

## **Agriculture Tariff 2003-04**

1. Majority of the population in AP directly depends on agricultural activities for their livelihood. Growth in production and productivity in agriculture has been responsible for the improved food security in the state. Thus, directly or indirectly agriculture in the most important issue touching every one's lives in AP.
2. Well irrigation mostly under electric pump sets account for 22.8% of the irrigated area under cultivation in Andhra Pradesh. Further most of this area is located in the droughtprone backward regions of Telengana and Rayalaseema. More than this while under the canal irrigation government met all the expenditure of setting up the infrastructure like constructing the dam and laying the canals under well irrigation it is the farmers who met the expenditure towards digging/drilling the well and installing the pump set running to nearly a lakh of rupees. Though it is still controversial one could say that agricultural power consumption accounts for one fourth (25%) of the total power consumption in the state which is quite high compared to Orissa (3.7%), Kerala (4.4%), West Bengal (12%) etc. This only goes to highlight the important role that well irrigation played in AP's economy. According to the still incomplete census of agricultural pump sets there are 20 lakh pump sets in the state and if we take that each pump set provides direct employment to five persons, more than one crore people are dependent on well irrigation. If we take in to account the indirect employment resulting from this and its linkage to different sectors of the economy well irrigation can be neglected only to the peril of the state economy. This critical role of well irrigation should be taken into account while deciding on the tariff to be paid by the farmers.
3. Farmers are also politically active and organised in AP. With all this, agriculture power has been projected as one of the major 'problem' areas in AP. Farmers are painted as villains and the agriculture power issue is said to have slowed down the pace of power reforms in the state. However, it is not fair to look at this issue in isolation. Aspects related to the overall performance of the utility, issues related to remunerative price for farm products (are there market mechanisms which assure the farmer a price which is cost plus?) and the crucial role of agriculture has to be considered while analysing the issue.
4. During each tariff hearing staff of the Commission is also making presentation on the tariff. At the time of hearings it is specifically mentioned that staff opinion should not be treated as the opinion of the Commission and that they are speaking as consumer representatives. It would be better to state also that they are not speaking on behalf of the consumers but an expert body who are speaking their mind out. This is to be specifically pointed out that as we observe most of the time the opinions of the staff are at variance with the consumers interests, particularly agricultural consumers.
5. Farmer needs:
  - a) Power supply when required for farming operation
  - b) Quality (Good Voltage) and reliable power supply

- c) Affordable tariff
  - d) Fresh connection when required after a reasonable wait time
  - e) Fast response to power breakdowns, and voltage fluctuations
6. Utility needs:
- a) Reasonable revenue from agriculture power supply - on time
  - b) Funds to provide supply, carry out efficiency improvement measures
7. Tariff
- a) There has been very poor response to APERC's offer of metered tariff (20 p/unit till 2500 units/year and 50p/unit later) for the agricultural pump sets. This is because of apprehension among farmers about the intention of installing meters for the agriculture pump sets. They fear that this is first step towards hiking the tariff beyond their reach. There were enough statements from different sources, particularly the World Bank and the state government about introduction of cost to serve based tariff over the period. In order to gain acceptance of the tariff stipulated by the Commission every step needed to remove this fear among farmers is to be taken. One of the steps could be to declare that this tariff would be in operation for a long period say 10 years. Another step could be linking agriculture tariff to cheaper sources of power.
  - b) The out-of-turn tatkal scheme (125p/unit) also received very limited response. Obviously, it is very high and except in emergencies no farmer will think about it. While cane crushing is charged 50 paise per unit and pisciculture and prawn culture are charged 90 paise per unit it is not proper to charge agriculture under tatkal at Rs 1.25 per unit. It should be modified to have a one time deposit and then energy tariff similar to normal scheme. (Similar to Gas connection/ Phone connection schemes etc for out-of-turn allotment). It is not fair to penalise the tatkal consumer forever with a high tariff.
  - c) Though the present ARR and Tariff Proposals present some information on cost to serve to different categories of consumers, method used to arrive at these figures is not made clear. Also, cost to serve to the total category of consumers is given but not on per unit basis. This shows that they have arrived at these figures working from backwards rather than based on any scientific method. In the case of agriculture cost to serve calculation should have taken into account the fact that it is not supplied during peak hours, is interruptible and is given at the time convenient to the utility.
  - d) In agriculture differential tariff is introduced on the basis of HP capacity. Per HP tariff for 5HP pump set is higher than 3HP pump set. This is on the same lines of domestic tariff where consumers using smaller units of power are assumed to be poor. But this analogy may not be applicable to pump sets. The pump set HP capacity is not related to the wealth or income of the farmer but the water availability. Lower the depth of the water table higher is the HP. Because of this there is need to remove this differential tariff and introduce uniform tariff.
8. Estimating Agricultural Consumption

- a) The volume of total agricultural consumption is one of the contentious issues in the tariff fixation. Debate has gone on for some time and but given the nature and quality of data/information made available in the present filings the issue is far from being resolved. Against 10000-12000 MU figures given by the utility, alternate figures of 5000-7000 MU have been projected by many consumer organisations. This issue was expected to be sorted out this time with the availability of agriculture pump set census data and DT metering data.
- b) Current ARR and Tariff Proposals show that in the case of some DISCOMs the agricultural census is still incomplete even after three years long exercise. This gives rise to many misgivings about the delay in completing the census. We feel that some sample set should be independently verified by farmers' associations and consumer groups to authenticate it.
- c) It is surprising to see that valid DT metering data is available for only few % of the total agricultural DTs in the DISCOMs. Until now all the DTRs on the agriculture feeders are not metered. Out of the metered DTRs regular readings are not taken for all of them. It was stated that regular readings were taken only for a sample of DTRs. How this sample is prepared is not made clear. One is not sure whether this sample represents the universe. It is no wonder that this sample study leads to amusing results. Based on these readings, the estimated growth rate and census data, DISCOMs have estimated agricultural power consumption. In CPDCL, the estimation (of 6893 MU) is higher than the prevalent value (4800 MU) and it has been arbitrarily limited to 4843 MU! LT loss of 5-9% has been assumed to arrive at the consumption estimates. This needs to be explained. DISCOMs need to clarify why the sample size is small even now and we feel that these readings have to be independently cross-checked.
- d) In all the ARRs and Tariff Proposals it was mentioned that because of severe drought power consumption has increased. But it should be otherwise. Because of declining water table many open and borewells are going out of use. This should lead to lower consumption. All the DISCOMs in their ARR and Tariff Proposals have mentioned that during current year (2002-03) because of lower hydel power generation APTRANSCO has allotted them lower quantum of power and in order to cope with this they in turn reduced power allotted to agriculture. Figures provided them show that higher power consumption in agriculture is wrong.

## 9. Metering

- a) The reform program had planned to achieve 100% metering of pump sets by 2003. What is the current target date? Utility has also been installing meters on the agricultural DTRs. What is the target date for completion of agricultural DTR metering?
- b) We feel that installing meters on all the pump sets is not going solve the problem of accounting agricultural consumption or improve revenue collection. This is because the utility does not have the resources to consolidate the bills and maintain the meters. At the same time, it is necessary to have a good estimate of the agricultural consumption, at least at a DTR level. This could be addressed by

- DTR metering. In addition to this, some mobile metering sets could be used to randomly check connections.
- c) Farmer cooperatives could be given the responsibility of managing the supply from the DTR. They could be given group incentives for reducing consumption, improving revenue collection etc. This may be a better idea than privatising distribution at the 33 kV substation level
  - d) Why DTR metering is not complete? Is it that intentionally it is being delayed?!

## 10. Supply Quality

- a) 9-hour supply is stated to be given in two phases. The Commission in its orders has specifically mentioned that if the Licensees want to supply power for more than 9 hours they should obtain its consent. But the fact is that they have supplied less than the allotted quantum. We do not know whether reduction in supply also needs the Commission's permission. There are widespread complaints of poor voltages and frequent interruptions. DT failure rates and motor burn-outs are high. With these, the farmer is paying a very high price for the power.
- b) Notwithstanding the problems faced by the farmers, this lower supply of power to agriculture should have led to lower subsidies/cross-subsidies. We would like to know whether this is accounted for in the filings for the year 2003-04.
- c) High Voltage Distribution System (HVDS) projects are being planned to improve voltage and reduce theft. We wish to know the experience of the HVDS project implemented in Nalgonda, Mahaboobnagar and other districts over the last few years. We feel that lessons from this experience should be incorporated in the ongoing projects. Farmers have to be taken into confidence to ensure success.

## 11. Efficiency Improvement

- a) Measures to improve efficiency have been suggested by the utility and a 3-year concessional (50%) tariff was announced. Since the efficiency improvement measures cost about Rs. 10,000/- per pump set the concessional tariff is not economically beneficial to the farmers and as a result there is no response to this from the farmers. Since the major beneficiary of efficiency improvement is the utility, it could take more initiative to implement them by meeting the expenditure towards these improvements. This will benefit the utility and lead to effectiveness of the incentives.

## 12. Others

- a) There should be more representatives from Farmers groups in the Commission Advisory Committee.
- b) Details of unauthorised connections normalised should be made available on request.
- c) Are the Tatkal scheme connections given to the fresh connections over and above the normalised ones according to the target set by the state government? The information provided in the ARRs show that this target is not fulfilled by any of the DISCOMs. This needs to be clarified.

TABLE: AGRICULTURE POWER DATA (TO BE COMPLETED)

	<b>Central</b>	<b>Eastern</b>	<b>Northern</b>	<b>Southern</b>	<b>Total</b>
No of pumpsets	867188	119567	722864	413973	2123592
Total HP	4362940	837814.5		2441995	
Average HP	5.03			5.89	
MU 2002-3	4843	1203	2743	2564	11353
MU 2003-4	4605		2734	2656	
Agr. DTs				16638	
Mnitred/Valid		3839/882	5289/2313	5244/1548	
KWh/HP/Yr	1580	1436		1037	
Revenue 2003				103.45	
Revenue 2004				106.68	
D.Loss 2003				21.22	
D.Loss 2004				19.43	
LT Loss		8		5	