CHAPTER - 7

TARIFF DETAILS

7.1 General

In this Section, the Commission has elaborated its views on several critical aspects of tariff determination, such as applicability of revised tariffs with retrospective effect, creation of regulatory asset, linkage of tariffs to cost of supply, reduction of cross-subsidies, tariff for agricultural consumers and hut service connections, etc. This is all the more important as this is the first Tariff Order being issued by the Commission, and all the stakeholders should be aware of the Commission's approach in determination of tariffs. This is in the interest of transparency as mandated by the ERC Act, and to fuel further debate on these issues, so that corrections can be undertaken after considering the views of all the stakeholders in the future tariff determination process.

7.2 Applicability of Tariff Revision

Section 59 of the ES Act entitles the TNEB to adjust its tariffs so as to ensure that the total revenues in any year of account shall, after meeting all properly chargeable expenses, leave the mandatory surplus of not less than 3% on its Net Fixed Assets. The TNEB has requested the Commission to issue the Tariff Order, such that the revised tariffs would be applicable for four months of FY03, from December 1, 2002. The TNEB has stated that if the entire revenue requirement were recovered in the four months, then it would entail huge increases in the tariffs. The TNEB has submitted that its intention is to minimise the rate shock to the consumers and maintain a smooth trajectory while maintaining sanctity of Section 59 of the ESA.

As regards the tariff revision for FY04, the TNEB has submitted the relevant data in its Tariff Application, though it has not explicitly asked for a tariff revision for FY04. It is implied, however, as the TNEB has asked for the tariff revision to be made applicable from December 1, 2002.

The Commission has given this issue serious thought, and has decided that there is no benefit in issuing the Tariff Order for revision in tariffs for only four months of FY03 (as petitioned) , and expect the TNEB to file another Tariff Petition for FY04. This would entail a lengthy public procedure and would also mean that the TNEB would not be able to implement the revised tariffs for FY04 from April 2003. Moreover, the issues related to the revenue requirement for FY04 have already been debated at length during the public hearings and through the objections submitted by the stakeholders, and thus, the due public process has already been completed for FY04 also. The Commission has hence determined the tariffs such that the revenue requirement for the entire FY04 and the balance period of FY 03 are recovered through the revised tariffs applicable for twelve and a half months, from March 16, 2003 to March 31, 2004.

The Commission thus rules that the revised tariffs would be applicable from 16th March 2003 to 31st March 2004, and till such further time as the TNEB does not approach the Commission for tariff revision. The Commission also directs that, henceforth, the TNEB should submit a Tariff Proposal for any financial year by the end of December of the previous financial year. In other words, the Commission expects the TNEB to submit a tariff revision proposal for FY 2004-05 before the end of December 2003, in case the TNEB desires to revise the tariffs for FY 2004-05.

7.3 Regulatory Asset

The TNEB has assessed the uncovered gap due to the delayed implementation of the tariff revision as Rs. 1714.6 crore in FY03. The TNEB has requested the Commission to consider the uncovered gap as a regulatory asset along with interest. The TNEB has justified the request stating that this mechanism while ensuring the interests of the TNEB would also ensure that the consumer interest is protected. The TNEB has proposed that the regulatory asset be amortized over a four to five year period or in a phased manner as decided by the Commission to seek recovery in an even manner from the consumers. TNEB has added that this mechanism allows the impact of the tariff increase to be spread over a period of time and hence prevent any rate shock to the consumer.

The TNEB has cited instances of other SERCs creating a regulatory asset, especially Haryana ERC, where 60% of the resultant revenue gap due to the prevailing below cost tariffs and due to late submission of tariff application was treated as a deferred cost, to be borrowed by the Licensee, and the interest thereon would be passed through in the revenue requirement of subsequent years.

The Commission is of the view that the TNEB must have been well aware of the revenue requirement for FY03 at the time of the previous tariff revision in December 2001. Also, if a Regulatory Asset is created and amortized over four to five years, then the revenue requirement in the succeeding years would increase further. The Commission has hence not created any Regulatory Asset.

7.4 Average Cost of Supply

The Commission has designed ARR Formats such that data regarding the voltage-level cost of supply is maintained by the TNEB, with the eventual aim of linking the tariffs to the voltage-level cost of supply, if not the category-wise cost to serve. The consumers will appreciate that the cost of supply at higher voltages will be lower than that at lower voltages, on account of the downstream distribution costs and the higher level of T & D losses at lower voltages. If the tariffs are determined in relation to the voltage level cost of supply, then the tariffs for the LT consumers will have to be increased substantially. Moreover, the level of cross-subsidy with respect to the average cost of supply is itself high. The Commission would also like to have more data and a more detailed analysis of the voltage level costs before arriving at the voltage level cost of supply.

The Commission is of the view that the tariffs should gradually approach the average cost of supply, and the Commission would attempt to eliminate the cross-subsidy in a period of five years. The Commission is of the view that considering the data availability, the average cost of supply method is the most suitable methodology for the present. The average cost of supply in FY03 and FY04 has been computed as shown in the Table below:

Table: Average Cost of Supply

(Rs/kWh)

Particulars	FY03		FY04	
	TNEB	TNERC	TNEB	TNERC
Projected Sales (MU)	37524	36726	41633	39458
Total Revenue Requirement (Rs. Crore)	12318.31	11696.8	13264.49	12133.12
Average Cost of Supply	**3.28**	**3.18**	**3.31**	**3.07**

The average cost of supply in FY04 is lower than that in FY03, on account of the fact that FY03 is a bad hydel year and the hydel generation is very low, resulting in increased power purchase from costlier sources.

7.5 Cross-subsidy Reduction

The Commission is committed to gradually reduce the cross-subsidies in the State over a five-year period, by increasing the tariffs applicable to the subsidised categories, viz. agriculture, domestic, Lift Irrigation Societies, power looms and Cottage industries, and reducing the tariffs applicable to the subsidising categories, viz. HT and LT industrial consumers, Railway Traction, HT and LT Commercial category, etc. However, the magnitude of the tariff revision required and the level of cross-subsidy is such that the Commission has been compelled to increase the tariffs for the subsidising categories also, in order to avoid tariff shock for the subsidised categories. The Commission has endeavoured to minimise the tariff increase for the subsidising categories while undertaking higher tariff increases for the subsidised categories. The category-wise sales and revenue from approved tariffs have been summarized in Annexure A. The category-wise increase in average realisation is shown in the Table below:

Table: Increase in Average Realisation

CONSUMER CATEGORY	AVERAGE REALISATION IN Rs/kWh			% INCREASE IN AVERAGE REALISATION
	EXISTING	TNEB PROPOSED	TNERC	
HT Industry	4.19	4.59	4.47	6.69
Railway Traction	4.62	4.62	4.47	-3.31
Educational Institutions	4.12	4.53	4.31	4.40
Public Worship	3.30	3.30	3.30	-
HT Commercial	5.43	6.23	6.21	16.37
Lift Irrigation	0.25	0.50	0.50	-
Supply to Pondichery	3.00	3.00	3.00	-
TOTAL HT CATEGORY	**4.31**	**4.73**	**4.61**	**7.14**
Domestic	1.79	2.29	2.18	22.13
Huts (Unmetered) *	0	10.00	10.00	-
Public Lighting & PWW	3.41	3.41	3.41	-
LT Educational Institutions	3.89	4.59	4.53	16.61
LT Public Worship	3.07	3.07	3.05	-0.51
Cottage Industries	2.39	2.62	2.56	7.13
Powerloom	2.17	2.17	2.17	-
LT Industries	4.07	4.70	4.48	10.20
IT Parks, IT industry	3.80	4.36	4.25	11.85
Agriculture (Unmetered) **		50.00	20.83	-
Commercial	4.83	5.83	5.80	19.96
Temporary supply	10.00	10.00	7.00	-
TOTAL LT CATEGORY	**1.94**	**2.47**	**2.31**	**19.30**
TOTAL HT & LT	**2.62**	**3.12**	**2.98**	**13.52**

Note : i) Average realisation includes fixed charges and energy charges.

ii) Average realisation numbers rounded of the nearest 2 decimals

iii) * - Flat rate tariff in Rs./Month

** - Flat rate Tariff in Rs./HP/Month

The above table shows that the Commission has attempted to increase the tariffs for the subsidised categories to a higher extent than that for subsidising categories.

The Commission is of the view that no consumer should be charged 50% more or less than the cost of supply and this goal is to be achieved in a period of three to five years. For categories such as agricultural and huts that are currently getting free supply, the period for achieving this target will have to be longer, as the gap to be bridged to achieve even 50% of cost of supply is much higher. Currently at lower consumption levels in respect of domestic, tiny industries and power loom consumers the tariff rates are below the 50% of the cost of supply. Likewise, commercial and temporary supply categories are paying more than 50% above the cost of supply. These rates would be adjusted accordingly in a phased manner within a period of three years. If necessary, high priced HT or LT higher slab rates would be decreased, if they exceed more than 150% of average cost of supply.

The domestic category is also being subsidised substantially, and the average realisation from domestic category with revised tariffs amounts to only 71% of the average Cost of Supply. The Commission has initiated the process of tariff reform, and the domestic tariffs will increase over a period of time. Consequently, the increase in tariffs for domestic category is bound to be higher than that for subsidising categories.

7.6 Rationalization of Categories

The TNEB has not proposed any rationalisation of categories and slabs in its Tariff Petition. However, the Commission is of the view that the number of categories and slabs should be reduced to the maximum possible extent, to simplify the administration of the tariff and reduce the confusion in the minds of the consumers. The Commission has done away with the concept of differential tariffs for metropolitan and non- metropolitan areas.

The TNEB has submitted that the differential tariffs were introduced to recover the additional costs of higher depreciation and interest on account of installation of underground cables in metropolitan areas as compared to overhead lines in nonmetropolitan areas. The TNEB has submitted that the consumers located in metropolitan areas should pay a higher tariff for the improved quality of supply in their area of supply. In response to a query from the Commission, the TNEB has clarified that underground cables have been laid only in the Chennai Corporation area. The extent of area covered by the Chennai Corporation is small compared to the area covered by Chennai Metropolitan area. The Commission has hence removed the concept of differential tariffs for metropolitan and non- metropolitan areas.

The Commission has also reduced the number of slabs in the domestic category to five, from the existing six slabs, by merging the 301 to 500 units slab and the above 500 units slabs. The Commission will further reduce the number of slabs in the subsequent tariff determination process. The Commission has merged the LT industrial category with the IT industry, by removing the restriction on lighting load. The Commission has also merged the Railway category with the HT industrial category, which will provide relief to the Railways.

7.7 Tariff for erstwhile free supply categories

7.7.1 General

This aspect is very sensitive and has aroused a lot of opinions, both, for and against, during the public hearings and there have also been several objections in this context. In subsequent sections, the Commission has discussed the tariff for the agricultural category and the hut service connections, in detail.

7.7.2 Agricultural Tariff

The TNEB has proposed a flat rate tariff of Rs. 600 per HP per year for unmetered agricultural connections and 50 paise/kWh for metered agricultural connections. A comparison of the prevailing agricultural tariffs in selected states where SERC's have issued Tariff Orders, is given in the following table :

Table : Agricultural Tariff across different states

State	Un-metered Category	Metered Category	
	(Rs/HP/year)	Fixed Charges (Rs/HP/month)	Energy Charges (paise/unit)
Andhra Pradesh			
upto 3 HP	275	0-2500 units/annum	20
3 HP to 5 HP	425	Above 2500 units/annum	50
5 HP to 10 HP	525		
Above 10 HP	625		
Karnataka	720	20	40
Maharashtra	1320	10	90
Punjab			
Without State Government Subsidy	2544		200
With State Government Subsidy	720		57
Madhya Pradesh			
upto 3 HP	2280		240
3 HP to 5 HP	2688		
5 HP to 10 HP	2760		
Above 10 HP	3216		
Orissa			160
Gujarat	1680	10	50
Rajasthan	1020		90
Uttar Pradesh			
Upto 5 HP	720	10	60
Above 5 HP	840		

Note : Based on the latest Tariff Orders issued by the respective SERC.

As can be seen from the above table, supply to agricultural consumers is being charged in all the States, and free electricity is not being supplied in any State. In Punjab, which till recently was supplying free electricity to farmers, the tariff has been levied at 57 paise/kWh after accounting for State Government subsidy of Rs. 1.43 per kWh of agricultural consumption.

The agricultural Tariffs in Karnataka and Uttar Pradesh are slightly higher than the Tariff proposed by the TNEB. In Andhra Pradesh, slabwise agricultural tariff are in force, with the lower slabs have flat rate tariff ranging from Rs. 275/ HP/Year to Rs. 525/HP/Year. In the other States, the agricultural tTariffs are much higher. Also, all the SERC's have implemented optional metered Tariffs till 100% metering is achieved. In view of the above comparison, it appears that the agricultural Tariff proposed by TNEB is quite reasonable.

The provisions of the ERC Act, which states that the tariffs should progressively reflect the cost of supply, bind the Commission. Further, the TNEB has to operate on commercial principles. The Commission is of the view that unless electricity is charged for, it will be difficult to inculcate the sense of conservation of scarce resources and the consumers will not manage and control their consumption. Uncontrolled consumption of electricity has contributed to the lowering of the water table and to avoid further deterioration in the water levels, the electricity consumption has to be controlled, to ensure that future generations are assured of their share of ground water. The consumers should also appreciate the fact that the fuel used for generation, viz. coal and gas are also scarce resources which do not come to the TNEB free of cost but are being paid for.

The State Government have indicated in their written submission that due to financial constraints, the Government is unable to provide revenue subsidy to TNEB from its budget. GoTN has requested the Commission to consider alternative means of ensuring that free electricity is continued for farm pumpsets and huts.

The Commission appreciates that the small farmer will be unable to pay substantial tariffs immediately, and the tariff increase has to be gradual. It should also be borne in mind that the supply availability to agriculture is restrictive as compared to other categories. Moreover the voltage profile for agricultural supply is also said to be poor to most of the services. Water table in many of the places in Tamil Nadu has gone down considerably and more energy is required to pump water. It is pertinent to note that, of the 29 districts in the State, all districts except Chennai are declared by the Government as drought hit. Under these extreme circumstances, the Commission is constrained not to concede the request of TNEB to charge the agricultural consumers at the rate of Rs 600/HP/ Annum. Considering all the above, the Commission has decided to introduce tariff for agriculture at the rate of Rs. 250 per HP per annum, for unmetered services or 20 paise per unit for metered services. In order to incentivise the consumers to opt for metered services the monthly minimum charge for metered services has been fixed at Rs.25. The billing cycle for agricultural consumers shall be half yearly, and the first bill will be raised at the end of September 2003.

7.7.3 Hut Service Connections

As stated earlier, the ERC Act provisions effectively does not permit free supply of electricity to any consumer category, and if the State Government wishes to subsidise these consumers, then it has to compensate the TNEB for the corresponding revenue loss. Moreover, the TNEB has itself stated that there have been instances of misuse/excess use of electricity from such free hut service connections. The Commission has hence accepted the TNEB's proposed tariffs of Rs. 10 per connection per month. If the consumption of the hut service connections is found to exceed the normative levels, then meters will be installed and domestic tariffs will be applicable as per the slab rates applicable for the domestic category.

7.8 Time of the Day Tariff

The TNEB is currently charging peak hour penalty of 20% for consumption during peak hours, viz. 0600 to 0900 hours and 1800 to 2100 hours, from the HT industrial category. However, there is no rebate for consumption during off-peak hours for these consumers. Rebate for night-time consumption is available for those HT industries that set up units in areas other than Chennai metropolitan area and operate during night shift only between 2130 to 0530 hours, to the extent of 40% for a period of seven months from July to January during the first five years of operation.

During the public hearings and in the objections/representations submitted to the Commission, several respondents have argued that the TNEB should give rebate for consumption during off-peak hours. The Commission is in agreement with this principle, as peak load flattening is essential. The TNEB has to create generation facilities to cater to the peak load and hence, any reduction in the peak load in the system will benefit the system.

However, as sufficient data is not available to assess the impact of this rebate, the Commission has provided a rebate of 5 % for HT industrial consumers for consumption during 2200 to 0500 hours, to begin with. The TNEB is directed to submit data on ToD consumption alongwith the subsequent Tariff Application for all consumers where ToD meters have been installed. Depending on the impact and response to the ToD tariffs, the Commission will modify the rates accordingly in the subsequent tariff revision exercise. The Commission will also consider extending the ToD tariffs to other categories depending on data availability and viability.

Consequent to the introduction of the above rebate for HT industrial services, the night-time rebate provision for new industries is discontinued with immediate effect. Industrial units who are already enjoying this benefit will continue to get the rebate till the completion of five years as specified.

7.9 Billing Demand

The billing demand definition in the existing tariff schedule specifies that the maximum demand charges for any month will be levied on the kVA demand recorded in that month or 100% of the sanctioned demand, whichever is higher. This provision effectively means that the Billing Demand is equivalent to the Sanctioned Demand. Several representations were received by the Commission to reduce the Billing Demand to 80% to 85% of the Sanctioned Demand. In other States, too, the Maximum Demand charges are levied on a percentage of the Sanctioned Demand (ranging between 75% to 80%). The Commission has hence changed the billing demand definition as “Maximum demand charges for any month will be levied on the maximum kVA demand recorded in that month or 90% of the sanctioned demand, whichever is higher”.

7.10 Metering

The TNEB has stated that it has implemented 100% metering for all consumers except those in the farm sector and huts, and all new agricultural connections and huts are being metered from 1st July 2002. The TNEB has also submitted that the defective meters are being replaced within the same billing cycle, and there are no pending defective meters to be replaced. The Tariff Petition was silent on the timeframe and approach to meter agricultural category and huts. In response to the specific queries raised by the Commission, TNEB has submitted that it has targetted to achieve an ambitious task of metering all the unmetered connections within a period of three years. The Commission appreciates that this task is substantial and directs TNEB to submit a detailed metering plan and periodical progress every quarter from 1-7-2003.

7.11 Bulk Supply Consumers

The Commission is of the view that bulk consumers taking bulk supply at single point, including defence establishments, residential complexes, police quarters, plantation workers quarters, etc. should be encouraged as the TNEB's losses will reduce and the TNEB is also saved of the metering, billing and collection expenditure for the individual consumers. Several States have given a rebate on the bill amount while some States have maintained that the consumption of such bulk consumers should be divided by the number of households within the complex to enable the consumer to avail of the benefit of the slab system.

Such domestic bulk supplies fall under three groups viz., (a) Those who avail HT supply for predominantly domestic loads and distribute the supply within their area, (b) Those who avail HT supply for industrial purpose and also extend the LT supply to their residential areas and (c) Those who avail domestic LT three phase bulk supply and distribute within their area for the quarters, etc.,

The problem experienced by the first group(a) is that they are charged under HT tariff III (applicable for Commercial) since HT supply to domestic is an uncovered category in the HT tariff. Commission is fully convinced that it is not justified to charge the domestic consumption under a commercial rate simply because there is no such category under HT tariff. This problem is mainly for the defence establishments. Since the number of such cases is too small to be considered for creation of a separate tariff category and in as much it is a Governmental establishment, it has been decided to bring this category under the existing HT category II-A .

As for the second group (b), the HT supply comes under HT tariff I-A. However the domestic consumption within their area is measured seperately as LT three phase bulk supply and charged under LT tariff I-A. The problem is that , being a bulk supply under a single meter , the consumers cannot enjoy the slab concessions available if separate supply is availed directly from TNEB for each house. Again such cases are limited to railway colonies , tea plantations, etc., Considering the overall objective of the Commission that all the tariffs should henceforth be sustainable with at least the average cost, it is decided that the domestic bulk consumption under such HT categories shall henceforth be charged under the newly introduced LT Tariff IC.

The third group(c) is simply the LT bulk supply consumers who avail three phase bulk supply at LT under tariff I-A such as Police Quarters and distribute the same within their area. Their concern is mainly the loss of concessional slab rates available if separate supply is availed directly from TNEB for each house. Since this group is mainly of Police Quarters, which is a Government department, they are proposed to be brought under a notified category and charged under the LT tariff I C.

7.12 Penalty for HT Services taking Supply at Lower Voltage

The existing penalty of 10 p/kWh for HT consumers whose sanctioned demand exceeds 5000 kVA and who do not avail supply at the specified voltage, has been extended to all HT consumers who do not take supply at HT voltage.

7.13 Surcharge for Arc Furnaces

In the existing tariff schedule, High Tension industries under Tariff I-A having arc furnaces are being charged 25% extra to the High Tension Tariff I-A for the electricity consumption. This additional charge is on account of the harmonics created by the rectifiers used by the arc furnaces. The Commission has modified this clause in the Tariff Schedule and these arc furnaces will now have to pay additional energy charges of 15%, on the base HT I-A tariffs. Further, the Commission is of the opinion that this extra charge should be levied only till such time as the harmonics are created by such industries. These industries and TNEB would be well advised to study remedial measures available to rectify the situation. If such remedial measures are adopted by the industries / TNEB , then this surcharge has to be reviewed.

7.14 Power Factor Incentives and Penalties

The existing tariff structure provides for the levy of a Power Factor (PF) surcharge for all HT consumers, at the following rates:

Below 0.90 lag and upto 0.85	1% of the current consumption charges for every reduction of 0.01 in power factor from 0.90
Below 0.85 to 0.75	1.5% of the current consumption charges for every reduction of 0.01 in power factor from 0.90
Below 0.75	2% of the current consumption charges for every reduction of 0.01 in power factor from 0.90

The current consumption charges include the demand charges and energy charges at notified rates, excluding concessions, if any.

Several representations have been received for a corresponding rebate to be extended for HT consumers having PF above 0.9. In other States, too, the PF incentive is extended to units having PF above 0.95. The Commission has provided for a PF rebate at 0.5% of the current consumption charges for PF above 0.95, for every increase of 0.01 in PF above 0.95. In line with the above, the LTCT industrial services under LT tariff III-B with a connected load of 75 HP and above are also covered under the power factor incentives and penalty. It is proposed to introduce power factor penalty as well as the incentive for all industrial services under the bracket of 25 HP to 75 HP also. Since all such services may not have the power factor measurement facility through electronic meters, TNEB is being directed to install such meters within a period of three months from the effective date of this order and then introduce the incentive / penalty suitably as per the tariff schedule.

In fact, as per the TNEB's Terms & Conditions of supply, all LT services , when using a motive load of 3 HP and above should install a power factor improvement capacitor of suitable rating and henceforth use only ISI marked motors for new services. Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

7.15 Railway Tariffs

The Commission has restored the original category (prior to the changes made in GO Ms 95) for the HT supply for traction by merging the existing HT Tariff IB with HT Tariff IA. Their grievance on the domestic consumption rates is almost solved by notifying them to come under the newly introduced notified LT Tariff IC for such bulk consumption to domestic purposes.

7.16 Directives

The Commission wishes to place a record its appreciation of the consistent and sustained efforts taken by the TNEB to reduce the T&D Loss, and cut its costs in various areas of activities and in general to improve the efficiency of the operations not only in the Headquarters but also down to level in the Regions and Circles. However the TNEB, the Commission is sure , would not like to rest on past laurels. Therefore the Commission has decided, to issue the following directives to help the TNEB reach greater heights in its performance.

i. Submission of ARR and Tariff Proposal

The Commission directs that, henceforth, the TNEB should submit the Tariff Proposal for any financial year by the end of December of the previous financial year. In other words, the Commission expects the TNEB to submit a tariff revision proposal for FY 2004-05 before the end of December 2003, in case it desires to revise tariffs for FY05. Also, henceforth, a Tamil Version of the tariff proposal has to be submitted along with the English version to the Commission as well as made available to the public.

ii. Metering

All services should be metered, including huts and agricultural services. The TNEB is directed to complete hundred percent metering within three years as committed by them. Moreover, all new connections are to be issued on metered basis only.

The TNEB is directed to submit a Master Metering Plan (MMP) for the approval of the Commission, within three months from the date of issue of this Tariff Order. The MMP should clearly state the number of un-metered consumers in each category, the average number of defective meters, the number and type of meters that are planned to be installed each year, and the area-wise and category-wise targets for completion of the metering programme. In this context, TNEB shall also submit a periodical progress for every quarter starting from 1-7-2003.

TNEB, in its reply dated 5-3-2003, to some specific queries of the Commission on the metering plan, have submitted that additional investments have to be made in FY04 to meet the requirement of 100% metering. The Commission will consider this additional investment if TNEB factors the interest component on such additional capital investments in the next tariff revision, provided significant progress is achieved by TNEB in the metering programme.

iii. Energy Audit

The Commission is of the opinion that the TNEB should be able to assess the transmission and distribution losses in each of the voltage systems of the Grid. Towards this, the TNEB is directed to improve the level of metering and conduct more energy audits at the 11 kV feeder level. The Commission directs the TNEB to undertake energy audits at the HT/LT levels and its own generating stations and submit a quarterly report to the Commission on the progress achieved in the energy audit programme, the results of the energy audit, and the action taken report highlighting the action taken by the TNEB to rectify the situation. Towards the assessment of LT line losses, the Commission has taken note of the two consultancy works in progress under the World Bank assisted Water Resources Consolidation Project. The results should be submitted to the Commission and the follow up should be completed well before the next tariff petition.

iv. T&D Losses

Lot of concern has been voiced on theft of energy by the representatives of all Consumer groups.

The Commission’s ruling on losses has already been outlined in Chapter 2 in detail.

The TNEB should put in greater efforts to prevent the theft of electricity by illegal means such as hooking, tampering of meters, etc. through more rigorous vigilance drives. The TNEB should also take strict action against the erring employees who are found conniving with the consumers to deprive the TNEB of its rightful revenue. The TNEB is also directed to implement a suitable scheme for rewarding the people who inform the TNEB regarding theft of electricity and violation of the Conditions of Supply taking place. The reward could be structured as a percentage of the additional revenue assessed by the TNEB, rather than the actual collection by the TNEB against the revised assessment.

The TNEB should concentrate its efforts on theft-prone areas as well as on consumer categories having higher tariffs to ensure that the investment and effort on vigilance and enforcement drives results in more than commensurate benefits to the TNEB.

The Commission takes on record the action plan of TNEB for FY04 to peg the T&D loss and directs that this plan should be scrupulously implemented without any omission and quarterly progress on loss levels and action taken to reduce the losses should be submitted to the Commission with effect from 1-7-2003.

v. Quality of Supply

The Commission is fully convinced that if the quality of supply and a good customer service/ relation are maintained, the consumers will not mind paying a higher price. Now that the tariff is revised with an assured 3 % surplus, it is for the TNEB to ensure quality of service and customer satisfaction. In this context the following directions are issued:

a) TNEB shall immediately initiate discussions with the Commission and evolve a format for quality assessment to reveal the quality of supply through parameters such as reliability index on feeder availability, voltage / frequency excursions over a period, loss of load, etc., and submit the same to the Commission every quarter.

b) TNEB shall evolve (if needed through a Consultant) a strategy for bringing about a positive change in the attitude of its employees and submit a detailed proposal to the Commission within three months.

c) Submit an action plan to release the overloaded distribution transformers in each circle by installing additional transformers and achieve the failure rate bench mark of 6%.

vi. Performance Benchmarking

- The TNEB has received ISO 9002 certification for its NCTPS. The Commission directs that action may be taken immediately to bring all the Thermal Generating Stations of TNEB under ISO 9001 within one year. Further, the TNEB should also streamline the operations of its Transmission and Distribution wing and initiate action to obtain ISO9001 certfication for its T & D wings. To start with, the TNEB should identify atleast 1 circle in each region and obtain ISO 9001 certification for these circles within 2 years.

- The Commission has set performance benchmarks for TNEB's generation parameters such as PLF, auxiliary consumption, heat rate, etc. and has allowed generation costs accordingly. The Commission directs the TNEB to strive for further improvement in the efficiency parameters of the generating stations. Moreover, the TNEB should ensure that there is no slippage in the performance, once the expected level of efficiency is achieved.

- TNEB has to adopt an integrated approach of cost per useful heat value (UHV) in the procurement and usage of coal in various thermal stations. The Commission has taken note of the efforts taken by TNEB to reduce the transportation cost. The savings due to mechanization of coal handing systems, availability of exclusive berth at Ennore Port, improved facilities at Paradip Port, usage of higher capacity vessels etc., has not been distinctly reflected in the fuel cost for FY04. This has to be quantified in the next tariff proposal.

- The Commission directs the TNEB to explore the use of imported coal for power generation purposes in order to optimize the cost of thermal generation. The pros and cons of usage of imported coal vis-à-vis indigenous coal for power generation may be juxtaposed to explore whether usage of imported coal would be technically feasible and economically viable.

- The TNEB is directed to explore the feasibility of using washed coal in its thermal plants to reduce the ash content.

- The TNEB should strive to reduce the number of employees per m.u. generated and per 1000 consumers to levels lower than the national average of 2.53 employees per mu of sale.. During the public hearings, consumers complained that TNEB is top-heavy and there is insufficient manpower deployment at the field level. TNEB should conduct a manpower audit in all areas of operation to rationalize and redeploy its manpower such that the quality of supply and service is improved.

vii. Power Purchase Cost

Many objectors have vociferously expressed and criticized TNEB about the high cost of power purchase from IPPs. GoTN, in the "White Paper" on the Tamil Nadu Government's finances placed on the floor of the Legislative Assembly, have stated that "*The unreasonably high cost of purchasing electric power from IPPs in the Private Sector has made a serious dent in the TNEB's finances. The Board now proposes to renegotiate its power purchase cost with the Private Sector IPPs " .*The Commission directs the TNEB to explore all possible options with concerned IPP generators at the earliest in order to optimise the cost of power purchase from IPP sources under the existing low interest regime. The TNEB should also strictly follow the principle of merit order despatch in its power procurement process.

viii. Management Information Systems

The TNEB is directed to maintain consumption and revenue data strictly as per the slab-wise tariff categories, to enable more accurate estimation of the revenues.

The TNEB is directed to submit data on ToD consumption alongwith the subsequent Tariff Application for all consumers where ToD meters have been installed.

The Commission has taken note of the sample MIS formats of TNEB for the performance analysis of Generation and Distribution circles and directs TNEB to evolve a consolidated and comprehensive Performance Assessment Format by including the benchmarks, action taken to overcome the shortcomings, etc. This will be a quarterly review and will commence from 1-7-2003.

ix. Demand Side Management

The Commission has taken note of the Demand Side Management (DSM) initiatives of TNEB. Instilling consumer awareness is the main factor for success in this area. TNEB is therefore directed to

(a) Submit a report within three months an action plan to create awareness on DSM measures through road shows, TV serials/ advertisements, posters, meetings, incentives, etc.,

(b) Submit a report within three months on the feasibilities of enforcing the DSM measures for all the HT industrial and commercial consumers.

(c) The TNEB should propagate the use of energy efficient devices such as Compact Fluorescent Lamps, etc. and Agricultural pumpsets and capacitors having ISI labelling.

x. Billing and Collection

The Commission directs TNEB to consider innovative methods such as spot billing, opening of more collection centers, authorizing more agencies such as Banks and Post Office etc., to collect payments to reduce the billing and collection cycle, thus improving the cash flows. These methods have already been implemented in several other States. There have been representations that TNEB should arrange holiday collection centers at strategic locations in urban areas. TNEB has to examine the request and implement the same, if feasible, within six months. TNEB may consider introduction of the Voluntary Deposit Scheme akin to the scheme offered by the Mahanagar Telephone Nigam in Mumbai, wherein the consumers have the option to pay a specified amount in advance against their future bills as a deposit. The TNEB can deduct the bill amount from the deposit, while paying interest on the balance amount.

TNEB is also directed to submit an action plan for Computerization of LT billing in all Municipal Corporations (Urban area) within one year.

xi) Reforms and Restructuring

The TNEB is directed to discuss with the GoTN, the feasibility of reforming and restructuring the TNEB, to introduce competition and improve the operational efficiency. As a first step, the concept of profit centers /Strategy Business units can be introduced, for better accountability and a sense of competition. Subsequently the feasibility of unbundling can be assessed.

xii) Quantification of Efficiency Measures

TNEB has proposed some efficiency measures, however, it has not quantified the savings in concrete terms. The Commission has included the impact of efficiency improvement in different areas such as Generation, Power purchase and interest expenditure, etc., which have been discussed at length in the respective sections. TNEB is directed to come out with specific proposals within six months, indicating the effective savings for FY04. Similarly, the next tariff proposal should clearly indicate this item separately in the ARR.

xiii) Consumer Grievances

TNEB has stated that it intends to set up a "Call Center" with a Toll Free 4 digit telephone number, to enable consumers to register their complaints over the telephone. This is a very good step, and the TNEB is directed to implement this at the earliest and ensure that enough staff is made available to handle the complaints received. TNEB is directed to made available "Consumers Grievance Forms" along with the service connection Application forms.

xiv) Materials Management

The TNEB should draft a Materials Management Manual for its Generation, Transmission and Distribution wings, to ensure that only the required level of inventory are maintained.

xv) Resolution of Court Cases

The TNEB is directed to take all efforts for speedy resolution of the pending court cases so that its revenue dues are recovered speedily.

TNEB is also directed to comply with the directives that have been noted in the rulings of Commission under various sections of this Order but have not been explicitly mentioned here.

7.17 Tariff Schedule

Part 1 : High Tension Supply

1.0 General Provisions applicable for High Tension Supply

i.) Any High Tension Supply involving a sanctioned demand above 5000 KVA plus 2 percent marginal adjustment shall be given supply only at 33 KV, if available in the area or at EHT voltage,

ii.) In the case of existing High Tension Consumers whose sanctioned demand exceeds 5000 KVA and who do not avail supply at the voltage indicated in item (i) they shall be charged an extra levy of ten paise per KWH over and above the normal tariff, for the entire energy consumed. This extra levy is applicable to all categories of HT consumers till they avail supply at the specified voltage

iii.) Power Factor / Low factor surcharge:- In respect of High Tension Service connections, the average power factor of the consumers installation shall not be less than 0.90 lag. Where the average power factor of High Tension service connection is less than the stipulated limit of 0.90 lag, the following compensation charges will be levied.

Below 0.90 lag and up to 0.85	One percent of the current consumption charges for every reduction of 0.01 in power factor from 0.9
Below 0.85 to 0.75	One and half per cent of the current consumption charges for every reduction of 0.01 in power factor from 0.90
Below 0.75	Two per cent of the current consumption charges for every reduction of 0.01 in power factor from 0.90

iv.) **Incentive for High Power Factor :** Wherever the power factor of HT services exceeds above 0.95, a Power Factor rebate at 0.5% of the amount of current consumption charges for every increase of 0.01 in PF above 0.95 shall be allowed

Note: Current consumption charges include the charges of recorded demand and the energy charges at notified tariff rate excluding concessions, if any.

v.) Billable Demand: In case of two part tariffs, maximum Demand Charges for any month will be levied on the KVA demand actually recorded in that month or 90% of the sanctioned demand whichever is higher.

vi.) In the case of supply under HT Tariff IA, II A, and III, the use of electricity for bonafide purpose of lighting, heating and power loads in the residential quarters within the premises shall be metered separately by the consumers taking HT supply and paid to the Board at LT Tariff II A. The units shall be deducted from the total number of units registered in the main meter of HT supply for billing purposes.

2.0 High Tension Tariff I-A

Tariff Category	**Rate in paise per kWHr (unit) – Energy Charges**	**Rate in rupees per KVA of Maximum Demand**
HT Tariff I-A	**350**	**300**

i.) This tariff is applicable to all the industrial establishments and registered factories which includes tea estates, textiles, fertilizers, steel plant , heavy water plant, chemical plants, software industries, maintenance, training and service institutions. From now on, this tariff is also applicable to Railway traction. In view of the merger of existing tariff of Railway Traction I-B with that of I-A tariff , the HT tariff category I-B is abolished.

ii.) New High Tension Industries set up from now on shall not be eligible for any tariff concession such as night shift concession etc., except as otherwise specified by the Commission. However, the existing industrial units that are already enjoying the concession will continue to avail the concession till the completion of the existing tariff concession period.

iii.) If the consumer availing himself of HT supply under HT I A does not for any reason utilize the power load for more than 30 days, then the current consumption charges for the power utilized and the service for lighting and non-industrial purposes shall be billed under HT III.

iv.) The HT Industrial consumers (HT IA) shall be billed at 20% extra on the energy charges for the energy recorded during peak hours. The duration of peak hours shall be 6.00 A.M. to 9.00 A.M. and 6.00 P.M. to 9.00 P.M.

v.) The HT Industrial Consumers (HT I A) shall be allowed a reduction of 5% on the energy charges for the consumption during 2200 to 0500 hrs as an incentive for night consumption. This concession shall however be not applicable to those industries which are availing night shift concession, until the tariff concession period is over.

vi.) The consumption of electrical energy by the HT Industrial Consumers under HT I A having Arc furnaces will be charged an additional energy charge of 15% on the HT I A tariff .

vii.) For the High Tension Industries under Tariff I A, having arc or Industrial furnaces or steel rolling process, the integration period for arriving at the maximum demand in a month will be adopted fifteen minutes.

3.0 High Tension Tariff II-A

Tariff Category	Rate in paise per kWHr (unit) – Energy Charges	Rate in rupees per KVA of Maximum Demand
HT Tariff II-A	350	200

i.) This tariff is applicable to recognized educational institutions, hostels run by the recognized educational institutions, Government Hospitals and the hospitals under the control of Panchayats, Municipalities and Corporations, Veterinary hospitals, Leprosy Centre, Primary Health Centre, Orphanages, Public Libraries, Water Works, Public Lighting, Public Sewerage Works by Government / Local Bodies, Laboratories, Research Institutions, Studios, Cinema Theaters, Ministry of Defense Establishments, Housing complexes and such other institutions declared by the Commission from time to time.

ii.) If the HT consumer under this category needs to extend LT supply within their area of operation for any commercial purposes, they have to inform TNEB suitably and separately meter such consumption and pay at the applicable LT Commercial tariff.

4.0 High Tension Tariff II-B

Tariff Category	Rate in paise per kWHr (unit) – Energy Charges	Rate in rupees per KVA of Maximum Demand
HT Tariff II-B	280	125

i.) This tariff is applicable to actual places of worship and specially notified places of public interest, mutts, religious institutions etc., declared by the Commission from time to time.

ii.) If the HT consumer under this category needs to extend LT supply within their area of operation for any commercial purposes, they have to inform TNEB suitably and separately meter such consumption and pay at the applicable LT Commercial tariff.

5.0 High Tension Tariff III

Tariff Category	Rate in paise per kWHr (unit) – Energy Charges	Rate in rupees per KVA of Maximum Demand
HT Tariff III	**500**	**300**

i.) This tariff is applicable to all Commercial Establishments and other categories of consumers not covered under HT tariffs I-A, II-A, II-B, IV and V.

ii.) Industries requiring HT supply during construction period shall be charged under this tariff

6.0 High Tension Tariff IV

Tariff Category	Rate in paise per kWHr (unit) – Energy Charges	Rate in rupees per KVA of Maximum Demand
HT Tariff IV	**50**	**Nil**

i.) This tariff is applicable to the Lift Irrigation Societies for agriculture which are registered with the Registrar of Co-Operative Societies or under any other Act.

7.0 High Tension tariff V

Tariff Category	Rate in paise per kWHr (unit) – Energy Charges	Rate in rupees per KVA of Maximum Demand
HT Tariff V	**300**	**Nil**

i.) This is an exclusive tariff for sale to the State of Pondicherry

Part 2 : Low Tension Supply

1.0 Low Tension I-A :

Tariff	Consumption Slabs – Range in kWHr (Units) and billing period (one or two months)	Energy Charges in paise/kWHr	Fixed charges Rs./Month	Monthly Minimum in Rupees
LT Tariff I-A	From 0 to 25 units per month (or) 0 to 50 units for two months	110	0	20 per month (or) 40 for two months
	From 26 to 51 units per month (or) 51 to 100 units for two months	130	0	
	From 51 to 100 units per month (or) 101 to 200 units for two months	260	5	
	From 101 to 300 units per month (or) 201 to 600 units for two months	350	5	
	From 301 units and above per month (or) 601 units and above for two months	475	5	

This tariff is applicable generally for domestic purposes of lights and fans including radio / TV and other home appliances. This tariff is also applicable to the following category of services

a) Handloom in the residences of handloom weaver (regardless of the fact whether outside labor is employed or not) and to handlooms in sheds where energy is availed only for lighting and fans.

b) Public Convenience maintained and run by the local bodies and by such other organizations.

c) Community Nutrition Centers and Block Offices of Tamil Nadu Integrated Nutrition Projects.

d) Anganwadi Centers, Nutrition Meal Centers and School buildings associated with Government Welfare Schemes.

e) Consulting Rooms attached to the residences of professionals such as Doctors Clinics without any in-patient beds, Chartered Accountants,Lawyers and also to Goldsmiths whose work is limited to manual labor.

f) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

2.0 **Low Tension Tariff I-B**

Tariff	**Description**	**Energy Charges in paise/kWhr**	**Fixed charges Rs./Month**	**Monthly Minimum in Rupees**
LT Tariff I-B	Till installation of Energy Meter .	Rs.10 /Month		
	On Installation of Energy Meter	50	Nil	10 per month (or) 20 for two months

i.) The Billing and collection for the newly introduced tariff for Hut services shall be once in 6 months .Accordingly, the first collection shall commence from September 2003.

ii.) This tariff is applicable to huts in village panchayats, houses constructed under Jawahar Velai Vaaipu Thittam, TAHDCO and Kamarajar Adi-Dravidar housing schemes and huts in town Panchayats in Kanyakumari District alone.

iii.) Hut means, a living place not exceeding 200 square feet area with mud wall and thatched roof.

iv.) Only one light not exceeding 40 watts shall be permitted per hut.

v.) Whenever the norms prescribed in (i) to (iii) above are violated, the service category shall be immediately brought under Low Tension Tariff I-A and billed accordingly.

3.0 Low Tension tariff I-C

Tariff	**Energy Charges in paise/kWHr**	**Fixed charges Rs./Month**	**Monthly Minimum in Rupees**
LT Tariff I-C	350	Nil	50 per month (or) 100 for two months

i.) This tariff is applicable to the LT bulk supply for railway colonies, plantation worker colonies, defense colonies, Police Quarters and other notified categories as decided by the Commission from time to time .

ii.) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB’s terms and conditions.

4.0 **Low Tension tariff II-A**

Tariff		**Energy Charges in paise/kWHr**	**Fixed charges Rs./Month**	**Monthly Minimum in Rupees**
LT Tariff II-A	Village/Town Panchayat	340	Nil	50 per month (or) 100 for two months
	Municipality/ Corporation	350	Nil	50 per month (or) 100 for two months

i) This tariff is applicable to Public Lighting, Public Water Supply and Public Sewerage System belonging to Village / Town Panchayats, Township areas, Municipalities, Municipal Corporations, TWAD Board.

ii) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

5.0 Low Tension tariff II-B

Tariff	**Energy Charges in paise/kWHr**	**Fixed charges Rs/Month**	**Monthly Minimum in Rupees**
LT Tariff II-B	440	20	50 per month (or) 100 for two months

(i) This tariff is applicable to recognized educational institutions, hostels run by recognized educational institutions, hostels run by the Adi-Dravidar and tribal welfare and backward class welfare departments, Government Hospitals and the hospitals under the control of Panchayat Unions, Municipalities and Municipal Corporations, Veterinary hospitals, Leprosy Centre, Primary Health Centre, Health sub centers, Destitute home, Old age homes, Orphanages, Public Libraries, Laboratories, Research Institutes, Studios, Cinema Theaters, flood lighting arrangements at Rockfort temple and such other institutions declared by the Commission from time to time.

(ii) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

6.0 Low Tension Tariff II-C

Tariff	**Energy Charges in paise/kWHr**	**Fixed charges Rs./Month**	**Monthly Minimum in Rupees**
LT Tariff II-C	300	10	50 per month (or) 100 for two months

i.) This tariff is applicable to actual places of public worship.

ii.) The existing concessions to the actual places of worship having annual income less than Rs 1000 shall be continued under the same terms and conditions until further orders of the Commission.

iii.) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

7.0 Low Tension Tariff III- A (1)

Tariff	Consumption Slabs – Range in kWHr (Units) and billing period (one or two months)	Energy Charges in paise/kWh	Fixed charges Rs./Month	Monthly Min. in Rupees
LT Tariff III-A(1)	From 0 to 250 units per month (or) 0 to 500 units for two months	180	30	60 per month (or) 120 for two months
	From 251 to 750 units per month (or) 501 to 1500 units for two months	270	30	
	From 751 and above for one month (or) 1501 and above for two months	310	30	

i.) The tariff is applicable to Cottage and Tiny industries , small Gem Cutting units, Sericulture and Floriculture, where the connected load does not exceed 10 HP.

ii.) Supply to welding sets has to be classified under Low Tension Tariff III-B.

iii.) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

8.0 Low Tension Tariff III-A (2)

Tariff	Consumption Slabs – Range in kWHr (Units) and billing period (one or two months)	Energy Charges in paise/kWHr	Fixed charges Rs ./Month	Monthly Minimum in Rupees
LT Tariff III-A(2)	From 0 to 250 units per month (or) 0 to 500 units for two months	140	30	60 per month (or) 120 for two months
	From 251 to 750 units per month (or) 501 to 1500 units for two months	225	30	
	From 751 and above for one month (or) 1501 and above for two months	250	30	

i.) This tariff is applicable to power looms and related ancillary tiny industries engaged in warping, twisting and winding.

ii.) The connected load shall not exceed 10 HP under this category.

iii.) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions.

iv.) The ancillary industries of Power Looms which are engaged in warping , Twisting & winding , are brought under Tariff III(A)-2

9.0 Low Tension Tariff III-B

Tariff	Consumption Slabs – Range in kWHr (Units) and billing period (one or two months)	Energy Charges in paise/kWHr	Fixed charges Rs./Month	Monthly Minimum in Rupees
LT Tariff III-B	From 0 to 750 units per month (or) 0 to 1500 units for two months	400	30	100 per month (or) 200 for two months
	From 751 and above for one month (or) 1501 and above for two months	470	30	

i.) This tariff is applicable to all industries not covered under LT Tariff III-A(1) and III-A(2)

ii.) Supply to welding sets shall be charged 15% extra

iii.) The lighting load restrictions under this category is removed and the IT industries are brought under this category

iv.) The Alternative two part tariff of III-B is withdrawn and the services presently under that tariff are to be brought under this tariff classification.

v.) All Low Tension services under this category and with a connected load of 25 HP and above , should maintain a power factor of not less than 0.85 lag. Where the average power factor of Low Tension service connection is less than the stipulated limit of 0.85 lag, the following compensation charges will be levied.

Below 0.85 lag and up to 0.75	One percent of the current consumption charges for every reduction of 0.01 in power factor from 0.85
Below 0.75	One and half per cent of the current consumption charges for every reduction of 0.01 in power factor from 0.85

Incentive for High Power Factor: Wherever the power factor exceeds above 0.90, a Power Factor rebate at 0.5% of the amount of current consumption charges for every increase of 0.01 in PF above 0.90 shall be allowed.

Note: The penalty for low power factor and the incentive for better power factor as specified above shall come into force along with the tariff revision for all the LT-CT services with a connected load of 75 HP and above. Since other services under the bracket of 25 HP to 75 HP may not have the power factor measurement facility through electronic meters, TNEB have to install such meters within a period of three months from the effective date of this order and then introduce the incentive / penalty suitably as per the tariff schedule.

10.0 Low Tension Tariff IV :

Tariff	**Description**	**Energy Charges in paise/kWHr**	**Fixed charges Rs./Month**	**Monthly Minimum in Rupees**
LT Tariff IV	Till installation of Energy Meter .	Rs.250 per HP per Annum		
	On Installation of Energy Meter	20	Nil	25 per month (or) 50 for two months

i) The Billing and collection for the newly introduced tariff for Agriculture services shall be once in 6 months .Accordingly, the first collection shall commence from September 2003.

ii) This tariff is applicable for the agriculture and the Government Seed Farms.

iii) This tariff is applicable irrespective of whether the land is owned or leased, if the usage of electricity is for agriculture and the usage is restricted to the owned / leased area.

iv) All the new services under this category shall have ISI marked motors and power factor compensation capacitors to qualify for the supply. All the existing services should be provided with power factor compensation capacitors within one year. Non-compliance to provide the capacitors shall invite compensation charges as per the existing terms and conditions of TNEB.

v) The services under this tariff shall be permitted to have lighting loads up to 50 watts per 1000 watts of power connected subject to a maximum of 150 watts inclusive of wattage of pilot lamps. Lighting the farm or the field around the pump sets should be through energy saving compact fluorescent lamps only. Extra lighting over and above the limit and for uses other than lighting shall be through a separate service under LT Tariff V only.

vi) Agriculturists shall be permitted to use the water pumped from the well and stored in overhead tank for bonafide domestic purposes in the farm house. The farm house shall be in close proximity not exceeding 50 meters from the well.

vii) If it is established that the water pumped from such services under this category is used for purposes other than agriculture or sold to others, the service category shall be changed to LT Tariff V.

viii) Sugar cane crushing motors and allied equipments shall be permitted to be connected and operated only when the respective agricultural services are provided with energy meters. When such services are not provided with meters, the consumer shall immediately opt for the metering.

ix) The proposed tariff is also applicable for the existing agricultural services covered under Self Financing Scheme. The other terms & conditions such as priority, cost of works etc., as applicable for the SFS shall continue.

11.0 Low Tension Tariff V :

Tariff	Consumption Slabs – Range in kWHr (Units) and billing period (one or two months)	Energy Charges in paise/kWHr	Fixed charges Rs./Month	Monthly Minimum in Rupees
LT Tariff V	From 0 to 100 units per month (or) 0 to 200 units for two months	530	30	40 per month (or) 80 for two months
	From 101 and above for one month (or) 201 and above for two months	580	30	

i.) This tariff is applicable to all Commercial establishments and consumers not covered in I-A, I-B, I-C,II-A, II-B, II-C, III-A(1), III-A(2), III-B, and IV.

ii.) All consumers under this Category, having motor loads of 3 HP and more shall install adequate power factor improvement capacitors (ISI marked) . Non-compliance shall invite compensation charges as per TNEB's terms and conditions. The services having a connected load of 25 HP and above shall be covered under the power factor penalty / incentive scheme as in (iii) below.

iii.) All Low Tension services under this category and with a connected load of 25 HP and above, should maintain a power factor of not less than 0.85 lag. Where the average power factor of Low Tension service connection is less than the stipulated limit of 0.85 lag, the following compensation charges will be levied.

Below 0.85 lag and up to 0.75	One percent of the current consumption charges for every reduction of 0.01 in power factor from 0.85
Below 0.75	One and half per cent of the current consumption charges for every reduction of 0.01 in power factor from 0.85

Incentive for High Power Factor : Wherever the power factor exceeds above 0.90, a Power Factor rebate at 0.5% of the amount of current consumption charges for every increase of 0.01 in PF above 0.90 shall be allowed.

Note: Since all the services having a connected load of 25 HP and may not have the power factor measurement facility through electronic meters, TNEB have to install such meters within a period of three months from the effective date of this order and then introduce the incentive / penalty suitably as per the tariff schedule.

12.0 Low Tension Tariff VI

Tariff	Description	Energy Charges in paise/kWHr	Minimum in Rupees
LT Tariff VI	Temporary supply during the construction stage for combined lighting and power loads	700	50 per kW or part thereof per day
	Lavish illumination	700	

i.) The LT tariff VI is applicable for the requirements of a temporary supply during the construction stage. The temporary supply shall be converted into the respective regular category after the completion and compliance to the respective terms and conditions.

ii.) This Tariff is also applicable for lavish illumination including special lighting for weddings, garden parties and other private functions.

7.18 Existing, Proposed and Approved Tariffs (Category wise)

Table : High Tension tariff

Sl. No	Category		Tariff	Existing Rate		Proposed by TNEB		Approved by TNERC	
				Demand Charges Rs./kVA/ Month	Energy Charges Ps./unit	Demand Charges Rs./kVA/ Month	Energy Charges Ps./unit	Demand Charges Rs./kVA/ Month	Energy Charges Ps./unit
1	HT Industries	Metro	IA	300	330	300	370	**300**	**350**
		Non-Metro		300	320	300	360		
2	Railway Traction	Metro	IB		470		470	**300**	**350**
		Non-Metro			460		460		
3	Recognised Edn. Institution	Metro	IIA	150	360	250	360	**200**	**350**
		Non-Metro		150	350	250	350		
4	Actual places of Public worship	Metro	IIB	125	290	125	290	**125**	**280**
		Non-Metro		125	280	125	280		
5	Commercial	Metro	III	300	430	300	510	**300**	**500**
		Non-Metro		300	420	300	500		
6	Lift Irrigation & Co-operative Societies for Agriculture.		IV		25		50		**50**
7	Supply to Pondicherry		V		300		300		**300**

The Commission acknowledges the efforts of all the officers and staff of the Commission in the tariff exercise. In this context, The Commission will be failing in its duty if a special mention is not made about the invaluable contribution of the former Member Thiru E.C.Arunachalam who was involved since the inception of the Commission and retired on 15-12-2002. The services of the Commission's Consultant M/s ICRA Advisory Services was extremely good, useful, professional and highly co-operative. The unstinted co-operation of the Chairman / TNEB and his officers in furnishing the required clarifications have made the job of the Commission easier. The awareness of the public in general and various NGOs in particular has been wonderful. Their suggestions / objections have focused our attention to address many key issues.

S.Thangarathnam	A.Balraj
Member	Chairman

R.Balasubramanian
Secretary