

**CHAPTER – 1**  
**INTRODUCTION**

**1.1 Preamble**

Consequent to the enactment of the Electricity Regulatory Commissions(ERC) Act 1998 (Central Act 14 of 1998) the Government of Tamil Nadu (GoTN) constituted the Tamil Nadu Electricity Regulatory Commission (TNERC) vide G.O Ms No 58 Energy (A1) Department dated 17-3-99 and made the following appointments to the Commission:

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|---|-------------|
| 1. Thiru K.Venkatesan, I.A.S., (Retd)                 | Chairperson |
| 2. Thiru M.G.Devasagayam, I.A.S., (Retd)              | Member      |
| 3. Thiru E.C.Arunachalam, Chief Engineer (Retd)/ TNEB | Member      |

Thiru E.C.Arunachalam assumed charge on 1-7-99. Since Thiru.M.G.Devasagayam expressed his inability to join, GoTN appointed Thiru.D.S.Hanumantha Rao as Member in his place who assumed charge on 22-9-99. The Chairperson designate did not join and the Government of Tamil Nadu also did not post any alternative person. However, the Commission was engaged in creation of the necessary infra structure facilities, attending seminars and preparation of regulations and codes. In the meantime, the second Member Thiru D.S.Hanumantha Rao retired on 5-6-2001 on super annuation. Subsequently the Government, after following all the selection procedures , appointed Thiru A.Balraj I.A.S., (Retd) as Chairperson and Thiru S.Thangarathnam as Member vide GO Ms 54 dated 12-6-2002. Consequent to the joining of the second Member and the Chairperson on 17-6-2002, the Commission became fully functional.

The functions vested with the Commission under section 22 (1) of the ERC Act are :

- a) To determine the tariff for electricity whole sale, bulk, grid or retail as the case may be, in the manner provided in section 29;

- b) To determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;
- c) To regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission , sale, distribution and supply in the State;
- d) To promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.

The Commission has issued its conduct of Business Regulations through notification no. TNERC/CBR/1/1 dated 5-7-2002 and gazetted on 17-7-2002, for conducting its business. The tariff regulations issued by the Commission in notification TNERC/TR/5/1 dated 19-7-2002 and gazetted on 21-8-2002 governs the process of electricity tariff revision in the State.

In line with the stipulations in regulation 7 of the TNERC Tariff Regulations 2002 , Tamil Nadu Electricity Board (TNEB) submitted a Tariff Petition on 25-9-2002 along with the Annual Revenue Requirement (ARR) for revision of tariff with effect from 1-12-2002. This order of the Commission pertains to this tariff revision petition.

## **1.2 Procedural History**

- i. TNEB submitted a tariff revision petition on 25-9-2002 along with the ARR for a revision with effect from 1-12-2002. The tariff petition and the ARR were placed before the Commission after initial scrutiny for the procedural requirements and the petition was admitted and registered as TP 1 of 2002 under resolution no 17 of the Commission. The Commission also approved a draft public notice for publication in the leading Tamil and English dailies as listed below, on 1-10-2002, informing the general public with brief details of the tariff revision proposed by TNEB, annual revenue requirement, etc., and inviting response from all the stakeholders.

- The Hindu
  - The New Indian Express
  - Dinamani
  - Daily Thandhi
  - Namathu MGR
- ii. TNEB was asked to make the Tariff Petition and ARR available for perusal by the interested person at the offices of the Chief Financial Controller/ Chennai and the eight regional Chief Engineers so that the interested public could have access to the proposals. The copies were also made available for sale at a nominal cost of Rs.100 for a copy of petition and Rs 200 for a copy of ARR. These documents were uploaded on the website of TNEB and TNERC.
- iii. The last date for submission of written objection was fixed as 23-10-2002. Southern India Chamber of Commerce & Industry, Confederation of Indian Industry and others requested for extension of last date for submission of objections after a detailed analysis. In response to these requests, the last date was extended to 30-10-2002.
- iv. In the meantime, a copy of the Tariff Petition and ARR were handed over to the Commission's Consultant for Tariff Analysis- M/s ICRA Advisory Services (ICRA) and a team of Commission's officials for a detailed scrutiny. M/s ICRA raised certain preliminary queries to TNEB on the tariff filing and the same was forwarded to TNEB in letter dated 3-10-2002 and TNEB furnished replies for most of the queries vide their letter dated 9-10-2002. In addition to these replies, a meeting was arranged between the TNEB, Commission's staff and the Consultants M/s ICRA at the Commission's office on 16-10-2002 and 17-10-2002 to clarify the doubts and explain some working sheets. Consequent to this meeting some additional queries were raised on power purchase and demand estimation, in letter dated 22-10-2002 to TNEB. The staff of the Commission based on their independent detailed analysis of the petition and ARR raised some points for clarification and the same was approved and sent to TNEB in letter dated 25-10-2002.

- v. The response to the public notice issued by the Commission was excellent. Practically every segment submitted their viewpoints. In all, objections were filed by 478 petitioners. Even though it was indicated in the public notice that the objections should be accompanied with an affidavit in the specified format (which was also published with the notice), most of the objectors did not comply with this requirement. Being the maiden tariff exercise and a new experience to the general public, the Commission took a lenient view on such procedural inadequacies and decided to register all the objections. Similarly, in spite of our specific stipulation that a copy of objection should be forwarded to TNEB to enable them to reply to the petitioner directly, this was also not complied with by many and hence the Commission took a copy of all the objections and requested TNEB to send their reply in time to each individual before the public hearing. TNEB complied with this instruction and have handed over a copy of their reply to the Commission. In fact a particular segment of the electricity consumers, viz agriculturists had individually submitted an identical and Xeroxed copy of a petition in large numbers ( 2786 petitions) . They had all been grouped and treated as one petition. However each petitioner was individually replied by TNEB. The details of objectors is furnished in the enclosed Annexure 1.
- vi. The first meeting of the State Advisory Committee (SAC) was convened on 7-11-2002 to discuss the tariff revision petition of TNEB. Prior to the meeting , all the members of the SAC were provided with a copy of the tariff petition and ARR to enable them to study in depth and offer their expert advice / comments on the proposal. The proceedings of the meeting have been minuted and taken into consideration in this tariff exercise.
- vii. In the next stage of the tariff process, the Commission approved a programme of Public hearing at Chennai, Coimbatore and Madurai as per the following schedule. While deciding the places for hearing, the Commission took note of the number of petitions received from each area, number of persons who have opted to be heard in person, geographical accessibility to the public in the surrounding areas, time factor, etc., The programme was released in the leading Tamil and English newspapers as before through a public notice. The individuals/

organizations who wanted to present their cases in person during the hearing were grouped suitably and informed through separate letters.

<b>Day &amp; Date</b>	<b>Place</b>	<b>Venue</b>	<b>Time</b>
8-11-2002 Friday	Chennai	Mini Auditorium, Music Academy, 168, TTK Road, Chennai 600 014	10.30 am to 5.00 pm
11-11-2002 Monday	Coimbatore	Tamil Nadu Agricultural University Campus, Coimbatore	10.30 am to 5.00 pm
13-11-2002 Wednesday	Madurai	Collectorate Campus ( Changed later to MADISSIA Hall) Madurai	10.30 am to 5.00 pm
18-11-2002 Monday	Chennai	Mini Auditorium, Music Academy, 168, TTK Road, Chennai 600 014	10.30 am to 5.00 pm

The public hearings as scheduled above were conducted smoothly and received a wide media coverage and public attention. The list of persons who had deposed before the Commission in the public hearings are furnished in the Annexure 2. In addition to the above public hearings., the Commission held another exclusive hearing on 19-11-2002 at the Court Hall of the Commission where the following parties with specific objections were heard viz.,

- Southern Railways
- State of Pondichery
- South India Chamber of Commerce
- Tamil Nadu Newsprints and Papers Ltd

The Commission has gone through all the petitions received and has given due consideration to the issues raised in the objections as well as during the public hearings. In order to ensure that all the points have been duly taken note of, a consolidated list was prepared by a separate group and sorted issue wise and category wise under identifiable headings so that all issues are brought to the attention of the Commission.

- viii. On completion of the public hearings, it was scheduled to have a public hearing at Chennai on 20-11-2002 for TNEB to present its case in public and reply to the

various objections / comments in the response petitions and public hearings. This was also notified in the newspapers. However, the meeting was postponed due to unavoidable reasons. This meeting was again planned on 20-1-2003 and had to be cancelled due to administrative reasons. Finally the meeting was held on 10-3-2003.

- ix. In order to know the views of the State Government on the subsidy and other issues on policy matters, Government was addressed to depose before the Commission and the Government made a written submission on 10-3-2003.
- x. The Commission has thus ensured that the due process contemplated under the governing Act and regulations were followed at every stage and an adequate opportunity was given at every stage to all the persons concerned to express their views.

### **1.3 An Over View of TNEB**

#### **1.3.1 General**

Tamil Nadu Electricity Board (TNEB) is a vertically integrated utility formed as a statutory body by the Government of Tamil Nadu on 01.07.1957 under the Electricity Supply Act, 1948 (ESA). The Board is primarily responsible for generation, transmission, distribution and supply of electric energy in the State of Tamil Nadu.

The installed power generating capacity of the Board is 5212 MW as on 31.3.2002. Currently, the Board has a mix of the various generating capacities such as 2970 MW of coal based thermal stations, 227 MW from two Gas Turbine Stations, 1996 MW from 33 Hydro Stations and 19 MW from Wind Farms. In addition, Board has a share of 2048 MW from Central Generating Stations, 813 MW of privately owned wind farms and Independent Power projects aggregating 729 MW.

The Board met a peak demand of 6809 MW on 28-6-2002 and supplied energy of 35202 million units in 2001-02. The revenue of the Board from the sale of power during the year 2001-02 was Rs.8058.23 crore.

The Board has employee strength of about 90429. The number of employees per million units sold is around 2.57, as against the national average of 2.53.

The Board serves about 152 lakh consumers through a fairly well connected transmission and distribution network. As on 31.03.2002, all the 15,822 inhabitant villages have been electrified. Out of the total number of households in the State numbering about 144 lakh as per census 2001, about 110 lakh households have been electrified. In addition, about 16.59 lakh agricultural pump sets have been given electric supply.

### **1.3.2 Operational performance of the Board**

The Board's thermal stations have been consistently performing well. During the year 2001-02, the three thermal stations have recorded high PLF levels (TTPS – 88%, MTPS – 87% and NCTPS-85%). The State does not have its own coal resource and has to source its requirements from far off places like Eastern Coal Fields and Mahanadhi Coal Fields situated in West Bengal and Orissa respectively, at a high cost through rail cum sea route.

The Board has tapped the hydel potential almost to the full extent. The hydel generation is dependent on the precipitation levels during the monsoon season. The Board mainly employs the hydel capacity to meet the demand during peak hours. Hydel generation accounts for less than 10% of the total energy requirement of TNEB.

Tamil Nadu has the largest wind power capacity of about 850 MW and ranks first in the country in terms of installed wind based power generation. However, being infirm in nature, this power is available primarily from May to September.

The TNEB has submitted that the energy requirement of the State has been growing at the rate of 6% every year. The Board has proposed to meet this increasing demand by power purchase from NTPC and NLC from their proposed power projects, as well as new coal based power projects at North Chennai and Tuticorin, which are to be implemented as joint venture of TNEB with NTPC and NLC. Recently the Board commissioned the 95 MW Valathur (Perungulam) gas turbine power project. During FY 2003-04, the Board proposes to commission the 100 MW Kuttalam gas turbine power

Project. The 2x1000 MW nuclear power project of Nuclear Power Corporation at Kudankulam is expected to be commissioned by 2007-09. TNEB is pursuing LNG based power project at Ennore and lignite based power project at Jeyamkondam in private sector.

The Board's transmission & distribution network comprises 1,65,524 circuit kilometers of extra high tension (above 33 kV) and high tension (11 kV to 33 kV) lines, 4,35,000 circuit kilometers of low-tension lines, 948 substations and 1,40,710 distribution transformers.

The Board has assessed its overall T&D loss levels for the current year at 16.25% purely on the basis of their own assumptions.

### **1.3.3 Commercial & Financial performance of the Board**

The Board is one of the top performing utilities in the country in terms of its generation performance, low level of T&D losses, metering , billing and collection performance. The Board has nearly 100% assessment of metered consumption and around 98% collection efficiency. However, its growing base of subsidized consumers such as agriculture, hut service and a high percentage of domestic consumers has adverse impact on its financial performance. Free supply or below cost of supply to these categories without a corresponding subsidy from the State Government has led to resource constraints to undertake further capital expenditure and to meet the day to day normal revenue expenditure.

Urban and services sector are the fastest growing sectors of the State's economy. However, the mix of the consumers being added to the grid has been skewed towards the subsidized categories of consumers. While the number of domestic consumer has increased by 10 % every year, the number of industrial consumer has increased at a very low level. The LT and HT industries together constitute 2.66% of the total consumers, which contribute nearly 58% of the total revenue of the Board. The gradual decline in their share is affecting the continuance of the cross-subsidy available to the Board.

The Board has been dependent on the Government to provide tariff compensation for supply of free electricity to certain categories of consumers. The cash subsidy available till FY 1995-96 was nearly Rs 350 Crores per annum, which has gradually reduced to Rs 250 Cr in FY 2001-02. The cash subsidy has not at all matched the increase in consumption by the subsidised categories. This has led to gradual deterioration in the financial health of the Board.

The Board has submitted that the overall average cost of power at the consumer end for the years 2002-03 and 2003-04 are estimated to be 328.28 and 330.61 paise per unit. As against these, the overall expected rates of realization from sale of power for the above two years with the existing tariffs will be 253.41 and 253.28 paise per unit respectively. Therefore for each unit sold, Board will be incurring a loss of 74.87 and 77.37 paise for 02-03 and 03-04 respectively.

The State Government has been unable to meet the subsidy commitment and the requisite equity support. Hence, the Board has become dependent on external borrowings to meet its financial requirement. The external borrowings are expensive sources of funds and are further adding to the interest burden of the Board. Use of borrowings to meet the revenue expenditure is aggravating the situation. The TNEB has submitted that the expenditure on account of interest is expected to increase by more than Rs 200 Cr during FY 2002-03.

Coupled with the growing interest expenditure, there is steep increase in the power purchase expenses. The power purchase quantum (in MU) is expected to increase by about 10.5% while the corresponding increase in TNEB generation is about 1.5% during FY 2002-03. The same is also reflected in the increasing share of the power purchase cost in the overall revenue requirement of the Board. With limited funds at its disposal for adding new generating capacity, the Board may have to be dependent on power purchase from other sources to meet its requirement in future. Moreover, the power purchase cost, especially from the new IPPs, is currently very expensive. Hence, the operating expenses of the Board are increasing. There is no corresponding increase in the tariffs.

The tariffs were last revised w.e.f. 1.12.2001 after a period of nearly 2 years. There was a backlog of tariff revision. As stated in the present proposal of the TNEB, the existing tariffs, based on the latest estimate of energy sold, would recover only Rs 9509.00 Crores against the total annual revenue requirement during FY 2002-03 at Rs 12318.30 Crores. The gap of Rs 2339.30 Crores (after adjusting for non-tariff income and tariff compensation) needs to be covered at least partially through the revision in the tariffs. Similarly during FY2003-04 TNEB would recover only Rs.10,544.80 crore based on the estimated energy sold and recoveries from non tariff income and revenue subsidy is estimated at Rs. 226.6 crore and Rs. 250 crore respectively. As against this the total annual revenue requirement is estimated at Rs.13,764.49 crore. The gap of Rs.2743.09 crore is to be covered through additional revenue from the proposed tariff.

## **1.4 Basic Tariff Philosophy**

### **1.4.1 Act Provisions**

The functions of the State Commission provided for in section 22(1) of Electricity Regulatory Commissions Act, 1998 are:

- (i) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;
- (ii) to determine the tariff payable for the use of transmission facilities in the manner provided in section 29;
- (iii) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
- (iv) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.

It may be seen from the above that the manner provided in section 29 of ERC Act is to be followed in determining the tariff for wholesale, bulk, grid or retail sale of electricity in the State. There are six sub-sections (1) to (6) in section 29. The sub-sections (2) (a) to (2) (g) stipulate the guidelines to be followed by the State Electricity

Regulatory Commission (State Commission) to determine by Regulations the terms and conditions for fixation of tariff.

The sub-sections (2) (c), (2) (e), (2) (f) and (3) of sections 29 of ERC Act are particularly important with reference to determination of retail tariff to consumers. The guidelines stipulated in sub-sections (2) (c), (2) (e) and (2) (f) are (i) that the tariff progressively reflects the cost of supply of electricity at an adequate and improving level of efficiency, (ii) the interests of the consumers are safeguarded and at the same time, the consumers pay for the use of electricity in a reasonable manner based on the average cost of supply of energy and (iii) the electricity generation, transmission, distribution and supply are conducted on commercial principles. Therefore, it can be said that the guidelines to determine the terms and conditions for fixation of tariff stress that the basis for fixing tariff is the cost of supply of electricity.

The sub-section (3) of section 29 of 1998 Act stipulates where the tariff rates can differ from the cost of electricity. According to this sub-section, the Commission shall not show undue preference to any consumer in fixing tariff rates but may differentiate according to the

- (i) Consumer's Load Factor
- (ii) Consumer's Power Factor
- (iii) Consumer's total consumption of energy during any specified period or the time at which the supply is required
- (iv) Geographical position of any area
- (v) Nature of supply and
- (vi) The purpose for which the supply is required.

Having stated the factors under which the tariff rates can differ from the cost of supply, each factor may be examined in detail.

(i) Consumer's Load Factor

Consumer's Load Factor over a period of one month or say one billing period may be stated as the ratio of energy consumed in units during a particular billing period

to the Maximum Demand in kilowatts reached during the said billing period multiplied by the number of hours of the billing period. If the maximum demand is measured in KVA, then it is to be multiplied by power factor to arrive at the corresponding maximum demand in kilowatts. If a consumer avails demand uniformly throughout any billing period, the load factor will be unity. The load factor may vary between 0.1 and 0.9. In the cases where the demand variation is wide the load factor will be much below unity. From the point of view of the utility, loads with high load factor are better manageable. Therefore there can be incentives for consumers for maintaining high load factor and disincentive for low load factor. It is to be noted that for a given maximum demand and given demand rate, the charges per KWh of energy on account of demand charges will be more when the load factor is low and will be less when the load factor is high.

(ii) Consumer's Power Factor

Consumer's Power Factor depends upon the nature of appliances used in the consumer's load. Unity power factor loads cause minimum losses in the feeding side distribution and transmission lines. Therefore, it is natural that consumers having low power factor are penalized by charging penal charges and consumers with higher power factor are rewarded by the utilities.

(iii) Consumer's total consumption of energy during any specific period

In any transmission grid there are peak demands during selected peak hours. In Tamil Nadu, the peak hours are 6.00 a.m. to 9.00 a.m. and 6.00 p.m. to 9.00 p.m. The peak demand determines the requirement of generation capacity. From the utility's point of view, if peak demand is reduced, the generation capacity requirements will be less to that extent and as a result reduced investment on generation capacity. It is common to provide disincentives in the tariff rates for availing supply during peak hours and incentives for availing supply during non-peak hours.

(iv) Geographical position of any area

Differential tariff rates can be adopted for Metropolitan, Non-Metropolitan areas, Municipalities and Village Panchayat areas, Rural and Urban areas, etc.

(v) Nature of Supply

The tariff rates may differ according to the voltage at which supply is given to any consumer. Power from various sources is pumped into the grid at EHT and HT (mostly at EHT) voltages. All the power pumped at various voltages are not absorbed fully by the loads at the respective voltages. So the net power flow is from EHT voltages to HT voltages and further down to LT voltage. Hence, the cumulative losses at lower voltages are higher than that at higher voltages. As a result, the cost of supply at higher voltages is less than that at lower voltages. Normally, the tariff rates are to be fixed in accordance to the cost of supply. Also different tariff rates can be fixed for consumers for whom uninterrupted power supply is ensured and for consumers for whom power supply is made available only during particular hours in a day.

(vi) The purpose for which the supply is required

Different tariff rates can be fixed according to the purpose for which electric supply is used like domestic, commercial, industry, traction, etc. It may be seen that the Act permits higher or lower rate for different purposes or categories for which the supply is used. If different rates or incentive / disincentive levies are proposed on account of factors like consumers' load factor, power factor and total consumption during any specified period or time, geographical position of any area and nature of supply, the reasons for such discrimination is to be spelt out in a transparent and acceptable manner. It is desirable that charges on account of these factors are brought out separately instead of embedding into the total tariff rates.

#### **1.4.2 Analysis of existing tariff structure in Tamil Nadu Electricity Board**

Having gone through the provision of the ERC Act in respect of tariff determination, the commission has examined the existing tariff rates in vogue in Tamil Nadu Electricity Board.

## **i) Consumer Categories**

The Board currently has its consumers categorized as follows:

### (a) Based on their voltage of use

The customers are identified as Low Voltage (LV) or Low Tension (LT) customers and High Voltage (HV) or High Tension (HT) consumers.

### (b) Based on their usage pattern

There are currently 19 broad consumer categories, within the LT and HT voltage groups. These are further classified as residential, commercial, agricultural, industrial, etc. based on the usage of electricity by these consumers.

LT category consists of the following consumers:

- Domestic Category for lights & fans, and power loads
- Huts in Village Panchayats
- Actual Places of Public Worship
- Public Lighting, Public Water Works and Public Sewerage System
- Agricultural and Government Seed Farms
- Cottage & Tiny Industries
- Power looms
- Industries
- Information Technology industries set up in information technology parks or software training institutes, etc.
- Recognized educational institutions, hostels run by recognized institutions, Govt. Hospitals, Research Institutes, etc.
- Commercial and others
- Temporary supply power under LT

EHT / HT Category receiving supply at 11/22/33/110/230 KV has the following categories of consumers:

- Registered factories, Tea Estates, Textiles, Fertilizers, Steel Plants, Heavy Water Plants, Caustic Soda, etc.
- Railway Traction
- Recognized educational institutions, Government Hospitals, primary health centers, public libraries, water works, public lighting, etc.
- Places of Public Worship
- Lift Irrigation Co-operative Societies for Agriculture
- Supply to Pondicherry State

(c) Based on their level of consumption

Some categories of consumers are further classified into various energy slabs depending on their level of consumption. The tariff slabs occur in the LT category of consumers.

**ii) Other salient Features**

- a) Under the existing tariff rates, there are six slab rates for domestic tariff, three slab rates for tiny industries and power looms. There are two slab rates for LT industries, IT industries and commercial services. Higher tariff rates are adopted for higher levels of consumption in all the categories of consumers.
- b) In addition, in the existing tariff structure there is wide gap in tariff rates between HT and LT categories. For each category of consumers on account of less line loss and less investment for HT categories compared to LT categories normally HT tariff rates should be lesser than LT Tariff rates. But the existing tariff structure is the other way round.
- c) In HT tariffs I A, I B, II A, II B and III separate energy charges for Chennai Metropolitan area are in vogue. An additional levy of ten paise per unit is being made for Chennai Metropolitan area. Likewise under LT tariffs II B, II C, III B, III C and V ten paise difference is maintained between the rate adopted for Chennai

Metropolitan area and that for non-metropolitan area. Under LT tariff II A for Public lighting different rates for Village Panchayats and for Municipality and Corporations are adopted.

- d) For High Tension Industrial Consumers 20 percent extra on the energy charges is being charged for the energy consumed during peak load hours.
- e) New Industries in the areas other than the Chennai Metropolitan area running only night shift are given concession of 40 per cent in the energy rate for a period of seven months from July to January for the first five years. This night shift concession will be 20 percent if such Industries run one day shift and one night shift.
- f) All HT services have to maintain an average power factor of 0.9 during any billing period. Three graded penalties are in vogue for power factors (i) below 0.9 and upto 0.85 (ii) below 0.85 and up to 0.75 and (iii) below 0.75. Likewise LT industrial consumers (with CT meters) have to maintain a power factor of 0.85 lag. Penal levies are made if the power factor goes below 0.85.
- g) All HT and EHT consumers having sanctioned demand exceeding 5000 KVA have to avail supply at the voltages 33 KV and above. A penal levy of ten paise per unit is being made on the energy charges for failure to comply with this requirement.
- h) Free supply is given for hut services in Village Panchayats and agricultural pump sets. For pump sets energized under priority schemes ( Self Financed Schemes), Rs.250 per HP per annum or 50 paise per unit of energy consumed (either of the two rates can be opted by the consumers) is being charged.

#### **1.4.3 Rationalization of existing tariff to meet the requirements of Act Provisions.**

If the Act provisions and the existing tariff structure of TNEB are compared it may be seen that rationalization of existing tariff structure boils down to three areas. Firstly, the number of slabs in each consumer category should be reduced. Secondly, HT tariff and LT tariff for same category of consumers should be made at least equal to

begin with. Later, HT tariff rate should be made lesser than LT tariff rate. Thirdly, the tariff rates for all categories of consumers should progressively reflect the cost of supply. How the three requirements can be met is detailed below categorywise. The strategy to be followed is that the revision of tariff rates should not cause tariff shock to any group of consumers.

#### **1.4.4 Reduction in number of slabs for each consumer category .**

In the process of tariff revision it must be seen that the number of slabs in any category of consumers should not be increased over and above the prevailing number of slabs. For Tiny Industries, Power looms, LT Industries, LT IT Industries and Commercial Services, the Commission proposes a time frame of three years to bring in a single slab rate for each of these categories. The time-frame may be longer for the domestic category.

#### **1.4.5 Adoption of rational tariff rate for any category of consumers under HT and LT .**

Normally for any consumer category HT tariff should be lower compared to LT tariff as the cost of HT supply is lower than that of LT supply. As already stated, the existing tariff structure is in the other way round. The Commission proposes to increase HT Tariffs at a lower rate as compared to the rate of increase in tariff rates for LT categories during the ensuing years.

#### **1.4.6 Adoption of tariff rates for all categories of consumers reflecting the cost of supply.**

No consumer apart from agricultural and hut consumers should be charged 50% more or less than the cost of supply and this goal is to be achieved in a period three years. At present the tariff rates are below the 50% of the cost of supply for the lower consumption levels in respect of LT domestic, tiny industries and powerloom consumers. Likewise commercial and temporary supply category of consumers are paying more than 50% over and above the cost of supply. These rates are to be adjusted accordingly in a

phased manner within the target period of three years. If necessary, at times high priced HT or LT higher slab rates will have to be decreased, if they exceed more than 150% of cost of supply.

For huts and agricultural services a separate policy has to be evolved and followed. All services are to be metered. It may take three years to complete hundred percent metering and to streamline meter reading, collection and disconnection mechanism. To increase the rate up to 50% of cost of supply to these two categories it may take further three to five years. The policy is to be re-examined at the end of three years.