ultimately borne by the general public in one way or other. One of the ways to quantify these higher losses and to reduce the same is fixing the meters at the distribution points from sub-stations to agricultural borewells.

3.3.4 The DISCOMs in the Petitions have proposed to reduce the distribution losses from actual levels in FY 2020-21. It is understood that the DISCOMs are making their efforts to improve their balance sheet and make themselves self-reliant. In view of the same, the Commission may direct the DISCOMs to pass on the savings generated from reduction of technical losses towards reduction of average payables to generators.

DISCOMs replies

3.3.5 The T&D losses for FY 2022-23 have been computed based on the loss targets approved by the Commission. Hence, the loss reduction mentioned in the said duration is as per the loss targets approved by the Commission.

3.3.6 The steps taken for reduction of losses in Hyderabad South & Hyderabad Central Circles are as below:

Reduction of abnormal losses in Hyderabad South Circle

(a) Every month, intensive inspections are being conducted by operation wings and DPE wing to minimize the theft / direct tapping/ unauthorized usage of power supply to reduce the losses. The existing LT overhead lines are replaced by 70 sq mm LT AB cable in phased manner so that theft of energy by direct tapping can be avoided.

(b) To improve the billing and to minimize the losses the monthly targets are fixed to replace the non-IR port meters with IR/IRDA port meters and strict instructions are issued to concerned officers to take action accordingly.

(c) Total overloaded feeders have been identified and bifurcation works are being carried out to provide quality of supply as well as reduction of technical losses.

(d) It has been proposed to erect additional Distribution Transformers (DTRs) of various capacities and DTR capacity will be enhanced for reducing further network losses and to improve reliability of supply.

(e) Regular maintenance of feeders and LT lines, DTRs and RMUs etc., are being carried out for minimizing breakdowns and interruptions to minimize the losses and improve the sales.

(f) Erection of new sub stations to provide reliable and quality of power supply to the consumers and reduction of technical losses.

Reduction of abnormal losses in Hyderabad Central Circle

(a) New substations and new 11 kV feeders are being proposed under RDS scheme

(b) Bifurcation of 11 kV overloaded feeders has been proposed .

(c) Monthly intensive inspections with DPE wing and operation wing staff and doubtful energy meters suspected of tampering are being referred to MRT wing.

(d) Replacement of energy meters with smart energy meters has been proposed.

3.3.7 The following steps taken apart from the specific activities mentioned above for reduction of losses:

(a) Energy audit has been brought online and losses are being calculated on monthly basis. Energy audit of all EHT services is being done through online. Similarly, Energy audit is being done jurisdiction wise for effective monitoring.

(b) Identification of high loss feeders is done for attending exceptional, booking of theft cases, replacement of old mechanical meters, segregation of overloaded 11 KV feeders etc.

(c) Every month intensive inspections are being conducted by operation wings and DPE wing to minimize the theft / direct tapping/ unauthorized usage of power supply to reduce the losses

3.3.8 TSNPDCL Energy Audit Report for 2nd Quarter of FY 2021-22 was uploaded in TSNPDCL website.

3.3.9 The DISCOMs have not achieved the Aggregate Technical & Commercial (AT&C) loss targets under the UDAY scheme, but have shown a significant reduction in its actual distribution loss levels from FY 2017-18 to FY 2020-21 (from 11.35% to 9.81% for TSSPDCL, from 11.01% to 9.03% for TSNPDCL). This reduction was possible due to the various loss reduction measures and strategic investments undertaken by the DISCOMs.

3.3.10 DISCOMs are participating in various Central and State level schemes intended to reduce the AT&C losses. DISCOMs are participating in PM KUSUM scheme component A which facilitates renewable generation at 11 kV level thus reducing the transmission losses. DISCOMs are in the process of participating in Revamped Distribution Sector (RDS) scheme for financial turnaround. This would help in further improving the overall financial condition of the DISCOMs, by reduction in the AT&C loss levels. As part of RDS scheme, DISCOMs are proposing the bifurcation of the mixed agriculture feeders to exclusive agriculture feeders to measure the energy consumed by the agriculture pumps on the existing feeders.

3.3.11 The DISCOMs have always tried their best to pay the dues to the generators in a timely manner. Payment timelines to the generators would definitely improve if the financial conditions of the DISCOMs are improved. DISCOMs will continue to put best efforts in improving operational efficiencies and to utilize the same in their timely payments to generating companies.

Commission's View

3.3.12 With regard to the higher distribution losses in certain areas, the Commission directs DISCOMs to take strict measures to reduce the distribution losses and submit the quarterly report on the measures taken. The DISCOMs are also directed to ensure the timely availability of quarter wise energy audit reports available in public domain.

3.3.13 The Commission has considered only the approved distribution and transmission losses for FY 2022-23 in the MYT Orders issued for wheeling business for the DISCOMs and transmission business for TSTransco.

3.4 ENERGY AVAILABILITY

Stakeholders' submissions

3.4.1 For FY 2022-23, the DISCOMs have shown a surplus of 3066 MU. In light of the projected surplus for FY 2022-23, the need for further increase in generation capacity has to be justified. Further the DISCOMs have arrived at such surplus by considering lower for the TSGenco's thermal generating stations and lower availability of hydel power. The surplus of 3066 MU as submitted by the DISCOMs is an underestimate and the actual surplus available according to the submissions works out to 5458.50 MU. When there is a surplus of 5458.50 MU the need to go for short term purchase of 2393 MU at higher price has to be ascertained. Further the DISCOMs, while proposing for relinquishing their share in CGS have claimed to fill the gap by operating TSGENCO plants at higher PLFs. In case the TSGenco's thermal powerplants are operated at PLF of 85% instead of lower PLF proposed, the surplus power available would be ranging from 7500-9000 MU. The filings show that the TPCIL's powerplant is expected to be operated at 95% PLF. In case all the other thermal power plants are operated at this level, the surplus power available would be further higher. Considering the scope of surplus power available to the DISCOMs there will be no need to procure short term power from market at higher price and the Commission may not allow power procurement from short term market.

3.4.2 The DISCOMs have rightly pointed out that meeting the irrigation needs is of prime importance and generation of power from hydel generating stations is subject to the irrigation needs. DISCOMs have explained that a high quantum of 3094 MU of hydel generation during the first half of FY 2021-22 can be attributed to a good monsoon and that a similar trend may continue in FY 2022-23, however, the DISCOMs have not submitted the justification for the energy availability from hydro power as 4000 MU as against 4921 MU for FY 2021-22. The DISCOMs also have not provided any information as to why the availabilities of hydel power from Machkund and Tungabhadra projects have not been considered.

3.4.3 From the submissions of sales and availability projections the percentage of renewable energy in the total purchase (after adjusting the hydel energy) works out to be 12% of which 11% is from solar generation and the same is higher than the RPPO of 8% (7.10% for Solar and 0.90% for Non-Solar power sources) for FY 2021-22. Considering that the DISCOMs are fulfilling RPPO from existing PPAs, the need to enter into new PPA's has to be seen. The DISCOMs had earlier requested the Commission not to enhance the RPPO from the then prevailing 5%, however, it is not clear as to what has prompted the DISCOMs to enter into PPAs with renewable generators beyond their RPPO requirement, on long term basis at higher costs by around 50%.

3.4.4 The DISCOMs have considered the CUF for wind generating stations as 23% and solar generating stations as 21%. Even though the DISCOMs have considered such lower CUF, they are not entitled to curtail the power from renewable generators as they have to comply with the must-run status in accordance with Indian Electricity Grid Code (IEGC). Accordingly, the Commission may issue necessary directions to DISCOMs to comply with the Grid Code and must run status accorded to NCE projects.

DISCOMs replies

3.4.5 DISCOMs have a dedicated wing Telangana State Power Coordination Committee (TSPCC) to coordinate all the power purchase related matters of the DISCOMs. TSPCC explores all the options for power purchase cost optimization while designing power procurement planning strategies. Under the purview of TSPCC, DISCOMs have been procuring power via an adequate mix of long term, medium term and short-term arrangements depending on the factors like ensuring satisfactory planning (for meeting demand), sourcing options availability, cost competitiveness etc. The load generation balance has to be assessed based on the available contracted capacities to DISCOMs not link the same with the installed capacity of the State. As the entire installed capacity in the State may not cater to the demand of DISCOMs as some of them might sell power outside the State or to the open access consumers within the State. Further, the hydel capacities operate only for a few months of the year & capacities of NCE sources operate only for a few hours of a day and not round the clock. Hence, it is not appropriate to consider the installed capacities for hydro and NCE sources while evaluating the demand supply scenario of the State.

3.4.6 The peak demand of the DISCOMs is expected to increase from 13688 MW in the upcoming future as a result of the LIS loads. DISCOMs are obligated to supply 24x7 power supply to its consumers (including agriculture) and are bound to contract with additional capacities to ensure no power interruptions in State. However, there is energy surplus scenario in some time block durations and DISCOMs shall engage in the sale of such surplus power based on the cost competitiveness.

3.4.7 The hydel energy availability of 4921 MU in FY 2021-22 was predominantly due to a record high generation of 3074 MU in H1 FY 2021-22 which can be attributed to a good monsoon season. The hydel generation was 3424 MU only in FY 2020-21 and such seasonal conditions in FY 2021-22 can’t be considered as a norm and used for the estimates for FY 2022-23. Hence, a moderated reduction over FY 2021-22 has been considered for hydel energy availability in FY 2022-23. DISCOMs have submitted the Resource Plan for the 4th Control Period (FY 2019-20 to FY 2023-24), on 31.10.2018, before the Commission which contains the long-term sales and load forecast. DISCOMs are in the process of filing the power procurement plan for the aforesaid period.

3.4.8 The detailed reasons for considering no availabilities of hydel power from Machkund and Tungabhadra projects have already been submitted to the Commission.

3.4.9 RPPO computations have to be done on the energy input and not energy sales. While entering into PPAs for purchase of renewable power, DISCOMs are also examining the RPPO targets in vogue both at State level and National level. Ministry of Power (MoP) notified RPPO trajectory for solar as well as non-solar for three-year period from FY 2019-20 to FY 2012-22 which is as under:

Table 3-1: RPPO trajectory notified by MoP for FY 2019-20 to FY 2021-22

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Non-Solar	10.25%	10.25%	10.50%
Solar	7.25%	8.75%	10.50%
Total	17.50%	19.00%	21.00%

3.4.10 Currently, DISCOMs are exceeding the RPPO targets as notified by the Commission, however going further these targets are further likely to be enhanced as the targeted renewable capacity addition at India level has been revised to 450 GW by 2030 (350 GW Solar and 100 GW Non-Solar). Also, due to the generation from the rooftop solar and the future participation in PM KUSUM scheme the DISCOMs are likely to exceed the targets set by the Commission. Though at present, it is not mandatory for the DISCOMs to comply with the MoP trajectory, it is likely that the State RPPOs may be directed to align with the MoP RPPO in terms of Tariff Policy and particularly in view of the proposed Amendment to the Section 142 of the Act which proposes for imposing penalties ranging from Rs.0.25/unit to Rs.2.00/unit for non-compliance of RPPO targets. Hence, it is required that the DISCOMs shall be prepared to meet the larger RPPO targets in phased manner that may be imposed in future by MoP on all the States including Telangana.

3.4.11 Month-wise energy surplus/ shortfall can be arrived at by considering the month-wise energy availability and energy requirement. Due to the month-wise variations in the energy availability there will be cases of surplus in few months and shortfall in few which is an unavoidable case. The energy shortfall in certain months of the year is expected to be procured from the short-term market. The summation of shortfall in such months amounts to 2393 MU. While, in other months, where there is an energy surplus, the summation will amount to 5459 MU. These two numbers cannot be compared as they are occurring at different months of the year. It is further clarified that the short-term power can't be considered under availability. The energy dispatch has to match with the energy requirement, hence the short-term has been shown under the same.

3.4.12 Availability of thermal plants are projected at normative PLF provided in corresponding PPA considering plant overhaul planning. The thermal generating plants are being operated below their threshold PLF due to high penetration of renewable energy at day time and reduced loads during night time. The renewable energy plants cannot be backed-down as they are must-run stations and also DISCOMs have to fulfill RPPO obligations to avoid penalty. TSSLDC have to issue back-down instructions to the generators for balancing the system demand-supply to ensure grid security, based on descending order in the merit order despatch.

3.4.13 In respect of NCE projects, the historical actual generation data of the generators are being taken as basis for preparation of ARR proposals. However, payments for the proposed generation particulars are subject to terms and conditions of respective PPAs which are in turn governed by respective Commission Orders determining tariff for such NCE Projects. DISCOMs honor the must-run status awarded to the renewable generators in accordance with the IEGC. However, DISCOMs can proceed to curtail energy from these projects as per clause 5.2 (u) of the Grid Code in case of grid security.

Commission's View

3.4.14 The Commission has considered the energy availability from various approved contracted sources of power considering the projected generation at normative parameters for FY 2022-23. Based on the month wise energy available vis-a-vis energy requirement, the month wise deficit or surplus has been arrived at.

Further, the month wise deficit has been allowed to be procured from short-term purchases and sale of surplus power has been considered during the surplus months. The rationale adopted by the Commission in projecting the energy availability for FY 2022-23 has been detailed in Chapter 4 of the Order.

3.5 POWER PURCHASE COST

Stakeholders' submissions

3.5.1 The DISCOMs have not considered any sale of surplus power as the cost of such additional purchase is expected to be higher than the revenue from sale of surplus energy. The estimated energy deficit is proposed to be purchased from the short-term market at a tariff of Rs.3.85 per unit, which is not supported by any justification. Though the DISCOMs have mentioned increase in per unit cost of thermal power plants due to their backing down to purchase must-run renewable energy, they have not projected the quantum of thermal power to be backed down and fixed charges to be paid therefor. The DISCOMs have not provided information relating to backing down of thermal power during FY 2019-20, FY 2020-21 and FY 2021-22 and fixed charges paid therefor.

3.5.2 As per the latest estimates shown during public hearings conducted by the Commission in the month of June 2021, the capital costs per MW of some of the projects taken up by TSGenco are in the range of Rs.5.92 crore/MW to Rs.7.90 crore/MW. These capital costs are likely to be revised upwards again and such higher capital costs, if allowed by the Commission, would lead to higher fixed charges and would impose additional burdens on the consumers. The Commission in its earlier Orders had disallowed capital costs for some of the thermal power projects of TSGenco and SCCL.

3.5.3 The following points may be considered regarding the PPAs approved earlier:

(a) The two PPAs with Sembcorp Energy India Limited (SEIL) have different fixed cost tariffs although the generating station is the same.

(b) The MoU and PPA signed with CSPDCL on long-term basis have been questionable and detrimental to the interest of consumers. The tariff for CSPDCL has been projected to be Rs.3.90 per unit for FY 2022-23 as equal to the cost for last two years.

(c) Extension of time was granted to the private developers who had PPAs with DISCOMs for supply of solar power on long term because of which the developers availed the benefit of reduction in prices of solar panels, etc., without reducing the higher tariffs. Had the DISCOMs cancelled those PPAs and gone for fresh bids it would have benefited the consumers substantially.

(d) In the case of Power Supply Agreement (PSA) of DISCOMs with NTPC Vidyut Vyapar Nigam Ltd. (NVVNL), the DISCOMs have not even tried to negotiate reduction of price with NTPC in tune with the market trends, though there has been abnormal delay in commencing supply of power under the said PPAs or cancelling the PSAs. The PSAs with NTPC and SECI (for supply of solar power) are detrimental to the interests of the DISCOMs.

(e) Even after detailed submissions and directions of the Commission to negotiate with NTPC for purchase of power from Telangana STPP phase I, the DISCOMs failed to negotiate with NTPC and protect the interests of the consumers.

(f) The DISCOMs have entered into medium-term agreement with PTC India Ltd. for procurement of 550 MW for 6 months in a year at the rate of Rs.4.29 per unit, whereas under the same scheme PTC is supplying power to Kerala at the rate of Rs.3.29 per unit. The Commission may direct the DISCOMs to cancel their agreement with PTC for the year FY 2022-23 considering the availability of surplus power and availability of power in power exchanges at even lower price.

(g) The DISCOMs have already saddled themselves with many high cost PPAs and one of them is NTPC bundled power where the cost of solar power is Rs.4.73 per unit and Rs.3.95 per unit for thermal power. There is no justification for purchasing such bundled power with such high cost for a long-term period. The cost of thermal power under bundled power arrangement is more than the variable cost of the thermal power units of TSGenco. In the name of bundled power, the DISCOMs have to bear the overburden of both solar and thermal power on long-term basis. Since the agreements cannot be undone now, it needs to be seen how the burden of such high cost PPAs is relieved.

3.5.4 With regard to the proposal of DISCOMs to amend Regulation 4 of 2005 to put a mechanism for automatic pass through of power purchase cost adjustment in view of the enforcement of Electricity (Timely Recovery of Costs due to change in Law) Rules, 2021 by the Central Government dated 22.10.2021, such an automatic pass through of impact in cost due to change in law by a formula is unwarranted and may lead to divergent interpretations and disputes and bypasses of regulatory examination of the veracity and permissibility of such impact. True-up claims under various uncontrollable factors including power purchase cost can be made by the DISCOMs or TRANSCO and the Commission considers the same after holding public hearings along with permissible carrying cost. Further, the DISCOMs have every right to examine the impact of change in law as and when TSGenco/TSTransco show the same in their monthly bills and contest its veracity and permissibility. Therefore, Commission may reject the proposals of the DISCOMs for amending the said

Regulation.

3.5.5 While entering into PPA with CSPDCL for supply of 1000 MW, the DISCOMs booked an additional transmission capacity for another 1000 MW. The DISCOMs may submit whether the additional transmission capacity of 1000 MW is booked and what are the consequences of not availing such additional 1000 MW.

3.5.6 Fixed charges for TSGenco and CGS plants have to be considered as per latest tariff orders and not based on submissions/actual cost of the plants. Escalation in variable charges from actuals of FY 2020-21 is not justified and has to be disallowed by the Commission. The other charges claimed of around Rs.40 crore for TSGenco is also not justified. Considering the fixed costs of TSGenco stations as per latest tariff order and no escalation in variable cost from actuals of FY 2020-21 shall lead to disallowances amounting to Rs.1156.64 crore from the claimed amount by the DISCOMs for TSGenco stations.

3.5.7 Despite the reduction of energy availability from TSGenco hydel plants in FY 2022-23 from FY 2021-22 by around 921 MU an increase in fixed charges of Rs.170.83 crore has been proposed by the DISCOMs. Accordingly, the Commission may disallow such increase in the fixed cost of Rs.170.83 crore.

3.5.8 The proposed power purchase from Telangana STPP-I at Rs.4.53 per unit is not justified with supporting data like construction progress etc. to back up its claims towards such high-power purchase quantum and cost. The DISCOMs have not made it clear whether the fixed cost claimed by it is approved by the CERC or not. The Commission may not consider the power purchase from Telangana STPP-I and instead offset such power purchase quantum with 921 MU from hydel generation along with procurement of additional short term power purchase of 2578.56 MU at average Day Ahead Market (DAM) price for FY 2020-21 of Rs.2.82 per unit.

3.5.9 Considering the fixed costs of CGS stations as per latest tariff Orders of CERC and not considering the purchase of power from Telangana STPP shall lead to disallowances amounting to Rs.1760.29 crore from the claimed amount by the DISCOMs for CGS stations.

3.5.10 It is observed that the DISCOMs, in the case of SCCL and SEIL have also claimed Rs.2.20 crore and Rs.62.37 crore towards other cost without any justification or supporting documents and accordingly the same may be disallowed by the Commission.

3.5.11 DISCOMs have to enter into banking agreements with states in Northern Region owing to the contrast of yearly peak and non-peak periods.

3.5.12 The average rate of Rs.3.85 per unit for purchase of short-term power is significantly on higher side as compared to actual average rate of FY 2020-21 in power exchange of Rs.2.82 per unit. The Commission may consider the actual monthly DAM Market Clearing Price (MCP) for FY 2020-21 and actual monthly Real Time Market (RTM) MCP for FY 2020-21 for arriving at short term power purchase cost and for inter DISCOM purchase cost.

3.5.13 DISCOMs have not reduced the revenue from sale of surplus power of Rs.1581 crore from the total power purchase cost.

3.5.14 The GoI alluded to the imminent growth of short-term market in the draft National Electricity Policy document issued in 2021 and one of the several measures taken to achieve such objectives and a key among them is the resolution on introduction of long duration contracts at the power exchanges. Currently, the short-term procurement beyond 11 days of contract could only be done by the DISCOMs through trader/DEEP only, however Indian Energy Exchange (IEX) is in the process of introducing longer duration contracts beyond 11 days and up to 1 year for both conventional and non-conventional power. The proposal for the above contracts is pending before CERC. Accordingly, the Commission may consider and approve all the available options in the short-term market for optimizing power purchase costs as well as to meet the deficit requirements of the DISCOMs.

3.5.15 The DISCOMs have the option to either fulfil their RPPO by purchasing renewable power or sell surplus renewable power in the short-term market through Green-DAM (G-DAM) and Green-TAM (G-TAM) products available at the IEX platform. G-DAM and G-TAM provide alternative market-based route to the renewable generators to sell their green power and for the buyers to fulfil their RPPO at competitive price with flexibility of entry and exit in the market.

3.5.16 From the information related to power procurement during FY 2020-21 and FY

2021-22 it is uncertain whether the merit order is being followed in power procurement. The variable cost of power from CSPDCL is Rs.1.20 per unit and that of SEIL is Rs.2.26 per unit and in case merit order was followed CSPDCL would have been preferred compared to SEIL, however, power at higher PLF (80% to 95%) is procured from SEIL compared to CSPDCL (37% to 52%). The Commission may look into the merit order followed by DISCOMs in its procurement.

3.5.17 From the filings of the DISCOMs, it can be seen that power purchase cost amounts to 74% of ARR and considering the same, avenues have to be explored to reduce the tariff burden on consumers as well as budgetary support from GoTS. DISCOMs in their narrative of reasons for the proposed tariff hike highlighted variable cost components like price of coal, transport cost of coal, clean energy cess, etc., however, a closure examination of DISCOMs ARR and tariff filings for FY 2022-23 shows that fixed costs have also increased. While the fixed cost has increased from Rs.1.61 per unit in FY 2018-19 to Rs 2.01 per unit in FY 2022-23, variable cost reduced from Rs.3.08 per unit to Rs.2.76 per unit. Hence, during this period while per unit fixed cost increased by 24.84%, per unit variable cost reduced by 10.39%. This statistic requires that more attention is required to increasing fixed cost burden. The important reason for this higher fixed cost is the high capital cost of the thermal power projects that have become operational since formation of separate Telangana State.

3.5.18 The per unit variable cost of coal based thermal power plants supplying power to DISCOMs vary widely indicating that there is a scope to bring down the same. Expect Yadadri TPS (YTPS) all the other TSGenco thermal stations are located near coal mines and expenditure related to the same have been part of capital cost of the plant. As a result, there should not be much difference between variable cost of CSPDCL and variable cost of TSGenco plants. It is to be noted that the variable cost of SEIL which is located away from the coal mines is Rs.2.26 per unit and is still less than the variable costs of TSGenco plants. Considering that some of TSGenco plants are newly constructed after SEIL, the variable charges have to be on lower side owing to improved efficiency at which the plants are operated.

3.5.19 DISCOMs have proposed to procure solar power of 400 MW from SECI at

Rs.2.78 per unit and 1692 MW from NTPC at Rs.2.82 per unit. Considering the availability of solar power at rates below Rs.2.50 per unit, the above procurement of DISCOMs appear to be at higher tariffs and DISCOMs also have not specified the basis of this solar power being procured. It is to be noted that recently SECI offered solar power to Andhra Pradesh at Rs.2.49 per unit without any interstate transmission costs.

3.5.20 DISCOMs have to stop procuring solar power from MW/utility scale solar plants and instead procure solar power from decentralised solar plants which shall also bring down the T&D costs.

3.5.21 DISCOMs on one hand proposed relinquishment of power form plants whose per unit variable costs are ranging from Rs.3.18 to Rs.3.61 and on the other hand have proposed to procure power from PTC whose variable cost is Rs.4.29 per unit. The cost of power from the plants proposed to be relinquished is much lower than that of power procurement from PTC and considering the same the DISCOMs may withdraw the proposal to relinquish the share from those plants and also may withdraw the proposal to procure costly power from PTC.

3.5.22 The DISCOMs in the Petitions have not submitted any information regarding the difficulties and measures to be taken by them on account of payments being made to generating companies by maintaining Letter of Credits (LC) in compliance to the Central Government's directives.

3.5.23 In case of PPA related disputes, the excessive payments made under such PPA disputes and expenses incurred for resolving such disputes has to be submitted by the DISCOMs. DISCOMs have to provide whether there are any disputes on account of errors before courts which are realized after finalizing of PPAs either by itself or pointed out in internal audit. In case of such errors found, whether any actions have been taken against the officers or staff who are involved in such activities. Further, details on whether any information regarding such disputes has been shared with the vigilance department of Government may be submitted.

3.5.24 In view of the environmental benefits, power from thermal generating stations has to be reduced gradually and, in this regard, the measures taken by DISCOMs may be submitted. Procurement from renewable energy sources has to be encouraged and considering the current unification of Indian power grid, DISCOMs have to procure renewable power with low cost.

3.5.25 The clearing of bills of wind and solar generators is taking anywhere between 6 to 12 months and the DISCOMs are unilaterally waiving off the Late Payment Surcharge (LPS) which is payable as per provisions of PPA. This delay in payments to generators have cascading effect on the generator's financial situation. In this regard, since the DISCOMs have not considered any cost for LPS against the Energy bills in the proposed filings, the Commission may issue directions to DISCOMs to consider LPS for a delay period of 6 months in their ARR proposal instead of filing true up Petitions and also considering the time value of money. Non allocation of funds in the ARR would lead to unavailability of funds to clear the past dues.

DISCOMs replies

3.5.26 The DISCOMs have considered the energy availabilities for FY 2022-23 as per the projections shared by the respective generating station, energy requirement as per the estimated sales projections and loss levels. While, it has led to an energy surplus of 3066 MU on an annual basis the same may not be true for all months of the year. The installed capacity of hydel stations is applicable only for a few months of the year. DISCOMs have shown the month-wise energy availability, month-wise sales and voltage-wise losses as per the prescribed formats. The month-wise energy deficit/surplus can be arrived based on the abovementioned parameters.

3.5.27 DISCOMs have not estimated any sale of surplus power in FY 2022-23 due to the cost competitiveness i.e., DISCOMs have considered the energy dispatch in line with the energy requirement only. For showing sale of surplus power DISCOMs have to purchase power at a higher rate and sell such power at a cheaper rate which is not feasible. Though, on a real time basis, if the market conditions are favorable DISCOMs shall engage in the sale of surplus power in various time blocks as done in the recent years. The details of quantum of surplus sale and revenue earned from FY 2015-16 to FY 2021-22 have been submitted.

3.5.28 The Commission will determine the capital cost and tariff after prudence check based on the bench mark norms specified from time to time. While determining the capital cost or tariff of the project, the Commission will scrutiny the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost overrun due to delay in execution of the project, time overrun and such other matters considered appropriate.

3.5.29 The earlier PPA with SEIL was signed for 500 MW (Net) by the then four distribution licensees of erstwhile AP under Case-I bidding route for supply of power from Unit-I (660 MW). This procurement was initiated in the year 2010 and the financial bid was submitted in 2011. The rates submitted in 2011 cannot be compared with the prices in 2016. The earlier PPA was signed for 25 years whereas the PPA for 570 MW was signed in 2016, that too for a period of 8 years only. Hence the rates in the both bids are not comparable. Tariff quoted in shorter period are slightly higher than tariffs committed for 25 years period. Considering TSGenco capacity additions, DISCOMs limited the PSA (570 MW) for eight years only. Fixed charges in earlier PPA under Case-I bidding was increasing year-on-year (Escalation component present) whereas the Fixed Charge in this PPA under DBFOO would be decreasing by 2% year-on-year which would be advantageous to DISCOMs. Therefore, tariffs in the both PPAs are not comparable.

3.5.30 At the time of formation of the Telangana State there had been severe power crisis with load relief given to all categories of consumers including industries which led to entering into an MoU between the Telangana State and State of Chhattisgarh during the year 2014 wherein, Marwa (2x500 MW) TPS was identified as dedicated source of supply to Telangana. Accordingly, a PPA was entered by DISCOMs with CSPDCL on 22.09.2015 with the tariff to be determined by Chhattisgarh State Electricity Regulatory Commission (CSERC) under Section 62 of the Electricity Act 2003. CSERC had determined the tariff of Marwa TPS vide Order dated 07.07.2018; aggrieved by this order DISCOMs filed Appeal No.391 of 2018 before Appellate Tribunal for Electricity (APTEL), which is pending for adjudication. DISCOMs are paying provisional tariff of Rs.3.90/unit for the supply of power from CSPDCL as per the Commission’s interim Order dated 31.03.2017.

3.5.31 Considering the various factors like delay in TS i-pass approvals, land acquisition and conversion issues, connectivity issues etc., GoTS had granted extension of time for completion of the solar power projects. The Commission after careful examination, considering the requirement of encouraging renewable sources of energy, accorded approval for extending the Scheduled Commercial Operation Date (SCOD) up to 30.06.2017 and further directed to file individual Petitions for amending the PPAs in respect of penalties and re-fixation of tariff. As such, the revised SCOD for the individual projects were finalized by the Commission Orders duly hearing the arguments of both parties (viz., DISCOMs & solar power developers). It is pertinent to mention that penalties were also levied for delay in achieving the COD and Bank Guarantees (BGs) were encashed in certain cases penalizing for delay in SCOD.

3.5.32 The PSAs for procurement of 400 MW Solar power bundled with 200 MW thermal power under JNNSM Phase-II State specific Bundled Scheme were signed in 2016. In view of the delay in adoption of tariffs (discovered through competitive bidding by NTPC) by CERC, the issue pertaining to according consent to the PSAs entered with NTPC came up for public hearing during the year 2021. The power from these projects has been scheduled to DISCOMs from respective CODs of the plants from the year 2017. As such, the tariff from these projects cannot be compared with the latest tariffs. Also, before signing the PSAs for the said procurement DISCOMs held series of discussions/ deliberations/ negotiations with NTPC/SECI and were successful in modifying certain provisions of the PSAs, safeguarding the interests of the end consumers. However, majority provisions of PSAs are in line with the guidelines issued by GoI and are non-negotiable which cannot be modified as the Solar tariff was discovered through competitive bidding in the year 2016.

3.5.33 Pursuant to the directions given by the Commission, DISCOMs held discussions with NTPC several times for incorporating the modifications in the Clauses of PPA of TSTPP. In reply, NTPC vide letter dated 14.10.2016 and 18.01.2019 have furnished their views. DISCOMs have communicated NTPC comments to the Commission. The Commission also directed DISCOMs to take legal opinion on jurisdiction of appropriate Commission for determination of tariff. In response, DISCOMs submitted the legal opinion to the Commission, wherein the counsel opined that the appropriate Commission to determine the tariff of NTPC's TSTPP in question is the Central Commission under Section 79 of the Electricity Act, 2003. And as per the Commission's direction on

02.02.2021, Supplementary Agreement was entered between NTPC and DISCOMs on 09.04.2021 to the extent of terms mutually agreed and submitted to the Commission. By taking into consideration all the stakeholders' objections, DISCOMs and NTPC replies, the Commission has issued consent to the PPA of TSTPP-I on 25.08.2021.

3.5.34 In the matter of medium-term agreement with PTC, in Pilot Scheme-I the tariff of Rs.4.24/unit (excluding trading margin of Rs.0.05/unit) and was discovered through competitive bidding conducted in the year 2018, whereas, the supply of power from PTC to Kerala is under Pilot Scheme-II at the tariff of Rs.3.26/unit (excluding trading margin) that was discovered through competitive bidding conducted in the year 2020. Further, in Pilot Scheme-I, the Generator had agreed to supply power in a staggered manner of 6 months in a year as requested by DISCOMs i.e., for Rabi & Kharif seasons, whereas in Pilot Scheme-II minimum off-take is 85%, which is mandatory through-out the year continuously. If power off-take is less than 85% then penalty would be levied, whereas, in the pilot Scheme –I the minimum power off take is 55% and if power off take is more than 55% then utility would get 1% discount in tariff for every 5% incremental off-take beyond 55%. Hence, the Terms & conditions of Pilot Scheme-I & II are different.

3.5.35 DISCOMs have been procuring power via an adequate mix of long term, medium term and short-term arrangements, depending on the factors like ensuring satisfactory planning (for meeting demand), sourcing options availability, cost competitiveness etc. under the purview of TSPCC. DISCOMs are obligated to supply 24x7 power supply to its consumers (including agriculture) and are bound to contract with additional capacities to ensure no power interruptions in the State. All the PPAs entered by the DISCOMs are approved by the Commission.

3.5.36 The basis for short-term purchase rate has been detailed in the Petition. The short-term purchase rate for FY 2020-21 was Rs.3.85/unit. While, for H1 FY 2021-22 the same was Rs.3.23/unit. Hence, the arrived rate is Rs.3.59/unit for FY 2021-22 and Rs.3.85/unit for FY 2022-23.

3.5.37 In the matter of request for amendment of Regulation 4 of 2005 by the DISCOMs, the MoP Order dated 09.11.2021, states as follows:

"5. Distribution companies face revenue constraints as the corresponding pass through of cost is not done regularly and timely in the retail tariff. Timely collection of revenue from consumer would ensure timely payment by the distribution company to the generating stations and coal companies.

6. Section 62(4) of the Electricity Act provides that tariff or part of any tariff can be amended more frequently than once in any financial year in respect of any changes expressly permitted under the terms of any fuel surcharge formulae as may be specified.

7. The present mechanism leads to delays. It may be changed to provide for automatic pass through in tariff change in costs on account of change in law/ power purchase costs in accordance with a formula laid down by the State Regulatory Commissions.

8. The Discoms will pass through the change in costs according to the said formula whenever the change in costs due to change in law/power purchase costs occur.

Till a suitable formula is prescribed by the State Commissions the formula given in the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021 may be adopted.

9. The State Commissions are requested to place the above mechanism in operation with immediate effect."

3.5.38 DISCOMs had earlier filed a Petition for amending the existing clause related to power purchase cost variation, to which the Commission in its Order dated 02.06.2021 ruled as under:

> *"The Commission would treat the submissions of the TSDISCOMs as suggestion/input as and when the Commission initiates the process of adding to or amending or varying regulation relating to the Terms and Conditions for Determination of Tariff for wheeling and Retail Sale of Electricity. The TSDISCOMs are also at liberty to place any more inputs when the Commission invites comments/suggestions on any such draft regulation on the subject matter."*

3.5.39 The additional 1000 MW LTA capacity with CSPDCL was relinquished, in view of significant renewable capacity addition in Telangana State and commissioning of other State-owned thermal projects. As there is adequate power due to significant renewable capacity addition to fulfill RPPO and also due to commissioning of other State-owned thermal projects in the state, no adverse effect i.e., shortage of power has been noticed due to absence of the additional 1000 MW power.

3.5.40 The tariffs for SEIL-I and SEIL-II have been considered based on the actuals for H1 of FY 2021-22. The threshold limit for 269.45 MW PPA is 85% and for 570 MW PPA is 90%. Every month, DISCOMs will schedule/off-take power based on merit order of the total contracted power. Hence scheduling of power from these two units cannot be decided simply considering the individual PPA Tariff.

3.5.41 The Government, with a view to encourage generation of electricity from renewable sources of energy issued various solar policies and schemes to achieve the targeted capacity of 450 GW by 2030 and to increase the share of installed capacity from renewable sources to 40% by 2030. Accordingly, all procurements made from renewable sources so far under long term basis were made under a transparent and competitive manner in the interest of consumers of DISCOMs and fulfillment of power purchase obligations fixed by State Commission and MoP. Further, DISCOMs have made its best efforts at the time of execution of PPAs with generators to purchase power at the best price, i.e., most competitive price available, that is the least price discovered under the competitive bidding for procurement of power from renewable generators in the bidding. Due to advancement of technology and efficiency, the capital cost of solar PV and connected equipment were reduced year on year thereby the tariff discovered through competitive bidding are in down trend. The tariff discovered in 2010 cannot be compared with the tariff discovered in the year 2020. The projects awarded in the year 2020 have time till 2022 to complete the project at reduced capital cost. It is not appropriate to compare the rates arrived in Telangana in 2010 to the rates obtained in 2020. Had the DISCOMs not entered into PPAs on long term, the DISCOMs would have procured the power at higher cost. As per the doctrine of contracts, the sanctity of the PPAs has to be preserved, it was also noted that the terms of PPAs did not permit unilateral alteration or alteration at behest of other party.

3.5.42 Capacity addition decisions involving renewable power purchases (solar, wind, etc.,) can be made well in advance when such capacity is needed, as power generation from renewable sources will take more gestation periods for generation of energy from renewable resources

3.5.43 DISCOMs have considered the fixed charge projections for H2 of FY 2021-22 in line with the actual fixed charges for H1 of FY 2021-22 for CGS thermal stations. The increase in FC in FY 2021-22 is predominantly due to increase in fixed charges in H1 of FY 2021-22 over H1 of FY 2020-21. In the absence of variable charge estimates from CGS stations, DISCOMs have considered the variable charge projections for H2 of FY 2021-22 and FY 2022-23 in line with the actual variable charges for H1 of FY 2021-22.

3.5.44 With regard to the fixed charges for TSGenco stations, Commission's Order on the MYT Petition filed by TSGenco for the Control Period from FY 2019-20 to FY 2023-24 is yet to be issued; hence fixed charges projections made by DISCOMs are provisional. However, DISCOMs will pay fixed charges as per Commission's Order.

3.5.45 The other costs claimed are inclusive of cost of water, IT initiatives, secondary energy charges for hydel stations, thermal incentives and medical & welfare expenses etc. In case of STPP, Rs.2.20 crore pertains to water charges based on past actual values as per the Regulation. The amount of Rs.62.37 crore is claimed towards other costs for the power purchases from SEIL is based on the supplementary charges approved by CERC under Change in Law.

3.5.46 As per AP Re-Organization Act 2014, NTPC shall establish a 4000 MW (5X800 MW) power facility in the successor State of Telangana after establishing necessary coal linkages. Accordingly, DISCOMs entered PPA for 2X800 MW (Phase-1). A purchase of 3499.63 MU has been arrived considering CODs of unit -1&2 as 30.09.2022 & 31.12.2022 respectively. NTPC has not yet filed Petition at CERC for determination of tariff.

3.5.47 Efforts are also being made by DISCOMs for banking arrangements with other State utilities.

3.5.48 With regard to stakeholder's request to disallow power purchase cost from the claim for DISCOMs, there are certain discrepancies and that the assumptions by stakeholder are very optimistic and intended only towards the reduction of the costs without considering the practicality of the same. Accordingly, the Commission may consider the projections submitted by DISCOMs along with justifications.

3.5.49 Merit order is being followed by TSSLDC. It may be observed that CSPDCL is declaring its plant availability in the range of 37 to 52% due to lack of coal whereas, SEIL is declaring its plant availability more than 90%.

3.5.50 All efforts are being made by DISCOMs for power procurement in most effective way taking every measure to reduce the cost burden on DISCOMs, which would indirectly lessen the burden on consumers. All the PPAs are being entered with generators/developers by DISCOMs after taking Commission approval issued after public hearings. It may be observed that increase in fixed cost from FY 2018-19 to FY 2022-23 is due to the commissioning of new thermal and hydel projects of TSGenco taken up to provide reliable and quality power 24 hours to all categories of consumers.

3.5.51 The competitive bidding for 400 MW solar power from SECI at Rs.2.78/unit under ISTS Tranche-VI scheme and 1692 MW solar power from NTPC under CPSU scheme at an average cost of Rs.2.82/unit was concluded in the year 2019. Whereas, the competitive bidding for SECI offered rate of Rs.2.49/unit to AP was concluded in the year 2021. Also, for the aforesaid schemes, the ISTS transmission charges and losses are granted waiver by MoP. DISCOMs have also signed PSAs with NTPC at Rs.2.45/unit in the year 2021. It may be observed that the tariff of solar power projects cannot be compared as the competitive bidding year and terms and conditions of specification differ.

3.5.52 Taking the advantage of waiver of ISTS transmission charges granted by MoP DISCOMs are planning for procurement of power from ISTS connected projects at competitive tariffs discovered through bidding process conducted at national level. Whereas, setting up of distributed solar generation would be uneconomical due to high land cost.

3.5.53 DISCOMs are proposing to relinquish share of Telangana from NLC Thermal Power Station stage- I & II only. In the tariff petition filed by NLC for the Control Period FY 2019-24 before CERC, NLC are claiming for additional tariff based on certain factors, by these claims the fixed cost would increase. NTPC & NLC being long term projects, DISCOMs have to bear the fixed charge commitment throughout the year, whereas, in Pilot Scheme-I, the generator has agreed to supply power in a staggered manner of 6 months in a year for a period of 3 years, as requested by DISCOMs i.e., for Rabi & Kharif seasons. The agreement with M/s. PTC will end in September 2022. Moreover, in PTC, the minimum power off take is 55% and if power off take is more than 55%, then utility would get 1% discount in tariff for every 5% incremental off-take beyond 55%, whereas for CGS fixed cost liability is for Normative availability i.e 85%.

3.5.54 In the filings before CERC, NTPC & NLC are claiming additional tariff based on certain factors like RoE on additional capitalization, special allowance in lieu of R&M, high O&M expenses and proposed Installation of FGD and by these claims the fixed cost would increase. The fixed cost of these two plants will increase in future. The average power purchase cost of DISCOMs is Rs.4.78/unit as many new hydel and thermal stations are added after the State formation. The loss of capacity that is proposed to be relinquished will be met from TSGenco plants running at higher PLF and at a lesser cost when compared to power from NTPC & NLC.

3.5.55 The Commission does not allow the Late Payment Surcharge (LPS) on delayed payments against the energy bills of the generators in ARR filings for retail supply tariff.

3.5.56 In the matter of difficulties in maintaining of Letter of Credits, DISCOMs are bound to implement the guidelines provided by MoP in the matter of payment security mechanism. Accordingly, based on non-fund based credit limits, payment related provisions in PPAs generators are given Letter of Credits in a timely manner.

3.5.57 In the matter of PPA related disputes, TSSPDCL submitted that only one case is pending before the court. Notice has been issued to generator in the matter of liquidated damages. The legal fees in this matter shall be paid after the cases is resolved. All the payments done to the generators as of now are only done as per the provisions under PPA and no other payments have been done to any generator. There have been no cases on account of errors found after finalizing PPAs. In the matter of PPA related disputes, TSNPDCL submitted that 104 cases are pending before the courts out of which maximum pertains to gas related PPAs. There have been no cases on account of errors found after finalizing PPAs.

3.5.58 Currently, the Commission specifies RPPO targets for procurement of power from renewable energy sources and accordingly DISCOMs have to take measures to comply with such RPPO targets. DISCOMs are under continuous search for procurement of power from low-cost renewable energy sources in order to comply with RPPO targets. DISCOMs have proceeded to procure economic renewable power available across the country, bidding through a central Government undertaking SECI has been done and certain PSAs/PUAs have been signed. Further, some of the agreements are under advanced or under pipeline stages.

3.5.59 DISCOMs make note of the suggestions provided by the stakeholder in the context of long duration contracts in the IEX. DISCOMs have a dedicated wing (TSPCC) to focus on all the power purchase related matters of the DISCOMs. Under the purview of TSPCC, DISCOMs will explore the option of such long duration contracts in the IEX, post its approval by the CERC and subject to the directions of the Commission.

3.5.60 DISCOMs make note of the suggestions provided by the stakeholder in the context of purchase/sale of renewable energy in power exchange. Under the purview of TSPCC, DISCOMs have been utilizing the GDAM and GTAM products of IEX for sale or purchase of green power.

Commission's View

3.5.61 With regard to the approval of PPAs, the Commission emphasizes that all the PPAs are approved by the Commission after due regulatory process by inviting stakeholders' objections and suggestions.

3.5.62 The Commission has approved the power purchase cost for FY 2022-23 duly considering the approved PPAs, based on the approved quantum of energy and applicable tariffs for the respective generating stations. The Commission's approach for approving the power purchase cost for FY 2022-23 has been elaborated in Chapter 4 of this Order.

3.6 DISTRIBUTION COST

Stakeholders' submissions

3.6.1 The DISCOMs have not complied with the Commission's directives the MYT Order dated 29.04.2020. In this regard, the Commission may disallow or withhold of 30% of its Distribution Cost on account of non-adherence to Regulations and directives.

3.6.2 The Commission is requested to ensure that the DISCOMs follow the computations of depreciation for each year of the 4th Control Period in accordance with the CERC (Terms and Condition of Tariff), Regulations, 2019.

3.6.3 The salaries of the recently regularized outsourced employees have to be decided based on their experience.

3.6.4 It is observed that the PRC for employees of electrical utilities of the State are being revised for every 4-year period against the existing 5-year period for other State Government employees and 10-year period for Central Government employees. In this regard, it is requested to consider the PRC revision period of 5 years for employees of electrical utilities of the State in line with other State Government employees.

DISCOMs replies

3.6.5 The directives issued by the Commission are being complied with by the DISCOMs and hence the question of disallowance or withholding of distribution cost does not arise.

3.6.6 TSNPDCL adopted the depreciation rates as per CERC (Terms and Conditions of Tariff) Regulations, 2019 and considered the same in the Annual Performance Review (APR) filings for FY 2020-21 submitted on 31.12.2021. TSSPDCL is in the process of adopting the depreciation rates as per CERC (Terms and Conditions of Tariff) Regulations, 2019.

3.6.7 The outsourced employees are regularized in TSDISCOMs as Artisans and their terms of service are governed by agreement with the Labor Commissioner and accordingly their salaries and increments are determined and released on a regular basis.

3.6.8 In the matter of pay revision, power utilities are specialized agencies and employees working in power utilities are in the emergency service and work 24x7. In this regard, the pay revision of these employees is not comparable to that of Central / State Government employees. Further, even before the un-bundling of APSEB in 1999, pay revisions were made every four years, and increasing the timeliness of pay revisions could cause unrest among employees working at power utilities of Telangana.

Commission's View

3.6.9 The Commission has taken note of the stakeholders' submissions and replies of the DISCOMs.

3.7 TRANSMISSION CHARGES

Stakeholders' submissions

3.7.1 Considering that the DISCOMs are proposing to procure power from short term market in FY 2022-23, there is a need to look in to the reimbursement made to DISCOMs by TSTRANSCO and TSSLDC from the transmission and SLDC charges that are received/being received from the power exchanges in view of the short-term power purchases made by the DISCOMs in FY 2021-22 till now. The Commission is requested to adjust such reimbursed amount in the ARR and offset the revenue gap.

3.7.2 For computation of PGCIL charges, the applicable capacity considered by the DISCOMs for calculation of POC charges cumulatively is 4669 MW, however, as per SRPC RTA & RTDA account for the billing month of January 2022 the current actual allotted capacity is to the tune of 4304.91 MW. The Commission is requested to compute the transmission charges considering the current actual capacity of 4304.91 MW instead of 4669 MW considered by the DISCOMs.

3.7.3 The DISCOMs have claimed Rs.12 crore under STOA charges, however, as per CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 no transmission charges for STOA for Inter-State transmission system shall be payable by a distribution licensee which has Long term or Medium term Open Access or both or by a trading licensee acting on behalf of such distribution licensee. Accordingly, the Commission is requested to disallow the claim of Rs.12 crore made by the DISCOMs.

3.7.4 The above consideration of PGCIL charges at current actual capacity of 4304.91 MW and non-consideration of claim of Rs.12 crore amounts to Rs.138.33 crore and the Commission may disallow the same from the claim made by DISCOMs.

Petitioner's replies

3.7.5 There are no open access charges (transmission and SLDC charges) in respect of short-term purchases made by DISCOMs as it is covered under the total contracted capacity. Hence DISCOMs have not paid any transmission and SLDC charges to TSTransco for power purchases made through power exchanges for FY 2021-22. Hence, reimbursement to DISCOMs by TSTransco/TSSLDC doesn't arise.

3.7.6 The computations submitted for PGCIL charges for FY 2022-23 were based on the allocation capacity as per percentage share of Telangana prevalent at the time of filing i.e., till Oct-2021.

3.7.7 DISCOMs would like to clarify that they have been paying short term open access charges for H1 of FY 2021-22 on account of power procurement from power exchanges. Hence, DISCOMs have claimed the same for FY 2022-23 in line with the per-unit charges paid for H1 of FY 2021-22. The Commission may consider the projections submitted by DISCOMs along with the justifications.

Commission's View

3.7.8 The Commission takes note of the stakeholders' submissions and replies of the DISCOMs.

3.8 REVENUE AND REVENUE GAP

Stakeholders' submissions

3.8.1 While the ARR and Sales have been increasing over the years, there has been no increase in the subsidy amount provided by the GoTS.

3.8.2 In the matter of savings due to UDAY Scheme, in the retail supply tariff Order for FY 2018-19, the DISCOMs have submitted that the savings due to UDAY Scheme may be considered at the end of the Control Period and the Commission had adjusted Rs.1116.42 crore in the ARR for FY 2018-19. In this regard, DISCOMs may submit the latest position relating to taking over of the outstanding debt of the DISCOMs by the GoTS under UDAY scheme.

3.8.3 From the Revenue deficit submissions shown by the DISCOMs, it can be seen that the total accumulated revenue gap of the DISCOMs for the four-year period from FY 2018-19 onwards works out to Rs.36841.63 crore. For FY 2022-23, even after taking into account the impact of proposed tariff increase and subsidy from GoTS, a substantial deficit of Rs.2686.79 crore for TSSPDCL and Rs.1410.44 crore for TSNPDCL have been shown and the DISCOMs have not proposed any mechanism to recover the same. Apart from the above, the DISCOMs are yet to submit their true up claims for retail supply business for the period FY 2015-16 to FY 2020-21 along with the true up claims for distribution business for the first three control periods. The accumulated true-up claims of the DISCOMs are turning out to be unbearable to the consumers at large and such accumulated burdens shall lead to increased working capital and the avoidable interest thereon.

3.8.4 The DISCOMs have not given any calculation or justification for the subsidy claimed for FY 2022-23. The subsidy receivable for FY 2022-23 is shown equivalent to the subsidy for FY 2021-22 despite the increase in cost of service. The subsidy requirement for LT-I and LT-V categories has to be based on the projected sales of respective categories and ACoS. The estimated subsidy receivable from GoTS for FY 2022-23 for LT-I and LT-V is estimated to be Rs.8523.91 crore for TSSPDCL and Rs.5319.30 crore for TSNPDCL. The Commission may consider this shortfall of subsidy and allow the same in the ARR for FY 2022-23 in line with Section 65 of the Act.

3.8.5 The DISCOMs have estimated revenue from Additional Surcharge for FY 2022-23 considering Additional Surcharge of Rs.4.06 per unit and Rs.2.34 per unit, for H1 and H2 respectively, whereas the Commission had approved the Additional Surcharge of Rs.0.96 per unit for H2 of FY 2021-22.

3.8.6 The DISCOMs are facing severe financial crises and the losses of the DISCOMs for the period from FY 2014-15 to FY 2019-20 as per their Annual Reports are Rs.31664 crore which are equivalent to 59.68% of ARR for FY 2022-23. This financial crisis raises uncertainty on the future of the DISCOMs to carry out their functions.

3.8.7 For the DISCOMs, arrears of Rs.50,000 and more pending for six months as on 30.09.2021 amounts to Rs.11979 crore and substantial portion of these arrears have to come from State Government Departments. The DISCOMs may submit the details of measures that have been taken to realize the dues. According to Clause 1.2(i) of UDAY MoU, all the outstanding dues from Government Departments to DISCOMs have to be paid by 31.03.2017, however, since then the arrears have in fact increased. Further, there is no proper information regarding the payment of subsidies by GoTS. Payment of subsidies according to monthly schedule as stipulated by the Commission shall aid the DISCOMs in bringing down the debt burden to a large extent.

3.8.8 TSSPDCL has submitted that a sum of Rs.82.41 crore & Rs.92.01 crore had been written off during FY 2020-21 and H1 of FY 2021-22 under bad debts. Similar write-offs by TSNPDCL have not been submitted. Provision for bad debts shall not to be imposed on the consumers as it is nothing but penalizing sincere consumers for the failures of commission and omission of the personnel