

Email**P Sarada**

Fwd: Suggestions on TS DISCOMS Fillings for the SAC MEETING to be held on 28-01-2022

From : Umakanta Panda <secy@tserc.gov.in>

Thu, Jan 27, 2022 04:46 PM

Subject : Fwd: Suggestions on TS DISCOMS Fillings for the SAC MEETING to be held on 28-01-2022**To :** P Sarada <jdte@tserc.gov.in>

From: ecmieitsc@gmail.com**To:** "Umakanta Panda" <secy@tserc.gov.in>**Sent:** Thursday, January 27, 2022 2:54:13 PM**Subject:** Suggestions on TS DISCOMS Fillings for the SAC MEETING to be held on 28-01-2022ENERGY CONSERVATION MISSION
INSTITUTION OF ENGINEERS (INDIA) TELANGANA STATE CENTER

To

THE SECRETARY,

TELANGANA STATE ELECTRICITY REGULATORY COMMISSION,
HYDERABAD-500004.

Lr.No.ECM/IEITSC/F.No. TSERC/D.No. Spl. /2021, Dt.25.01.2021.

Respected sir,

Sub: Submission of suggestions on the ARR and tariff proposals of TS discoms for th
FY-2022-23 – Reg.

Ref: LR No. TSERC/Secy/JD(IT)/SAC/D.No.5 dt: 5.01.2022

With reference above, we have gone through the aggregate revenue requirement and retail supply business for the FY-2022-23 proposals submitted by TS Discoms. The following the suggestions are submitted to the Hon'ble commission for kind perusal.

I) Agriculture Tariff & related issues

Agriculture in Telangana State is mostly depends on electricity run pump sets and lift irrigation schemes. The share of consumption by Agl sector is 38.16% as per actual consumption during FY 2021-21. Hence, it needs focused attention for betterment of discoms

A) Estimation of agriculture consumption

Both discoms have shown that, agricultural consumption for FY-2022-23 will fall on account of rise in Canal-based cultivation, owing full-fledged operations of the LI schemes The LI schemes consumption in TSSPDCL area rises by 190% (1830 to 5325 MU) and TSNPDCL area rises to 246%. (2452 to 8501 MU). Both discoms put together 3575 MU recorded during FY 2020-21. When we look at pervious consumption pattern of LI

schemes with respect to their capacity, the figures shown are very high side, which is nothing but exaggeration. Discoms may obtain details like number of new LI schemes coming into operation with their capacities and hours of run from irrigation department and estimate the consumption in a scientific method instead of requesting commission for true-up exercise later.

In our view, owing to increase of irrigation lifts, individual motors may reduce along the canal for whom water flows by gravitation but, these water may not flow continuously in all seasons, moreover, while flowing the ground water table rises, hence, there is a scope for recharge of defunct bore wells and increase of new connections. Owing to abundant availability of water and motors backup farmers may prefer more area and 2 or 3 crops in a year. Further, history revealed that annual agricultural specific energy consumption of individual pump set per HP keeps increasing. Ultimately there is a scope for consumption rise or at the most stable but wouldn't decrease in any case.

Hence, abnormal consumption projection on lift irrigation schemes and reduction of consumption on individual motors may be reviewed/ reconciled for factual determination of tariff and government subsidy.

B) Replacement of energy efficient motors in agriculture sector.

It is well known fact that, all most all motors running in agriculture sector are inferior, local made and inefficient causing 30 to 40% more consumption. Since electricity supply to agriculture is free, farmers are not interested to use energy efficient motors as these costs more. Any saving in energy under subsidized category is advantage to the discoms. As savings of energy not only reduces the expenditure on power purchase, but results indirect budget spent on distribution network, generating plants ultimately leads to reduction in carbon emissions.

Recognizing the fact, Hon'ble commission has directed to replace 10% existing agriculture pump sets with energy efficient every year, as stipulated in UDAY, MoU. But, no discom has taken up this matter on a plea that shortage of funds.

Whereas there is opportunity for substantial savings on Agriculture pump sets, with ESCO companies Example: M/s. EESL as taken up such projects without upfront investment to discoms,

Pilot projects were implemented at Maharastra, Karnataka, Rajasthan and states like AP, Uttar Pradesh have replaced 74,000 conventional pump sets with help of M/s EESL.

C) INCENTIVES TO FARMERS FOR USING LESS ELECTRICITY

Punjab State Power corporation limited (PSPCL) has introduced an innovative financial incentive scheme for the farmers in the name of "Paanibachao-Paisakamao". The concept of the scheme was, if a farmer consumes less energy than a particular pre-decided limit for the crop he or she will be incentivized.

For example, the supply limit of a farmer is fixed at 1,000 units per month according to HP capacity of the pump set and if the farmer consumes 800 units for the difference of 200 units less consumption an amount of Rs. 800 (at the rate of Rs 4 per unit) will be credited to farmer account.

This scheme was taken up on pilot basis after conducting prior critical study and implemented to the farmers coming forward voluntarily for installation of meters and participation in the scheme. No charges or penalties in case of excess consumption. This type of schemes motivates the farmers to buy energy efficient pumps, avoiding of auto starters and practice or grow less water consuming dry crops which not only saves the energy but reduces the threat of depletion of groundwater levels in the area. Earlier, tariff orders Non-DSM agriculture tariff exists. But as per policy of government

supply was made free to all. Hence, in place of Non-DSM agriculture tariff an incentive scheme may be planned for the farmers following DSM measures so as to tap the saving potential in the sector.

D). Implementation DSM measures and inspections

In the above context, discoms shall strictly ensure DSM measures and meters for newly released services. Regular vigilance being conducted for metering services, but agriculture connections are neglected as the power supply is free. But intensive inspections are carried out on agricultural pump sets, unauthorized Agl connections, additional load auto starters will come to know, besides check on DSM measures followed by farmers, which will help to control consumption on Agl pump sets

II) Electric vehicle charging Tariff

Electric vehicles are pollution free compared to IC engine based vehicles. In view of various advantages and the commitments at Cop-11, held at Paris, Electric vehicles in the country are being encouraged at Center and State level. EV sector is at budding stage and it is the future hope for power sector for betterment of their financial status. More purchases more will be the demand thus revenue to discoms. People need to be motivated for opting Electric Vehicle.

In the proposed tariff, rates are increased by Rs. 1 per unit. When we look at the previous or present financial year consumption in the EV category, TSNPDCL records nil and TSSPDCL records negligible i.e., about 2 MU. In the above context increase in tariff is absurd.

Hence, Hon'ble commission may examine tariff for supply of electricity to EV stations at average power purchase cost of Rs. 4.68 or continue present tariff as it is constant as an encouragement for new buyers. It is pertinent to mention here that companies like "Fortum" a private operator gave free of cost EV charging for one year to attract consumers. (Like Reliance Jio telecom at the beginning)

Installation of, EV charging stations are in slow rate to build confidence on availability among the new buyers abundant stations need to establish everywhere.

Since, EV tariff is beneficial, discom's may plan to establish charging stations at all 33/11 KV Sub-Stations, offices where assured power, place and 24/7 manpower is available, which will boost EV adoption in larger scale leading to additional income to the discoms. (Like petrol bunks run by IOCL, BPCL etc.,)

Further use of EV within discom may be made mandatory so as to minimize the expenditures on officer travels, besides an example to public.

In this regard Hon'ble commission may clarify provisions to run own EV stations by discoms.

III) Green power tariff for industrial and commercial consumers

Reduction in use of fossil fuel is need of the hour to reduce the carbon emissions and healthy atmosphere for society. The State & Central government's are striving for increasing renewable power generation to meet the growing demand with clean and safe green energy.

Many states have started Green Power tariff long back and was available in TSDISCOMs during FY 2015-16. The reasons not known but was discontinued subsequent tariff orders. It is highly appreciable that, now few consumers are coming forward to use green power. Accordingly, discoms proposals for green power tariff for FY 2022-23 is INR 2 per KWH over and above the retail supply tariff for the commercial and industrial, which is found to be discouraging.

In the tariff proposal discom's said that tariff for green power is arrived in the lines of

MERC order dated 22.03.2021. In such case 50% of the difference between the cost of RE & Non-RE sources worked out to be INR 1.685 per unit (3.37x0.5). When we look at Karnataka Green tariff is Rs. 0.50 per KWH over and above existing tariff and in case of AP it was flat Rs. 12.25 per KWH, no demand or fixed charges.

Presently, green power is available at lowest price below Rs. 3 per unit against earlier purchase cost of about Rs. 10 per unit Recently commission has ordered green power tariff for excess over generation by individual consumer supplying to discom at Rs.4.32 per unit whereas consumers coming forward for green power is charged high. However, considering the back down costs of thermal power, it can be increased, but may be limited to Rs. 1 to 1.685 per unit over and above the existing tariff. Since fixed/Demand charges compulsory for the consumers.

In the above context, Hon'ble commission may examine the green power tariff in the larger interest of the society and the Nation.

Further, it is not specified, whether a consumer can opt any share (partial) of their consumption under green power tariff or not. It is also requested minimum period for opting or with drawing green power tariff shall be specified so as to motivate many consumers for this concept.

IV) 33KV OR 11KV LINE LOSSES

It is the most important aspect of the discoms need to concentrate. Though the line losses are less compared to many other states and the nation's average but need to strive hard to reduce bearest worlds minimum as low as 4 to 5% which is far away from our present status.

Discoms are stating that, regular energy audit being done at corporate office level and measures like erection of new 33/11 KV substations, 33KV, 11KV lines and capacitor banks are installed at overloaded feeders.

Recent 11KV feeder wise energy audit put on public domain revealed that the individual feeder losses are varying from 5% to 35% especially in the same area and consumer mix, the variations are abnormal, that means there is a specific problem in the area like rampant theft, metering issues etc, special task force with police personal shall be formed to handle problematic areas. Particularly colonies in rural areas, Slums, sensitive areas in towns these problems are much. In such areas Distribution Transformer wise energy audit shall be conducted to know the pit falls. However, Discoms shall come out with concrete plan to curb or minimize the commercial losses to same level in the same town.

It was noticed from the M/S CESS, tariff Appendix 3 form 3.2 that 11 KV line loss are increased in the year 2021-22 from 9.9 to 10.8, whereas shown less for FY-2022 to 23. without mentioning action plans to reduce.

V) Discount tariff or incentives for Energy efficient projects

Many organizations, including government bodies are planning for energy efficient projects to reduce their power consumption thus expenses on bills. Energy efficient projects taken up by the Commercial and Industrial consumers may affect the revenue, hence Discoms may not show interest. But this type of projects need to be encouraged in the larger interest of nation and as for BEE guidelines in line with the Energy conservation act-2003.

As such some discount in tariff or incentives are given to the consumers implemented proven energy efficient projects. Which, not only helps the EE projects more viable and also motivates the other consumers. For example, MuDSM, programs like energy efficient street light projects being implemented in Municipalities & Grama panchayats.

Loss of revenue to Discoms due to implementation of energy efficient projects need to be compensated elsewhere.

VI) TIME OF THE DAY TARIFF

Owing to non-availability of all categories of the power generation round the clock but demand varies abnormally in the morning and evening peak hours, for management of grid TOD tariff is being implemented in HT category. However, owing to increased penetration of renewable power like Solar, which is only available in the day time, grid management becoming difficulties are increasing. But as a policy RE power is being encouraged.

To handle the problem ToD tariff need to be extend for LT categories also. From the available data the maximum demand in LT industrial and commercial consumer put together is in the considerable range of several 1000 MVA's. Discoms shall workout on TOD tariff for high consumption industries and commercial consumers Hence, if TOD tariff is imposed, discoms can maintain peak load easily, besides getting additional revenue.

OTHER ISSUES

1) AADHAR CARD LINKAGE TO CONSUMER SERVICES

Primarily all public or private organizations are collecting Aadhar card for details for any service. Example: Telecom sector, LPG cylinder, Banking Income tax etc.,

If Discom updates consumer details by linking Aadhar card number of connections on single person are known, data will be most useful for identification of persons in case of default of bill payments which will reduce or the eliminate debts of consumers.

2) SMART METERS:

Installation of smart meters will help discoms for effective monitoring of consumptions and revenue, so as to reduce the AT&C losses. Presently smart (prepaid) meters are being installed for government services spread over entire Telangana, some places communication becoming a problem and obligatory to disconnect government public servicing organization. Hence, for effective utilization, performance evaluation, the smart meters need to be installed at the cities and towns for high value or consumption consumers in particular for Industrial and commercial consumers. All new connections at cities may be given with prepaid meters only. Further, consumers shall be allowed to procure prepared meters from the open market at their own cost, later these amount can be returned on installment basis through power consumption bills. So, that initial expenditure burden on discoms is relived.

3). RESEARCH AND DEVELOPMENT CENTER AT DISCOM LEVEL.

Research and development is a priority focus area in the power sector with the a mission for providing affordable quality power to each strata of the society as mentioned in the Ministry of power website.

Regular researches need to be conducted to develop better systems and adopting worldwide latest technologies in the field of power distribution. At national level under Ministry of power autonomous bodies like Central power research institute (CPRI), NTPC energy technology research alliance(NETRA) are exists. Similarly, at least an in house exclusive R&D center need to be established at Discom level. It is needness to mention here that the expenditure incurred for maintenance of R&D is exempted from taxes.

VIII). Finally we respectfully submit to the honorable commission that, our only intention is to encourage the renewable energy, use of energy efficient equipment or appliances and conservative methods to save energy, by making involvement of everyone in the nation's good cause of protecting environment.

In view of the larger interest, we pray honorable commission to look into the suggestions and the cause necessary directions to the Discoms for implementation.

Thanking you sir

Yours faithfully
(E. SRINIVASA CHARY)
CHAIRMAN,
ENERGY CONSERVATION MISSION, IEITSC
HYDERABAD

