

4.1 Salient features of tariff filing	37
4.2 Consumer mix	37
4.3 Information inadequacy	37
4.4 Commission's Analysis of the Tariff Filing	37
4.5 Basic Areas of Tariff Design	38
4.5.1 Cost of Service	38
4.5.2 Commission's Observations on T&D losses	38
4.5.3 Consumption Estimates	38
4.5.4 Modified Fuel and Power Purchase Adjustment Charge (FAC)	40
4.6 Tariff	40
4.6.1 Revision of Tariff in previous years	40
4.6.2 Domestic Tariff	40
4.6.3 Non-Domestic Low Tension (NDLT)	43
4.6.4 Mixed Load High Tension (MLHT)	44
4.6.5 Small Industrial Power (SIP)	44
4.6.6 Large Industrial Power (LIP)	45
4.6.7 Agricultural Tariff	45
4.6.8 Mushroom cultivation	45
4.6.9 Public Lighting	46
4.6.10 Railway Traction	46
4.6.11 Delhi Metro Rail Corporation Ltd.	47
4.6.12 Supply to NDMC and MES	48
4.7 Total Revenue from Approved Tariffs	48
4.8 Revision to the Tariff Schedule: Salient Features	49
4.8.1 Changes/modifications made	49
4.8.2 Certain changes proposed by DVB and accepted by the Commission	50
4.9 Treatment of the Revenue Gap	51

4.1 Salient features of tariff filing

The application filed by the DVB while seeking an increase in tariffs for all the categories of consumers, clarifies that the adverse financial position of the utility is predominantly due to the Tariffs having remained unrevised since 1997, inspire of substantial increase in the cost of inputs and services. In the above filing DVB have proposed

- An overall increase of 35% over the current tariffs, which would be expected to generate additional resources to the tune of approximately Rs. 1208 crores.

- Besides the tariff hike the application included proposals for upward revision of the minimum charges and the limit for bulk consumers (MLHT/LIP) categories from 100 kW to 50 kW.
- Additionally it has also been proposed to subdivide the first domestic slab of 1 - 100 units into two slabs of 1-50 Units and 51-100 units.
- The proposal further envisages additional resource mobilisation to the extent of approximately Rs. 150 crores by effecting reduction in T&D losses to the extent of 2% (revenue gains calculated at the proposed tariff rates).

The revenue gap for the ensuing year, after the tariff revision and the efficiency improvement was initially projected at Rs. 817 crores but was revised to Rs. 895 crores by the DVB in subsequent responses to the Commission. DVB have made a request to the Commission to allow an adjustment in the uncovered revenue gap leaving undisturbed the tariff proposed (by DVB). It has also been requested that the Commission may permit DVB to recover the uncovered revenue gap in the next financial year along with the carrying charges @ 20% per annum.

4.2 Consumer mix

For the purpose of projecting the revenue the DVB have incorporated the results of a sample study based on information compiled over a period of two months in order to estimate the breakup of various components of revenue for LT consumers according to the consumer category and slabwise consumption .

4.3 Information inadequacy

DVB have submitted that this is for the first time that the organisation has filed a detailed tariff application and that in the past they have not been maintaining information in the formats required by the Commission. It was requested that the Commission may accept the information as provided by the Petitioner.

4.4 Commission's Analysis of the Tariff Filing

4.1 The Commission has made detailed analysis of the filing and has also critically scrutinised the submissions made by the consumers and stakeholders, along with the response given by the Petitioner, to such submissions. The Commission has also taken on record the subsequent filing of the petitioner for supply of supplementary information.

4.4.2 The Commission has noted that the DVB's tariff filing is not quite in accordance with the Guidelines for Revenue and Tariff Filings issued by the Commission in October 2000. Most importantly, DVB's backward calculation in tariff filing exercise, is not in conformity with the given procedure and standard practice adopted for Tariff determination. At the outset it was pointed out to the Petitioner that Section 59 of the Electricity Supply Act, 1948 specifies the methodology to set Tariff for the SEBs and that the filing is not in accordance with the Commission's Guidelines. The Utility responded by stating that "...although the DVB made calculations of the expected aggregate revenue for the ensuing financial year from the charges which it believes it is

permitted to recover, DVB also assessed whether it could propose tariff increases to cover the consequent revenue gap and then in order to minimise the burden imposed on its consumers, decided not to propose such tariff increases in full. Therefore, it proposed lower tariff with a consequent revenue gap."

4.4.3 Details of energy consumption by different categories of consumers and estimation of revenue accruing there from are crucial inputs to Tariff designing process. In absence of requisite data base in DVB, the organisation, as mentioned earlier, has attempted to supplement the data base by the previously stated sample study conducted over a period of two months. The Commission feels that this study may not be a true representative of the actual pattern and may cause distortions in estimation of the revenue for the full year.

4.4.4 The Commission also noted that the data in the tariff filing and even that obtained during subsequent interactions with DVB remained inadequate and even inconsistent. This inadequacy made it difficult for the Commission to make revenue calculations so essentially required for Tariff design.

4.4.5 The conclusion that emerges from above analysis is that the record of DVB in the matter of preparation of accounts, system of billing, effecting recoveries, preparation of data base etc. leaves scope for considerable improvement.

4.5 Basic Areas of Tariff Design

Commission has consequently addressed the basic areas having direct relevance to

Tariff designing as mentioned in following analysis.

4.5.1 Cost of Service

DVB have submitted in its application that in the absence of any concrete data on the distribution of the difference between energy input and energy billed, across consumer categories, the embedded costs cannot be calculated. The only option thus left to the Commission is to use the average cost of supply of energy as a parameter of cost of service. In this context, some consumers have suggested that the unit cost of power should be the sum of the cost of generation, transmission, distribution and overheads, and should not include the effects of the T&D losses. However, since a certain level of T&D losses are inherent in an electricity transmission and distribution system, it is essential that the Revenue calculations includes at least a portion of T&D losses which no doubt are abnormally high in the DVB system. Over a period of time as the efficiency level of the utility improves, the tariffs would more or less reflect the efficient costs. As per the filing, the T&D losses in the years 1998-99 and 1999-00 were of the order of 52.4% and 50.56% respectively. DVB have not placed on record any conclusive figure for reduction in T&D losses for the year 2000-01. For the financial year 2001-02, the loss reduction envisaged is 2%. Further, as per the analysis brought out in preceding chapters there were inconsistencies in the reporting of T&D loss figure by DVB in various documents. The DVB have clarified the reasons thereof through submissions dated 11th April 2001. The aforesaid letter also indicates T&D loss figures of 46.8 % as the cumulative figure upto March 2001.

However, in absence of any definite and reliable submissions by the DVB the Commission has relied upon the latest figures for computation of the expected revenue, for the year 2001-2.

4.5.2 Commission's Observations on T&D losses

Commission is of the view that as mentioned by DVB in one of the supplementary filings, it is expected that as a result of measures taken by the DVB during the year 1999-2000 the organisation has been able reach a turn around stage and has managed ultimately to achieve T&D loss reduction by above 2% and as result of further intensified efforts during 2000-01, it is possible that DVB would have achieved a breakthrough leading to loss reduction of about 3.5 to 4%.

4.5.3 Consumption Estimates

Table 4.1 shows the actual billed units in MUs for 1997-98 to 1999-00 and estimated billed units for 2000-01 and 2001-02 as submitted by DVB and the growth rate of consumption of various categories in the period under consideration.

4.5.3.1 DVB has estimated billed units at 9494 MU for the ensuing year (2001-02), which is based on a T&D loss figure of 50.56%. DVB has estimated a reduction in the T&D loss of 2% in the ensuing year, resulting in 383 MU of additional billed units.

Table 4.1: Category wise growth rate of billed units

Category	Units Billed (MU)					% Increase			
	1997-98	1998-99	1999-00	2000-01 (E)	2001-02 (P)	1998-99 /1997-98	1999-00/ 1998-99	2000-01 (E)/ 1999-00	2001-02 (P) /2000-01(E)
Domestic	2984	3246	3676	4004	4159	8.8%	13.3%	8.9%	3.9%
Non-Domestic	633	683	770	834	861	7.9%	12.9%	8.3%	3.3%
Small Industrial Power (SIP)	1010	1158	1326	1490	1598	14.6%	14.5%	12.4%	7.2%
Large Industrial Power (LIP)	931	969	960	957	957	4.0%	-0.9%	-0.3%	0.0%
Agricultural	55	63	68	74	78	15.8%	6.8%	9.1%	4.9%
Railway	70	101	128	170	218	44.3%	27.0%	32.8%	27.7%
Water	272	287	295	302	302	5.3%	2.9%	2.2%	0.0%
Public Lighting	136	138	138	137	137	1.4%	0.3%	-1.0%	0.0%
NDMC	837	970	960	1009	1020	15.8%	-1.0%	5.1%	1.0%
MES	119	138	146	159	167	15.8%	6.3%	8.9%	4.7%
Total	7047	7751	8468	9136	9494	10.0%	9.3%	7.9%	3.9%

4.5.3.2 It may be seen from the Table 4.1 that the growth rates for billed units have been of the order of more than 9% in years 1997-98 to 1998-99 and 1998-99 to 1999-00. The growth rate from 1999-00 to 2000-01 is of the order of 8% , whereas, growth rate of consumption for the year 2001-02 works out to 4%. These estimates do not reflect for any decline in consumption due to closure of polluting units. Some inconsistencies are observed in growth pattern of the billed units over the years for which no explanation or supporting data has been provided by DVB .In absence of the requisite details Commission has accepted the consumption pattern as reflected in above records.

4.5.3.3 Estimates of Billable Units

As noted above, the Commission is adopting DVB's latest estimate of a loss figure of 46.8% only for the purpose of computing the expected revenue for the ensuing year. At this level of T&D loss, the billable million units are 10,340 units as against DVB projection of 9494 MU.

4.5.3.4 Commission's Estimates

The above billable units were distributed among the various categories of consumers in proportion to their share of consumption as derived from DVB estimates of consumption for the ensuing year. The Table 4.2 provides DVB's

estimate of billing units for the ensuing year for each consumer category, share of each category in total consumption, and the Commission's estimates based on the percentage share of each category.

4.5.3.5 Commission has already observed in preceding chapters that the quantity and quality of data submitted by DVB for the computation of revenue is extremely inadequate. The Guidelines require that the expected revenue from tariff charges "should include a statement of and supporting documentation for the forecast quantities supplied under each rate for the ensuing financial year. The quantities, together with the prices, shall be capable of providing the expected revenue under each rate and hence in aggregation the total expected revenue from tariffs for the year." In spite of the requirements of the Guidelines, no details of consumption, number of consumers and connected load/ contract demand slab-wise or voltage-wise has been submitted. DVB has not even provided the details of methodology of its revenue calculation, pleading inability on account of loss of electronic data.

4.5.3.6 Methodology adopted by the Commission

In the absence of the basic data required for the computation of revenue, the

Commission based its calculations considering that for LT consumers, the units for the different slabs and sub-categories are derived from the results of the sample study conducted by DVB in October-November 2000. For the bulk consumers consumption has been based on the actual billed units data for the period 1999-2000 and first six months of 2001-02. DVB have shown a consolidated consumption figure for

Table 4.2: DVB's estimate for billing units for ensuing year

Category of Consumers	DVB Estimate (Mus) 2001-02	Share of Category in Total Billed Units as per DVB for 2001-02	Commission Estimate (MUs) 2001-02
Domestic	4159	43.8%	4529
Non-Domestic	861	9.1%	938
Small Industrial Power (SIP)	1598	16.8%	1740
Large Industrial Power (LIP)	957	10.1%	1042
Agricultural	78	0.8	84
Railway	218	2.3%	237
Water	302	3.2%	328
Public Lighting	137	1.4%	149
NDMC	1020	10.7%	1110
MES	167	1.8%	181
Total	9494		10340

NDMC. The actual bills of DVB to NDMC for the period from October 2000 to January 2001, indicate that approximately 21% of the total energy to NDMC is supplied at 66 kV, 65% of energy is supplied at 33 kV and 14% at 11 kV. These percentages were applied to the total billed units of NDMC. Supplies to MES are effected entirely at 11 kV.

4.5.4 Modified Fuel and Power Purchase Adjustment Charge (FAC)

DVB's proposal includes a modified Fuel and Power Purchase Adjustment Charge (FAC) for all categories of consumers. The Commission has already deliberated on this issue in its Order on Rationalisation of Tariff (2000-01) for Delhi Vidyut Board and stated as follows "*.... the Commission orders that in future the proposed tariff would incorporate the forecasting of the revenue requirements on account of FAC*". The Commission reiterates that there should not be any separate charge as FAC. The Commission would consider any difference in the power procurement cost approved by the Commission for the ensuing year and actual power procurement cost prudently incurred during the year to be allowed in the ARR of the next year.

4.6 Tariff

4.6.1 Revision of Tariff in previous years

While in the ARR filing it has been averred that there has been no revision in Tariff since 1997, it has been noted, that there has in fact been increase in Tariff in respect of non domestic and Industrial categories of consumers by way of levy of Fuel Adjustment Charges having a cumulative effect of approximately 66 Paise per unit of energy. It is also noted that if the T&D losses are brought down to

acceptable standards, the gap between the revenue required and revenue collected would be minimal. However reiterating the necessity for taking a practical view in context of the ground realities an upward revision of tariff has become inevitable in the long-term interest of the utility and the consumers. The Commission has sought to modify the existing tariff after considering the effect of tariff revision on the financial viability of the DVB and the billing impact on the consumer. It has been the Commission's aim to make the tariff, which also covers terms and conditions of supply, simpler and free from ambiguities. The Commission has also attempted to rationalise the tariff by bringing tariffs towards the average cost of service. The Commission after taking into account the information provided by DVB and keeping in mind the above objectives has approved the following tariffs for various consumer categories.

4.6.2 Domestic Tariff

This tariff is applicable for the lighting/fan and power consumption of residential consumers, hostels of recognised/aided educational institutions and stair case lighting in residential flats, compound lighting, lifts & water pumps or drinking water supply and fire fighting equipment etc. in Cooperative Group Housing Societies (CGHS), bonafide domestic use in farm houses etc. The domestic consumers account for approximately 44% of the total billed units and contribute around 30% to total revenue. The domestic tariff has not increased since 1997 as the fuel adjustment charge was not applicable to this category of consumers. The Commission has designed the tariff structure for domestic consumers keeping in view the following factors:

4.6.2.1 Lifeline Concept

It is presumed that the consumption level for the consumers in the lowest income bracket is around 50 units per month, which meets the requirement of electricity to the bare minimum extent. The Commission would like to address the lowest rate only for the benefit of such category of consumers. Commission while appreciating the fact that the cost of service is much higher and such measures do in fact amount to cross-subsidisation, has also noted that it would not be feasible to expect an immediate turnaround in the policies followed in the past and subsidised rates for such categories would have to be continued for at least for some time in near future.

4.6.2.2 Subsidy

Analysis of ARR has brought forth the fact that the average cost of service for the utility even on benchmarking the T&D losses at 20% would work out to Rs 3.37(approx.). The domestic category of consumers, therefore, enjoy a substantial benefit of subsidy as long as the rates are lower than the cost of service. The Commission is expected to design a tariff structure, which ultimately facilitates movement towards elimination of cross-subsidies. The objective however would be achieved only gradually and in phases.

4.6.2.2.2 Some of the consumers requested a concessional tariff for the senior citizens similar to that provided by the transport utility. The Commission believes that unlike the transport services it is very difficult for the utility to identify senior citizen consumers and in the present circumstances there is a greater possibility of this facility being misused.

These social concerns, could perhaps be addressed by the Government.

4.6.2.3 Minimisation of tariff shock

At present, the rates applicable for the domestic consumers do not have an inbuilt component for Fuel Adjustment Charges on one hand and on the other hand, have an element of cross-subsidy. In case, all such components were added to the domestic tariff there would be steep hike resulting into considerable hardship to domestic consumers. The Commission, while devising mechanism for generation of additional financial resources for the utility, has also kept in view the fact that it would not be practical or rational to attempt the coverage of revenue gap arising out of non-revision of tariff for the past three years in one stroke and has thereby attempted to minimise the effects of tariff shock on the economically vulnerable segments of society. Therefore, the Commission would attempt to spread over the coverage of revenue gap in a phased manner.

4.6.2.4 Keeping in view the above

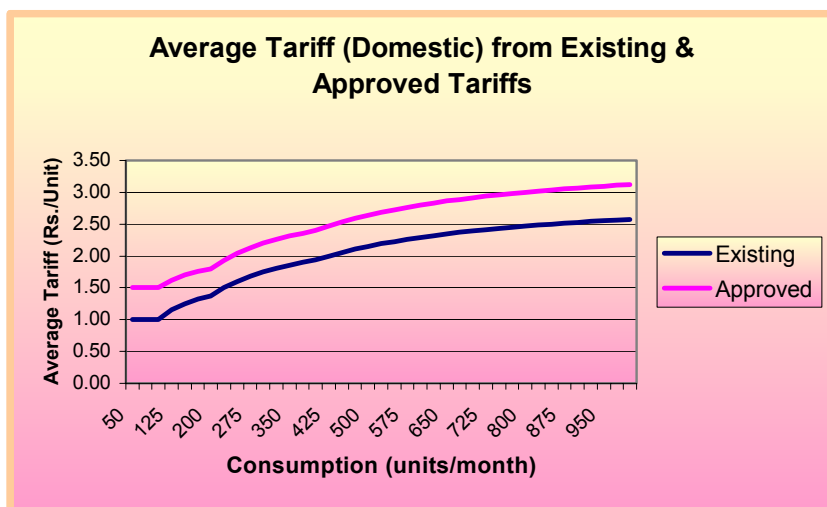
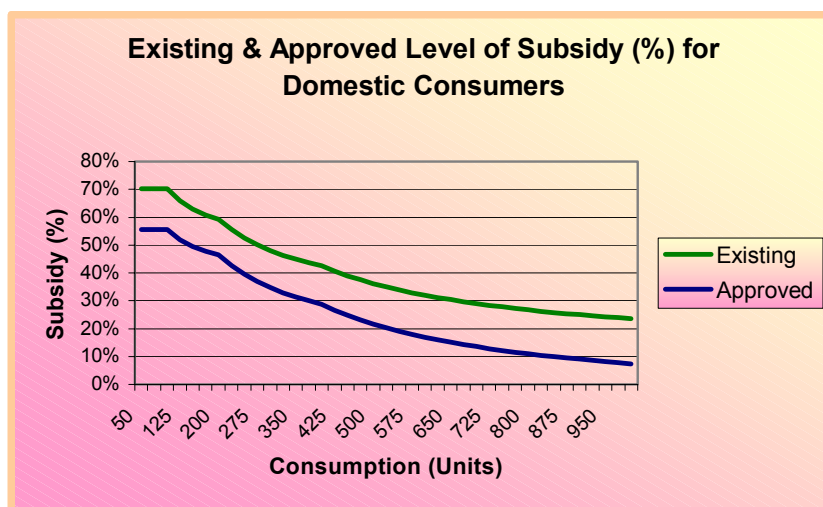
considerations the Commission has devised the tariff for different slabs. The existing Tariff, proposed Tariff as suggested by the DVB and that approved by the Commission are given in Table 4.3.

4.6.2.5 The graphical representation as given below would reveal that all the domestic consumers would continue to pay tariffs below the cost of service upto a consumption level of approximately 800

Table 4.3: Domestic tariff

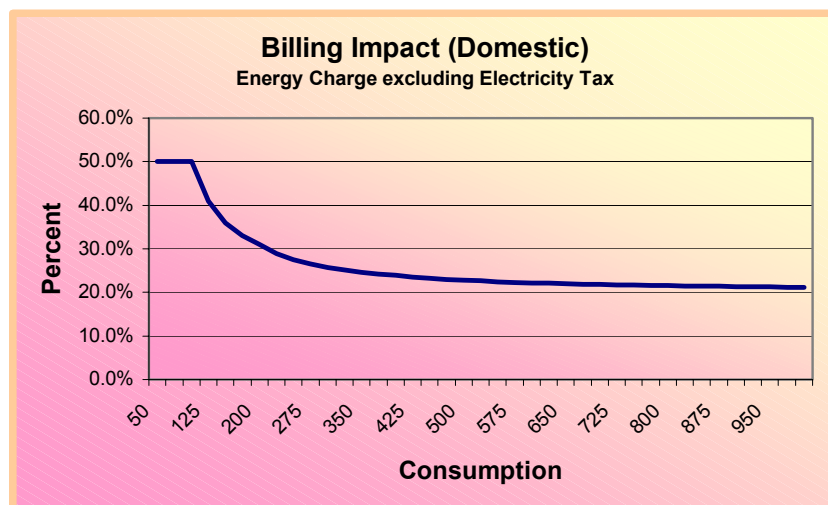
Slab	Existing (P/U)	Proposed (P/U)	Approved	
			Slabs	Tariff (P/U)
0-50	100	175	Lifeline (upto 50 units)	125
51-100	100	250	0-100	150
101-200	175	300	101-200	210
201-400	250	400	201-400	300
Above 400	300	450	Above 400	360

units per month, even after working out cost of service at 20% T&D loss. In fact the same impact continues up to consumption level of about 2000 units per month.



4.6.2.6 Domestic power

Domestic power with separate meters and having different K. Nos. is currently charged at the highest slab rate for domestic light/fan and power consumers. The existing charge is 300 paise per unit. The proposed charge is 450 paise per unit. The approved highest slab rate of 360 paise for domestic light/fan and power consumers shall apply to these consumers.



4.6.2.7 Domestic lighting/fan & Power on 11kv single delivery point for CGHS and other similar Group Housing Complexes

The existing tariff for this category is indicated in table 4.4.

4.6.2.7.1 The methodology followed for tariff setting in respect of the Group Housing Societies being billed on basis of single point supply was discussed in technical session with DVB. The

Table 4.4: Existing CGHS rates

% Consumption	Rate in paise per unit per month
First 30% Consumption	100
Next 30% consumption	200
Next 30% consumption	250
Remaining 10% consumption	300

Commission was apprised that the existing formula is based on presuming an average consumption level of 400 units per household per month. The 400 units so presumed are subsequently broken down in different slabs based on the domestic tariff structure and the energy charge thus receivable is worked out. The percentage wise break-up as indicated in the Table 4.4 has been arrived at in a manner such that the said energy charge tends to

approximate the amount payable to the utility. DVB has proposed to change both the tariff structure and the rate as per the pattern indicated in Table 4.5. According to DVB, the above tariff structure is devised assuming an average consumption of 500 units per month per household.

4.6.2.7.2 Proposed Structure

DVB has proposed to change both the tariff structure and the rate as per the pattern indicated in Table 4.5.

4.6.2.7.3 The Commission believes that

Table 4.5: Proposed CGHS rates

Consumption	Rate in paise per unit per month
First 10% consumption	175
Next 10% consumption	250
Next 20% consumption	300
Next 40% consumption	400
Remaining 20% consumption	450

though the consumption level by the relatively well off occupants of CGHS could be higher than the level of 400 units, it may be little more pragmatic to adopt a consumption level per household per month at 450 units. According to the approved slabs for domestic category the tariff structure shall be as shown in Table 4.6.

4.6.2.7.4 The Commission finds that the ultimate effect of the above said formulation is arriving at a multiplication

Table 4.6: Approved CGHS rates

% Consumption	Rate in paise per unit per month
First 22.2% (i.e. 100/450) consumption	150
Next 22.2% (i.e. 100/450) consumption	210
Next 44.4% (i.e. 200/450) consumption	300
Remaining 11.2% (i.e. 50/450) consumption	360

factor of 2.532 [i.e. $(22.2 \times 1.50 + 22.2 \times 2.10$

$+ 44.4 \times 3.00 + 11.2 \times 3.60) / 100$], which is in fact the weighted average of tariff under different slabs for 450 units of consumption. The Commission, therefore, finds that such a complex calculation methodology for billing is not necessary and a much simpler course of action would be to resort to billing by multiplying total energy consumption with the single per unit charge of Rs. 2.532. A rebate of 15% shall be available on the energy charges.

4.6.2.7.5 As in the existing arrangement, minimum charges at the rate of Rs. 150/- per kVA or part thereof per month on the maximum demand of the connection shall continue to be applicable.

4.6.2.8 Energy charges for common facilities for group housing societies

4.6.2.8.1 With regard to the common facilities for the group housing societies the Commission was apprised during the technical session that the common facilities in such cases were being fed either through a separate meter for such purposes or through the single point supply meter at HT (which also supplied

energy for the entire GH complex). In case of the first eventuality the energy supplied was billed at the rates applicable to domestic power connections whereas in respect of the second eventuality the charges get embedded in the total energy bill as worked out for the single point supply system. It can be appreciated that there is disparity arising out of the pricing mechanism applicable under the above-mentioned two circumstances. During the discussions in the technical session the DVB expressed the view that societies covered by the first eventuality could also avail the tariff structure for common facilities provided for single point supply system, if they also decide to move towards single point supply. DVB shall be prepared to work out the modalities for such a change over. Commission decides that in the meantime the tariff structure as applicable to the domestic category of consumers shall be applicable for common facility connection provided to such societies.

4.6.2.8.2 The Commission also wishes to place on record the fact that at subsequent stage the requisite statutory measures regarding licensing of agencies being supplied energy on single point basis for utilization by individual consumers will have to be appropriately addressed under the DER Act, 2000.

4.6.2.9 Domestic Lighting/Fan and power connections In Regularised/ Unauthorised Colonies, left out Pockets and Villages Both electrified and unelectrified

4.6.2.9.1 DVB is currently levying a fixed charge based on plot size for consumers residing in regularised/unauthorised colonies, left out pockets and villages both electrified and Unelectrified and has

proposed a substantial hike of 2.5 times for these consumers.

4.6.2.9.2 Proposed & Approved Rates

The Commission feels that the rates fixed earlier were not based on any scientific analysis and also on the lower side as compared to the area of plots occupied by the consumer. However, it is also a fact that certain amount of arbitrariness shall continue to prevail in the absence of load details/. metering of such consumers The Commission has strived to achieve some semblance of logical estimation of energy charges due from these consumers by assigning energy consumption level to different categories. It has been presumed that the consumption level of consumers occupying plots of size of 50, 51-100, 101-150, and 151-200 Sq. Yds. shall expectedly

Table 4.7: Tariff for domestic lighting/fan and power connections in regularized/unauthorized colonies, left out pocket and villages

Plot size (Sq Yds.)	Existing (Rs. per month)	Proposed (Rs. per month)	Commission's Approval (Rs./ Month)
Upto 50	100	250	150
Above 50 upto 100 .	200	500	255
Above 100 upto 150	300	750	360
Above 150 upto 200	400	1000	510
Above 200	Only metered supply as per normal tariff schedule		

be 100,150,200 and 250 units respectively. Applying domestic category rates, the rates payable in lump sum each month have been worked out/approved as indicated in Table 4.7

4.6.3 Non-Domestic Low Tension (NDLT)

4.6.3.1 This category covers LT consumers of load upto 100 kW having connected load (other than the industrial load) for lighting, fan & heating/cooling power appliances in all non-domestic establishments. This category also includes, but is not limited to, schools/colleges, hospitals, railways (other than traction), hotels & restaurants,

cinemas, banks, shops, poultry farms, horticulture, etc. They consume approximately 9% of the total billed units. This category of consumers are showing a growth rate higher than most of the other categories.

4.6.3.2 Currently the NDLT consumers having a single phase connection and a load of upto 10 kW are paying 300 paise per unit plus the fuel adjustment charge (FAC) of 65.81 paise per unit. Consumers with a three-phase connection and load above 10 kW are paying 400 paise per unit plus FAC. DVB had proposed a uniform tariff for non-domestic LT consumers in its proposal for tariff rationalisation in September 2000. The Commission had indicated in its Order on Rationalisation of Tariff that there was

merit in the argument of the DVB to have a uniform tariff for both single phase & 3 phase connections in the same category of consumers; and that the

Commission shall address this point of quantum of tariff along with the future tariff proposal. In the present tariff filing DVB has proposed a uniform tariff of 525 paise per unit. The proposed tariff is 44% and 13% more than the existing tariff for single phase and three phase consumers respectively.

4.6.3.3 Disparity between Three Phase & Single Phase Consumers

At present the three phase consumers are paying 100 paise per unit more than the single-phase consumers. The Commission believes that eliminating this

rate differential and simultaneously increasing the tariffs of both types of connections would have a big impact on the single-phase consumers. The Commission would endeavour to reduce the difference between the tariffs of the three phase and single phase connections gradually by increasing the tariff of single phase consumer more than that for the three phase consumers. For the present Order, the Commission approves a rate of 440 paise per unit for single-phase consumers and 500 paise per unit for three phase consumers. The approved tariffs are respectively 20.2% and 7.5% higher than the existing tariffs for single phase and three phase consumers. The tariff for Non-Domestic Power on 11 kV single point supply for commercial complexes will be 500 paise per unit with a rebate of 15% on energy consumption charges.

Table 4.8: Tariff for NDLT consumers

Slab	Existing (P/U)	Proposed (P/U)	Approved (P/U)
Single Phase (<10 kW)	365.81	525	440
Three Phase (>10 kW)	465.81	525	500
Non-Domestic Bulk	415.81	525	500

4.6.3.4 Misuse of supply

The existing tariff for misuse is 500 paise per unit and the proposed tariff is 600 paise per unit. The Commission appreciates that for misuse of existing connections, the consumer should be penalised and the penalty should be severe enough to discourage the defaulting consumer. Therefore the Commission accepts the DVB proposal.

4.6.4 Mixed Load High Tension (MLHT)**4.6.4.1 Consumer Profile**

This category includes non domestic consumers having connected load above 100 kW for lighting, fan, heating/cooling power appliances in domestic/

non-domestic establishment, pumping loads of Delhi Jal Board/ DDA/ MCD and supply to Delhi Metro Rail Corporation for their ongoing projects etc. DVB has not provided revenue related information specific to this category. In the filing this category is merged with the Large Industrial Power category.

4.6.4.2 Existing and Proposed Tariff

The existing energy charge at 11 kV supply is 350 paise per unit plus the FAC and the demand charge is Rs. 150 per kVA or part thereof per month. DVB has proposed

Table 4.9: Tariff for MLHT category consumers

Voltage	Existing		Proposed		Approved	
	Demand (Rs./kVA)	Energy (P/U)	Demand (Rs./kVA)	Energy (P/U) / (P/kVAh)	Demand (Rs./kVA)	Energy (P/kVAh)
11 kV	150	415.81	150	485/415	150	390
400 V	200	515.81	200	575/490	200	465

energy charge of 485 paise per unit and demand charge of Rs. 150/kVA or part thereof. Additionally, DVB has introduced kVAh tariff

of 415 paise per kVAh. At 400 volts, the existing energy charge is 450 paise per unit plus FAC and demand charge is Rs. 200/kVA per month. DVB has proposed energy charge of 575 paise per kWh or 490 paise per kVAh and demand charge of Rs. 200 per kVA per month.

4.6.4.3 Commission's analysis

The Commission noted certain deficiency in the proposal to the effect that the Petitioner have, in contravention to Commission's directive contained in the Order dated 16th January 2001, given the tariff proposal in terms of both kWh as well as kVAh. It is understood that Trivector meters have been provided to this

category of consumers and, therefore, energy charges have to be billed on the basis of kVAh reading recorded by the meters.

4.6.4.4 Approved Tariff

The Commission approves energy charge of 465 paise per kVAh at supply voltage of 400 V and 390 paise per kVAh at supply voltage of 11 kV. For supply at 33/66 kV, consumers will get a rebate of 2.5% on the energy charges on 11 kV rates and a rebate of 4% for supply at 220 kV as proposed by DVB.

The demand charge shall continue at the existing level. Table 4.9 summarises the existing, proposed and approved tariffs for MLHT consumers.

4.6.5 Small Industrial Power (SIP)

This category consists of industrial consumers with connected load up to 100 kW including lighting, heating and cooling load. Their consumption is approximately 11% of the total billed units. They are also showing a steady growth in consumption over the years for which DVB has submitted data in the filing.

4.6.5.1 Existing tariff

The existing tariff in conforming industrial areas and for consumers having valid MCD licence or Lal Dora Certificates in case of rural villages is 300 paise per unit plus FAC. For all other connections used for industrial activities without valid

municipal licence, the energy charge is 400 paise per unit plus FAC. DVB had proposed 460 paise per unit for licence holders and 600 paise per unit for consumers without having valid municipal licence including in urbanised villages and non-conforming areas. For supply at 11 kV single delivery point for group of SIP consumers the same tariff as applicable to regular consumers is applicable with a 15% rebate on energy charge

4.6.5.2 Approved tariff

The Commission approves the tariff of 410 paise /unit for SIP . The tariff for supply at 11 kV for single delivery point for group of SIP consumers will be 410 paise per unit with rebate of 15% on energy consumption charges. The rates approved for levy of misuse charges shall be 600 paise/unit.

Table 4.10: Tariff for SIP consumers

Category	Existing (P/U)	Proposed (P/U)	Approved (P/U)
Continuous/Non Continuous Industries	365.81	460	410

4.6.6 Large Industrial Power (LIP)

4.6.6.1 Consumer profile

This category includes large industrial consumers having load above 100 KW including lighting load. This category accounts for only 2.4% of the total billed units. The consumption of this consumers category has declined in recent years. Tariff for this category is specified at 400 V and 11 kV, with a further provision of rebate of 2.5% and 4% on the energy charge at 11 kV for supply at 33/66 kV and 220 kV respectively.

4.6.6.2 DVB's proposal

In respect of this category also the Commission noted that the proposal does not conform to the Commission's directive contained in the Order dated 16th January

2001, and the tariff proposal has been submitted in terms of both kWh as well as kVAh. Since Trivector meters have been provided to this category of consumers

Tale 4.11: Tariff for LIP category of consumers

Voltage	Existing		Proposed		Approved	
	Demand (Rs./kVA)	Energy (P/U)	Demand (Rs./kVA)	Energy (P/U)/ (P/kVAh)	Demand (Rs./kVA)	Energy (P/kVAh)
11 kV	150	365.81	150	425/ 360	150	340
400 V	200	465.81	200	525/ 450	200	425

also, energy charges have to be billed on the basis of kVAh reading recorded by the meters.

4.6.6.3 Approved Rates

The existing, proposed and approved charges are given in Table 4.11. Rebate on energy charge for availing supply at higher voltage as proposed by DVB will apply. The

LIP tariff apply to the induction furnaces, which are further subject to a minimum consumption guarantee charge.

subject to a minimum charge of Rs. 250 per kW or part thereof per month. DVB has proposed energy charge of 75 paise per unit. The misuse charge is proposed

at 600 paise per unit subject to minimum charge of Rs. 350 per kW or part thereof per month.

4.6.7.3 Approved Tariff

The Commission observes that historically agricultural consumers have been paying tariffs much below the cost of service. Clearly such low level of tariff is unsustainable keeping in view the financial viability of the utility. But the tariff of this category has to be increased gradually, so that over a period of time the tariff reflects the cost of service. Keeping this objective in view the Commission accepts the tariff proposed by DVB.

Table 4.12: Agricultural tariff

Existing (P/U)	Proposed (P/U)	Approved (P/U)
50	75	75

4.6.8 Mushroom cultivation

4.6.8.1 DVB's proposal

DVB have proposed to introduce a category for mushroom cultivation with a proposed energy charge of 150 paise per unit subject to minimum charge of Rs. 150 per kW or part thereof per month.

4.6.8.2 Commission's analysis

The Commission noted that the proposal for this category at lower rates was not

4.6.7.2 Existing Tariff

The existing tariff for agriculture is 50 paise per unit upto a load of 10 kW. For loads above 10 kW and in case of misuse of agriculture connection, the energy consumption is billed at 500 paise per unit,

Table 4.13: Tariff for mushroom cultivation

Existing (P/U)	Proposed (P/U)	Approved (P/U)
100	150	200

consistent with the stand taken by the Petitioner while repudiating the request of poultry farmers for consideration under agricultural category. In poultry farmers case the DVB had taken the stand that agricultural rates were applicable to activities connected with cultivation of crops and benefit of such rates could not be allowed to activities, which required electricity for heating/ cooling purposes. It was noted that the requirement of electricity for mushroom cultivation was for air-conditioning purposes. Subsequently the DVB have responded by stating that although this activity had been treated under NDLT in the originally approved Tariff for 1997 it was decided by the Board in the year 1998 to bring this activity under Agricultural Tariff at a comparatively higher rate of 100 paise /unit against the agricultural rates of 50 paise /unit. In the Tariff proposal for 1999-2000 the activity was placed under agricultural category and rates proposed were 200 and 250 paise/unit for load upto 50kW and for load between 50kW and 100 kW respectively, whereas the agricultural tariff proposed was 75 paise/unit. DVB have stated that Mushroom cultivation is a highly power intensive activity and perhaps more power intensive than poultry farming, therefore DVB would have no objection if the Tariff for mushroom cultivation be kept at par with that applied to poultry farmers. The Commission has considered the proposal. Keeping in view the fact that the NDLT tariff if applied to this activity from the current year would give considerable rate shock to the consumers under this

category the Commission for the present is inclined to restrict the price hike to 200 paise /unit.

4.6.9 Public Lighting

4.6.9.1 Applicability

Tariff for this category is applicable to all street lighting consumers including MCD, DDA, PWD/ CPWD, Slums. The public lighting consumption is 1.4% of total billed units. The demand for street lighting purposes is not expected to grow in the ensuing year.

4.6.9.2 Existing tariff

The charges for public lighting consist of a maintenance charge of Rs. 50 per light point per month and energy charge of 230 paise per unit plus FAC per month. DVB has proposed a 50% hike in maintenance charges at Rs. 75 per light point per month and proposed to increase the energy charges to 525 paise per unit.

4.6.9.3 Commission's analysis

The Commission considers that the rates for public lighting need to be revised. In view of the increase in costs of services for DVB over the years, It is noted that against an outlay of Rs.3.20 crores during the year 1998-99 an expenditure of Rs.4.25 Crs. is anticipated during 2001-02 in respect of R&M costs based on assumed increase in cost @ 10% p.a. On prorata basis and allowing increase for one more year with 97-98 as the base year, the fixed charges for the public lighting work out to Rs. 73 per light point. However the MCD have contended that 50% of the light points remain non functional. In the absence of any detailed justification being

offered by the Petitioner the Commission is not inclined to agree to the proposal of the DVB in toto. The Commission approves the rate of Rs. 60 per light point per month as maintenance charges. With regard to the energy charge, the Commission approves the rate of 360 paise per unit. There shall be no separate charge on account of r FAC.

4.6.10 Railway Traction

4.6.10.1 Consumption Pattern

The consumption of Railway Traction is 2.3% of the total billed units. For the period for which DVB has provided consumption data, the Railways have shown a very high growth rate and the consumption in ensuing year is also expected to increase by 28% over the consumption of current year.

4.6.10.2 Existing Charges

The existing charges payable by Railway Traction consist of a demand charge at Rs. 150 per kVA per month on billing demand, and energy charges at 300 paise per unit plus FAC, and a capacity blockage charge applicable to consumers drawing power at 33/66 kV single phase at Rs. 25000/- per month upto contract/maximum demand of 5 MVA. For contract/maximum demand of above 5 MVA, the capacity blockage charge is determined according to the formula: Rs. 1260 x (2.97A+5), where 'A' is the contract demand or maximum demand in MVA, whichever is higher.

Table 4.14: Public lighting tariff

Existing		Proposed		Approved	
Fixed Charge (Rs./Light Point)	Energy (P/U)	Fixed Charge (Rs./Light Point)	Energy (P/U)	Fixed Charge (Rs./Light Point)	Energy (P/U)
50	295.81	75	525	60	360

DVB has proposed to increase the energy charge for Railways to 425 paise per unit.

4.6.10.3 Capacity Blockage Charges

The Commission has noted that DVB is supplying power for the Railway traction through one phase while the other two phases remain unutilised / blocked. In course of the Technical discussions the DVB have suggested that the Railways may examine the feasibility of taking power from all the three phases. Commission is in agreement with the contention of Petitioner on this issue and the levy of capacity blockage charges shall continue in accordance with the mutually agreed formula followed in the past.

4.6.10.4 Leading power factor incentive

The Commission is not in agreement with the suggestion for provision of incentive for leading power factor load in view of the introduction of the kVAh billing for energy charges, which the Railways have agreed to during the deliberations on the proposal for rationalisation of Tariff in the year 2000-01 filed by the DVB. Technical considerations require power factor of the load be maintained close to unity (lagging), which has already been incentivised through the kVAh billing system.

4.6.10.5 Site for Metering

In regard to the proposal that metering should be done at Railways premises in order to account for the technical losses from the supply point to the Railways premises, Commission was apprised by DVB during Technical Sessions that metering has to be done at the end at the DVB substation where Railways starts drawing power in the system owned by

them. This was also appreciated by the Railways. Accordingly, the present system of billing with reference to the metering arrangement is to continue.

4.6.10.6 Approved Tariff

The Commission approves a tariff for Railways as the tariff for LIP consumers along with the levy of capacity blockage

Table 4.15: Tariff for railway traction

Existing		Proposed		Approved	
Demand Charge (Rs./kVA)	Energy (P/U)	Demand Charge (Rs./kVA)	Energy (P/U)	Demand Charge (Rs./kVA)	Energy (P/kVAh)
150	365.81	150	425	150	340

charges.

4.6.10.7 Electricity Duty

The issue regarding applicability of the Municipal charge pertaining to Electricity Duty on the Energy supplied to Railways was raised by the Northern Railways during the public hearing and subsequently a detailed application was filed by them inviting attentions towards provisions of section 184 of the Indian Railways Act which are to be considered in addition to the Constitutional provision regarding prohibition against levy of such charges by a State Government / local authority in respect of electricity supplied to Railways. The MCD have defended the levy by citing the provisions of DMC Act, 1957. The MCD had been supplied with a copy of application filed by the Railways on 24th April 2001 with the directions to furnish their response by 27th April 2001 which was still awaited at the time of issue of this order. The Commission is of the view that the issue involves a substantial point of law and, despite the failure of MCD to furnish their comments in time, it would not be prudent to decide the same conclusively on ex-parte basis. For the time being, the Commission has decided that since the tariff order cannot be delayed for want of a

view in this matter, a reasonable course of action at this stage would be to continue the levy of electricity duty in respect of energy supplied to Railways for a further period of next three billing cycles from the date of issue of this order. The collection would, however, be retained by DVB and not passed on to

MCD. In case, the MCD are able to furnish a satisfactory reply in support of their claim, the Commission would permit the payment of

such collection and future collections on this behalf to MCD, otherwise the collections shall be refunded to the Railways and any future collections on this account stopped from Railways.

4.6.11 Delhi Metro Rail Corporation Ltd.

4.6.11.1 Categorisation of DMRC

As has been discussed in Chapter 2, the Delhi Metro Rail Corporation has submitted that DVB's tariff proposal does not make any specific provisions for MRTS although it is an entirely different entity having specific characteristics of functioning. During Technical Discussions the Commission was apprised that initial power requirements of Metro upto about 30 MVA shall be met by DVB and later on, the full requirements of about 120 MVA by about 2005 shall have to be arranged from outside the DVB system for which the concerned Central Organisations have been deliberating.

4.6.11.2 Commission's view

The Commission is, therefore, in agreement with the DVB that for the initial requirements, Metro would be liable to be categorised as a bulk consumer of DVB. Accordingly, the Commission decides that the rates

applicable to Railway Traction except that the capacity blockage charge (since it will be three phase supply to Metro) will be applicable to Delhi Metro Rail Corporation Ltd.

4.6.11.3 It may be added in conclusion that the various issues regarding functional nature and operational requirements of Metro Rail, raised in their submissions, do not have bearing on the tariff structure.

4.6.12 Supply to NDMC and MES

4.6.12.1 DVB's submission

DVB have stated in its filing that it is supplying power to NDMC at 33 and 11 kV; and to MES at 11 kV only. However, the bills for NDMC from October 2000 to January 2001 show some amount of energy is being supplied at 66 kV also. NDMC accounts for almost 11% of the total billed units for DVB. Both NDMC and MES are not treated at par with the category "Bulk Consumers" as regards the tariff that is charged to them. Presently, the practice of charging tariff, billing, cost of services and average billing rate in respect of NDMC and MES is based on 'guiding principles' laid down by the erstwhile Ministry of Irrigation and Power in the year 1972. DVB has submitted that these consumers are not treated at par with other bulk consumers as they are charged a lower tariff based on cost of supply at the respective voltage level. NDMC and MES are placed much better with respect to the consumer mix. DVB has also argued that the quality and reliability of power supply to NDMC and MES is far better than to most other consumers of DVB and, as per practice, the load shedding pattern for NDMC and MES has also not been the same as for the rest of Delhi. During Technical Discussions DVB has also argued that the load pattern of

NDMC is also very skewed. DVB has proposed to introduce a separate tariff category for NDMC and MES incorporating a certain mark up for reducing the element of cross-subsidy and has proposed a tariff of 350 paise per unit irrespective of the voltage level.

4.6.12.2 Commission's view

The Commission believes that NDMC and MES are not similarly placed with the other bulk consumers as they purchase energy from DVB and supply it to retail consumers unlike other bulk consumers who consume energy as a raw material for production of some goods or services. Therefore, the Commission is inclined to set a tariff for these consumers at the cost of supply at appropriate voltage level. The cost of supply would consist of the pooled cost of DVB's own generation and power purchase costs adjusted for transmission losses plus a wheeling charge reflecting the O&M costs and depreciation of the transmission assets. The Commission also believes that ideally, the tariff for bulk consumers like NDMC and MES should be a two part tariff reflecting the fixed and variable costs of generation and power purchase and operation and maintenance costs. However, there is not adequate information available to the Commission to set such a tariff at present.

In the absence of any fixed charges, the pattern of demand makes it costlier for DVB to supply power to NDMC as compared to its other consumers. Taking note of all the arguments and also the level of information available, which could have enabled it to arrive at a precise estimate of wheeling charges and transmission losses, Commission approves a tariff of 270 paise per kVAh at all voltage levels.

Table 4.16: Tariff for NDMC/MES

Proposed (P/U)	Approved (P/kVAh)
350	270

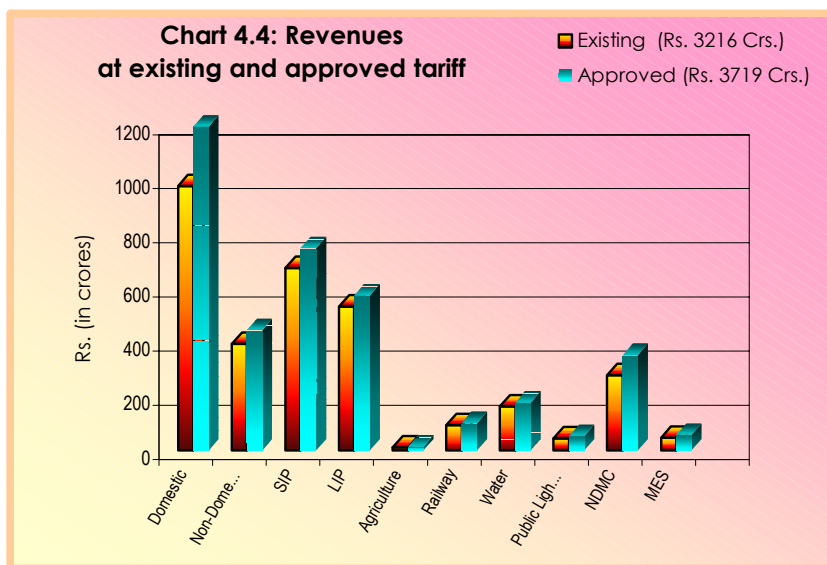
4.7 Total Revenue from Approved Tariffs

Table 4.17 summarises the revenue from the existing and approved tariffs.

The approved tariffs are 15.7% higher than the existing tariffs. The Commission estimated the revenue from other miscellaneous charges at existing and approved tariff to be Rs. 424.8 Cr. and Rs. 396.8 Cr. respectively. Thus the total revenue from existing and approved tariffs including the miscellaneous and other charges come to Rs. 3641.11 Cr. and Rs. 4116.65 Cr.

Table 4.17: Revenues and average tariff

Category of Consumers	Revenue from existing Tariff (Rs. Cr.)	Revenue from Approved Tariffs (Rs Cr.)	% Increase in average tariff over existing average tariff	
			Proposed	Approved
Domestic	977.58	1197.21	53.1%	22.5%
Non Domestic	393.55	444.87	29.9%	13%
Small Industrial Power	675.03	748.09	28.4%	10.8%
Large Industrial Power	532.84	573.27	15.3%	7.6%
Agriculture	11.08	14.34	50.0%	29.4%
Railways	93.31	101.20	14.8%	8.5%
Water	162.84	176.90	18.3%	8.7%
Public Lighting	44.01	53.56	74.0%	21.7%
NDMC	278.55	352.74	42.0%	26.6%
MES	47.52	57.61	38.0%	21.2%
Total	3216.32	3719.86	35.1%	15.7%



The approved tariffs are appended to this Order as Tariff Schedule for the year 2001-02.

4.8 Revision to the Tariff Schedule: Salient Features

4.8.1 Changes/modifications made

The Commission has examined the 'Tariff for the year 2001-02' submitted by DVB as an annexure to its ARR and has approved the same with following additions/changes:

4.8.1.1 Definitions

Definition of Act has been changed to mean Delhi Electricity Reform Act 2000 instead of Indian Electricity Act, 1910.

- Definitions of Commission, Electricity Act, Regulations, Licence/Licence holder, Consumer, Billing cycle have been added.
- Definition of Energy Charges modified to the extent that Energy charges are to be calculated based on kVAh in case of HT consumers as kVAh billing is applicable to them.

- Minimum Consumption Guarantee charges redefined to include (demand + kVAh charges) on 360 kVAh, as kVAh billing is applicable to the induction/arc furnaces consumers.
- Definition of connected load modified to exclude load of all spare plug sockets for the purpose of load assessment, to avoid any arbitrariness in load assessment and consequent harassment of the consumers. Further connected load shall be computed after allowing a tolerance of 5%, this would take care of any assessment error in connected load computation.
- Definition of billing demand has been modified as under:
 - The provision that billing demand is highest of the maximum demand during preceding 11 months has been deleted. The Commission feels that since the consumer has been billed for higher kVA drawn from the system, in the form of higher demand charges at that point of time, the provision of levying demand charges based on maximum demand

during preceding 11 months is punitive in nature.

4.8.1.2 General conditions of supply

(i) As has been discussed in Chapter 2, DVB had proposed that the load limit upto, which a connection could be released as SIP/NDLT connection be reduced from present 100 kW to 50 kW. The Commission has retained the limit of 100 kW. The rationale of preserving the limit has been explained in Chapter 2.

(ii) In cases where consumer has load requirement in excess of 100 kW but avails the supply on LT due to non-availability of space, consumer's load entitlement is being fixed at 200 KW/plot. The Commission feels that present provision of 200 kW is liable to be misused if the number of consumers per plot is more than one, and would thereby put severe strain on DVB's LT system. This could also impede the process of moving towards an LT less system.

(iii) Violation of weekly close day, peak load hours, emergency conditions restrictions

(iv) Mandatory Energy Audit

Issues at (iii) & (iv) are not precisely Tariff related. The Commission would prefer to take a view on these efficiency related measures at an appropriate stage after detailed deliberations involving stakeholders and consumers.

4.8.1.3 Application

(i) In cases of load violation i.e. load on NDLT/SIP being found more than 100 KW, load violation charges would be levied on (energy + demand) charges instead of the total bill amount, as the total bill amount may include other charges

unrelated to energy consumption such as electricity duty, meter rent, past arrears etc.

(ii) 'Modified fuel & power purchase adjustment charges' provision has been deleted, as the DVB is required to project escalation in the fuel price and power purchase in the ensuring year's ARR, as per Commission's order dated 16th January on Rationalization of tariff 2001.

4.8.1.4 Other Conditions of Supply

(i) No misuse charges would be levied for supply to activities incidental to the main activity provided load for such activity is within 10% of sanctioned load or 10 KW whichever is less. Commission feels that incidental activities such as chemist shop in a hospital etc. not only give support to the main activity but also help people who avail such facility. A limit of 10% of Sanctioned Load or 10 KW whichever is less has been imposed to guard against any misuse of the provision.

(ii) Similarly in case of industrial premises no misuse charges would be levied on similar incidental activity i.e. use for domestic or non-domestic purposes by any agency even other than the registered consumer, provided the main activity continues. Upper limit, in this case also is 10% of the Sanctioned Load or 10 KW whichever is less.

4.8.1.5 Installation of shunt capacitor

(i) Clause regarding levy of Low Power Factor (LPF) surcharge for power factor below 0.85 has been restricted to a surcharge @ 20% upto a power factor of .75. In case of most HT consumers, LPF surcharge is not applicable with the introduction of kVAh billing. Low power factor surcharge is being levied on SIP/NDLT consumers based on

measurement of instantaneous power factor, which is an erroneous approach. The Commission is of the opinion that levy of LPF surcharge should be based on average power factor. At present DVB has no mechanism to compute average power factor for consumers having electromechanical meters.

(ii) Provision relating to disconnection of supply in case average power factor goes below 0.6 and additional LPF surcharge @ 2% has been deleted, as the Commission feels that the surcharge @ 20% is enough to penalize defaulting consumers and to motivate them for installation of power factor correction equipments. This penalty would fairly compensate the DVB for any loss on account of low power factor.

4.8.1.6 Domestic tariff

Provision relating to applicability of this tariff to farmhouses is modified to include only those farmhouses where sanctioned load does not exceed 21 kW., comprising of 11 kW load for domestic & 10 KW load for agricultural requirement.

4.8.1.7 Non Domestic Power on 11KV Single Delivery Point for Commercial Complexes

Provision relating to imposition of surcharge @ 30% on exceeding the contract demand has been modified to include a 5% cushion on contract demand. This would allow for incidental demand violation by the consumer.

4.8.1.8 Public Lighting

The common facilities for Co-operative societies having independent connections through separate meters' have been deleted from NDLT III and included in the domestic tariff Category

4.8.1.9 Minimum Charges

Provision relating to Minimum charges during temporary suspension of supply, applicable to SIP consumers, has been deleted. As per clause 10 of conditions of supply issued by DVB, 'any connection lying disconnected for any reason for more than 6 months is liable to be disconnected'. After disconnection, the connection would be taken up only as a new connection with associated charges. Therefore, the Commission feels that such provision is redundant.

4.8.2 Certain changes proposed by DVB and accepted by the Commission

The Commission has accepted other some changes proposed by DVB in the provisions of the 'Tariff Schedule 1997-98'. Following changes with respect to the existing provisions have been accepted:

4.8.2.1 Definition of connected load

Modified to include "Heating/cooling use of the apparatus/load shall be taken into account as per prevailing season i.e., 1st April to 30th Sept., cooling and 1st October to 31st March heating. The load exclusively relating to pumps meant for fire fighting purposes shall not be taken into account."

4.8.2.2 Change of category from LT to HT due to unauthorized load

Provision regarding levy of surcharge has been modified to exclude: "However this would not prejudice the levy of SIP/NDLT tariff with load violation surcharge @ 30% on account of connected load beyond 100 kW from a date falling even prior to the past six months on the prima facie establishment with documentary evidence from that date. This relevant tariff with surcharge

and other levies, for violation as may be called for, will continue in subsequent bills till the load is brought within SIP/NDLT limits and verified by the Board."

4.8.2.3 Provision regarding Misuse of Supply

It has been modified to include "The following shall not be treated as misuse of supply

i) Change of firm from Private Limited to Limited and vice-versa

ii) For cottage industries operating in residence by family members only where electricity is not used for processing/manufacturing of goods such as repair of shoes by cobbler, Dhobi where ironing of cloth is not done by electricity, stitching/knitting where the machines are not operated with electricity etc."

4.8.2.4 Provision regarding installation of shunt capacitors

It is modified to include "Billing of energy charges in case of MLHT and LIP consumers shall be done on the basis of kVAh recording of meter. In such cases the above clauses relating to incentive for power factor improvement and supply disconnection shall not apply."

4.8.2.5 Provision regarding assessment of energy when meter is faulty

This has been added as under "As and when the meter is detected to be faulty either by DVB or by consumer, the calculation for estimation of energy (for the period meter is defective) shall be made on the basis of the pattern of consumption available for the period of past six months when the meter was functional and the pattern of consumption recorded in the six months succeeding the replacement of the defective meter. The final adjustment for the said period shall be made on the basis of the pattern of

consumption recorded during this total period of twelve months"

4.8.2.6 Non-domestic power on 11 kV single delivery point for commercial complexes

Following is added "Where the MDI reading exceeds contract demand, a surcharge of 30% shall be levied on the total amount of the energy charges for such billing cycle. The surcharge so levied shall be without prejudice to any action as may be called for under the act/rules /regulations/orders issued from time to time."

4.8.2.7 Mixed Load (High Tension)-MLHT & Large Industrial Power

Introduction of a tolerance of 5% on contract demand has been accepted. Contract demand violation charges @30% thus, shall be applicable when the MDI reading exceeds contract demand by more than 5%. Further, for both the above categories energy billing shall be based on kVAh

4.8.2.8 Railway Traction

Introduction of a tolerance of 5% on contract demand has been accepted. Contract demand violation charges @30% thus, shall be applicable when the MDI reading exceeds contract demand by more than 5%. Simultaneous maximum demand at all metering points shall be considered for levy of demand violation charges. Further energy billing shall be based on kVAh.

4.9 Treatment of the Revenue Gap

DVB has stated that it made its tariff filing in accordance with the Commission Guidelines issued in October 2000. However, DVB has also pleaded that since this was the first time they were filing a detailed tariff application and since in the past DVB have not been maintaining

information in the formats required by the Commission, it requests the Commission to accept the information as provided.

DVB admits that audited accounts are not available after 1991-92 and even un-audited accounts are not available after 1998-99. DVB has also stated that they do not have fixed asset register. The tariff filing did not include DVB's load-forecast projection for 2001-02 and methodology for estimating consumption by category of consumer, methodology for the estimation of expected revenue for the ensuing year, details of the assets currently owned by the utility and its investment plan.

DVB could not furnish either an embedded cost study or a marginal cost study to support its filing. Nor did it provide any detail on its strategy for the reduction in T&D losses, its plans for future load research, its plans for rationalization and upgrading its manpower or its efforts to strengthen the energy audit.

A number of meetings were held with the DVB from time to time and Commission also issued deficiency letters to the DVB to provide relevant information. However, DVB has not been able to provide complete information to the Commission. In addition to this, the figures in respect of a number of cost and revenue parameters (including T&D losses, energy consumption by various categories of consumers, etc.) submitted by DVB in its various submissions vary considerably from each other. For example, the current level of T&D losses as per the tariff application is 50.56% but as per a subsequent submission it is 46.8%. Further, the T&D loss level

submitted by the DVB to CEA is 48% and to the Planning Commission is 36%.

Considering the above, the ARR and expected revenue figures computed by the Commission are its best estimates. Therefore, Commission would conduct a year-end review of all the expenses and revenue of the utility for the year 2001-02 along with the next ARR filing and determine any over or under recovery of allowable costs of DVB during the year. This ex-post review would also establish

any uncovered revenue gap, which the Commission could permit the utility to carry forward as a regulatory asset – on which DVB might be permitted to earn a return equal to the cost of capital used to finance this asset.

Based on the information available with the Commission, the Commission has arrived at an aggregate revenue requirement of Rs. 5239.34 crores. The tariff and other charges approved by the Commission are expected to generate Rs. 4116.65 crores of revenue.

The Commission expects DVB to generate additional revenue of (or reduce costs by) Rs. 250 crores from efficiency improvements in its operation. This leaves a revenue gap of Rs. 872.7crores to be carried forward as regulatory asset. However, as has been mentioned above, this revenue gap is only provisional and would be subjected to an ex-post review at the end of the year.