

2. On the Response from Stakeholders

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2.1 Stakeholders' response to tariff proposal

The Commission received written comments from 523 stakeholders, which included individual respondents and those representing the interests of domestic consumers through Residents Welfare Associations (RWA) and Cooperative Group Housing Societies (CGHS), industrial groups through Welfare Associations and Federations, commercial groups through Chambers of Commerce and Commercial Associations and also the consumers from agricultural category. Certain non-government organizations representing the consumer interest also made their submissions. One political party and two MLAs also sent their views to the

Commission. Responses were also received from Municipal Corporation of Delhi, New Delhi Municipal Council, Delhi Metro Rail Corporation and the Northern Railways.

2.2 Public hearings

The Commission heard representations from 88 objectors during public hearings that took place on 14th-16th, 19th-21st, and 27th March 2001.

2.3 Objections and suggestions made by the stakeholders

The objections and suggestions made by the stakeholders cover the various aspects of the ARR filing including the procedure followed by Commission as well as the functioning of the Petitioner organisation. Some major objections and suggestions, response from the Petitioner and observations of the Commission are brought out below.

2.3.1 Procedural Objections

2.3.1.1 Regarding opportunity for participation

Procedural objections primarily related to the denial of opportunity to the stakeholders for active participation in the process of tariff setting. A few respondents felt that adequate publicity had not been given to the proposal from the Petitioners and placing of the petition on the Commission website did not provide access to all the consumers. During the course of public hearing, it was also argued on behalf of certain respondents that the response received from the Petitioner in pursuance to various clarifications sought by the Commission should also be made available to the public for analysis and submission of respective comments.

2.3.1.2 Commission's Observations

Commission notes that adequate publicity was given to the proposal received from DVB. The salient features of the tariff proposal were published in leading newspapers, published from Delhi, in English, Hindi and Urdu on 4th and 5th February 2001. In the aforesaid press advertisements it had been stated that a complete copy of the petition was available on the Commission website and could be downloaded by the interested stakeholders therefrom. Copy of the petition could also be purchased from the Commission office on payment of the requisite charges. The attachments relating to the petition could be inspected from the Commission office on any working day on payment of requisite inspection charges. The responses could be sent by e-mail, fax or by post. The stakeholders were given time to respond by 19th February 2001.

2.3.1.2.1 Substantial participation by stakeholders

Several stakeholders benefitted from these arrangements and collected copies of the petition and also inspected the attachments thereto. Keeping in view the substantial number of responses received from public it can be inferred that the proposal had received adequate publicity and the public by and large contributed significantly through their suggestions and comments.

2.3.1.2.2 Extent of public participation

It is also noted that although the exercise for tariff setting is required to be conducted with participation of the stakeholders as far as possible yet it is to be appreciated that it is not possible to

adopt a procedure which involves exchange of each and every information received from the petitioner with the stakeholders / respondents at every stage of scrutiny and examination of the proposal. It is felt that such a procedure as suggested by certain respondents would lead to undesirable expenditure of public money and would also cause considerable delay in finalisation of the proposal without any corresponding benefit to the quality of the final Order. Commission is satisfied that the extent of public participation was substantial and the opportunity provided to the stakeholders for participation was fair and reasonable. **In order to ensure widest public participation Commission accepted submissions even without attested affidavits, appreciating the fact that, all consumers may not be aware of the legal procedure involved in making submissions before the quasi-judicial authority.**

2.3.2 Quality of filing

2.3.2.1 Inadequacy of data

Inadequacy of the data furnished with the petition was another major issue, which invited substantial criticism from the various stakeholders and respondents at the initial stage and during the course of public hearing also. Several respondents commented on the failure of the Petitioner organisation to prepare its accounts as per the prescribed procedure and also expressed their strong criticism of the inability of the Petitioner to furnish information as per the formats prescribed by the Commission. Certain respondents wanted the Commission to reject the filing on this ground itself.

2.3.2.2 DVB's response on quality of filing

Responding to the criticism on this account the DVB have made the following submissions:

- The quality of information furnished by DVB is to be viewed in context of the efforts made by it for updating the accounts and submission of the same to the auditors, against the inherited backlog from its predecessor organization.
- DVB have claimed that the accounts in several respects are better than those of other State Electricity Boards. DVB have an advantage over other Boards since its billing is completely computerised and, therefore, the financial information on this aspect of functioning of the utility is fairly reliable.
- The Petitioner organisation annually submits information on capital expenses to the GoNCT of Delhi at the stage of seeking plan funds by way of loans.
- The information regarding power purchase cost is also reliable since it is substantially based on the supplies (almost 85%) from Central Power Sector Undertakings and other grids.
- The interest expenses on Plan and Non-plan Loans were also known accurately since these are based on terms and conditions on which the GoNCT of Delhi provides such loans to DVB.
- The data relating to personnel management of DVB is also computerised.

2.3.2.3 DVB's request

DVB have argued that since the information relating to the parameters which are to be

relied upon by the Commission for framing its order on tariff determination are substantially reliable; therefore the necessity for rejection of the filing on the grounds of inadequacy of data should not arise.

2.3.2.4 Commission's observations on quality of filing

The Commission has appreciated the concern shown by several stakeholders regarding the failure of the utility to maintain its accounts in a satisfactory and acceptable manner. However, in light of its awareness about the quality of information management system with the DVB, the Commission took a view that in the overall interest it would not be prudent to reject the filing summarily. Instead, it would be better to obtain more and more information in order to refine the filing for its further processing.

2.3.2.5 Strategy for filling up information gap

The Commission has thus decided to entertain the petition and seek further supplementary information and clarifications from the Petitioner. The information gap was also filled up, to some extent, through discussions with the key officials of the Petitioner organisation during the technical sessions. The Commission is satisfied that this was the best option available in the current scenario and such a step was also in public interest.

2.3.2.6 Requirement of developing Management Information System

Every organisation in the present day atmosphere requires systematic study of information, coupled with tools of analysis, which minimises risks and facilitates sound decisions. DVB, being in Delhi, enjoys a clear advantage by

virtue of the fact that they have to operate in an area where latest techniques of information are available at its doorsteps. Promotion of computerised data Management at each level of decision making, development of a system of monitoring of various technical issues through computerised process and complete computerisation of material and maintenance management activity is a critical necessity for revival and survival of the organisation.

2.3.2.7 Commission's direction on tariff filing

In the context of Tariff filing the **Commission directs DVB to develop its Management Information System and start collecting and compiling data in the formats as required for the next tariff filing. The Commission also directs the petitioner to clearly identify costs pertaining to its generation, transmission and distribution business separately, and submit the same to the Commission along with the next tariff filing.**

2.3.2.8 Quality to be improved in next filing

In the next filing, if the Commission finds that the quality of data has not improved significantly, it may be constrained to reject the filing.

2.3.3 The legal status of DVB and competence for filing the petition

2.3.3.1 Objection raised and reply given by DVB

The Status of DVB and its competence to file this petition before the Commission was also questioned by one of the respondents on the grounds that the DVB was not a licensee and therefore it could not have come before the Commission with the tariff determination petition. The petitioner rebutted that DVB is a State Electricity

Board constituted under the provisions of Electricity (Supply) Act, 1948 and is a deemed licensee by virtue of the provisions of the aforesaid Act.

2.3.3.2 Commission's views

Commission is of the view that the powers delegated under the Delhi Electricity Reform Act, 2000 are quite comprehensive and there is no bar against the tariff determination petition filed by the Board being considered by the Commission. The Delhi Electricity Reform Act, 2000 provides that the DVB shall continue to perform its present duties and obligations till successor entities takeover as a sequel to the reform process in power sector in Delhi. The regulatory responsibilities entrusted to the Commission under the aforesaid legislation have a wide coverage including regulation of the activities of the DVB in its present state. The DERC Comprehensive (Conduct of Business) Regulations, 2001, under which these proceedings are being conducted also provide powers to the Commission for conducting the tariff setting proceedings in a manner, which is suitable to the requirements of the situation.

2.3.4 DVB's role in effecting privatisation and five year tariff determination principles

2.3.4.1 DVB's role in effecting privatization

DVB's role in effecting privatisation and its suggestions for fixation of tariff setting principles for the next five years was questioned by several stakeholders on the grounds that DVB was in the process of winding up and therefore it has no authority to suggest the tariff or the tariff setting principles for its successor entities. It was suggested that the process of privatisation should be carried out in a transparent manner under regulatory scrutiny otherwise

the tariffs could be very high due to revaluation of assets.

2.3.4.2 Five year tariff principles

No member of the public supported DVB's request for a five-year formula for setting tariffs. Respondents linked both the tariff filing and the multi-year formula to the privatisation efforts (although one consumer suggested that the formula was a ploy to evade privatisation by showing an improvement in revenues), and then provided their views on privatisation.

2.3.4.3 Public views on benefits of privatisation

Opinion was split on the benefits of privatisation of distribution system. Some argued that privatisation will not give relief to customers and that those who hope that privatisation will improve efficiency are misinformed. Others maintained that there was no hope without privatisation.

2.3.4.4 Consumers' reservations regarding process and timing for privatisation

Even those of the respondents who favoured privatisation questioned the process and the timing. They argued that DVB should de-link its future plans from the current ones as the tariff determination principles for 2002-2006 embody issues that need to be tackled separately. The documents, thus far submitted to the Commission, do not contain adequate information regarding privatisation. Another respondent stated that while the decision to privatise DVB may be a good one, it should be discussed and analysed by Parliament and implemented in a proper manner. The argument that losses can be controlled after privatisation, which can

be done after an increase in rates, appeared to one objector to amount to putting the cart before the horse. Still another contended that DVB should first try to develop as a model organisation for five years by completely eliminating power theft.

2.3.4.5 Elements of the formula

Elements of the formula were also criticised. DVB have not shown the relationship between the tariff hike and privatisation of the power sector, as privatisation should reduce losses appreciably. Several suggested that the plan to reduce losses at 2% per year is ridiculous when companies in Kolkatta and Mumbai distribute power with T&D losses of less than about 10%.

2.3.4.6 DVB's response

The DVB have responded to this criticism by stating that it is the nodal agency, which under directions of the Government are also taking steps in the process of reforms and privatisation for the power sector in Delhi. The Petitioner have admitted that although there is lack of reliable information for deciding the benchmarking parameters in respect of such exercise, yet it was keen to ensure that the objects of the reform process were achieved quickly and effectively. It felt that being the only agency having the expertise in this field the DVB did have a role to play in the process of privatisation. It has been further stated that the new entities, which would take the place of DVB, would not be in a position to immediately submit their tariff proposals before the Commission until the restructuring plan has been completed.

2.3.4.7 Regarding depreciation of assets

Regarding the doubts of the stakeholders on the issue of the depreciation of assets the petitioner have asserted that the privatisation would obviously be through a transparent process subject to regulatory scrutiny. **Detailed analysis of this issue** has been made in Chapter 3 containing Commission's order on ARR of DVB for the year 2001-02.

2.3.5 Other General Objections

2.3.5.1 Comparison with other SEBs

Other general objections of the stakeholders refer to the difference in the functional scenario between Delhi and the neighbouring States. It was pointed out by the respondents that in states like Haryana, there were substantial losses due to the large number of agricultural connections. The DVB enjoyed an advantageous position in this regard. Due to the difference in consumer profile, any comparative analysis with the tariff structures of other States was not acceptable.

2.3.5.2 Operational Constraints of DVB

In this regard, the petitioner has stated that in certain respects their operational parameters are disadvantageous also. For instance there are a number of Jhuggi Jhopri (JJ) clusters in Delhi, which do not have metered supply. Such JJ clusters are the biggest sources of pilferage of energy. It has been further argued that the cost of power purchase is higher in the case of Delhi. The comparative statements have been brought out in order to indicate that the requirements of DVB are not inconsistent with those of other utilities.

2.3.5.3 Commission's observations

The Commission noted that comparisons do not serve any purpose in the present context where issues are to be decided on

their respective merits. However, for information sake, the Commission has collected information on tariff structures and costs of power in respect of neighbouring States of Haryana, U.P. and Rajasthan. The table in Annexure D gives the relevant details.

2.3.6 T & D losses

2.3.6.1 General criticism from consumers

The majority of consumers have protested against the tariff hike on the ground that this is merely an attempt to cover up the losses for which the organisation is also substantially responsible. Certain respondents have suggested that the conduct rules of the organisation should provide for strict disciplinary action against the employees of the utility found to be involved or colluding with persons involved in theft of power.

2.3.6.2 Doubts regarding statistics

Consumers have doubted the figures regarding T&D losses submitted by the DVB in the petition. Many objectors observed that the high T&D losses were responsible for the high level of and increase in the tariff. DVB's average of 50% losses (with losses in some areas as high as 72%) are considered particularly egregious in light of the compact nature of the service territory and when compared to national averages of 22% and international standards of about 8%.

2.3.6.3 Losses due to Deficiencies in Metering and Billing system

Some stakeholders suggested that the losses are the result of meter tampering and unauthorised connections, which take place with the collusion or negligence of staff and the knowledge of the politicians and police. Unpaid bills

and daytime street lighting also contribute to losses. Particularly criticised was the theft that occurs in the JJ clusters and the free electricity provided to employees, politicians and the police. Others charge that there is a massive theft by industrial and commercial consumers and point to the unexplained low power factor. The objectors note that honest citizens bear the cost, and some predict that increased tariffs will only lead to increased theft.

2.3.6.4 Objections to targets for loss reduction

Several objectors termed the proposed 2% reduction in losses "negligible" and "ridiculously low", and noted that the closure of illegal industrial units by itself will achieve greater reductions. Alternative targets for loss reduction ranged from 4% (recommended by BSES, NOIDA Power Company and AES) to 20% of the loss, and it was suggested that if the Government could not control the theft, then Government, rather than honest consumers, should pay for it.

2.3.6.5 Suggestion for scientific analysis

Several objectors suggested that a scientific study should be conducted by an independent commission on the technical aspects of generation, transmission and distribution, and maintenance of equipment to determine the extent to which the losses are due to technical causes versus inefficiency, corruption, and theft.

2.3.6.6 Need for firm approach in checking losses

All objectors addressing this issue believe that the Commission and DVB should take firm steps to curb the losses. They suggest that consumers should be supplied only through metered connections. Heavy penalties should be imposed for meter

tampering and other forms of theft on both, defaulting consumers and the officers concerned. Theft could also be reduced by installation of meters outside consumer premises and within secure boxes under the control of the DVB, or by replacing the overhead lines with underground cables.

2.3.6.7 Need for regular checking

Suggestions were also made on efforts to control theft. Objectors stated that DVB should regularly check VIP, industrial and commercial connections, farm houses, cinema halls, guest houses, marriage pandal, exhibitions, etc. It should increase the proportion of staff for enforcement, set up special vigilance squad, employ newer technology for checking pilferage and remove all unauthorised connections and reseal all meters. One suggested that NGOs be associated with the enforcement raids.

2.3.6.8 Suggestion for Energy Audit

Other recommendations include conducting of proper energy audit procedures with metering at the area, sub-area and consumer levels and prompt replacement of defective meters. It was also suggested that contractors and sub-contractors should be given proper incentives for efficient bill collection and employees made responsible for discrepancies between net energy available and energy billed. Alternatively, one agency could be made responsible at the zonal level for billing as well as revenue collection. Replacing 11 kV system with 33 kV system and other improvements in the distribution equipment could reduce transmission losses.

2.3.6.9 DVB's response on T&D losses

2.3.6.9.1 On substantial reductions not feasible

Responding to the severe criticism in this regard the Petitioner have stated that it is not fair to presume that the heavy T&D losses are entirely attributable to managerial failure. Instead, the causes should be scientifically analysed. The Petitioner have submitted a detailed paper on this subject. In this paper on T&D losses the DVB have admitted that in light of the past history of the organisation it would not be possible or feasible for DVB or its successor organisations to reduce the losses drastically. It was opined that reduction in losses can be expected after a substantial period when the process of reforms has been successfully implemented. Till such reduction in losses is achieved the consumers may not expect substantial reduction in tariff. During this initial period, whatever efficiency gains are achieved by way of reduction of losses would be required to be passed on to the successor entities.

2.3.6.9.2 On DVB's comparison with other SEBs

The Petitioner have submitted that there is no doubt that the percentage of such losses is much higher as compared to private utilities like the BSES and CESC yet they would like their performance to be compared with other State Electricity Boards. DVB have stated that the majority of consumers in Delhi including the agricultural consumers are provided with metered supply of energy and there is a much better record of the energy billed to the consumer. The figures of T&D losses that are calculated by taking into account the difference between the energy purchased and the

energy billed are, therefore, much more reliable in respect of Delhi. In other States substantial portion of transmission and distribution losses are apparently being projected against the consumption shown under the agricultural category.

2.3.6.9.3 **On reasons for technical losses**

The Petitioner have further informed that the technical losses are due to multiplicity of voltage transformations and other factors such as inadequate reactive power compensation and poor voltage regulation, unbalanced loading of transformers and lines and the transformers being located at substantial distance from the load centers. It has stated that the technical losses and line losses can be reduced over a period of time by substantial investments in system improvements.

2.3.6.9.4 **On reasons for commercial losses**

In respect of commercial losses it has been stated that these can be attributed to various factors besides theft. Such other factors are billing & metering deficiencies and technical defects in the meters. Improvements in these areas again require investment of substantial funds. The Petitioner feels that the collection efficiency of DVB at the rate of 90 percent is much better than other Electricity Boards.

2.3.6.9.5 **On difficulties due to JJ clusters**

Petitioner have further elaborated the difficulties being encountered by the organisation due to the existence of large number of unauthorised colonies and JJ clusters all over Delhi and the problem encountered by it in carrying out the electrification of such areas. The petitioner have stated that there were certain,

directives under Delhi Electricity Control Order, 1959 regarding connections not being provided to unauthorised constructions despite the heavy increase in number of such constructions in the recent years. Petitioner feels that the policy of withholding connections has lead to substantial increase in theft of electricity in unauthorised colonies and JJ clusters. The petitioner have given details of the magnitude of the problem, which remains to be encountered and the extent of efforts undertaken by it in this regard.

2.3.6.9.6 **On other Important Steps**

DVB have given a detailed account of other measures, which are being taken by them to curb T&D losses. These measures include:

- organisation of meter camps,
- installation of shunt capacitors,
- introduction of superior quality tamper proof meters with long-term warranty,
- selective load shedding in theft prone areas,
- power factor improvements by changing the system of billing of energy from kWh to kVAh,
- expediting the disposal of new connection applications,
- handing over the system of meter reading and delivery of bills to private operators in certain selected areas, and
- the proposed state-of-the-art online computerised billing system.

2.3.6.9.7 **On results on the measure taken**

The Commission has asked DVB to intimate the precise results of the measures taken by it for reduction of losses, to demonstrate

measures stated as being initiated/taken by DVB during last 2 years. DVB have expressed their inability to provide such details in near future. Yet it has claimed that the system of metering 11 kV feeders and carrying out of energy audit at circle & district level has already been put in place. The organisation has also claimed to gear up enforcement activities.

2.3.6.10 **Commission's Analysis /Order on T&D losses**

The T&D losses of DVB, being the most important issue under discussion for these proceedings, have been examined very critically.

2.3.6.10.1 **Reversal of trend noticed**

A detailed note submitted by DVB indicates that although the issue has been engaging the attention of the management for a considerable period yet it has not been able to arrive at any definite conclusion about the success or failure of its effort to contain the transmission & distribution losses. From the various reports received during the course of proceedings it is noted that the organisation finds it difficult to segregate billing losses, line losses and losses due to theft of energy. On the other hand, the assessment of such losses remains a crucial exercise for arriving at any estimate of efficiency measures required to be taken for the future and also for estimating the extent of revenue, which would be available after reduction of T&D losses on a comparable basis. The only positive signal, which emerges is that the trend of T&D losses has been reversed to certain extent in the preceding months. The Petitioner are, however, not willing to

take this as an indicator of the reduction of the current T&D losses.

2.3.6.10.2 ***Stress on energy audit***

A number of schemes have been listed out for containing T&D losses for the past years. However, in the current scenario, when new entities are likely to take over, it is difficult to ascertain as to how much priority would be accorded to which of these schemes by the successor entities. The Commission had earlier been requested by the GoNCT of Delhi to provide estimates of the T&D losses, which should be allowed to the DVB. At that stage the Commission had indicated that estimation of the allowed level of T&D losses for the utility is to be based on the energy audit plans of the organisation. Only after analysis of results of such energy audit it would be possible to decide as to what should be the rate of gradual reduction of T&D losses in the future.

2.3.6.10.3 ***Need for scientific methodology***

Having discussed the T&D issue as above the Commission is of the view that the methodology for estimation of actual T&D losses (difference between the energy fed into the system and the energy billed) is not really scientific. The right approach should be to meter the energy at each at the input and output points in the system as well as the consumers' end through meters of appropriate quality.

2.3.6.10.4 ***Need for reliable data***

The very fact that the estimates of DVB regarding the precise figures of T&D losses have shown substantial inconsistencies within themselves makes the Commission feel that there is an urgent need for complete energy audit at all voltage levels. Commission also believes that the enforcement mechanism is not fully

effective, given the infrastructural advantages of its area of operation, and needs to be supplemented with the latest technological innovations like real time energy audit.

2.3.6.10.5 ***Tariff hike not a remedy for checking T&D losses***

The Commission feels that tariff hike is definitely not a remedy for compensating the revenue loss attributable to the abnormally high T&D losses. Simultaneously, it is also appreciated that the massive losses cannot be reduced drastically over a short period of time.

2.3.6.11 ***Directions of the Commission on T&D losses***

In an effort to tackle the issue comprehensively, the Commission directs the Petitioner to:

(i) Conduct complete energy audit (right upto the LV consumer level) for one feeder each for each of the Circles and submit a report to the Commission by 30th September 2001.

(ii) Consider taking up a pilot project for real time energy audit and submit to the Commission a scheme bringing out, *inter-alia*, cost benefit analysis by 31st August 2001.

(iii) Submit to the Commission a time bound action plan for metering during the current year indicating milestones and parameters for assessment by 31st July 2001.

(iv) Submit to the Commission a time bound action plan for improvements in the billing system proposed to be brought about through the pilot project on billing (under implementation at Daryaganj) during the current financial year, indicating milestones and parameters for assessment by 31st July 2001.

(v) Submit to the Commission by 31st August 2001 a time bound action plan for the scheme for the electrification of pre 1993 regularisable colonies during the current financial year. The Commission is of the view that the contention that the scheme can be kept in abeyance on account of ban on creation of posts is not logical. It is so because the implementation of the scheme is related to generation of revenue for the utility and to the ultimate benefit of the consumers. DVB is directed to take up the matter with the concerned authorities to ensure implementation of this scheme.

(vi) Provide estimation of loss of revenue, which it attributes to the Government directives for not providing electricity to the unauthorised colonies. The information so compiled would form the basis for seeking matching finances from the Government.

2.3.7 ***Tariff Structure***

2.3.7.1 ***Current rates considered higher by consumers***

Many of the stakeholders stated that the current rates are already high, especially when compared to the cost of power purchase. Several objectors calculated that on an average, the billing rate is 383 paise per unit including the minimum charges. Several objectors have calculated that the domestic tariff above first slab is above the cost of production. For 400 units the present realisation is 193 paise per unit, which is close to the cost of service of 204 paise per unit and, therefore, the proposed level of 256 paise per unit is unfair. They also believe that it is incorrect to say that the current tariff is 138 paise per unit as

most customers are already paying above 300 paise per unit.

2.3.7.2 Proposed increase considered abnormally high

Several objectors estimated that average rates have been increased by 153% for domestic and 129% for non-domestic categories. They variously argued that tariff should not be increased by more than 10% to 75%, and were not persuaded by the comparisons with neighboring states. Several noted that the rates of Rajasthan, UP and Haryana cannot be cited as a comparison to Delhi because of different consumer profiles (especially their rural areas), different effective dates of their tariffs and the absence of demand charges. One pointed out that the Calcutta Electric Supply Company was able to make a profit on much lower rates.

2.3.7.3 DVB's argument not convincing

Similarly, they did not find convincing, DVB's arguments, that tariffs had not been increased since 1997 or that the increases were driven by the increased wages of DVB's labour force. The 1997 increase was a substantial 74% with minimum charges raised from Rs. 75/- to Rs. 200/- in certain category of consumers. Meter rent was increased just last year. Further, the increase in staff wages was only 2%, which does not, by itself, justify the tariff increase.

2.3.7.4 Objection to Minimum Charges

Several objectors noted that the minimum charges should be related to the cost of the service line, and not increased with a tariff revision. It was originally instituted to recover development charges but has become a permanent feature of the tariff. Many objectors commented that minimum charges are contrary to the spirit of energy conservation and are unfair where consumers are economical in their

consumption. They are especially burdensome for small users and especially for the small domestic consumers where the minimum charges increase the rate of the lowest slab from 130 to 250 paise per unit.

2.3.7.5 Basis for tariff setting

The public also offered their views on the basis of setting tariffs. Several argued for cost-based rates. For example, 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. Others believe that the tariff should be increased on the basis of indices rather than cost plus using unreliable data and unsubstantiated benchmarks.

2.3.7.6 Proposed hike termed as inequitable

In terms of the tariff design some stated that the proposed hike is inequitable for the different categories and that the increase particularly burdened the middle class, lower class and small businesses. The adverse effect on the hotel industry with its high electricity usage was also noted. Several objectors stated that full pricing of electricity should be applicable uniformly for all sectors.

2.3.7.7 Pricing of proposed slabs

Many members of the public commented on the pricing and delineation of the slabs proposed by DVB and observed that new slabs have been introduced in order to increase the revenue.

2.3.8 Domestic Consumers

2.3.8.1 Slab System

Several stakeholders stated that the 1-50 units slab in the domestic category is unjustified. DVB's contention regarding the consumption in the 50-100 units range is not convincing and that the consumption

taken at 200 units is unrealistically low, as even a small family consumes 250-350 units per month. Some suggested that the slab system should be eliminated altogether and that too many slabs create confusion. Suggestions included simplification of rates with flat rate of 250 paise per unit for domestic and 500 paise per unit for non-domestic with minimums of Rs. 100 and 200 respectively or the adoption of single rate for all types of consumers, other than subsidised ones, but that subsidies should be available only to the weaker sections.

2.3.8.2 Suggestions regarding cross subsidisation

Respondents have suggested variously that there should be no increase for below either 100 or 250 units per month or for domestic light, based on either ability to pay or in order to encourage conservation. Similarly, others suggested that any increase should be weighted towards the heavy domestic users. One member of the public queried as to why average billing rate for NDMC and MES is lower than domestic customer. Several objectors argued that concessional rates should be offered to senior citizens. In contrast, a supporter of the increase suggested that the basic rate should be 250 rather than 175 paise per unit. Some members of the public offered a variety of pricing schemes for the domestic slabs.

2.3.8.3 Minimum charges

Domestic Consumers have expressed their reservations against levy of minimum charges on the grounds that such charges should be levied in the eventuality of there being surplus generation capacity available to the

utility for meeting the demands of consumers. Seasonal consumers feel that they pay the charge even though they do not use electricity in certain periods of the year. Some objectors specifically complained of the increase in the minimum charge up to 5 kW in case of Domestic Light.

2.3.8.4 Problems of Group Housing Societies

One of the respondents informed that in spite of an agreement with DVB to the effect that the group housing societies are to be billed on the basis of actual consumption and not on the basis of minimum charges, the DVB continued to bill the consumers on basis of minimum load which result in a high rate per unit (Rs. 3.50/unit). Consumers have raised an issue that DVB charges them on MDI basis in addition to energy charges. Representatives of the group housing societies argued that the charge for common facilities of housing societies should be at the lowest slab rate and rates should be set to enable the societies to avoid being penalised by being treated as a single customer under the slab rate. Rather, DVB should encourage single point bulk supply to societies by offering discounts of 50% in the first year and 35% in subsequent years.

2.3.8.4.1 Clarification sought from DVB

The DVB was asked to clarify whether in the group housing flats common facilities were separately metered and what was the rate levied on such connections.

2.3.8.5 Problems of DDA flat owners

On behalf of consumers in DDA flats it was stated that they have no control over sanctioned load and the sanctioned load is high compared to other private houses, partly because load is correctly reported

for the DDA flats in comparison to other dwellings.

2.3.8.6 Problems relating to temporary connections

Certain objectors also pointed out that the temporary connections sometimes continue for very long periods on account of the inability of DVB to provide a regular connection for various reasons beyond control of the consumer. However, the consumer has to pay higher tariff (applicable for temporary connections) for no fault on his behalf.

2.3.8.7 Request from NGOs

NGOs have submitted that they should not be charged at commercial rates since they are working as non-profit organisations. They further requested that their representatives be associated with enforcement raids.

2.3.8.8 Problems of consumers in JJ Clusters

While discussing the supply to JJ clusters the objectors commented against the exploitation by private contractors in JJ clusters. Some consumers also stated that the charging of JJ consumers on a fixed charge basis amounts to discrimination. DVB were expected to inform about the possibilities and initiatives taken to measure energy consumed by these consumers.

2.3.8.9 DVB's response

2.3.8.9.1 Minimum charges

The demand for abolition of minimum charges being quite widespread the Commission sought a detailed note from the petitioner based on the consumer profile and pattern of consumption for various categories in order to ascertain whether levy of minimum charges is really affecting the revenues of the petitioner in a substantial manner.

The DVB responded by stating that levy of minimum charges is in accordance with the provisions of Section 22 of the Indian Electricity Act, 1910. Minimum charges are levied as a standard practice by all other State Electricity Boards in order to recover the return on investments on fixed costs. It has been stated that the minimum charges being levied constitute a significant portion of the total revenue and are equivalent to consumption of 3 hours per day in case of domestic consumers against the sanctioned load of 2 kW.

2.3.8.9.2 On CGHS: Minimum charges

Regarding the issue raised by the Co-operative Group Housing Societies with reference to levy of minimum charges it was clarified that in accordance with the tariff issued in April 97, minimum charges were to be levied at the rate of Rs60 per kW or past thereof per month against the sanctioned load or connected load whichever is higher. Later on the Board modified the policy on receipt of certain representations by issuing a circular dated 5th February 1999, which provided that the levy of minimum charges should be based on MDI reading as recorded by the meter.

2.3.8.9.3 On CGHS: Common facilities

In respect of the common facilities for the group housing societies it has been clarified that the slab system as requested by certain residents of such societies is not permissible for the common facilities. The individual connections are already being provided the benefit of slab system is societies where separate meters have been provided to individual residents.

2.3.8.9.4 On CGHS: Slab system

Commenting on the slab system proposed in the tariff for CGHS (single delivery-point supply), it has been clarified by the DVB that the same has been worked out on the notional basis of 500 units per consumer per month. It has been stated that the slab system for domestic consumers is essentially a means of subsidy since, in the existing social conditions, it is not possible to remove the element of subsidy.

2.3.8.9.5 On temporary connections

With reference to the grievance relating to continuation of temporary connections for long periods it was clarified that such connections are given for short durations only for specific purposes such as construction activity and social or religious functions. However, in respect of unelectrified areas permanent connections are not being given in absence of the requisite distribution network. Relaxation was being made in those cases where the sponsoring agency had paid the development charges. In such cases, although the higher tariff is not being charged yet surcharge is being levied on all such temporary connections in unelectrified areas.

2.3.8.9.6 On supply to JJ clusters

With reference to the issues raised regarding the supply of electricity in the JJ clusters through contractors the Petitioner have stated that there may be some truth in the allegations regarding exploitation by contractors in such areas yet the present resources do not permit any alternative remedy. It has, however, been denied that the connections in JJ clusters are being charged on a fixed charge basis. The petitioner has cited a circular dated 3rd January 2001 regarding methodology of billing to be followed in JJ clusters.

2.3.9 Industrial Consumers**2.3.9.1 Adverse effect of increase in tariff**

Industrial Consumers have observed that power is major input (for example, 60% of the cost of production for induction furnaces) and any increase in cost makes the end product less competitive. The difference between the rates in Delhi and other areas runs counter to the efforts for industrial development in the National Capital Territory. Current rate of 300 paise per unit plus fuel surcharge is at par with neighbouring States and should not be raised, and if the cost per unit is 359 paise, the tariff should actually be reduced.

2.3.9.2 Grievance regarding Demand Charges

The objectors have protested against the levy of demand charges along with the minimum charges stating that in some neighbouring States, demand charges are not levied along with the minimum charges.

2.3.9.3 Regarding subletting charges

Consumers have also suggested for changing the clause regarding levy of subletting charges for use of same premises by more than one unit and also change in trade.

2.3.9.4 Regarding categorisation of LIP/MLHT and SIP/NDLT**2.3.9.4.1 Opposition to changing the limit of 10kW**

There was a great deal of opposition to changing the demarcation between SIP/NDLT and LIP/MLHT categories from 100 to 50 kW. Many consumers argued that the change adversely affects small industry, as effectively it increases the tariff from 300 to 525 paise and demand charges to Rs.200 per kW. Several objectors suggested that the SIP limit should be increased to 150 or 200 rather than decreased and that for prospective customers the SIP/NDLT and

LIP/MLHT boundary should be at least 70 kW. SIP units are already paying high minimum wages, costly imports and raw materials and high Central and State taxes and the proposed increase could force closure. A suggestion has also been made for increasing the SIP/NDLT limit upto 200 kW on the grounds that the consumers are required to install a number of pollution control equipment. Even the smallest factories use over 50 kW, particularly given the Supreme Court orders that industrial customers require load of 20-30 kW for effluent treatment plant, 10-20 kW for fire fighting and another 5 kW for sound proofing.

2.3.9.4.2 Disagreement on relationship of limit with tariff

The public disagreed on the relationship between the SIP/NDLT and LIP/MLHT tariffs with some objecting that the tariff for SIP/NDLT is higher than the current rate for LIP/MLHT while others stated that this was appropriately based on cost. In this context, some consumers also suggested that transformers should be mounted on poles to overcome the space constraint for SIP/NDLT consumers.

2.3.9.5 Regarding consumers operating in non-conforming areas

Industrial consumers have pointed out that DVB have suggested different tariffs for consumers having MCL and those not having such licences. Similarly, differential treatment is meted out to industries operating conforming/non-conforming areas. It was suggested that the responsibility for enforcement of respective laws rested with the local body or the pollution control authorities. DVB was making undue enrichment by penalising such consumers.

2.3.9.6 Regarding consumers operating in Lal Dora areas

One of the respondents has cited a DVB circular No. CE(C)/CCI/P-29/97-98/15 dated 12.2.97 issued under signature of Chief Engineer (Comml.), which provided for industries located in the Lal Dora area of villages running with valid MCL /ad hoc registration / trade licence / NOC from civic body being considered as running from conforming areas seeking benefits of the concessions provided therein.

2.3.9.7 Regarding poor quality of supply

Commenting on poor quality of supply, including frequent breakdowns, which in turn damage their equipment, industrial consumers have objected to the levy of minimum charges. Some consumers have even suggested that for bulk consumers, DVB should give concessional rates.

2.3.9.8 Regarding ToD metering

Consumers have also suggested introduction of ToD metering with incentives during off-peak hours.

2.3.9.9 Regarding Lock-in Period for change of load

Consumers stated that the lock-in period for change of load should be reduced since it causes unnecessary harassment to consumers. Consumers are willing to pay investment charges.

2.3.9.10 Regarding DG sets and transformers**2.3.9.10.1 Procedure to be simplified**

Stakeholders have suggested that the procedure for installation of DG sets be simplified.

2.3.9.10.2 Regarding transformers

Several objectors questioned DVB's presumption about ownership of transformers. They argued that smaller customers do not have transformers, either

because of cost or space, and therefore pay 525 paise per unit plus demand charges rather than 425 paise per unit. DVB should give customers at least two years to switch over to 11 kV system, if they can. Technical recommendations were made regarding the provision of circuit breakers with the meters, and installations of MDI meters and shunt capacitors.

2.3.9.11 Regarding Misuse Charges and Nominative consumption violation and surcharge

One person stated that the misuse charges were considered too high and should only be levied for excess load; another suggested that the surcharge for violation of normative consumption is unfair. Several believed that DVB should provide rebates for timely payment.

2.3.9.12 Minimum consumption guarantee charges

On behalf of the induction furnace consumers in Delhi, the major point raised by the All India Induction Furnaces Association is abolition of minimum consumption guarantee (MCG) charges imposed on them since they are unable to consume power equivalent to MCG charges due to certain commercial factors beyond their control such as recession, non-availability of raw materials, break-downs etc. It has also been submitted that instead of 24 hours, the industry gets a supply for no more than 20 hours per day with peak load restrictions ranging from 3-4 hours daily besides tripping of at least 4-5 times in a month.

2.3.9.13 DVB's Response to industrial Consumers

With reference to the various issues raised by the industrial consumers the DVB have submitted the following response.

2.3.9.13.1 On Demand charges

It has been stated that these are applicable in respect of only bulk consumers i.e. those billed under the LIP category or the MLHT category. In case of nil consumption the demand charges become the minimum charges. As such there is no eventuality in which both minimum charges and demand charges are levied simultaneously.

2.3.9.13.2 On comparison with other States

It has been stated that different States are following different policies for providing incentives to individual categories of consumers and their precedents cannot be followed without taking into consideration the socio-economic constraints.

2.3.9.13.3 Misuse charges for change of trade

Misuse charges are being levied in only those instances where industrial power connections are used for running induction furnaces/arc furnaces, steel rolling mills, ice factory, cold storage without requisite approval of the municipal authorities.

2.3.9.13.4 Levy of subletting charges

Such charges have been justified on the ground that subletting amounts to permitting an industry to function without requisite municipal license.

2.3.9.13.5 On the issue of levy of higher tariff

On the issue of levy higher tariff on industries functioning without approval of municipal authorities it has been stated that the policy to levy higher charges in respect of such industries has been followed for past several years and is supposedly in pursuance to the policy of the Government to check the growth

of unauthorised units in non conforming areas. It was pointed out that a number of public interest litigations are pending in respect of such category of consumers and this category also requires considerable enforcement action.

2.3.9.13.6 On the reference pertaining to industries operating in the Lal Dora areas,

It has been stated that earlier industries had been permitted in rural areas in order to boost the economy of the villages and such connections were given only to the bonafide residents of the village. Subsequently, a number of villages were urbanised and, therefore, the facility could not be given in respect of industries operating in such urbanised villages. Apparently, due to increase in the number of such units and the subsequent difficulties being faced by the local population, certain restrictions have been found desirable. The Board has issued a revised circular on 26th of Feb. 2001 according to which industrial load of 20 HP is to be treated at par with conforming area. Load in excess of 20 HP is to be treated as being operated from non-conforming area without MCD licence and shall, therefore, be subject to levy of higher tariff.

2.3.9.13.7 On the poor quality of supply

The DVB have informed that the same is attributable to the conditions prevailing in the Northern Grid, to overloading of the system and also to the maintenance problems of its ageing equipment. The quality of supply is also adversely affected due to low power factor. In order to check this DVB have introduced the system of kVAh billing.

2.3.9.13.8 On time-of-day metering

The Petitioner have stated that it is not possible to introduce this system since the majority of the consumers do not have electronic meters. According to the Delhi Electricity Control Order (DECO), 1959, running of industry during peak hours is prohibited. The issue is, therefore, that of enforcing the restrictions rather than that of incentivising it.

2.3.9.13.9 On the issue of change in categorisation for LIP/MLHT and SIP/NDLT categories of consumers

It has been stated that the limits are much lower in other places. In Mumbai the limit for such categorisation has been stated to be 50 kW and 70 & 75 kW in Haryana & UP respectively. The change in categorisation has been stated to be a progressive measure since it is expected to reduce the line losses, load on distribution transformers, maintenance problems, improve the voltage profile, ensure stability of supply and also to reduce the scope for power theft. DVB have also stated that for the consumers having space limitation, specific provision has been made in the Tariff for using the existing LT system until the consumer shifts to the 11 kV system.

2.3.9.13.10 On minimum consumption guarantee charges

For induction furnaces it was clarified that such charges are levied since this is a highly power intensive industry and electricity is the basic raw material for such units. The levy of MCG provides a safeguard against fraudulent abstraction of energy and the same is covered by a ruling of Supreme Court in case of M/s Ashoka Soap Factory. Since the MCG is raised on pro-rata basis with reference to the number of days between the reading, the consumers do not suffer on account of levy of such

charges. Rebate is also given for recorded breakdowns extending for more than 12 hours in a billing cycle and also for recorded load shedding.

2.3.9.13.11 On the issue of reduction in lock in period

For change of load the DVB have responded by the assertion that it is willing to consider reduction of the initial lock in period from 5 to 2 years for LIP/MLHT categories provided the investment made by DVB in providing the bulk connection is reimbursed. For others, it could be reduced from 2 years to 1 year.

2.3.9.13.12 On the issue of giving incentive for higher power factor

On the issue of giving incentive for higher power factor i.e. 0.90 (lagging) or above, it was noted that the kVAh billing for energy charges for bulk connections of MLHT and LIP categories have already been introduced vide DERC Order dated 16.01.2001. The kVAh billing has in-built provision for incentive to those consumers who maintain higher power factor and disincentive to those consumers having low power factor. As such no separate provision for power factor linked incentive is called for. Consumers using load at low PF will have to pay more on kVAh billing and with high PF will pay less on kVAh billing.

2.3.10 Agricultural and Commercial

2.3.10.1 Mushroom cultivators

They have protested against the tariff hike both for the minimum charges (Rs 50 to Rs.150 per kW per month) as well as energy charges (Rs. 1.00 to Rs.1.50 per unit). It has been contended that the minimum charges should be allowed to be adjustable on annual basis as in case

of SIP tariff since no electricity for cooling is required to grow mushrooms during winter months.

2.3.10.2 Poultry farmers

Poultry farmers have represented to be considered in the agricultural category.

2.3.10.3 Members of the public

Member of public disagreed on the agricultural tariff. Some stated that the increase in agricultural rates is too high while others argued that the low rate for agriculture is unfair and industry should not be required to pay for the subsidy to agriculture.

2.3.10.4 The Hotel industry

The Hotel industry has contended that it is engaged in the business of hospitality, and should therefore be covered under the domestic rates. The industry also seeks tariff benefits on the ground that it is involved in a social activity. The Hotels and Restaurant Industry representatives have submitted that they need regular upgradation by replacing equipment and as such the connected load varies every year. It was requested that hotels should be allowed to file load requirement every year with automatic approval.

2.3.10.5 Association of Motion Pictures Exhibitors

Associations of Motion Pictures Exhibitors also requested for change of category to Industrial in view of the fact that Cinema has been declared as industry by Government of India. As per this, Association further stated that they are required to provide space for installation of equipment etc., which occupies prime commercial land. The cinema hall owner should be compensated for this.

2.3.10.6 Regarding shops in residential areas

One objector stated that these should be subject to commercial rates and another that the 50% increase on street lighting charges is unreasonable, as street lighting is for safety and welfare of the people of Delhi.

2.3.10.7 DVB's Response to Agricultural and Non Domestic Consumers

DVB have made the following response to suggestions received with respect to agricultural and non-domestic activities:

2.3.10.7.1 Agricultural Tariff

Agricultural tariff is applicable only for activities directly connected with the growing of crops and other incidental activities. Connections upto 10 KW are given on the recommendations of the Block Development Officer depending upon the requirement of the consumer for the poultry farming activity, requirement of electricity is primarily for lighting, heating and cooling and, therefore, the same have been kept under non-domestic category.

2.3.10.7.2 On the demand of cinema halls

It has been stated by the Petitioner that the word "industry" is often used in a broader sense but the same does not apply in the context of the present demand. The cinema halls are normally required to be given supply on HT (11 kV) and the load requirement is more than 100 kW. The consumer is required to provide space for installation of HT switchgear and metering cubicle, free of cost. While DVB does not ask for additional space for installation of sub-station, yet in some cases such sub-stations have been established with the consent of owners. However, this has benefited the consumer because there has been a saving on cost of HT cable and sub-

station equipment, which would have otherwise been passed on to the consumer.

2.3.10.8 Commission's observations on commercial and agricultural non-domestic categories:

2.3.10.8.1 On the representation from the poultry farmers

The Commission, while agreeing with the contention of DVB, is of the view that the rates for agricultural category should be strictly limited to activities concerned with cultivation of crops which serve the basic needs of the common man and it would not be fair to stretch the subsidised rates to various other categories which fail to meet the above criterion and use electricity basically for lighting, heating and cooling purposes. The Commission is endeavoring to gradually move towards cost reflected tariff and to reduce cross subsidisation. The Commission believes that for tariff purposes all of the above activities are commercial in nature irrespective of the way they are defined by some Central or State Legislation for specific purposes. The consumption pattern of the above consumers is more akin to the non-domestic/ commercial category than to the domestic category. Therefore, these categories will continue to be billed at the non-domestic tariffs.

2.3.10.8.2 Regarding the case of Mushroom Cultivators,

A detailed response (discussed in detail in chapter on Tariff) was sought from DVB based on which it was decided to fix tariffs at a different higher rates as compared to other consumers engaged in agricultural activities.

2.3.10.8.3 On demand of cinema halls

Under the present circumstances when the electricity sector in Delhi is suffering from a paucity of power and inadequate distribution infrastructure the Commission, therefore, feels, that the present system of approaching DVB for any change in load requirement shall continue.

2.3.10.9 Commission's views/Orders on the industrial consumers

The comments from stakeholders and the reply from the DVB with reference to the industrial category have been considered. The issues relating to Tariff structure have been addressed under the relevant headings. The following policy related observations /orders have been made by the Commission.

2.3.10.9.1 Categorisation of consumers under LIP/MLHT and SIP/NDLT

At present the limit of load under SIP /NDLT category has been proposed to be brought down to 50 kW from the existing 100 kW. The proposal would be affecting approximately 8000 consumers.

2.3.10.9.1.1 Feasibility

Commission has reservations about the feasibility of implementation of the proposal during the current year because it overlooks the repeated assertions of the consumers made during the public hearings that majority of the consumers under this category do not have provision for the transformer space. The installation of pole-mounted transformers at majority of sites may also not be possible. The procurement of additional transformers would be a time consuming process in view of the large number of consumers being involved. The solution offered by the DVB by way of continuing the consumer with the LT system until the consumers shifts to 11 kV system is in a way self-

contradictory and would not help in achieving the desired objectives. Substantial investment would be required to upgrade the network from 400 volts to 11 kV.

2.3.10.9.1.2 Installation of tri-vector meters

Another crucial requirement would be installation of Trivector meters for kVAh metering which is currently applicable to LIP/MLHT category. The availability and installation of such meters in the current financial year synchronizing with the implementation of the Tariff order is also questionable. The requisite feasibility study to support the proposal would be essential.

2.3.10.9.1.3 Load due to pollution control devices

The argument regarding enhancement of load due to installation of pollution control device does have some substance as far as reduction in the borderline between SIP/NDLT and LIP/MLHT consumers is concerned. The industrial consumers have to devote a certain fraction of sanctioned load for meeting such statutory requirements and, therefore, their case for continuation of the present limits merits a liberal treatment to that extent.

2.3.10.9.1.4 Commission's views

The Commission opines that kW linked tariff as at present has some inherent inconsistencies and Commission would, in fact, like to move towards a voltage linked Tariff. The Commission, therefore, does not accept the proposal on this issue and directs the Petitioner to prepare a base paper on this and submit to the Commission by 31st August, 2001.

2.3.10.9.1.5 Levy of higher tariff

As far as the submission of DVB regarding levy of higher tariff for industries functioning from non-confirming areas/ All Dora area are concerned, the Commission is of the view that the same are acceptable.

2.3.10.9.2 Order Regarding Induction Furnace Operators

With regard to the levy of minimum consumption guarantee (MCG) charges on the induction furnace consumers, the Commission has noted that induction furnace consumers are covered under LIP category and are billed accordingly with additional provision of MCG charges, which comprises of demand charges plus energy charges for 360 kVAh per kVA of billing demand. In case the consumption bill based upon actual consumption falls short of MCG charges, the latter amount is payable. Otherwise, actual bill under LIP category comprising of actual demand charges plus energy charges is payable. The amount of MCG charges has been worked out as under:

$1 \text{ kVA} \times 0.6 \text{ (load factor)} \times 24 \text{ hrs (working per day)} \times 25 \text{ days working per month} = 360 \text{ kVAh per kVA of billing demand.}$

DVB, however, allows rebate in the MCG charges for recorded load shedding from grid substations and for recorded breakdowns, excluding peak hour restriction, exceeding 12 hours in a billing cycle on verification/confirmation by concerned Executive Engineer (District). It is noted that the above formula assumes supply of power for 24 hours a day, as such, the rebate being allowed should also include the period of non-

availability of power during peak hours restrictions.

2.3.10.9.3 Order Regarding Lock-in Period

The proposed reduction in the lock in period from 5 years to 2 years for LIP/MLHT and from 2 years to 1 year for all other categories suggested by the petitioner is accepted by the Commission.

2.3.10.10 Minimum Charges

Regarding the tariff related issues raised by consumers of various categories, the issue of levy of minimum charges have been agitated by all categories. The Commission's analysis and its orders on this subject are given below.

2.3.10.10.1 DVB's submission

In its filing DVB have proposed to increase the minimum/demand charge of all classes of consumers as per details given in Table 2.1

2.3.10.10.2 Commission's analysis

The Commission has carefully considered the history of levy of such charges, the rationale offered by the petitioner and the strong reaction from the consumers to such levies, which according to them encourage a tendency to indulge into wasteful use of energy.

2.3.10.10.3 Justification for levy of minimum charges

The levy of minimum charges is historically attributed to fixation of tariff after taking into consideration the embedded cost of services. The charges constituting the fixed component of the tariff are derived from the requirement of the utility to recover the cost of investments on capital assets plus customer related costs. The latter comprises of subcomponents such as

Table 2.1: Minimum/Demand charges proposed by DVB

Category	Applicable to	Load Condition	Existing Rate Rs./kW/month	Proposed Rate Rs./kW/month
Domestic	Domestic light/ mixed load etc.	Upto 2 kW	50	150 per connection
		Above 2kW	60	75
	Domestic Power/ Place of worship	Upto 2 kW	50	90
		Above 2 kW	60	90
Non-domestic	Misuse as NDLT/Power	Upto 100 kW	250	350
	Misuse as Industrial Power	For all loads	300	525
	NDLT/Provisional Non-domestic	For all loads	200	300
	Misuse as Non-conforming Area	For all loads	250	350
Agricultural	Agricultural Power	Upto 10 kW	0	0
		Above 10 kW	250	350
	Domestic light & power	Upto 100 kW	250	350
	Misuse as Non-domestic light & power	Upto 100 kW	250	350
Industrial	Misuse as Industrial Light & Power	Upto 100 kW	250	350
	Non-continuous/ Continuous Industries	Upto 100 kW	200	300
	Non-conforming area	Upto 100 kW	250	350
	Subletting/No licence: Non-continuous Industries	For all loads	300	420
LIP	Subletting/No licence: Continuous Industries	For all loads	-	350
	400 V	Above 100 kW	200	200
	11 kV/Railways (33/66 kV)/Furnace/ Domestic	Above 100 kW	150	150
MLHT	400 V	Above 100 kW	200	200
	11 kV	Above 100 kW	150	150
	Hospital	Above 100 kW	150	255
	CGHS Flat	Above 100 kW	150	250
	Commercial Complex	Above 100 kW	150	197
SIP	Continuous		200	300
	Non-continuous		200	300
	MU Non-continuous		300	350
NDLT	III Phase		200	300
	MU III Phase		200	350
	Non-domestic Bulk		200	300

*Demand charges are shown in *Italics*

metering, billing, maintenance and other service expenses. The other component of the costs is the variable part dependant on the cost of generation and procurement of power etc.

2.3.10.10.4 Difficulties in estimation of embedded cost

With reference to the Petitioner organisation, the difficulty in estimation of

embedded cost arises from the fact that concrete data on allocation of the difference between the energy input and billed across consumer categories is not available and information on asset classification has not been forthcoming. In such circumstances, fixation of fixed cost for any category of consumers remains an exercise in arbitrariness. On

basis of information filed in the ARR, the Commission also does not consider that the fixed component of the cost of power has increased significantly after 1997.

2.3.10.10.5 Mechanism to ensure minimal returns

While the DVB considers the levy of minimum charges as a mechanism to ensure certain minimal returns on its investments under various heads an inference can also be drawn that continuance of such charges on a purely arbitrary basis could also perpetuate a culture of inefficiency wherein the utility can be complacent in checking the loss of energy through unfair means. Such an arrangement also leads to decline in quality of services since minimal returns are assured without corresponding obligation to effect improvements.

2.3.10.10.6 Minimum Charges not in nature of fixed charges

It is further noted that the minimum charges are also not in the nature of fixed charges, since the same are related to the level of consumption of the consumers, reflected in the quantum of sanctioned load. The strategy of estimating minimum charges in such manner is also not scientific for the reason that certain consumers, as stated during the public hearings, may be having sanctioned loads much lower than the actual load. On the other hand, certain consumers may be paying comparatively higher minimum charges due to correct reporting of the load provided in their dwelling units. There is also no doubt about the fact that fixation of minimum charges at the higher level does discourage the saving of electricity, thereby adversely affecting the demand side management of the utility.

2.3.10.10.7 Views of the Commission

For the above stated reasons, the Commission at present finds it difficult to agree to the demand for increase in minimum charges except for the rationalisation of the existing charges in the domestic category, and clubbing all the domestic consumers for the purpose of levy of minimum charges in one bracket at the rate of Rs. 60/kW/month. The Commission's Order draws on the fact that the lower diversity factor operating for the consumers upto a load of 2 kW places higher amount of stress on the resources of the utility as compared to consumers in the immediately higher load category.

2.3.10.10.8 System based on Meter Rating

The Commission feels that a remedy to the above predicament lies in devising a system based on meter ratings (a few standards) so that the reliance on sanctioned/connected load may be dispensed with for the purpose of estimation of minimum charges. The Commission directs DVB to submit a base paper for consideration of such scheme by 31st July 2001.

2.3.10.10.9 Consumers Operating Seasonal Industries

Some of the consumers operating seasonal industries complained that they have to pay the full minimum charge even though they use electricity only during certain periods of the year. The Commission is of the view that the minimum charges compensate DVB to some extent for the investments it has made for the supply of electricity and for maintenance of distribution lines and service connections of these consumers. Therefore, the minimum charges will continue for the full year for the seasonal consumers.

2.3.11 Administrative Expenses of DVB

2.3.11.1.1 Regarding employees expenses

The public believes that overstaffing and general casualness of approach affects the working of the organisation. It has been suggested that DVB should enlighten employees about their responsibilities and need for honesty and integrity, it should make staff accountable and take action against corrupt officers. In light of staff inefficiency and DVB's losses, consumers contended that DVB has been unduly liberal in granting Pay Commission benefits to its employees.

2.3.11.1.2 Regarding consumption of electricity by the DVB

It was stated that the same is also quite excessive. The subsidised rates for supply of electricity to DVB employees have also been questioned.

2.3.11.2 DVB's response

2.3.11.2.1 Historical Reasons

On this issue the Petitioner have responded by stating that DVB has inherited the organizational structure and pay pattern from its predecessor organisation. It has been operating with the strength of only 24,500 employees against the sanctioned strength of 31,200 employees. It is expected that in the following years, employee cost would go down due to retirement of a number of employees. Comparing its expenses with other states DVB have stated that their expenditure of 3.3 employees/MU sold is better than that of Himachal, J&K, Punjab, Haryana, Rajasthan, Tamil Nadu and equal to that of Uttar Pradesh. The ratio is much less in respect of MP, Karnataka, Maharashtra and Gujarat.

2.3.11.2.2 **Reasons for increase in DVB's consumption and subsidised rates for DVB employees:**

DVB have stated that the consumption of electricity by DVB has shown an upward trend from 1999 as a drive was launched for metering the entire consumption of DVB during that year. Regarding the subsidized rates for DVB employees, it has been stated that similar facilities are being provided to employees of other SEBs and also by other commercial organizations. It has been further stated by the petitioner that all existing terms and conditions of services are to be protected in the process of unbundling and disinvestments.

2.3.12 **General Performance of DVB**

2.3.12.1 **General theme**

The general theme of the public comments is that the tariff increase penalizes customers for DVB's own inefficiency and an increase in rates, unaccompanied by improvements in the quality of service and in the internal operation of the utility, is unreasonable. They find no strategy in the filing for stopping pilferage and improving efficiency.

2.3.12.2 **Regarding expected improvements in pursuance to creation of the Board**

It was stated that the performance of DVB has not improved after its constitution and the first priority should be improvement of services. The public cited power failures that reach 35-40% per month or 35% of the day, which increases consumer costs because customers must make alternative arrangements. The stakeholders also referred to frequent load shedding, poor voltage that damages customer equipment, frequent peak hour cuts, and the poor condition of feeder pillars, LT lines and LT cables.

2.3.12.3 **Regarding Metering and Billing system of DVB**

Consumers made several complaints and suggestions. Majority of the consumers have expressed grievances against the working of metering staff and the delay in delivery of bills, change of faulty meters and installation of new meters. The quality of seals affixed to the meters and the difficulties arising due to wear and tear thereof were also commented upon. The question of revision in levy of meter rents also came for criticism. A suggestion was made that unmetered supply be checked with pole mounted load limiters.

2.3.12.4 **Commission's observations**

The Commission wanted to be apprised about the strength of the metering staff and the system of their functioning in taking meter readings. During the proceedings, DVB representatives had apprised that superior quality meters which would carry paper seals were being proposed for installation. Complete details of such meters, the cost of replacement, the number of meters proposed to be replaced and the target date for completion of this exercise were also sought.

2.3.12.4.1 **Suggestions on Billing System**

Several suggestions on monthly billing, advance billing, payment of bills due 15 days after receipt of bill and an end to provisional billing, late billing and fictitious meter reading were made by Consumers.

2.3.12.4.2 **Reasons sought regarding delayed Billing from Petitioner**

Petitioner were asked to state the reasons for delayed billing which leaves the consumers with very little time for payment. Measures proposed for reduction of billing losses were sought from the petitioner along with the complete report of Indian Market Research Bureau survey on billing.

2.3.12.5 **Response from DVB on Metering & Billing**

2.3.12.5.1 **On the issue of metering of connections**

DVB stated that the staff comprises of 425 meter readers, 265 meter reading inspectors, and 32 meter reading superintendents which function under the control of Assistant Finance Officer. The pressure on metering staff has increased after addition of more than 3 lac new consumers in the billing net. However, DVB management has considered it prudent not to increase the metering staff. It has been further stated that due to the registration of several vigilance cases against such staff there has been some difficulty in filling up the vacancies.

2.3.12.5.2 **On procedural shortcomings in the system**

DVB have stated that due to the involvement of considerable manual and outdoor activity, the supervision of senior staff becomes difficult. The procedure presently being followed needs upgradation by elimination of manual processing. In respect of two districts namely R.K. Puram and Mehrauli, private agencies have been engaged. The DVB is also experimenting with electronic data logger devices for capture of meter readings in the field.

2.3.12.5.3 **The online Consumer Care Centre at Daryaganj and replication at 16 places**

DVB have informed that a consumer care center is in the process of being setup in Daryaganj, which has addressed the problems of billing and shall provide prompt redressal to the grievances through online computer terminals. It has been further clarified that on an average approximately

40,000 consumers receive erroneous bills for each round of billing. This is expected to reduce after introduction of the computerized billing system. In course of time the experiment of Daryaganj is proposed to be replicated in 16 other similar centers.

2.3.12.5.4 On change of faulty meters

Regarding the grievance relating to change of faulty meters, DVB have informed that the replacement is effected under instruction from XEN(D)/AFO(D)/MSR. The replacement of faulty meters has been taken up on a priority basis in the last few years and a time schedule has been laid down for various activities related to grant and release of new connections through circular dated 6th August 1985. As a result to weekly monitoring at the highest-level backlog of pending new connection cases has come down from about 40,000 to about 10,000 in a year's time. For the year 2000-01, 1.75 lac new connections are likely to be given.

2.3.12.5.5 On tamper proof seals for the meters

DVB mentioned that it is examining various options. It has modified specifications of single phase, three phase, whole current and CT operated meters of electro-mechanical type with magnetic suspension bearing ultrasonically welded, poly-carbonated body and push-fit terminal covers. These meters are stated to be tamper-proof and do not require additional sealing. Modifications have also been made in the designing of metering arrangements for CT connections. A provision has been made for compact resin cast type LT CTs/3 in one secondary wire also embedded resin cast. In future there is a provision to procure,

only electronic type meters for load above 6 kW. Electronic meters are proposed to be provided for all connections above 10 kW. For the future, DVB have applied for a loan to the tune of Rs. 51 crores, for replacement of meters. The replacement of meters is however to be preceded by examination of existing meters.

2.3.12.5.6 On objections pertaining to meter rent

It has been clarified that, meter rent is charged only in those cases where meters have been provided by the DVB and are maintained free of cost including replacement. The increase in meter rent is because of increase in cost but the same would not be levied in cases where consumers provide their own meters, as per DVB specifications, from approved supplier/manufacture.

2.3.12.5.7 For reduction of billing losses and improvement in grievance redressal system,

DVB expects much improvement with introduction of data logger devices and operationalisation of the computerised billing system. This will also use bar coding on electricity bills and scanners to read such bar codes based on details of K numbers and bill amount. Ultimately, the petitioner organisation proposes to introduce the system of payment of electricity bills through online terminals.

2.3.12.6 On the grievance pertaining to delay in preparation and distribution of electricity bills

DVB has clarified that the procedure involved manual operations at various stages, there are 108 cycles of domestic consumers and 30 cycles of SIP consumers every month. The present system of billing is highly centralized. The problem shall be reduced with operationalisation of new system at Daryaganj.

2.3.13 Commission's observations on quality of service

The Commission has taken a note of the widespread dissatisfaction of consumers with the quality of services provided by the DVB and appreciates the gravity of submissions made by the consumers. The complexity of the issues and magnitude of efforts required to overcome the historical deficiencies of the system is also understandable. The Commission would take up the matter in a comprehensive manner in due course of time; as of now appropriate directives have been issued as a part of this order.

2.3.14 Representations from utilities in power sector

2.3.14.1 The NOIDA Power Corporation:

The representation sought clarifications on the methodology adopted by the DVB for estimation of various parameters under the heads fixed assets, revenue collection and projection as well as multi-year tariff.

2.3.14.2 AES (India) Pvt. Ltd:

The organisation has put forth suggestions for tariff fixation that will minimize the Tariff shock and simultaneously enable transition of distribution companies in Delhi into efficient private entities. It has, *inter-alia*, been contended that the Tariff for the distribution should be fixed on the cost indices and it should be applicable after fixing the current Tariff applying appropriate ratio of CPI from 1997 till date. The retail Tariff for various categories would be fixed so as to bring the weighted average distribution segment of the retail Tariff in line with the said proposal by reducing the cross subsidization every year over a period of time. Further there should be no foreign

exchange rate protection and the change in the taxes should be passed through in the Tariff. This is supposed to be better approach over the cost plus approach in view of the unreliable data and unsubstantiated benchmarks and various elements of cost.

2.3.14.3 BSES:

In analyzing various parameters such as revenue short fall, T&D loss, FAC formula, depreciation etc. for determination of ARR, the organisation requested the Commission that in order to create an atmosphere conducive to privatisation

(a) bulk supply price for Distribution Companies (Distcos) be fixed together with retail tariff so as to make these companies commercially viable based on ground reality at the time of privatisation

(b) The benchmark for T&D loss reduction and collection efficiency improvement be fixed at realistic level based on existing conditions prevailing.

2.3.14.4 Response from DVB

The issues were discussed with the petitioner during the various technical sessions. The petitioner furnished to the Commission additional information from time to time through subsequent filings as per available record and also sought to clarify certain issues during the public hearing process. However, petitioner requested for waiver of requirement of furnishing information on certain issues as it could not furnish complete database as sought by the Commission for historical reasons.

2.3.15 Representation from Northern Railways

2.3.15.1 Submission by Northern Railways

The Northern Railways had informed that the Delhi Division of Northern Railways

utilises electrical energy for various activities from 122 supply points of DVB. It has responded to the ARR with various comments on the shortcomings in the functioning of DVB and quality of filing for tariff determination. The specific issues pertaining to the Northern Railways, which were raised in their submission, are discussed below.

2.3.15.2 Treating of maximum demand recorded during the preceding 11 months as billing demand

This has been stated to be unjustified on the ground that even though the maximum demand exceeds the contract demand predominantly on account of failure of power supply authorities yet this clause has repercussions on the tariff bill for next 11 months. Whereas in certain other states such as Tamil Nadu, such penalty is charged for exceeding maximum demand on the day of occurrence.

2.3.15.3 The capacity blockage charge

It is stated to be unfair since other SEBs do not levy such charges.

2.3.15.4 Bulk Supply Rates

DVB is buying 85% of its requirement from Central generating agencies and should therefore charge a tariff based on supply from NTPC.

2.3.15.5 Incentive for leading power factor

The DVB should give incentive for leading power factor also.

2.3.15.6 Metering

The metering should be done at the Railway premises in order to reduce the technical losses in the system from supply point to railway premises.

2.3.15.7 Incentive for prompt payment

There should be incentive for prompt payment and at least 7.5% cushion should be kept in the contract demand for levy of

penalty. The charging of electricity duty for being passed on to MCD is unconstitutional and the same is not being levied by other states.

2.3.15.8 Effect of increase in tariff for NDMC

The NDMC is charging the Railways at the rate of Rs. 6.3 per unit. In case of increase for the tariff of NDMC, the railways would have to pay the NDMC at higher rates.

2.3.15.9 Request for subsidy in Tariff

Railways have pointed out that they are providing a socially beneficial service to the country and therefore, as a matter of policy, they should be subjected to levy of only reasonable charge.

2.3.15.10 Levy of Electricity duty

Levy of electricity duty on energy supplied to Railways has been termed as without authority of law. A detailed petition on this issue was filed by Northern Railways.

2.3.15.11 DVB's response

DVB have responded by stating that:

2.3.15.11.1 Subsidy not desirable

The tariff proposal is at par with the MLHT tariff applicable to other bulk consumers. It is not desirable for DVB to subsidise functioning of the Railways.

2.3.15.11.1.1 Regarding Electricity Duty

It is stated that the same is payable to MCD and the Railways should take up the matter with MCD.

2.3.15.11.1.2 Capacity blockage charges

It was agreed in a meeting between the Railways and DESU that the tariff applicable to Railway Traction will be the same category tariff with further

stipulation of capacity blockage charges.

2.3.15.11.2 **Comparison with other States**

The comparison of charges with other states is not justified since the functional scenario differs from state to state.

2.3.15.11.3 **Simultaneous maximum demand**

The grievance regarding simultaneous maximum demand at various metering points for load violation charges has been addressed in the new tariff.

2.3.16 **Delhi Metro Rail Corporation (DMRC) Limited**

Delhi Metro Rail Corporation Limited have made the following submissions:

2.3.16.1 **No specific provision for MRTS**

The tariff proposal does not make any specific provisions for MRTS although it is an entirely different entity having specific characteristics of functioning.

2.3.16.2 **Supply to Mass Rapid Transport System**

Mass Rapid Transport System will receive bulk power only at a few points at 220 kV/66 kV/4kV and shall have power factor of 0.9 and above. This would employ negligible T&D losses and no O&M expenses for the network. Therefore, very negligible investment is required toward the fixed cost. The supply therefore, should be based on pattern of NDMC/MES and reasonable subsidy should be given keeping in view the social utility of the organisation.

2.3.16.3 **DVB's response**

DVB have responded by stating that:

2.3.16.3.1 **On tariff**

DVB proposed to levy the same rates on Delhi Metro as are applicable for Railway Traction.

2.3.16.3.2 **On demand of NDMC/MES pattern of tariff**

The demand for considering them at par with NDMC and MES is not tenable since the tariff for NDMC and MES is based on guiding principles notified by Government of India in 1972.

2.3.16.3.3 **On categorization of DMRC**

DVB propose to treat DMRC at par with other bulk supply consumers and also to provide the benefit of the simultaneous maximum demand for levy of load violation charges as has been proposed in the case of Indian Railways.

2.3.17 **New Delhi Municipal Council (NDMC)**

2.3.17.1 **NDMC submission**

The NDMC were originally called for public hearing on 21st March 2001. However, the respondent requested for adjournment till 27th March 2001. The request was allowed after consulting the petitioner who had no objection to the adjournment. The NDMC have made the following submissions:

2.3.17.1.1 **Jurisdiction of DERC**

The jurisdiction of DERC does not cover NDMC.

2.3.17.1.2 **NDMC as a licensee**

That the NDMC is a licensee under the Indian Electricity Act, 1910 and not a bulk consumer of DVB.

2.3.17.1.3 **Guiding principles for tariff**

The Ministry of Irrigation and Power order issued in the year 1972 has laid down the guiding principles for determining the cost of supply by DVB to NDMC.

2.3.17.1.4 **No justification for hike**

That any justification for the proposed hike by DVB does not exist since DVB is not incurring any additional liability towards the cost of supply in NDMC area.

2.3.17.2 **DVB's response**

The DVB have responded with following comments:

2.3.17.2.1 **On the fixation of bulk supply tariff**

The fixation of bulk supply tariff is covered within the scope of clause (a) of sub-section (1) of section 11 of DER Act, 2000. The aforesaid Act, having been assented by President of India, shall have supremacy over any other legislation on the subject.

2.3.17.2.2 **On guiding principles for tariff**

The bulk supply tariff for NDMC is to be determined not only by referencing of cost of supply at different voltages, but also by taking into account other relevant considerations such as consumer mix and consequent profitability. NDMC should not be allowed to make undue enrichment because of a favourable consumer mix. The retail NDMC & MCD tariffs for both the areas have to be the same.

2.3.17.2.3 **NDMC evading dues**

NDMC have been evading legitimate dues of DVB in the past relating to FAC. This should be taken care of.

2.3.18 **Municipal Corporation of Delhi (MCD)**

2.3.18.1 **Poor maintenance of Street Lights**

MCD had objected to the proposed increase in tariff for street lighting points from Rs. 50 to Rs. 75 per point per month. It has been contended that the maintenance of the street lighting system is undertaken by the DVB through contractors and there is no question of any increase in the wage bill. The maintenance is also very poor and

almost 50% of the points are non functional.

2.3.18.2 DVB's submission

DVB have rebutted the submissions on the grounds of all round increase in costs and by further contending that street lighting is an obligatory exercise on the part of the Municipal body and it can do so at its own cost. Further the DVB is not expected to subsidise the same for MCD.

2.3.19 Other miscellaneous suggestions

Other miscellaneous suggestions covered a number of points, which are briefly mentioned below

2.3.19.1.1 Free electricity for defence personnel

The Government should pay for **free electricity for defence personnel**. One

suggested that Jhuggies should be given electricity free but theft should be checked.

2.3.19.1.2 On FAC

It was stated that the frequent revision of the FAC is confusing. They also questioned the FAC formula, which does not consider the collection efficiency.

2.3.19.1.3 On demand side management

In addition, some members of the public believe that greater efforts should be made for energy conservation and observe that the filing provided no programme for demand side management. People should be encouraged to change their lifestyle to help conservation of energy. Shops should close at 7 p.m. to conserve electricity and street lights could be set at alternate points.

Polluting units, encroachers and squatters should not be given supply.

2.4 Conclusion

The various suggestions of miscellaneous nature as well as representation from the Government Departments have been duly examined and issues of immediate relevance to the tariff setting exercise have been considered in Chapter 4.