DELHI ELECTRICITY REGULATORY COMMISSION

Viniyamak Bhawan, C-Block, Shivalik, Malviya Nagar, New Delhi-110017



Petition No. 8/2002

In the Matter of:

Petition dated November 30, 2002 for filing of Aggregate Revenue Requirement (ARR) for the Financial Year 2002-03 (from July 1 onwards) and determination of tariffs and Petition dated December 31, 2002 for filing of Aggregate Revenue Requirement (ARR) for the Financial Year 2003-04 and determination of tariffs to be charged by BSES Yamuna Power Limited

AND

In the Matter of:

BSES Yamuna Power Limited (formerly Central East Delhi Electricity Distribution Company Limited) Shakti Kiran Building, Karkardooma, Delhi 110092

Before

Delhi Electricity Regulatory Commission

Sh. V.K. Sood

Chairman

Date of Order: 26th June 2003

Order

The Commission having deliberated on the above petition and also the subsequent filings by the petitioner in the course of above proceedings, and having considered the responses received from the stakeholders, has in exercise of powers vested under the Delhi Electricity Reform Act, 2000, passes this Order signed, dated and issued on 26th Day of June 2003. The Petitioner shall take immediate steps to implement the Order after giving seven days public notice in accordance with section 28 (6) of Delhi Electricity Reform Act, 2000, so as to make the revised tariffs applicable from July 4, 2003.

(V.K. Sood) Chairman

00-01, 2001-02and 2002-03	

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1. Background, Procedural History and Description of ARR Filing

1.1 About the Commission

The Delhi Electricity Regulatory Commission (hereinafter referred to as 'Commission') was constituted by the Government of National Capital Territory of Delhi (hereinafter referred to as 'Government') on 3rd March 1999 and it became operational from 10th December 1999.

1.1.1 Functions of the Commission

Major functions assigned to the Commission under the (hereinafter referred to as 'Act') are as follows:

- to determine the tariff for electricity, wholesale, bulk, grid or retail and for the use of the transmission facilities
- to regulate power purchase, transmission, distribution, sale and supply
- to promote competition, efficiency and economy in the activities of the electricity industry in the of Delhi
- to aid and advise the Government, on power policy
- to collect and publish data and forecasts
- to regulate the assets and properties so as to safeguard the public interest
- to issue licenses for transmission, bulk supply, distribution or supply of electricity

Table 1.1: Orders issued by the Commission

Sr. No.	Name of the Order	Date of issue
1.	Order on Rationalization of Tariff for Delhi Vidyut Board (DVB)	16.1.2001
2.	Order on ARR for 2001-02 and Tariff Determination Principles for the 2002-03 till 2005-06 for Delhi Vidyut Board	23.5.2001
3.	Order on Joint Petition for Determination BST and Opening Losses for DISCOMS	22.2.2002

- to regulate the working of the licensees
- to adjudicate upon the disputes and differences between licensees

1.1.2 Issuance of Concept Paper on Tariff and Guidelines for Revenue and Tariff Filing

1.1.2.1 Concept Paper on Tariff

The Commission brought out a Concept Paper on Tariff in September 2000. The Concept Paper provided a historical background of the power sector in Delhi, gave the first tariff proposal of Delhi Vidyut Board (hereinafter referred to as 'DVB') and sought suggestions from various stakeholders on the conceptual issues on electricity tariff.

1.1.2.2 Guidelines for Revenue and Tariff Filing

The Commission sent 'Guidelines for Revenue and Tariff Filing' to the Delhi Vidyut Board in October 2000 for submission of their Annual Revenue Requirement and Tariff petitions. It contained about 29 data forms with guidelines to get data from utilities.

1.1.3 Regulations and Orders issued by the Commission

In its journey from inception till date, the Commission issued three Tariff Orders and notified eight Regulations as given in Tables 1.1 and 1.2, respectively. The Orders were issued after following the due process and all stakeholders were given an opportunity to present their viewpoints.

1.1.4 Constitution of Commission Advisory Committee

The Commission has constituted the Commission Advisory Committee, vide notification dated 27th March 2003, to advise the Commission on major question of policy

Table 1.2: Regulation notified by the Commission

Sr. No.	Title of Regulations	Date of notification
1.	Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001	9-3-2001
2.	Delhi Electricity Regulatory Commission (Management and Development of Human Resources) Regulations, 2001	16-4-2001
3.	Delhi Electricity Regulatory Commission (Appointment of Consultants) Regulations, 2001	6-8-2001
4.	Delhi Electricity Regulatory Commission (Delegation of Financial Powers) Regulations, 2001	6-8-2001
5.	Delhi Electricity Regulatory Commission (Grant of Consent for Captive Power Plants) Regulations, 2002	21-4-2002
6.	Delhi Electricity Regulatory Commission (Performance Standards – Metering & Billing) Regulations, 2002	19-8-2002
7	Delhi Electricity Regulatory Commission (Medical Attendance) Regulations, 2003	12-3-2003
8	Delhi Electricity Regulatory Commission (Redressal of Consumers' Grievances) Regulations, 2003	10-6-2003

related to electricity industry in the State and on matters such as quality of supply, continuity and extent of service provided by licensees and compliance by licensees with the conditions and requirements of their licences.

1.2 Background

1.2.1 Transfer Scheme

Pursuant to the provisions of the Act, the Government notified the Delhi Electricity Reform (Transfer Scheme) Rules, 2001 (hereinafter referred to as 'Transfer Scheme') on November 20, 2001. The Transfer Scheme provided for unbundling of the functions of Delhi Vidyut Board (hereinafter referred to as "DVB") and the transfer of existing transmission assets of DVB to Delhi Transco Limited (formerly known as Delhi Power Supply Company Limited and hereinafter referred to as 'TRANSCO') and the existing distribution assets to three distribution companies (hereinafter collectively referred to as 'DISCOMs').

1.2.2 Policy Directions

1.2.2.1 Notification of Policy Directions

In exercise of powers conferred by Section 12 and other applicable provisions of the Act, the Government issued Policy Directions vide

Notification No F.11 (118)/2001-Power/2889 of November 22, 2001 and as amended on May 31, 2002 (hereinafter collectively referred to as "Policy Directions"). A copy of the Policy Directions is attached hereto as Annexure 1.

1.2.2.2 AT&C loss as a measure of efficiency

The Government, through the Policy Directions, indicated its intent to disinvest majority shareholding in the DISCOMs to private investors with the balance 49% remaining with the Government. The Policy Directions identified the Aggregate Technical & Commercial (AT&C) losses as the measure of efficiency of the Distribution business. It further indicated that a long-term definitive loss reduction in distribution, to be achieved over a five-year period, should be settled upfront through competitive bidding to induce investors. In this regard, the Government invited the investors to submit bids for AT&C losses, which they could reduce each year for the years 2002-03 till 2006-07. However, prior to the submission of bids by investors, the Commission was required to determine the base AT&C loss levels for each DISCOM through an Order, which were to be the opening levels of AT&C losses for the purposes of bidding.

1.2.2.3 Framework for tariff determination

The Policy Directions indicated that the AT&C loss for the purpose of tariff computation by the Commission for each DISCOM in a year shall be the opening AT&C loss and the reduction proposed for the year in the bid submitted by the investor selected by the Government for purchase of 51% equity in the distribution company. Further, tariffs are to be determined such that the DISCOMs recover all expenses permitted by the Commission and earn a 16% return on equity.

The Policy Directions envisaged identical retail tariffs for the DISCOMs till the end of 2006-07. An amount of approximately Rs. 3450 crore was committed by the Government in the Policy Directions, as a loan to be repaid by the Transmission Company, to bridge the gap between the revenue requirement of the TRANSCO and the bulk supply price that it may receive from the distribution licensees based on the above framework.

1.2.3 Determination of BST and Opening Losses

The Order on opening loss levels, to be passed by the Commission, as discussed in para 1.2.2.2, was also required to determine the bulk supply tariff (BST) applicable to each of the DISCOMs to apprise the investors of the various cost and revenue elements required in the determination of tariff.

1.2.3.1 Filing of Joint Petition, BST Order and submission of bids

A joint petition was subsequently filed by the TRANSCO and the three DISCOMs on 21st December 2001 for the determination of Bulk Supply Tariff for the period till 31st March 2002 and opening level of AT&C Losses for the DISCOMs. The Commission, after detailed analysis of the Petition and supporting information submitted by the

Petitioners and after due consideration of the responses received from the various stakeholders and Policy Directions, issued an Order on Bulk Supply Tariff and Opening Level of AT&C Losses for the three DISCOMs on 22nd February 2002.

Thereafter, the bids were submitted by the investors. After evaluation of the bids, the Government awarded 51% of the equity of the DISCOMs to the chosen private investors.

1.2.4 Effective date of Transfer Scheme

The Transfer Scheme was made effective by the Government from July 1, 2002 onwards and from this date, the petitioner formally succeeded to the distribution assets of DVB (as defined in the Transfer Scheme) and became authorized to commence electricity distribution and retail supply business in the specified area as the Central East Delhi Electricity Distribution Company Limited (CEDEDCL) (as defined in the Transfer Scheme).

1.2.5 Revision of Guidelines by the Commission

The Commission, in the meanwhile, revised the existing Guidelines for Revenue & Tariff Filing (Guidelines) to accommodate the Policy Direction framework envisaged by the Government. The revised guidelines were issued by the Commission on August 23, 2002.

The revised guidelines recognised the Sixth Schedule of the Electricity Supply Act, 1948 as amended from time to time, as the framework applicable to the TRANSCO for filing of its Annual Revenue Requirement (ARR). The framework envisaged by the Policy Directions was made applicable to the DISCOMs for ARR filing purposes. The existing data formats were accordingly modified.

These guidelines also required TRANSCO to play a lead role in facilitating a common agreement

between the TRANSCO and the DISCOMs in regard to energy supply-demand position in the State for the current and the ensuing year. This was important to ensure emergence of an overall revenue gap/surplus for all the Companies from the individual filings, based on a common expectation regarding the DISCOMs demand and supply requirement for the period. The co-ordination was also required to be done well in advance of the deadline set for submission of petitions to the Commission.

1.3 Procedural History

1.3.1 ARR & Tariff filings for FY 2002-03 by DVB

Section 28(5) of the Act required the erstwhile DVB to provide to the Commission by December 31 of each year, full details of calculations of the expected revenue from charges (called as ARR) for the ensuing financial year. On non-receipt of the ARR filing by the Commission for FY 2002-03 beyond the stipulated date, the Commission, vide letter of January 16, 2002, reminded the DVB to expedite the submission of the same along with the reasons for not adhering to the deadline as set out in the Act. A further reminder on above was sent to the DVB on March 1, 2002.

The DVB, vide letter of April 1, 2002 submitted that the Government had sought proposals from interested bidders for privatisation of the distribution business of the DVB and expected to receive the bids on April 10, 2002. The Government wished to handover the distribution business to the selected bidders soon thereafter. It was stated that while the estimation of revenue requirements of the DVB for FY2002-03 was almost completed, the estimation of revenues for the year depended upon the bid values of the selected bidder and hence could not be finalized at this juncture. In addition, the process

of tariff determination would take time even after the filing of the ARR. The DVB, therefore, requested the Commission that the existing tariffs as fixed in the Tariff Order dated May 23, 2001 be continued till further Orders in the matter.

The DVB, vide letter of June 20, 2002 submitted to the Commission that the privatisation of the distribution business of DVB was delayed beyond the earlier target of April 2002 of the Government on account of various reasons. It was informed that the Share Acquisition Agreement had been signed by the selected bidders on May 31, 2002 and that the distribution business was expected to be handed over to them from July 1, 2002 onwards.

On behalf of the new companies, it was contended that the TRANSCO and the DISCOMs would require some time to file their ARR and tariff filing. Further, it was prayed that the existing retail and bulk supply tariffs, as fixed by the Commission in its Orders of May 23, 2001 and February 22, 2002, respectively be continued till submission of fresh petitions and issue of Orders on the same.

1.3.2 ARR & Tariff filing by the Companies

1.3.2.1 Filing of petitions

The TRANSCO filed its petition for ARR approval and determination of Bulk Supply Tariff (BST) for FY 2002-03 on November 8, 2002.

The Policy Directions envisage uniform retail tariffs across the DISCOMs and tariffs to be determined so as to allow the DISCOMs to recover all permissible expenses and return for a year. This implies that the BST for the DISCOMs for a period cannot be determined in isolation for TRANSCO and further; one would have to take cognisance of the ARRs of the DISCOMs for further processing.

The Commission, therefore, directed the DISCOMs to file their respective ARR & Tariff petitions for FY

2002-03, latest by the end of November 2002. It further opined that the TRANSCO should coordinate with the DISCOMs for simultaneous filing of the DISCOMs during the currency of the Policy Directions i.e. from 2002-03 to 2006-07.

Thereafter, on November 30, 2002, BSES Yamuna Power Limited (hereinafter referred to as 'Petitioner' or BYPL) filed its ARR Petition for the nine months of the financial year 2002-03 (from July 1 onwards) and on January 1, 2003 for FY 2003-04. On December 2, 2002, North Delhi Power Limited (hereinafter referred to as or NDPL) filed its ARR Petition for the nine months of the financial year 2002-03 (from July 1 onwards) and for FY 2003-04. BSES Rajdhani Power Limited (hereinafter referred to as BRPL) filed its ARR Petition for the nine months of the financial year 2002-03 (from July 1 onwards) and on January 1, 2003 for FY 2003-04.

The petitioner did not propose any retail tariff and requested the Commission to determine the same taking into account the provisions of the Transfer Scheme, the Policy Directions issued by the Government and filings made thereunder. The petitioner, however, suggested certain tariff rationalisation measures for the consideration of the Commission.

1.3.2.2 Interactions with the petitioner

The submission of the filings were followed by a series of interactions, both written and oral, wherein the Commission sought additional information/clarification and justifications on various issues, critical for admissibility of the petitions. The petitioner submitted its response on the issues raised through separate submissions on January 8 and February 10, 2003. The petitioner cited data constraints and the legacy systems of DVB for delays in submitting the desired information in a timely manner.

The other Distribution Companies and TRANSCO also provided similar information and clarifications on the issues raised in respect of their filings, on various occasions.

1.3.2.3 Consolidated Petition

During a meeting held with the senior management of all the four Companies, the Commission opined that a piecemeal submission of information on different occasions by the Companies would not only pose difficulties in the processing of the petitions by the Commission, but also in filing of responses by the stakeholders. The Commission, therefore, directed the Distribution Companies to submit individual single Consolidated Petition for FY 2002-03 (nine months) and for FY 2003-04, incorporating the original petition and all the additional information provided by the Companies to the Commission, subsequent to submission of the ARR Petitions in November and December 2002. This was essentially meant to facilitate easy reference, internal consistency and to avoid multiplicity of documents.

The petitioner filed the Consolidated Petition (hereinafter referred to as 'Petition'). for FY 2002-03 (9 months) and FY 2003-04 on March 6, 2003. The Commission received the Consolidated petition from the other two Distribution Companies, namely NDPL and BRPL, on March 4 and March 6, 2003 respectively.

The Commission admitted the petition for further processing on March 6, 2003.

1.3.3 Public Notice and response from stakeholders

1.3.3.1 Publicity given to the proposal

The Commission brought out a Public Notice on March 07, 2003 indicating salient features of the petitions for the two years, and to invite responses from the consumers and other stakeholders on the Petitions submitted by the TRANSCO and the DISCOMs, in accordance with the provisions of the Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001. The Public Notice was published on March 7, 2003 in several dailies such as:

- The Hindustan Times, The Times of India, Indian Express, The Pioneer and The Economic Times in English;
- Punjab Kesri, Navbharat Times, Rashtriya
 Sahara and Dainik Jagran in Hindi; and
- Milap in Urdu.

A copy of the Public Notice in English, Hindi and Urdu is attached as Annexure 2a-1, 2a-2 and 2a-3 respectively.

A detailed copy of the petition of each petitioner was also made available for purchase from the respective head-office of the Companies on any working day from March 7th 2003 onwards, between 11 a.m. to 4 p.m. on payment of Rs. 100/-. The Notice specified the deadline of April 7, 2003 for the receipt of responses/objections from the stakeholders. Complete copy of the petitions were also put up on the website of the Commission, as well as that of the Company.

1.3.3.2 Presentation to the stakeholders and revised public notice

Despite the publicity given to the petitions as mentioned above, the Commission met with a lacklustre response from the public on the petitions. It was evident that lack of a tariff filing by the Companies directly affecting the interests of the various cross-sections of the public, and low awareness and appreciation of the tariff-determination process in the Policy Directions

framework of the Government amongst the public at large, was contributing to the mild response.

The Commission, therefore, decided to venture beyond the mandated process of public participation as laid out in its Comprehensive (Conduct of Business) Regulations, 2001 and held a presentation on the ARR and tariff determination process on April 5, 2003 at the Commission's premises. The presentation was made to select stakeholders including representatives of various Consumer/industrial Associations, NGOs, Public Bodies etc. who had been interacting with the Commission on various issues in the past. A list of the participants invited for participation in the presentation is attached as Annexure 3a to this Order.

During the presentation, the Commission briefed the stakeholders about the unbundling and privatisation process followed by the Government, the Policy Directions framework, the salient features of the petitions, the importance of the instant ARR petitions for the tariffs to be approved by the Commission based on these petitions received from the Companies. The Commission sought response from the participants regarding the petitions at hand, and also suggestions/responses on other related areas of concern to the consumers including rationalisation of tariff etc.

1.3.3.3 Extension of deadline for submission of responses

Considering the interest evinced and the request made by some of the stakeholders during the presentation, the deadline for the submission of responses/objections by the stakeholders was extended to April 16, 2003.

The Commission informed all the stakeholders about this extension of the deadline for submission

of responses through a public notice in leading English, Hindi and Urdu newspapers on April 7, 2003 (Annexure 2b-1, 2b-2 and 2b-3).

1.3.3.4 Seeking suggestion on rationalisation of

The Commission sought further suggestions/ responses from general public on other related areas of concern to the consumer including rationalisation of tariff categories/sub-categories, tariff structure amendment, other charges levied as per provisions of Tariff Schedule through a separate public notice in all leading newspapers on April 11, 2003 (Annexure 2c-1, 2c-2 and 2c-3). A deadline of April 21, 2003 was set to receive responses on this account from the public.

1.3.4 Public Hearing

The Commission received 78 responses in all. Several responses were received after the deadline for submission of the responses. The Commission forwarded the responses to the petitioner for submission of comments to the Commission and a copy to the respondent. A detailed list of the respondents is attached with this Order as Annexure 3b.

The petitioner filed its responses to the comments/objections of the stakeholders till May 8, 2003.

The Commission conducted the Public Hearings on the 12th, 13th and 14th of May 2003. All the stakeholders who had submitted responses/objections on the ARR Petitions were invited to express their views in the matter. A list of the respondents who participated in the hearing process is attached with this Order as Annexure 3c. The entire proceeding was split across five different sessions catering to distinct groups of stakeholders as given in Table 1.3.

Table 1.3: Dates of public hearing

Date	Category
May 12,	Industrial consumers and Associations
2003	
May 13,	Domestic, Co-operative Societies,
2003	NGO's, and Commercial
May 14,	Government Departments and
2003	Utilities

At the end of each session, the issues discussed were summarised, and the TRANSCO and the Distribution Companies were asked to respond to the concerns raised by the stakeholders.

1.3.5 Post admission interactions

1.3.5.1 Discussions during technical sessions and presentation by the petitioner

After admission of the filing, the Commission held technical sessions with concerned staff of the petitioner to seek additional information and clarifications. Subsequently a meeting was held on March 17, 2003 to seek clarifications and additional information. The Commission referred to its letter of January 23, 2003 during the meeting wherein the Commission had sought a comprehensive tariff rationalisation proposal from the petitioner in light of certain proposals submitted by the petitioner and other oral submissions made during various interactions and directed it to comply with the same.

1.3.5.2 Petitioner's responses to queries raised by the Commission

The responses to some of the queries raised during the meeting held on March 17, 2003 were submitted on April 16, April 17, April 24, May 2, May 5 and May 9, 2003. On April 30, 2003, the petitioner made a presentation to the Commission on the status of the Capital Investments proposed by the Company in its petition for FY 2002-03 (nine months) and for FY 2003-04. On April 30, 2003, a meeting was held between the Commission and

representatives of the petitioner to seek clarifications and a status review of the balance information pending for submission by the petitioner. The information submitted by the petitioner in response to the queries raised by the Commission pertained to the details of actual expenses incurred, actual sales and

revenue, investments, etc. for FY 2002-03 (July 2002-March 2003), category-wise break up of sales and revenue data, scheme wise details of capital investments, etc. The responses to some of the queries raised during the meeting held on May 24, 2003 were submitted on May 28 and June 6, 2003.

1.3.5.3 Visits by the Commission

In addition to the interactions with the petitioner in the Commission's office, the Commission also undertook visits to the petitioner's office on May 5, May 6, May 21 and May 22, 2003 to understand the process of data capture primarily in regard to billings and collections for individual districts, and to serve as a cross-check for the overall numbers submitted by the petitioner for the entire DISCOM. The Commission staff also undertook field visits in the petitioner's area at some select locations to review the physical progress of the Capital Works and Repairs and Maintenance works.

1.3.5.4 Apprising the Advisory Committee

The factual position of the petitions filed by the Delhi Transco Ltd. and the three DISCOMs was brought to the notice of the Commission's Advisory Committee during its first meeting, held on the 21st of May, 2003.

An Activity Chart giving the details of various activities undertaken during the proceedings is attached as Annexure 4.

Table 1.4: Summary of ARR of the petitioner

(Rs Crore)

ltem	FY 2002-03 (9 months)	FY 2003-04
Power Purchase cost at existing BST	477	650
Net expenditure excluding Power Purchase Cost and including special appropriations	210	306
Return on Equity and Free Reserves	16	25
Annual Revenue Requirement	703	981
Less: Non Tariff Income	15	21
Net Aggregate Revenue Requirement (ARR)	687	960
Less: Revenue at existing tariff	603	860
Net Revenue Gap	84	100

1.4 Summary of the petition

The petitioner has estimated an Annual Revenue Requirement (ARR) for FY 2002-03 (9 months) and FY 2003-04 at Rs. 703 crore and Rs. 981 crore, respectively. A snapshot of the ARR and revenue gap at existing tariff is provided in the Table 1.4.

1.5 Layout of this Order

This Order is organised into 5 Chapters. While the current Chapter gives the information about the Commission, the historical background and context in which current petitions were filed, the second Chapter gives a detailed account of responses from stakeholders, licensee's comments and Commission's views on the responses. Chapter 3 discusses the Annual Revenue Requirement. While Chapter 4 focuses on the Tariff Philosophy in the context of Policy Directions and the Rationalisation Measures, Chapter 5 deals with Tariff Calculations. Chapter 5 also gives a comparison of power purchase cost and Retail Supply Tariff in Delhi and neighbouring States. Chapter 7 reviews the Directives issued to erstwhile Delhi Vidyut Board in Commission's Order dated 23.05.03 and to TRANSCO and DISCOMs in Order dated 22.02.02 and lists down the new directives issued in this Order, Chapter 8 is the revised Tariff Schedule.

2. On the Response from Stakeholders

The issues relevant to the said Petition have been dealt in the following paragraphs:

These objections/responses mainly relate to Procedural Issues, Quality of Filing, Privatization Policy and Reform Process, Policy Direction issued by the Government of NCT of Delhi, AT&C losses, ARR and Revenue Gap, Rationalization of Tariffs, Conditions of Supply etc. The views of the Commission on each of these issues have been given subsequently.

2.1 Procedural Issues

2.1.1 Response From Stakeholders

These objections relate to non-filing of tariff petition by the licensee along with the ARR Petition, request for additional documents and placing tariff modifications before the House of Legislative Assembly, for approval.

The Bhartiya Mazdoor Sangh, the Delhi Dal Mills Association and the National Working Group on Power have submitted that according to DERA 2000, the Commission is under obligation to notify to the consumers any proposed change in the tariff and allow them an opportunity to offer their objections. Some objectors have asked for the documents submitted by the Petitioner to the Commission before admission of petitions. They have also drawn the attention of the Commission to filing of consolidated petitions claiming that there is no provision for the filing of consolidated Petitions (one filing for 9 months and other for 12 months)

The NWGP has taken objection to the presentation organized by the Commission to a select group of consumers on 5th April 2003. They have also stated

that the said representation should have been given by the Petitioner and not by the Commission. Some of the objectors have also brought to the notice of the Commission the difficulties faced by them in obtaining copies of the petition from the offices of the Petitioner.

The DDA in their response have dwelt on the provisions of section 62 of DERA 2000, which deals with placing before the House of Legislative Assembly of the National Capital Territory of Delhi, every rule made by the Government and every regulation made by the Commission. Deriving from this, they have contended that even the modifications in tariff should be laid before the House, for approval.

2.2 Quality of Filing and Additional Information

2.2.1 Response From Stakeholders

Some of the objectors viz. Federation of Delhi Small Industries Association, Bhartiya Mazdoor Sangh, the Apex Association of Wazirpur Industial Area, have sought additional information / documents viz.

- a) Request for Qualification (RFQ) issued to the prospective bidders for the DISCOMs
- b) Request for Proposal (RFP) issued to the prospective bidders for the DISCOMs
- c) Bid Documents submitted by the bidders
- d) Share Acquisition Agreement signed between the Companies and the GNCTD
- e) Share Holder's Agreement signed between the Companies and the GNCTD
- f) Power Supply Agreement between the DISCOMs and the TRANSCO

- g) Escrow Agreement
- h) Loan Agreements
- i) Assets and Liabilities Report prepared by SBI Capital/Other agency, if any, in respect of erstwhile DVB
- j) Category wise actual Revenue Recovery by the DISCOMs till March 31st, 2003.

2.2.2 Response of the Petitioner

The Petitioner has submitted that the present ARR Petition filed with the Commission and made public incorporates all the clarifications and additional information provided to the Commission. It has been further stated that this is the first such exercise for filing of ARR and tariff determination before the Commission after the restructuring of the erstwhile DVB and privatisation of the distribution business in Delhi. The Petitioner has further submitted that since BYPL took over the DISCOM in July 2002, the time available for data compilation was relatively short. In view of this compulsion, BYPL has filed supplementary submissions to substantiate and ensure completeness of data requirements. They have stated that the separate Petitions for the FY 2002-03 (nine months) and the FY 2003-04 were combined together to facilitate availability of all the information. BYPL has mentioned that the filing of ARR involves forecasting and projections for the ensuing period based on the actual data available and past trends. The details of the actual revenue realized, AT&C losses, expenses etc for the FY 2002-03 has been submitted to the Commission. Regarding the issue of making the transaction related documents public, the Petitioner has stated that the Commission may take a decision in consultation with the GNCTD.

2.3 Policy Directions

2.3.1 Response From Stakeholders

Objections have been raised to various provisions of Policy Directions issued by the Government of NCT of Delhi in November 2001 and subsequently amended in May 2002 relating to determination of AT&C losses, and certain other financial parameters applicable to private investors.

Some of the objectors like BMS, Delhi State Village Development & Welfare Sangh (DSVDWS), FISME and Naraina Small Industries Welfare Association, Phase-1, NWGP, and Federation of Delhi Small Industries Association and others have raised objections to various provisions of the Policy Directions. They have raised the issues of increase in Government support to TRANSCO from Rs.2600 crore to 3600 crore, the AT&C loss reduction target being reduced to about 17% over the 5 year period from the level of 21% indicated by the Government in the bid documents, the methodology of calculating AT&C losses, the allowed 16% return on equity to the DISCOMs in the light of falling interest rates etc. The objectors have further stated that on achieving a 0.5% targeted reduction in AT&C losses and by keeping the values of BST and RST unchanged, there would be little impact on the accounts of the DISCOMs, whereas the TRANSCO would come under tremendous financial burden. The objectors have further stated that this would burden the consumers and would cause loss to them.

Some of the objectors have stated that the Policy Directions are in conflict with the provisions of Acts and hence ultra-vires. They have further contended that the return of 16% needs to be weighed against factors such as "Interests of consumers, efficiency, economic use of resources

and good performance". They have also questioned the power of the Government of NCT of Delhi to issue any direction, which violates the legal provision. They have further stated that although Section 12 of DERA empowers the Government to issue directions in the matters of policy involving public interest, the Government cannot rewrite the Act in the name of issuing "Policy Directions". They have further opined that the Commission should determine the tariff in accordance with the provisions of ERC Act / Delhi Electricity Reform Act.

2.4 Privatization Policy and Reform Process

2.4.1 Response From Stakeholders

The privatisation model adopted by the Government of NCT of Delhi and parameters of the same have been objected to by some objectors.

The Delhi Power Consumer's Guild (DPCG) and Federation of Delhi Small Industries Association have raised doubts about the privatisation policy of the Government of NCT of Delhi and have expressed fears that the private players would be benefited and the consumers would continuously burdened with increase in tariff without any improvement in the quality of service. They have requested the Government and the Commission to review the rationale of the reform process and offer the consumers a rational tariff structure. They have questioned the huge revenue gaps projected by the TRANSCO and the DISCOMs and have expressed apprehension that Rs. 3450 crore that was budgeted to support the sector for a period of 5 years is likely to get exhausted in less than 2 years on account of the high level of expenses of the companies which would result in an adverse impact on the BST and on the consumer tariffs in the future.

2.5 Compliance with Directives

2.5.1 Response From Stakeholders

Some of the objectors have sought to know the status of various Directives issued by the Commission in its earlier tariff orders.

CHETNA, the Society for Protection of Cultural Heritage has requested the Commission to direct the TRANSCO and the Distribution Companies to submit the status of compliance of various directives issued vide Orders of 16th January, 2001 and 23rd May, 2001 and also direct them to first publish the Action Taken Report in at least two English Dailies and two Hindi newspapers. In the opinion of the Society, the stakeholders' suggestions should be invited on the status of compliance/non-compliance of the directives and only then the ARR of the Companies should be considered.

2.6 AT&C Losses

2.6.1 Response From Stakeholders

Objections have been raised regarding the high level of AT&C losses, pilferage and theft of energy etc.

The Senior Citizen's Welfare Association (SCWA), NWGP, FISME, Naraina Industries Association, Phase-I, the Federation of Delhi Small Industries Association, All India Federation of Plastic Industries, the Laghu Udyog Bharati (LUB) and DDMA, the Society for Protection of Cultural Heritage, the Delhi State Villages Development & Welfare Sangh (DSVDWS), the Single Point Agency Holder Association, Shri Vijender Kumar Gupta, Counsellor, MCD, Manufacturers Association and certain Residents Welfare associations including JCRWAP have expressed concern about high level of AT&C losses and have stated that these are responsible

for the high revenue gap projected by the DISCOMs. They have also taken objection to the marginal decline in the percentage of AT&C losses as projected by DISCOMs. One of the objectors has mentioned that the technical losses account for only 10% and the balance losses is on account of theft of electricity. Several objectors, during the public hearing, voiced their opinion that a higher loss reduction can be achieved during the first two years as against the inverted pattern proposed in the contract with the private investors.

The Senior Citizen's Welfare Association (SCWA) has stated that the reduction proposed in the AT&C losses in the FY 2003-04 being just 1.5%, with the increase in quantum of energy input, the losses would rise substantially in absolute terms. They have also questioned the allowable return, which has been guaranteed to these Companies on the agreed level of losses. Most of the objectors in this category have raised serious concern on the theft electricity directly from the Fuse-Pillar Boxes, illegal consumption of power in marriage ceremonies, by pavement dwellers, etc.

It has been suggested that the Resident Welfare Associations (RWAs) should be empowered to report cases of D.A.E. and the Area Inspectors should be held responsible if no action is taken on such complaints. This, they opined, would go a long way in curtailing the AT&C losses in the State.

The NWGP has stated that till date, no attempt has been made to determine the opening level of losses on a scientific basis. Some of the objectors have suggested that the Commission should employ experts to determine the potential for loss reduction in order to avoid the passing of the burden of indiscriminate losses on to the consumers. One of the objectors like the Naraina Small

Industries Welfare Association, Phase-1, has attributed the following reasons to theft of power:-

- Disparity in rates for LIP and SIP
- Non availability of legal connections upto the requirement of the consumer because of the law and procedures being a hurdle
- Consumers are charged under normative and minimum charges
- Higher sanctioned load leads to higher payment under minimum charges and also makes LIP tariff applicable, which is unjust
- Lower sanctioned load attracts threat by inspectors and normative charges

Most of the objectors have asked for stringent measures to be taken by the DISCOMs in the areas particularly in urban villages and illegal colonies to contain the theft of electricity and they have alleged that rampant corruption in the companies is primarily responsible for high level of their losses.

Some of the objectors have criticised the concept of AT&C losses which clubs the transmission losses, distribution losses, energy stolen, energy not billed, energy incorrectly billed, revenue not realized, revenue realized but embezzled, etc. etc. The objectors have stated that an arbitrary programme of reduction of AT&C loss (accepted bid), which aims to reduce losses by 17% till the end of 2006-07, has been drawn without any justification or analysis,. They have further stated that the reduction target of 17% is very low because a prudently managed licensee is expected to achieve the realization level of at least 99%.

The Single Point Agency Holder Association has requested that it be allowed at least 30% AT&C losses, which is much lower than the AT&C losses allowed to the DISCOMs.

Shri Vijender Kumar Gupta, Councillor, MCD has criticised the Privatisation Policy of the Government and has opined that DISCOMs should be advised to bridge their gap by plugging loopholes at their end and controlling losses.

2.6.2 Response of the Petitioner

The Petitioner has submitted that the reform and privatization of the power sector in the NCT of Delhi has been initiated to address the poor financial health and supply conditions in the sector. It has been further mentioned that prior to the commencement of distribution operations in central-east and south-west circles by the Petitioner, electricity distribution in such areas were being undertaken by a Government owned setup from 1997 onwards under DVB, and prior to that period under DESU. The AT & C losses in various areas of Delhi ranged from 50% to 65%. The Petitioner has further stated that it is making rigorous efforts in various functional areas including metering and billing and is conscious of the fact that reduction in AT&C losses over the target levels will improve the overall power sector performance in Delhi.

The Petitioner has submitted that it is a daunting task to achieve the AT&C Loss reduction targets considering the enormity of the problems and taking reference from other privatized entities both in India and abroad. The AT&C loss reduction of 17% over 5 years will require collections to increase over 33% at the current tariff level and is projected to turnaround the sector. This has been recognized in the Delhi Electricity Reform Package while fixing the AT&C loss reduction targets. The Petitioner has proposed capital expenditure for laying the basic infrastructure, system augmentation, and improvements in the metering and billing systems. Some of these expenditures will help the utility in

loss reduction while others will improve system reliability and customer services. Thus, all the capital expenditure is not for bringing down the AT&C losses and the results of these expenses will become visible over a period of time.

The Petitioner has further mentioned that the information on energy billed, amount billed and the amount realized compiled for each of the circles have been used to compute the energy units realized in revenue for each DISCOM, in accordance with the methodology provided in the Policy Directions. The difference between energy units input at 66/33 kV level into the DISCOM, estimated as explained above, and the energy units realized, as a percentage of energy input, is computed as AT&C loss for the DISCOM.

The Petitioner has submitted that the bidding criteria envisaged gradual reduction of AT&C losses. The utility earns 16% return provided it completes the AT&C loss targets and other performance targets stipulated by the Regulatory Commission.

2.7 ARR and Revenue Gap for FY 2002-03 (9 Months) and FY 2003-04

2.7.1 Response From Stakeholders

The major objection under this head relate to authentication of actual revenue and expenditure, restricting wasteful expenditure of the companies, detailed examination of the accounts of the Petitioner by the Commission, establishing prudency etc.

One of the objectors, BMS was of the view that the ARR for 2002-03 (9 months) should be approved on the basis of actual revenue and expenditure during the period since FY 2002-03 is already over. They have further stated that the wasteful expenditure of companies has increased and the Commission

should pass interim orders restricting the expenditure of DISCOMs within reasonable limits.

FISME and Naraina Small Industries Welfare Association, Phase-1, have stated that the Commission is obliged to examine the accounts of the Petitioner in the manner laid down by the Supreme Court. The objectors have submitted that the Commission may not be bound by the accounts of the Companies, which may be genuine and unchallenged.

The Rajasthan Udyog Nagar Manufacturer's Association and North-West Industrial Federation have submitted that the Petitions of the Distribution Companies are in total violation of DERA, 2000 and in contravention of the aims and object thereof. The objectors have stated that the contingency reserve claimed by the DISCOMs is around three times the allowable levels. They have asked the Commission to critically examine the taxes claimed by the Companies.

The TRANSCO has requested the Commission to scrutinize the ARRs for prudency. Specifically, the R & M cost should be examined with regard to the initial availability of stores to the DISCOMs by virtue of the vesting of the relevant assets of the DVB in the DISCOMs under the Transfer Scheme Rules.

The Senior Citizen's Welfare Association is of the opinion that the consumers should not be made to pay increased tariff to bridge the Revenue Gap as projected by the Licensees themselves, especially when the said Revenue Gap has not been certified as correct by an independent authority. Further, the Association has stated that there exists a possibility that the bulk of the projected Revenue Gap may be due to the inefficiency or incompetence on the part of the licensees or due to other extraneous considerations.

The Rajasthan Udyog Nagar Manufacturer's Association and North-West Industrial Federation have submitted that the revenue arrear collections should not be claimed as expenses. Delhi Transco Limited has referred to the relevant provisions of the Delhi Electricity (Transfer Scheme) Rules, 2001 regarding the sharing of receivables of the erstwhile DVB between the Holding Company and the Distribution Companies. The TRANSCO has urged the Commission to consider whether such collections may be shown as expenses and whether the 20% retained by the Distribution Companies should be shown as their collections.

2.7.2 Response of the Petitioner

The Petitioner has submitted that the revenue requirement an expenses should be seen in the view of the additional infrastructural requirements such as separate corporate office, communication system, monitoring system etc that have arisen consequent to the unbundling of the erstwhile DVB. The Petitioner has further submitted that the network inherited by it requires substantial investment for activities like system augmentation, meter replacement, energy audit etc. which would increase the depreciation and interest expenses. As regards the employee cost, the Petitioner has mentioned that under the Tripartite Agreement with employee, terms and conditions employment cannot be inferior to those of the erstwhile DVB. Further, the management is obliged to bring better managerial skills and technological innovations to keep up with the latest developments. The actual details of expenses, revenue and sale of power and AT&C loss for the period July 2002 to March 2003 have already been provided to the Commission.

2.8 Treatment of past Arrears Collected

2.8.1 Response From Stakeholders

Some objectors have stated that 20% of the past revenue arrears being collected by the DISCOMs on behalf of the Holding Company should be considered as non-tariff income.

The Delhi Power Company Limited (DPCL) has pointed out to the variation between the arrear figures provided by the DISCOMs in their Petitions and the actual arrears remitted by the DISCOMs to the Holding Company. Further, DPCL as stated that the DISCOMs have not given full details of the amount collected on account of arrears to the Holding Company and has asked for full details of amount collected against arrears on monthly basis. They have also asked for the remittance of the balance arrears from the DISCOMs.

2.8.2 Response of the Petitioner

The Petitioner has submitted that the Commission has applied the principle of revenue realization in the Bulk Supply Tariff Order, wherein the revenue realized included all collections without any distinction between prior period collection, and collection for the period of ARR as the entire funds were available for meeting the ARR. The Petitioner has stated that the Policy Directions specify that the Petitioner is required to remit 80% of the amount collected against arrears of the period prior to 1st July, 02 to the Holding Company, and retain 20% of the amount so collected. Thus, the full amount collected by the Petitioner is not available for meeting the Annual Revenue Requirement and therefore the revenue gap has increased. The Petitioner has opined that the revenue realized after deducting 80% of collection towards DVB arrears should be considered as revenue available for meeting the Petitioner's revenue requirement. It

has been further mentioned that the program developed for computation of collection against arrears can be scrutinized and verified by the Holding Company, and can be made open to any further suggestions if required for greater transparency on mutually agreed methodology. The details of actual collection against DVB arrears upto 31st March 2003 have already been submitted to the Commission.

2.9 Depreciation charges

2.9.1 Response From Stakeholders

The Rajasthan Udyog Nagar Manufacturer's Association and North-West Industrial Federation have opined that the depreciation should not be allowed on the assets added during the year.

2.10 Investments

2.10.1 Response From Stakeholders

The majority of objections under this head are regarding critical analysis of investments and checking prudency thereof. The Rajasthan Udyog Nagar Manufacturer's Association, North-West Industrial Federation and the BMS have all referred to this issue. The objectors are of the view that the heavy capital expenditure proposed by the DISCOMs for reduction of AT&C losses is not justified in the absence of tangible improvement in the supply and distribution of power.

The BMS has stated that the Companies have projected substantial capital investment in their Petitions, which does not carry prior approval of the Commission and hence should not be allowed.

On the contrary, the Federation of Delhi Small Industries Association, All India Federation of Plastic Industries and Naraina Industries Association Phase-I and II have stated that the equipment of the

distribution companies are old and faulty, and therefore have to be replaced in order to reduce the level of transmission losses and consequently provide quality supply to consumers. The objectors have opined that the recovery of the cost of such huge investments in one year is not justified, and should be recovered through better revenue realizations over future years.

2.11 Non-Tariff Income

2.11.1 Response From Stakeholders

TRANSCO has referred to the non tariff income approved by the Commission for the FY 2001-02 and has suggested that in addition to the items considered in the Order for the FY 2001-02, the following components of other income should also be included under the head of non-tariff income

- Rebate earned by the Distribution Companies for early payment of power purchase bills to TRANSCO
- 20% collection charges earned out of the recoverable arrears of the erstwhile DVB

The Delhi Metro Rail Corporation has suggested that no meter rent should be charged to DMRC, as the distribution licensees are not incurring any expenses on such meters. The BMS has stated that the figures for non-tariff income have been grossly underestimated in the Petitions.

2.11.2 Response of the Petitioner

The Petitioner has submitted that the electricity tax is collected on behalf of MCD and any change in applicability of the tax e.g.: Railways construction works, etc. has to be taken up with the MCD. The Petitioner has further stated that the energy bills of Railways are being accepted without payment of electricity tax, and the necessary modifications in the billing software are being carried out to ensure

exclusion of electricity tax element in traction bills. It has been further mentioned that in case any payment of electricity tax has been made by the Railways, the same shall be refunded on production of documentary evidence.

The Petitioner has submitted that the rebate accruing to the TRANSCO from the payment of BST has been considered in non-tariff income, which has reduced the ARR, and therefore benefits all the consumers. In this context, the Petitioner has further stated that the Railways are asking for allowing longer period for payment of bill, and at the same time asking for rebate on early payment, which are contrary.

2.12 Tariff Policy / Tariff Structure/ Tariff Rates

2.12.1 Response From Stakeholders

There has been a very encouraging response from the stakeholders conveying suggestions on this aspect. The responses have ranged from suggestions regarding various factors to be considered for revision of tariff, rationalisation of various categories under different consumer heads, tariff for different type of consumers, tariffs for licensee, creation of new categories/definition of categories etc. etc.

The BMS has suggested that the future earning potential of the Companies and impact of efficiency improvements, prospect of electricity industry becoming self-sustaining in five years time etc, should be factored while designing tariff thereby reducing the tariff shock to the retail consumers. They have also suggested that if the DISCOMs achieve their targeted loss reduction, an Order to reduce retail tariffs proportionately should be passed.

2.12.1.1 Industrial Tariffs

Response From Stakeholders

The Naraina Small Industries Welfare Association. the All India Induction Furnaces Association, various Manufacturers Association, DDMA and Mr. C.K. Bhardwaj have offered various suggestions towards changes in the tariff structure to make it more transparent, consumer friendly and fair to the DISCOMs. The NSIWA has advocated the concept of uniform tariff rates for all the consumer categories within the industrial sector. They have also objected to separate tariffs for consumers falling in the category of Induction/Arc Furnaces. They have seconded the suggestion of the Petitioner regarding tariff for SIP and LIP. They have further suggested there should only be one tariff for industrial / commercial / domestic connections where there are poly-phase connections. The AIIFA have raised objections to the tariff being charged from Induction Furnace units, mentioning that it is too high as compared to the cost of supplying power to them vis-à-vis other consumers. They have also suggested that they should be charged at the rates charged by the TRANSCO to bulk consumers. The Association and Mr. Bhardwaj have suggested that the two types of power consumed by these units i.e. one to run electric furnaces and the second for domestic load, factory lights, machine shop etc. should be charged at different rates. They have mentioned that such a facility was being extended by the erstwhile DVB and the same facility should be extended by the DISCOMs as well.

Mr. C.K. Bhardwaj has suggested that a provision for planned shut down of power should be incorporated for this industry. The objector has further suggested that whenever there is a local fault and power supply gets discontinued, those hours should be recorded and rebate should be

given for those hours and the tariff rates should be adjusted.

Some objectors, Manufacturer's Association and the DDMA, have opined that the tariff should be charged according to the average cost of supply. They have also pointed out that in the existing tariff structure, the LIP consumers pay a higher rate than the SIP consumers, which is contrary to the provisions of the ERC Act. They have made the following suggestions: -

- Tariffs should be based on the cost of energy supplied by the generating companies, and not on the basis of end use of electricity;
- Tariffs should be uniform for domestic, commercial and industrial consumer categories;
- The consumption pattern in industrial or commercial establishments should be based on sanctioned load only.

Friends Colony Industrialist Association is of the view that the tariff increase should not be allowed and the Distribution Company should undertake maximum efforts to reduce the line losses and control theft of energy. The Association has further suggested that the help of respective Associations could be taken to curb power thefts. The FCIA has also stated that revision in tariff rates would increase the temptation to steal energy thereby increasing the loss levels of the Petitioner further.

2.12.1.2 Tariffs for Streetlights and Signals

The Municipal Corporation of Delhi (MCD), DDA and Traffic Police have raised objections regarding the tariff for these facilities as also for maintenance charges of streetlights.

The MCD and DDA have indicated that the maintenance charge of Rs. 500/- as indicated by the Petitioner in the petition for every lighting mast point is very high. The MCD has also raised objections about the charges being levied by DISCOMs on various spare parts used in the maintenance as also about the procurement process of the DISCOMs.

The Traffic Police has stated that the different Distribution Companies are charging different rates for electricity consumed in respect of signals/blinkers. The objector has mentioned that in the tariff schedule for FY 2001-02, there is no mention of this category and energy rates have not explicitly been specified for traffic signals/ blinkers. The objector has requested the Commission to explicitly specify tariff applicable to this category. They have also pleaded that signals / blinkers are for public use and not meant for commercial use and therefore they should be charged at a lower rate.

2.12.1.3 Tariff Structure

Response From Stakeholders

A number of objectors have suggested modifications in the existing tariff structure to aim at rationalization. The FISME has suggested that tariff should be decided based on different voltage levels starting from the highest voltage to the LT and leave it to the discretion of licensee and the consumer to arrive at the appropriate voltage level at which the consumer will be supplied power. They have further suggested that declining slab wise tariff should be provided to encourage consumption and improvement of load factor. The

SCWA has also stated that ascending slab-wise tariffs encourage thefts.

The CII has suggested following modifications in tariff structure:

- The normative hours of electricity supply to retail outlets should be increased from 8 hours to 12-14 hours.
- Presently the tariff charged for loads in excess of 100 kW is on the higher side. The threshold limit for applicability of higher tariffs should be increased to 200 kW
- Estimation of connected load for any industrial unit should not include the connected load of the DG sets. The CII has suggested that penalties should be imposed on excess consumption rather than on excess connected load, which in its view would avoid manipulation at the field level. The CII has further suggested that the normative level of consumption should be enhanced from the existing 200 units to 400 units per kW per month.

Some of the objectors have further pointed out that high minimum charges would lead to increased theft of power and wrong declaration of connected load by the consumers.

One objector Mr. Kumar has suggested that energy charges for supply at 220 kV should be half that of supply at 440 kV because supply is received at lower voltage by the consumer.

2.12.1.4 Licensee Tariffs

Response From Stakeholders

The MES has pleaded for licensee tariff for MES establishments outside the licensed area. They have further stated that maintenance, upkeep of distribution and LT transformers / UG & OH lines is being done by MES themselves.

2.12.1.5 Creation of new Categories/Definition of Categories

Response From Stakeholders

The Senior Citizen's Welfare Association (SCWA) has requested for creation of separate tariff category for residences occupied by senior citizens to be charged at concessional rates. The Association has further suggested that social welfare organizations should be clubbed under domestic category rather than under commercial as is being done at present.

The Laghu Udyog Bharati (LUB) has suggested that the limit of 10 kW under clause 3.9 (viii) of the Tariff Schedule should be increased to 20 kW. The LUB, WSIA and New Rohtak Road Manufacturers Association have further suggested that the limit for availing SIP connection should be increased from 100 kW to 150kW- 250 kW, since the consumers are now required to install a number of pollution control equipment in addition to the normal equipment. The LUB has also suggested that the conversion from SIP supply to LIP supply should be effected from the date of registration of maximum demand by the electronic meter instead of levying the same for the preceding six months. The WSIA has also suggested minimizing difference in tariffs between SIP & LIP categories. The DDA has pleaded for concessional / domestic tariff for Jails / Nari Niketans / Poor Houses.

2.12.1.6 Cinema Theatres

Response From Stakeholders

The National Association of Motion Picture Exhibitors has not only opposed any tariff hike for cinema halls operating in Delhi but has also asked for power at concessional rates. The Association has suggested that the connections to Cinema halls should be treated as Industrial Connections rather

than commercial /non domestic since cinema has been declared to be an Industry by the Government of India, vide a Notification dated 16.10.2000.

2.12.1.7 Mushroom Tariffs

Response From Stakeholders

Several mushroom cultivation units have stated that since Mushroom Cultivation has been categorized as an agricultural activity by the Government, the tariffs applicable to the category should be reduced to the level of the other agricultural consumers.

2.12.1.8 Railway Traction

Response From Stakeholders

The Northern Railways (Railways) has listed the benefits to the Distribution Companies from the Railway Traction system and the social obligation that are fulfilled by the Railways. The Railways have submitted that the existing traction tariff is high and should be brought down to a reasonable level. The Railways have added that the energy charges should be based on the cost of energy purchased from Central Agencies like NTPC, etc. and the Distribution Companies may be allowed to charge additional component of billing charges and reasonable profit. The Railways have suggested a single part tariff for Railways as done in the case of other SEBs like PSEB, RSEB and MSEB, etc.

2.12.2 Response of the Petitioner

The Petitioner has submitted that the categorization of consumers is based on the purpose for which energy is used, quantum of load, voltage level of supply, etc. Further, such categorization has been done taking into consideration socio-economic conditions, paying capacities of consumers as also the system conditions. The DISCOM has opined that

it within the Commission's powers to take into consideration all these factors while determining the tariff.

The Petitioner has further stated that the Induction/arc furnaces are highly power intensive industries and electricity is the basic raw material for such units. These are continuous process industries with variations in load occurring throughout the day.

As regards the limit for the levy of normative charges, the Petitioner has submitted that the current allowable limit per kW for different categories under LT system is based on the load factor and average hours of use with reasonable amount of cushion to take care of such contingencies.

With regard to the exclusion of the load of DG sets in the estimation of connected load, the Petitioner has stated that:

- Connected load shall be determined as per the Commission's Tariff Order dated May 2001.
- As regards other issues connected with captive power plant, the Commission's Regulations (Grant of Consent for CPP, 2002) will apply.

The Petitioner has mentioned that the maintenance of street lights falls in the purview of the civic agency and local authority, i.e., MCD. In the past, DESU/DVB was handling this responsibility on behalf of MCD. With the privatization of DVB, the DISCOMs have their work cut out to fulfill the primary responsibility of supply of power. However, the issue of future maintenance of the streetlights is being deliberated with the MCD/PWD under the aegis of the GNCTD and it has been decided that an MOU will be executed between the agencies and the DISCOMs which will address all the issues related to

proper upkeep and maintenance of street lights on mutually agreed terms and conditions with inbuilt transparent mechanism for determination and recovery of maintenance charges. Insofar as the shifting of streetlights and associated electrical mains for road widening, such work is executed at the request of the concerned agency as a deposit work fully chargeable to that agency.

The Petitioner has stated that the charges for signals and blinkers have been fixed by the erstwhile DVB and have continued since then without any upward revision. However, these rates do not appear in the Tariff Order of May 2001 of the Commission. The same may be considered for incorporation in the current Tariff Order.

With regard to the tariff rates for cinema halls, the Petitioner has stated that the term 'industry' is often used in a broader sense. The DISCOM has added that operation of cinema halls is essentially a commercial activity being a place for exhibition of movies and does not involve any production related activity and the objector is confusing it with production of movies.

In regard to separate tariff for mushroom cultivation, the Petitioner has submitted that in the existing tariff schedule, mushroom cultivation is placed under agriculture category but with a higher tariff, for the following reasons:

- Agriculture tariff is applicable for activities connected with tubewells for irrigation of crops in conjunction with pumping load. The load requirement for such purposes is also small and such connections are given up to 10 KW.
- Such tariff below cost cannot be extended to power intensive cultivation like Mushroom

Cultivation (due to heavy air-conditioning load requirement)

As regards the objections on single point delivery connections, the Petitioner has submitted that

- A detailed proposal on SPD policy has already been submitted separately to the Honorable Commission for consideration.
- The Commission is seized with the matter and will take a decision after due diligence and consultations with the stakeholders.

The Petitioner has stated that the proposed Retail Supply Tariff has not been indicated, as there is large degree of correlation between the Bulk Supply Tariff and Retail Supply Tariff. Further, the Petitioner expects significant reduction in power purchase cost as CERC has revised norms for Tariff fixation for NTPC, NHPC power stations and PGCIL.

- (a) PLF for fixation of fixed cost/capacity cost shall be 80% against existing rate of 68.4%.
- (b) Incentive shall be payable only for PLF above 77% as against existing level of 68.4%.
- (c) In determining PLF, back down of generating unit shall not be considered.
- (d) Depreciation shall be considered @ 3.6% only against the existing rate of 7-8%.

In the matter of tariff applicable for Railways, the Petitioner has stated that the Transfer Scheme Rules clearly lays down the area of supply of the DISCOMs and their jurisdiction. The Petitioner is of the view that since the supply network for supplying power to Railways is laid by the Distribution Company, the tariff levied on Railways shall be at par with retail tariffs applicable to all bulk consumers of the DISCOM and not as per the Bulk Supply Tariff of TRANSCO or Generation Companies. Further, the Petitioner has submitted

that two-part tariff comprising demand charges and energy charges should be applied uniformly to all HT consumers of the Distribution Company.

2.13 Cross Subsidy

2.13.1 Objections

A number of objections under this category have been received, advocating removal of cross subsidy and fixation of tariff keeping in view of the average cost of supply.

FISME, Naraina Small Industries Welfare Association, Phase-1, DDMA and Northern Railway have suggested fixation of tariffs in relation to the average cost of supply of energy and have also suggested that any burden of subsidy extended to certain classes of consumers must be borne by the State Governments. Some objectors have highlighted the fact that in view of cross-subsidization of domestic and agriculture consumer categories, the industrial sector is being made to pay for the losses taking place in other consumer categories.

2.14 Minimum Charges

2.14.1 Response From Stakeholders

Various objectors across different cross-sections have strongly protested against the concept and the quantum of minimum charges.

The All India Induction Furnaces Association, the Federation of Industries of India, Engineers Association, the Senior Citizen's Welfare Council, the Naraina Small Industries Welfare Association, Phase I, Manufacturer's Association, the Plastic Component Industries (PCI), the DDMA, the DPCG, the North-West Industrial Federation, the FISME and a number of other objectors have protested against the imposition of minimum charges and

have suggested complete abolition of these charges in the light of acute power shortages and resultant load shedding faced by the State. They have questioned the concept of levying charges for electricity, which is not supplied to the Some objectors have stated that consumers. minimum charges are being levied to cover the cost of infrastructure provided and the cost of making energy available. The objectors are of the view that the cost of infrastructure is recovered at the time of load sanction and the cost of making the energy available does not arise because there is no surplus energy. Hence, the objectors have opined that the minimum charges should be waived.

The Engineers Association has objected to the minimum charges of Rs. 200 per kW being too high stating that most of the units are not running properly owing to the depressed industrial scenario. Some of the objectors have also stated in a sequential process, all the machines do not need to run simultaneously, and therefore, at any moment the running load is much less that sanctioned load/connected load (on which minimum charges are levied)

Several objectors and Manufacturer's Associations have stated that a large number of industrial units have installed separate machines for each and every small function and such machines are very sparingly used by these units. The objectors have further submitted that under such circumstances, levy of minimum charges would lead to the sufferance of these units due to sophistication and adoption of better management techniques and hence the minimum charges should be abolished.

Some of the objectors have further pointed out that high minimum charges would lead to increased theft of power and wrong declaration of connected load by the consumers.

The Senior Citizen's Welfare Association has stated that no interest is allowed on deposits made by the consumer with the Licensee to meet the minimum charges during his absence. The Association is of the opinion that the concept of minimum charges should be abolished and whenever the consumer makes any deposit with the licensee, he should be entitled to interest at the rate the licensee is paid on investments.

The North-West Industrial Federation has questioned the logic of levying minimum charges on the basis of connected load and requested for the reintroduction of the DESU/DVB policy of levying minimum charges on sanctioned load. The objector has further submitted that if the Distribution Company fails to supply the electricity for less than 25 days in case of SIP and commercial consumers and 30 days in case of domestic consumers, a proportionate rebate should be allowed in these charges.

The Senior Citizen's Forum (SCF) has suggested that minimum charges for domestic consumer should be fixed at Rs 100/- per month irrespective of the sanctioned load.

Friends Colony Industrialist Association (FCIA) has requested the Commission to abolish the levy of minimum charges unless the Company is made responsible for supplying minimum electricity. In this context it has been suggested that the respective Association should be entrusted with the task of verifying whether the Company has supplied minimum power or not.

2.14.2 Response of the Petitioner

The Petitioner has submitted that the levy of minimum charges is in accordance with the

provisions of Section 22 of the Electricity Act, 1910. Minimum charges are levied as a standard practice by electric utilities in order to recover the return on investment on fixed cost.

The Petitioner has further stated that the residential consumers pay single rate of charges for electricity service, covering both consumption of electricity and demand. This simple, combined charge is possible because there is relatively little variation in electricity use from home to home. However, to cover for the infrastructure required to cater to the demand of the residential consumers, minimum charges are levied if no consumption of electricity is recorded during a particular period or in case the consumption recorded is very low as compared to the sanctioned load.

The Petitioner has further mentioned that the case of large commercial and industrial consumers (LIP) is different since both their consumption and demand varies greatly. The Petitioner is of the view that meeting these consumers' needs requires keeping a vast array of expensive equipment transformers, wires, substations even and generating stations—on constant standby. The amount and size of this equipment must be large enough to meet peak consumption periods (i.e., when the need for electricity is highest). Therefore, minimum charges and demand charges are levied to recover the fixed cost of creating the infrastructure to supply the electricity as and when demanded by the consumer.

The Petitioner has submitted that the Utilities and Regulatory Commissions around the country have determined that the most equitable way to cover the cost of this equipment is to have those consumers who create this demand and the need for power during these peak periods pay for its availability. For this reason, utilities spread the costs

of this extra equipment among bulk consumers as a separate charge for demand or demand charges.

It has been further stated that Regulations require each consumer seeking supply of power to declare his load and revise the same from time to time depending on future growth and changes. This is vital information for any licensee for (a) designing system network (b) augmentation of various equipment and network to cater for growth and (c) contracting from generation/transmission licensee for supply of power to the distribution licensee.

The Petitioner is of the view that the bulk consumers enter into agreement with the licensee for contract demand, which is lower than the sanctioned load. Two-part tariff comprising demand charges based on contract demand and energy charges based on consumption is applicable to such consumers. Further, considering the fact that the network has been designed for sanctioned load, it would be ideal to levy demand charges for all categories of consumers based on contract demand or peak load, whichever is higher. This would require substantial investment for installation of costly meters with facility for recording maximum demand for all consumers. This, therefore, can only be implemented after taking into consideration all implications and with the approval of the Commission.

The Petitioner has opined that Minimum Consumption Guarantee (MCG) is levied as a safeguard against the fraudulent extraction of power by consumers and this provision has been endorsed by the Apex Court in the case of Ashoka Soap Factory. The Petitioner has stated that the consumer does not suffer since the charges are pro-rated on the basis of the number of days between successive meter readings/billing period,

including rebate for recorded/verified load shedding/breakdown of supply.

2.15 Demand Charges / Demand Surcharge

In this segment, the suggestions pertained to either abolition of demand charges and introduction of single part tariff or reduction / rationalisation of demand charges.

2.15.1 Response From Stakeholders

The Naraina Small Industries Welfare Association, Phase-, the National Association of Motion Picture Exhibitors, the FISME, the Northern Railway and some other objectors have expressed concern over the imposition of demand charges on various categories of consumers. Some of them have suggested imposition of single part tariff as per the Hon'ble Supreme Court's Order. They have further pointed out that the Supreme Court of India has ruled that the demand charges should not be levied on LIP consumers if the consumer consumes more than the minimum levels and under such circumstances, demand charges get merged with the actual consumption charges.

The National Association of Motion Picture Exhibitors has expressed concern over the imposition of demand charges on the basis of contract demand on the ground that it is a seasonal industry and therefore requires changing of contract demand twice a year. Further, since it is the discretion of the DISCOMs to change the contract demand and since there exists no time bound compulsion to that effect, the objector is forced to maintain a higher contract demand than required. The Association has urged the Commission to levy demand charges on the basis of peak consumption rather than contract demand. Additionally, the objector has suggested that there should be no demand charges in case there is a break down for a period

exceeding two hours. The Plastic Component Industry has opined that the demand charges should be based on actual meter reading.

The FISME has referred to the traditional approach to tariff formulation, in which capacity related costs are worked out and provided for in the tariff as Fixed Charge or Demand Charge. The objector has stated that there are some consumers whose maximum demand coincides with the system demand, and some whose maximum demand occurs during periods when the system is lightly loaded. In view of this, the FISME has opined that the demand charges for the two sets of consumers should be determined accordingly. The objector has further requested the Commission to impose demand charges on consumers having electronic meters and load charges on the consumers having electro-mechanical meters. The FISME has also stated that the provision in the present Agreement, binding the consumer to avail supply for at least two years has become irrelevant.

The Northern Railways has stated that demand charges currently applicable are on the higher side as compared to those levied by the neighbouring SEBs. The Railways has opined that demand charges should not be levied on the basis of the contracted demand and has suggested that billing demand should be considered as the highest of either 75% of contract demand or maximum demand indicated by the meter during the billing cycle.

The Northern Railways has further submitted that the demand surcharge applicable for exceeding contract demand is very high. Since the factors responsible for exceeding the contract demand are outside the control of the Railways, no penalty in the form of demand surcharge should be imposed. In this context, the Railways have

mentioned that the Commission's directive (imposition of demand violation charges @ 30% being applicable when MDI reading exceeds contract demand by more than 5% and simultaneous maximum demand at all metering points being considered for levy of demand violation charges) is not being complied with. The objector has, therefore, requested the Commission to pass directions for the implementation of this Order.

2.15.2 Response of the Petitioner

The Petitioner has submitted that the levy of minimum charges is in accordance with the provisions of Section 22 of the Electricity Act, 1910. Minimum charges are levied as a standard practice by electric utilities in order to recover the return on investment on fixed cost.

The Petitioner has further stated that the residential consumers pay single rate of charges for electricity service, covering both consumption of electricity and demand. This simple, combined charge is possible because there is relatively little variation in electricity use from home to home. However, to cover for the infrastructure required to cater to the demand of the residential consumers, minimum charges are levied if no consumption of electricity is recorded during a particular period or in case the consumption recorded is very low as compared to the sanctioned load.

The Petitioner has further mentioned that the case of large commercial and industrial consumers (LIP) is different since both their consumption and demand varies greatly. The Petitioner is of the view that meeting these consumers' needs requires keeping a vast array of expensive equipment—transformers, wires, substations and even generating stations—on constant standby. The amount and size of this equipment must be large

enough to meet peak consumption periods (i.e., when the need for electricity is highest). Therefore, minimum charges and demand charges are levied to recover the fixed cost of creating the infrastructure to supply the electricity as and when demanded by the consumer.

The Petitioner has submitted that the Utilities and Regulatory Commissions around the country have determined that the most equitable way to cover the cost of this equipment is to have those consumers who create this demand and the need for power during these peak periods pay for its availability. For this reason, utilities spread the costs of this extra equipment among bulk consumers as a separate charge for demand or demand charges.

It has been further stated that Regulations require each consumer seeking supply of power to declare his load and revise the same from time to time depending on future growth and changes. This is vital information for any licensee for (a) designing system network (b) augmentation of various equipments and network to cater for growth and (c) contracting from generation/transmission licensee for supply of power to the distribution licensee.

The Petitioner is of the view that the bulk consumers enter into agreement with the licensee for contract demand, which is lower than the sanctioned load. Two-part tariff comprising demand charges based on contract demand and energy charges based on consumption is applicable to such consumers. Further, considering the fact that the network has been designed for sanctioned load, it would be ideal to levy demand charges for all categories of consumers based on contract demand or peak load, whichever is higher. This would require substantial investment for installation of costly meters with facility for recording maximum demand

for all consumers. This, therefore, can only be implemented after taking into consideration all implications and with the approval of the Commission.

The Petitioner has opined that Minimum Consumption Guarantee (MCG) is levied as a safeguard against the fraudulent extraction of power by consumers and this provision has been endorsed by the Apex Court in the case of Ashoka Soap Factory. The Petitioner has stated that the consumer does not suffer since the charges are pro-rated on the basis of the number of days between successive meter readings/billing period, including rebate for recorded/verified load shedding/breakdown of supply.

In response to the objection relating to the Commission's directive regarding simultaneous maximum demand at all metering points, the Petitioner has expressed agreement with the suggestion. The Petitioner has further submitted that presently, the Railways are being supplied only at a single point from the Petitioner's licensed area. The second traction supply point of Railways falls in the licensed area of North Delhi Power Ltd. Since the supply points fall under different DISCOMs, the modalities for calculating simultaneous maximum demand and the revenue implications etc can be mutually decided between DISCOMs/Railways with the concurrence of the Commission or the Commission may pass suitable directions.

2.16 Delayed Payment Surcharge

2.16.1 Response From Stakeholders

A number of objectors have suggested reduction of Delayed Payment Surcharge and emphasised on assured bill delivery well within time. The National Association of Motion Picture Exhibitors, DMRC, the Senior Citizen's Welfare Association,

JCRWAP, FISME and several other objectors have advocated decrease in the delayed payment surcharge in view of the falling interest rates and also in view of the fact that the delivery system of bills is not fool proof. They have further submitted that the consumer is expected to keep track of the bills, and the Licensee has no onus of ensuring that the bill is delivered to the consumer in time. They have further suggested that the surcharge should be reduced to 1.5% and that too only if the licensee is able to prove that the bill was delivered to the consumer on time.

The Senior Citizen's Welfare Association has stated that where the drop box concept has been introduced, the receipts of the bills are not delivered to the consumer and, therefore, there is no assurance that the consumer's payment are accounted for appropriately. In addition, the consumer has to pay surcharge and also face the ignominy of having his meter disconnected. They have thus requested to streamline the procedure. They have further cited the example of MTNL, which offers ECS way of payment to consumers, under which the bill is directly debited from the consumer's bank account. They have pointed out that the MTNL also allows for 1% discount to subscribers availing this facility.

The FISME has stated that since surcharge is levied in case of late payment of bills, there is no justification in having different surcharge rates for different category of consumers. The objector has further opined that the surcharge should be in the ascending scale so that if a consumer has defaulted in making the payment within the due date once, he is encouraged to make payments at the earliest opportunity the next time. The objector has suggested the following ascending scale of surcharge for the consideration of the Commission:

- 0.5% if payment is made in the same calendar month in which due date falls
- 1% per month or part thereof if payment is made in next two calendar months
- 1.5% per month or part thereof if payment is made upto the fourth calendar month
- 2.5% per month or part thereof in subsequent months.

Friends Colony Industrialist Association has submitted that sufficient time should be given for payment of bills after the delivery of bills has taken place, and the late payment surcharge should be reduced. The Association has requested for a rebate on pre-payment of electricity dues by the consumers.

2.16.2 Response of the Petitioner

The Petitioner has submitted that presently Late Payment Surcharge is being charged @ 1.5% per month or part thereof from residential and agricultural consumers and @ 2% per month from industrial and commercial consumers. The Petitioner has further stated that late payment surcharge has no linkage with the prevailing interest rates in the banking sector, and is charged to meet the additional costs that the licensee has to incur in creating and maintaining a mechanism to recover the payment, serve additional notices, disconnect the service to a defaulting consumer, etc. Further it is not related to the cost of the borrowings by the Utility alone.

The Petitioner has mentioned that it is a common practice amongst all service providers including other utilities (banks, credit card agencies, telecom services, etc.) to levy such charges on late paying consumers. The Petitioner also pays Late Payment Surcharge @ 2.5% per month to TRANSCO for delay in payments.

2.17 TOD Tariff

2.17.1 Response From Stakeholders

Whereas a number of objectors have suggested the concept of time of day metering / tariff, some others have opposed the idea. While Mr. C.K Bhardwaj has requested for special concessional rates during off-peak hours, particularly during night hours, the SCWA has stated that TOD tariffs should be implemented. The Association has, however, further stated that the concept has not been explained to the consumers. The FISME has supported the concept of TOD metering and has stated that since electronic meters are easily available and are being installed, separate measurement of the consumption in three blocks of the day is not difficult. The objector has added that the Commission would have to work towards creating awareness regarding the system and its benefits to the consumers.

In contrast, the DPGC is of the view that the idea of having ToD meters is a catastrophic idea, which would make consumers life-long slaves of the utilities and their meters. Similarly, the Senior Citizen's Forum (SCF) has submitted that installation of Time-of-Day meters would lead to complaints and harassment of the consumers. The Forum is of the view that such meters would be far more difficult to check, repair and maintain and the billing would become too complex. The objector has opined that motivating the consumer to minimize consumption during peak hours is the only civilized and practical method.

2.18 Shunt Capacitor Charges

2.18.1 Response From Stakeholders

The Engineers Association has objected to the fine imposed @ Rs1/- per unit on small factory units

whenever there is some defect in the shunt capacitor. The Association has opined that such penalty not only imposes heavy burden on the consumers but also leads to harassment of the consumers. The Engineers Association has suggested that the required shunt capacitor should be installed / connected by the Distribution Company according to their norms on chargeable basis and the consumer should apply and deposit the required amount with the Company for the installation of the capacitor. Further, the Association has submitted that the Distribution Company has no right to charge penalty if the power factor falls below 0.85, since it is the responsibility of the Company to install shunt capacitors for the improvement of power factor.

2.19 Power Factor Penalty and kVAh based Tariff

2.19.1 Response From Stakeholders

Several objectors and Manufacturer's Associations have quoted the relevant section from the "Conditions of Supply" which states that in case the consumer fails to install the equipment necessary for maintaining power factor at 0.85, the Utility shall have the right to install the necessary apparatus at the cost of the consumer. In view of this stipulation, the objectors have opposed the imposition of penalty for not maintaining the power factor.

The PCI, DDA, the Manufacturer's Association, the Industrial Advisory Board, The Najafgarh Road Factories Association, the LUB, FISME and others have suggested that instead of penalizing the consumers for maintaining low power factor, the utility should educate them and take remedial measures, if any, on chargeable basis. If the consumer is found to be violating the power factor norms again on inspection by utility, only then

should the power factor penalty should be imposed.

Some Manufacturers Associations have opined that since power supply by the Petitioner is at less than 0.85, charging of penalty from the consumers for not maintaining power factor at this level is highly unjustified.

The Industrial Advisory Board (IAB) has requested the Commission to direct the Distribution Companies to maintain the supply of energy at more than 0.95 power factor. Some objectors have suggested that the consumers should be advised to install proper capacitors as directed by the Distribution Company and be given sufficient time before taking any penal action against the consumer.

The Najafgarh Road Factories Association has submitted that the Distribution Companies should install their own capacitor banks at HT and LT levels. Further, the Association has stated that there should be no penalty imposed for low power factor, because it has been noticed that power factor is low even after suitable power capacitors are installed in the system.

The LUB, the North-West Industrial Federation, the DDA and a number of other objectors have suggested that the utilities should come up with kVAh based tariffs so as to have inbuilt mechanism for penalizing/rewarding the consumer for maintaining adequate power factor. The DDMA has, incidentally, opposed the concept. The DDA has opined the billing for SIP Category wherever electronic meters are installed should be done on KVAh basis, as it will offer incentives for maintaining good power factor.

The FISME has highlighted the inherent drawback in the system of kVAh based billing, i.e. the reactive component is embedded in the tariff itself and, therefore, the consumers are not aware of the benefits they can avail if their reactive consumption gets reduced by installation of shunt capacitors. The objector is of the opinion that this would work against the efforts to improve the efficiency of the system since the energy losses would increase and voltage regulation will be poor. The objector feels that before introducing the concept of kVAh-based tariff, the Commission has to evolve suitable measures to counter the above drawbacks. Certain suggestions submitted by FISME pertaining to the implementation of kVAh-based tariff are outlined below:

- The Commission may consider adopting kVAh based tariff for all poly-phase consumers
- Initially for poly-phase consumers having load up to 50 kW, there should also be another optional tariff based on kWh consumption which should carry an additional charge to compensate for the strain created by the reactive load of the consumer
- Wide publicity may be given to the fact that these consumers can opt for the kVAh based tariff by installing their own electronic meters and suitable shunt capacitor and thus enjoy the benefit of reduced rates besides saving on meter rent.
- The Commission may consider directing the licensees that in every bill prepared on kVAh based tariff, the quantum of reactive component, the capacity of the shunt capacitors required to be installed and the reduction in the bill amount expected after the same, should be prominently displayed so that the consumers are encouraged to install and maintain the shunt capacitors.

As the introduction of the kVAh based tariff shall net the licensees additional revenue, the Commission may consider placing an obligation on the licensees to invest an earmarked amount for installation of shunt capacitors at different points of the network and as close to the load centres as possible so as to ensure proper voltage regulation.

The All India Induction Furnaces Association is of the opinion that the DISCOMs should provide a rebate/concession for maintaining power factor above the stipulated level (95%) like other States, such as, Karnataka, West Bengal, Uttar Pradesh, Gujarat, Maharashtra, Rajasthan and Madhya Pradesh.

Friends Colony Industrialists Association has stated that since maintenance of the power factor is the responsibility of the Distribution Company, the consumer should be penalized if the power factor falls below the stipulated level.

2.19.2 Response of the Petitioner

In the matter of the power factor surcharge, the Petitioner has submitted that the Utilities maintain power factor in their distribution network by installing suitably rated capacitors in the system. The present tariff is based on average P.F of 0.85 and no consumer should allow the average P.F to fall below 0.85. The Petitioner has further stated that the tariff schedule provides that it is the responsibility of the consumer to install capacitor for reactive compensation. The Petitioner is of the view that the tariff has provided LPF surcharge for defaulting consumers and the same should not be transferred to other consumers maintaining good power factor by transferring obligations on the licensee for putting additional capacitors for the excessive inductive load of defaulting consumers.

As regards the kVAh system of billing the Petitioner has submitted that the system provides incentive to those who maintain high power factor and disincentive to those who maintain low power factor, and therefore no separate power factor penalty is levied.

2.20 Connected Load

2.20.1 Response From Stakeholders

As in the case of the earlier Retail Tariff Order, issued in May 2001, the subject of connected load has evoked considerable response. The DDA, for example, has indicated definition of connected load in case of establishments like nursing homes and hospitals should be altered, as most of the equipment are not operated on continuous basis. The DDA has further submitted that according to the tariff schedule, the connected load is determined on the basis of manual verification of the load and, therefore, they had suggested that in respect of consumers where electronic meters have been installed the connected load should be deemed to be the load indicated in the MDI. The definition of connected load has also been raised by individuals who have raised concern over the fact that representatives of the licensees can enter the premises of the consumer for physical checking of the connected load. Further, it is felt that in case any consumer exceeds the limit of sanctioned load for a particular time period, this would be recorded in the meter and penalty should be applicable for that period only.

Other organizations have also given their own norms on how deviation from connected loads should be treated, for example, the Manufacturers Associations have stated that all consumers should be allowed to consume 8 units per day per kW of sanctioned load. If consumption exceeds this limit

for two billing periods, only then it should be presumed that the connected load is more than the sanctioned load. Similarly, the Laghu Udyog Bharti (LUB) has mentioned that too much of discretion is left to the inspecting agencies for determining the connected load, especially in the case of industrial consumers. The LUB is of the opinion that with the advent of pilferage proof meters, the maximum demand registered during the billing cycle should be treated as the connected load. In case where there are no electronic meters, the connected load should be calculated equivalent to 100% of the Heating Equipment and 60% of the electronic items since these are installed on higher rating.

Other suggestions made in respect of connected load is that loads exclusively meant for pollution control equipment/effluent treatment plant/sound proofing etc. should not be considered similar to consumption exclusively meant for fire fighting equipment. Another issue, which has been raised by the North West Industrial Federation, is that the tolerance of 5% for the purpose of connected load, which was introduced during the last tariff order, should be increased to 10%. Another view expressed by the North West Industrial Federation is that at present where electronic meters are not installed, the connected load may be calculated on the basis of consumption, by applying the normative consumption formula.

The FISME has put forth the suggestion that instead of executing the contract for quantum of load, the approval could be for a block of load, which would provide some flexibility to the consumers to meet an upswing/downswing in business.

The Senior Citizens Forum have also raised objections on the ways the connected load is calculated at present, mentioning that although

connections are provided in all rooms in households, not all connections are used simultaneously. The Forum has further averred that the calculations of connected load should be based on the average level of actual consumption of a household.

2.21 Misuse charges

2.21.1 Response From Stakeholders

A number of Industrial Federations have responded on the levy of misuse charges stating that it is unjustified and should be abolished. They include the Rajasthan Udyog Nagar Manufacturers Association, the North West Industrial Federation, the Federation of Delhi Small Industrial Association, the Plastic Component Industrial Association, the All India Federation of Plastic Industries Association and the Naraina Industries Association. It is the opinion of the Industrial Associations that the DISCOMs are taking undue advantage of misuse clause by booking consumers under the provisions even when the theft by them is not established. The objectors have welcomed the suggestions offered by the Petitioner on removal of misuse charges as mentioned in its ARR petitions. addition, the **Associations** have strongly recommended the abolition of MCD license conditions, particularly in the approved industrial areas where the area is earmarked for industry. The Associations have further protested against the imposition of misuse charge of existing minimum and maximum normative charges. While the entire industry had spoken against the conditions of having the MCD license for not attracting misuse charges, one single individual had stated that only users having a valid MCD license should be considered as registered consumers and be permitted to use the existing installed connection.

The objectors have identified certain broad areas and have indicated that misuse charges should not be levied in the following circumstances:

- Running the Industrial units in a duly approved industrial area without municipal license
- If more than one unit is being run in the premises of an approved industrial area and the energy consumption is being recorded through one meter though within the total limit of consumption.
- A new tenant should not be liable to pay an amount due from an earlier defaulter.
- Use of industrial load sanctioned for a specific activity and being used by some other industrial activity.
- Industrial electrical load sanctioned in an approved industrial area, if used by a partner firm, relative or tenant.

The DDMA has opposed the imposition of misuse charges from Lal Dora consumers. The Associations have provided a reference to the Tariff Order of 2001, which states that consumers with valid MCD License/Lal Dora certificate are exempted from payment of misuse charges. The Associations have further stated that misuse charges are levied on the pretext that the load is not sanctioned. In this context, the Associations have submitted that the regularized connected load should be treated as the sanctioned load.

The Senior Citizens Forum has suggested that misuse charges should not be enforced against any consumer without first serving a show-cause notice and giving a personal hearing.

The Friends Colony Industrialist Association has suggested that there should be no misuse charges levied if the consumption of a consumer is within

the limit specified by the sanctioned load. The Association has further stated that the old system of connected load should be scrapped with misuse charges, as in this era of modern technology there are several machines, which perform some specific jobs and run for a few hours only in a month. The objector has further opined that the condition of MCD license should be waived for all the factories located in approved industrial areas. In the Association's view, the License should be the responsibility of the Municipal Corporation of Delhi (MCD) rather than the Distribution Companies.

2.21.2 Response of the Petitioner

The Petitioner has submitted that the rationale behind applicability of minimum charges, normative charges and misuse charges are distinctly separate from each other. While the normative charges are in lieu of excess consumption beyond the sanctioned load limits, the minimum charges are for the recovery of cost of investment and maintenance of the distribution network; whereas the misuse charge is levied in case of violation of agreement for supply. These have also been defined accordingly in the tariff.

The Petitioner has further stated that the penalty for misuse is meant to serve as a deterrent against the misuse of electricity by the consumer, for purposes other than for which it was sanctioned in violation of the agreement executed at the time of commencement of supply. The Petitioner has mentioned that since the initialization of the misuse cannot be established, the assessment period prior to the date of detection has been fixed by the Commission. However, the consumer is provided the opportunity to prove that the misuse was not for the entire assessment period and would be charged accordingly.

The Petitioner has submitted that the existing tariff schedule specifies that the misuse tariff is applicable for industrial consumers operating without valid municipal license. The Petitioner is of the view that it is the responsibility of the statutory authorities concerned to ensure that industries are set up after complying with all the formalities and the licensee should only be concerned with ensuring that the consumer (prospective or existing) complies with the applicable electricity laws. The Petitioner has requested the Commission to consider this aspect suitably while determining the tariff.

It has been mentioned that the interpretation of "Misuse" in case of subletting of industrial power connection has been clarified by the Commission vide letter reference no. F.3(10)/Tariff/DERC/2001-02/3257 dated 23rd December 2002 and the same is being followed by the licensee. The Petitioner has mentioned that the Commission may consider this for inclusion in the tariff order.

With regard to the recovering of outstanding dues from the original consumers only, the Petitioner has submitted that the 'General Conditions of Supply' of the Tariff Order May 2001, Section 2.1 (iv) specifies that the applicant for a new connection shall deposit development charges, advance consumption deposit and all such charges as may be applicable including outstanding dues against the premises and/or disconnected connection(s). Thus, the Petitioner is of the opinion that it is the responsibility of the incoming consumer to ensure that there are no outstanding dues towards electricity bills in the premises, just as in the case of other liabilities, like taxes and any other encumbrances.

The Petitioner has stated that it shall grant new connections to the incoming consumer in premises

on submission of affidavit certifying that the incoming consumer shall bear the liability for payment of dues on the premises.

2.22 Energy Consumption Formula

2.22.1 Response From Stakeholders

The DDA has submitted that in the case of establishments like hospitals, hotels, restaurants, nursing homes and petrol pumps, the norms for assuming the billing losses in the case of defective meters is currently 20 hours per day due to which the consumers are subjected to a lot of hardship. The DDA has proposed that suitable adjustments be made in the existing tariff in the form of amendments towards the definition of connected load for such establishments.

2.23 Bulk Supply Tariff

2.23.1 Response From Stakeholders

TRANSCO has submitted that the DISCOMs are required to achieve a reduction in AT&C losses from year to year so as to narrow down the gap between actual cost of power available to TRANSCO without any support and bulk supply price from DISCOMs after taking into account their allowed expenses. The TRANSCO has suggested that the Bulk Supply Tariff should increase every year, and the proportionate increase should be more than the retail tariff. According to the TRANSCO, a 12% increase in retail tariff together with the AT&C loss reduction would lead to a 16 to 20% increase in the Bulk Supply Tariff. The TRANSCO has stated that the DISCOMs have projected a substantial revenue gap and have proposed a reduction in Bulk Supply Tariffs for both the years to facilitate them to meet their expenses at the existing level of retail tariff. The TRANSCO has submitted that this would mean less revenue

available to the TRANSCO against the sale of power to the Distribution Companies, which would ultimately result in additional Government assistance to bridge the gap. The TRANSCO has accordingly submitted to the Commission not to allow any reduction in Bulk Supply Tariff and to determine the BST after taking into account the approved Government support for the 9 months of 2002-03 and financial year 2003-04.

2.24 Procedure for getting connection and load sanction

2.24.1 Response From Stakeholders

The CII have suggested creation of single window concept within the DISCOMs since seeking a connection from the DISCOMs is a very time consuming process. The CII has given an example that it takes six months to get a 100 kW load sanctioned at the LT level. The insistence of the DISCOMs for only HT connections above 100 kW leads to problems since additional land needs to be procured for installing transformers. The CII has submitted that LT connections may be provided upto a load of 100kw and that additional load may be made available without any problems. Another aspect pointed out by the CII is that independent units located in commercial complexes, who commence their operations before the completion of the complex, should be allowed to have permanent connections instead of temporary connections since the latter is uneconomical.

2.24.2 Response of the Petitioner

The Petitioner has submitted that the Guiding Principles for the measurement of the connected load are as follows:

 Connected load shall be determined as per the Commission's Tariff Order, May 2001. As regards captive power plant, the provisions of DERC Regulations (Grant of Consent for CPP, 2002) will apply.

2.25 Quality of Service

2.25.1 Response From Stakeholders

Most of the objectors have pointed out that the transformers and sub-stations installed by the DISCOMs are poorly maintained and further, the Distribution Companies have not drawn up any plan for maintenance and upgradation of these transformers and sub-stations. Objections have also been raised on account of the fact that manpower available for attending to complaints was highly inadequate and that monitoring of complaints is poor.

The National Association of Motion Pictures Exhibitors have suggested that a penalty should be charged when the power factor drops below 0.5 and further that a discount of 30% should be provided as and when voltage varies by more than 10% or the frequency varies by more than 1%. Some other Manufacturers Associations have also suggested some norms on the basis of which the penalties should be imposed on the Distribution Companies and one suggestion is that if the DISCOMs fail to supply energy in any approved industrial area on more than 10 occasions in a month, fines should be deposited with the Commission.

The New Rohtak Roads Manufacturers Association has submitted that in case the Distribution Company fails to supply the energy for more than seven occasions in a month, the minimum charges for the month should be waived and a token fine be imposed on the Company. By and large, the basic premise of the objectors is that the tariffs have to be linked to the quality of service.

The Friends Colony Industrialist Association (FCIA) has stated that even after privatization of electricity distribution, there is no improvement in the quality of power supplied. FCIA has further submitted that the Distribution Company does not feel accountable for the situation, since it receives hefty minimum amount from the LIP and SIP consumers.

2.25.2 Response of the Petitioner

The Petitioner has reiterated its commitment to provide reliable and quality power to all its consumers. The Petitioner has further stated that the quality of power and its reliability cannot be solely determined by the service commitment of the Petitioner and is determined by several factors that are beyond its control, such as grid supply conditions, drawing of power by other licensees and consumers, etc. In the opinion of the Petitioner, in such a situation, it may become difficult to assure the parameters of supply at all times. The Petitioner has further mentioned that no rebates are available to the Petitioner either from its suppliers for deficiencies in the quality of power.

2.26 Tariff for Delhi Metro Rail Corporation

2.26.1 Response From Stakeholders

The Delhi Metro Rail Corporation (DMRC) has submitted that the tariff determined for the FY 2001-02 cannot be applied for the subsequent periods i.e. from 1.4.2002 onwards. The DMRC also added that it has filed an application for grant of license under DERA, 2000 on 25th July 2002.

The DMRC has referred to the meeting convened by the Government of NCT of Delhi, which was attended by the officials of the DMRC, TRANSCO and DISCOMs to discuss the tariffs, which would be applicable to DMRC. The DMRC has stated that it was decided in the meeting that DMRC's tariff would be based on TRANSCO's total cost including

the cost of power purchase. In case of supply at 66kV, the DISCOMs would add their own reasonable service costs. In accordance with the above, the DMRC has been paying @ Rs 2.60 per unit with effect from 5.9.2002, subject to adjustments in line with the tariff to be determined by the Commission for this period. It has been submitted that the tariff for sale of power by DISCOMs to DMRC should be in line with the abovementioned principles, except for the technical losses, which should be calculated at the relevant voltage level.

The DMRC has further submitted that unlike other consumers, all infrastructure, systems and facilities for conveyance of energy from place of interconnection with transmission system/distribution system are established, maintained and operated by the DMRC at its own cost. Therefore, the TRANSCO and DISCOM do not incur any expenses on maintenance of any dedicated transmission / distribution systems for supply of power to DMRC. In view of this, DMRC has submitted that the tariff applicable for DMRC should be 'single part' instead of a 'two-part tariff'.

Further, DMRC has requested that the approved tariff should be made effective from September 2002 onwards, and has asked the Commission to pass directions that the amount claimed by the Distribution Companies for the period from 5th September, 2002 be adjusted against the future bills accordingly.

The FISME Secretariat (FISME) has stated that power should be supplied to DMRC by TRANSCO rather than DISCOMs since DMRC is a bulk consumer receiving supply at 220 kV, while the jurisdiction of DISCOMs start from 66 kV and below. FISME has also suggested that installation of switching systems and maintenance of the supply system to DMRC should

be left to DMRC only. FISME has further criticized the DISCOM's proposal of treating DMRC as a special consumer for the following reasons:

- The provisions of the Central and the State Act specifically prohibit the element of cross subsidy being brought in supply to various consumers
- DMRC takes supply at 220 kV and hence the question of distribution costs of DISCOMs does not arise

The FISME has observed that when DMRC's load requirement increases, they will need to build their own 66kV/33 kV network. According to FISME, associating DISCOMs in this matter will result in duplicating the cost of maintenance activities, which would ultimately have to be borne by the Public. FISME has, therefore, stated that it would be in public interest to treat DMRC as a bulk consumer of TRANSCO rather than that of the three DISCOMs.

The Delhi Development Authority (DDA) has stated that although the supply to DMRC is being made at 220 kV from the sub-stations located in area of DISCOMs in accordance with the Transfer Scheme and Share Agreement with GNCTD, the supply to DMRC is to be made by TRANSCO. The DDA has further stated that the transmission losses upto 220 kV are marginal and can be metered. The DDA has also claimed that the Government is supplying power to the DISCOMs at subsidized rates. In view of the above, the DDA has submitted that since DMRC is a Government enterprise and is consuming power at 220 kV, fixation of its tariff by the DISCOMs will be against the principle of privatisation.

2.26.2 Response of the Petitioner

The Petitioner has submitted that the Delhi Electricity Reform (Transfer Scheme) Rules 2001,

dated November 20, 2001, defines a Distribution Company as a Company incorporated under the Companies Act, 1956 with the principal object of engaging in the business of distribution and supply of electricity in the specified areas of supply. The Petitioner has quoted Schedule C (IV. Miscellaneous) of the Transfer Scheme Rules, which is self-explanatory:

- "Notwithstanding that transmission system and lines vest with TRANSCO, any distribution and retail supply of electricity to the consumers directly from the transmission system / lines (without going through distribution system / lines) shall be the business of with Distribution Company and not that of TRANSCO." The TRANSCO will provide to the DISCOM the meter reading and other information relating to such direct supply to the consumers from the Transmission System/Lines.
- The Petitioner has accordingly made submissions to the Commission in its ARR Petition, with regard to tariff for supply to DMRC.
- The modalities for execution of a supply agreement between the DISCOM and DMRC are also being discussed.

2.27 Electricity Tax

2.27.1 Response From Stakeholders

The Municipal Corporation of Delhi (MCD) has stated that there exists no foolproof system to ascertain the amount of money collected in the form of Electricity Tax, which has to be remitted to the MCD. The MCD has requested for a higher level of transparency in the process so that the amount payable to the Corporation is paid without any controversy.

2.27.2 Response of the Petitioner

The Petitioner has submitted that it maintains separate accounts for the amounts billed and deposited against electricity tax and the tax is being remitted on a regular basis to the concerned taxation authority. The Petitioner has further stated that the accounts are also subject to statutory audit as per Companies Act, 1956.

2.28 SPD Connections

2.28.1 Response From Stakeholders

There are a number of single point delivery connections in various unauthorised colonies throughout Delhi. There have been a number of suggestions in relation to quality of service, over charging, redressal of complaints in these areas.

The Single Point Agency Holder Association has stated that the tariff proposals submitted by the Distribution Companies are not workable and sustainable. Further, the objector is of the opinion that for the FY 2002-03, the rate of Rs 1.15/unit for SPD connections is extremely high. After taking electricity at Rs 1.15/unit, the SPD is in no position to charge Rs 1.50/unit from domestic and Rs 3.50/unit for non-domestic consumers, i.e. a margin of 30% without providing for AT&C loss. The objector has added that for FY 2003-04, the Petitioner has proposed increase in tariff for SPD from Rs 1.15/unit to Rs 1.20/unit without proposing an increase in the tariff of the consumer, thereby reducing the margin of the SPD to 25% from 30%.

The objector has suggested alternative tariff rates

- The Single Point Supplier to take electricity from DISCOMs at a flat rate of Rs 1/ unit.
- Single Point supplier to charge from consumer at the normal domestic and non-domestic tariff rates as decided by the Commission instead of

- a flat rate as proposed by the Distribution Companies
- SPD should be given a minimum of 30% as AT&C losses since the DISCOMs are claiming much higher loss levels.

The DDA has suggested that the Petitioner should provide electricity to the unauthorized colonies directly instead of going through Jhuggi Jhopdi (JJ) agents or single point contractors. The objector has further submitted that these colonies should be treated along the same lines as the other regularized colonies since the majority of the population of Delhi lives in these colonies. The DDA has stated that in case there are difficulties in implementing the above suggestion, then at least the following suggestions should be considered:

- RWA's should be registered with the Commission and necessary training be provided to the personnel involved in Distribution.
- The JJ Contractors must also file for approval of their ARR with the Commission.
- The JJ Contractor should be required to maintain an account of all consumer meters and their readings.
- The contract of defaulting contractors should be annulled.
- The JJ contractor should not be allowed to sub contract or transfer the contract
- The employees of the contractors must carry an identity card and have a uniform different from that of the DISCOMs
- The Contractor should have various legal obligations so that his employees do not indulge in illegal activities.

The DDA has stated that electricity supply to SPD connections should be charged at the same rate as other domestic consumers instead of flat rate of Rs 1.50/unit.

2.29 Meters and their replacements

2.29.1 Response From Stakeholders

A number of objectors have given a variety of suggestions regarding the type/quality of meters, meter reading, meter rent and replacement of defective meters.

The Naraina Small Industries Welfare Association, Phase-1, Sh. S.K. Gupta, Senior Citizens Form, The All Induction India Furnaces Association, Manufacturer's Association, the Industrial Advisory Board, FISME, Najafgarh Road **Factories** Association, JCRWAP and a host of individual objectors have submitted suggestions regarding upgradation of meters, improvement in billing system, abolition of meter rent/replacement by electronic meters, identification of defective meters, simplification of procedures for meter replacement, the right of the consumers to have his own meter etc. etc.

The Naraina Small Industries Welfare Association, Phase-1 and others have suggested that all old meters should be replaced with new meters. They have further said that replacement of old meters is the responsibility of the Distribution Companies. They have made a suggestion that after replacement, the cost of the meter should be adjusted in 10 equal monthly installments and such payment be stopped once the cost is fully recovered.

The Senior Citizen's Forum has highlighted shortcomings in the billing system. They have requested the Commission to direct the Distribution

Companies to provide a time-bound action plan for complete computerization and streamlining of the billing system and that a Steering Committee should be formed to monitor the progress in formulation and implementation of such a plan. The Forum has offered its services in this regard.

Several objectors, Manufacturer's Associations and the IAB have proposed the installation of MDI meters for all consumers whose connected load exceeds 50 kW. The objectors have also requested the Commission to direct the Distribution Companies to install electronic meters, initially in the theft prone affluent residential areas of Delhi and in premises where meters are more than 15 years old.

Response of the Petitioner

The Petitioner has submitted that it has undertaken various measures for bringing improvements in metering and billing systems and processes, such as:

- Putting in place a comprehensive metering strategy - only static meters to be provided across all consumer categories with advanced features like historical log, tamper information, optical port for enabling automatic meter reading, etc.
- Meter ratings are also being standardized to reduce inventories
- Proper scheduling of bill printing and delivery
- Meter reading through computer compatible meter reading instruments enabling saving in time for meter reading
- Mapping of consumers so that meter readings are taken in proper sequence
- Installation of Point-of-sale machine for proper posting of payments

- Improved design of billing software to facilitate access to bill details by consumer on the website
- Consumer care center for quick redressal of consumer grievance
- Identification of defective meters for replacement

The Petitioner has further stated that the meters, which don't have proper sealing arrangement, shall also be replaced in a regular phased manner.

2.30 Conditions of Supply

2.30.1 Response From Stakeholders

A number of objectors have raised various issues concerning the Conditions of Supply arising from the billing system, service connection charges, delayed receipts of electricity bills, provision of space for installing transformers, switch gears, shifting of some consumers from one category to another, pre and post installation inspection etc.

The National Association of Motion Picture Exhibitors has asked for compensation for the steps being used by the DISCOMs for installing transformers in their premises for supplying power to other consumers.

The All India Induction Furnaces Association has requested for shifting of induction furnaces from surveillance to the general category. The Association has stated that the condition relating to presence of four Executive Engineers before repairing / restoration of power supply to Induction Melting Furnaces should also be modified, since it results in loss of production.

The Single Point Agency Holder Association has expressed agreement to the proposal of prior inspection and post installation inspections as was being done by DVB officials also. In the objector's view the contractor should be free to use material with ISI mark or any other Government specifications rather than following the specifications provided by the DISCOMs.

The Municipal Corporation of Delhi (MCD) has requested the Commission to carry out costing of spares in a transparent manner, since it involves public funds and is subject to audit by the State and Central Government agencies.

The Laghu Udyog Bharati (LUB) has suggested that the meter sealing wire should be made of corrosion proof material such as Nylon or stainless steel. The LUB has also suggested that the limit of temporary disconnection should be reduced from the present six months to three months. The LUB has further stated that the requirement of obtaining prior approval from the licensee for installation of a change-over switch should be done away with since a need may arise to change the configuration of machines from time to time.

Some of the objectors including the DDMA, The Society for Protection of Cultural Heritage have submitted that the DISCOMs are not adhering to the instructions issued by the Commission regarding Metering and Billing, causing inconvenience to the consumers. In case of late refund, the objector has suggested that the DISCOMs should pay interest. They have further pointed out that the DISCOMs have not introduced any mechanism for Consumer Grievance Redressal. The objector has opined that DISCOMs should not be granted permanent distribution license till they improve their functioning.

Mr. Kumar, Mr. S.K. Gupta and many others have pointed out to the harassment being faced by the consumers while applying for new connections, and have asked for streamlining the entire process including service connection fee and cost of other

material etc. Some of the objectors have suggested that just as there is a late payment surcharge levied on the consumers, there should be corresponding penalty imposed on the DISCOMs for late installation of meters. They have also suggested discontinuation of Electricity Tax, as the same does not provide any relief to consumers.

The North-West Industrial Federation has requested the Commission to direct the Distribution Companies to stop the practice of clubbing the load of two or more different power connections registered under different names for distinct portions of a building with the objective of bringing such connections under the LIP category. Further, the Federation has stated that in cases where the MDI/ electronic meters are installed and MDI does not exceed 100 kW, the category/billing should automatically be changed from HT to LT.

The Senior Citizen's Welfare Council has suggested that Meter Reading Cards should be introduced, wherein the consumers themselves can record their consumption, and make the payment accordingly. This system would be beneficial for the households where all the members are working.

2.30.2 Response of the Petitioner

With regard to the issue of compensation to cinema halls for their space, the Petitioner has stated that the concern has been noted, and will be addressed as per the terms of the agreement that the consumer has entered into with the licensee at the time of commencement of supply.

Regarding, the objections on single point delivery connections, the Petitioner has submitted that a detailed proposal on SPD Policy has already been submitted separately to the Commission for consideration. The Commission is seized with the

matter and will take a decision after due diligence and consultations with the stakeholders.

In the matter of the suggestion regarding the introduction of the concept of Meter Reading Cards, the Petitioner has stated that while the suggestion for meter reading card can be considered, the Petitioner is already seized with bringing about further improvements in the metering system, by exploring several options, viz., automated meter reading, pre-paid meters, etc. to provide better consumer services.

2.31 Data Extraction Mechanism

2.31.1 Response From Stakeholders

The Delhi Power Company Limited (DPCL) has submitted that while the NDPL has adopted the decentralized billing system developed by the DVB, the BRPL and BYPL have introduced a completely new billing system. Further, the DPCL has expressed concern over the software used by BRPL and BYPL for data extraction. In this context, the DPCL has suggested that all software for extraction of any commercial data by public utilities should be made transparent, and subject to independent scrutiny by the Commission. In addition, DPCL has recommended adoption of data management procedures and software, which is transparent and fairly capable of maintaining the MIS reports of all category consumers for all type of payments.

The TRANSCO has submitted that the data extraction mechanism and the relevant software of the DISCOMs should be transparent and wholly accessible. TRANSCO has requested the Commission to pass appropriate Orders to direct the Distribution Companies in this regard.

2.32 Development Charge and Deposit works

2.32.1 Response From Stakeholders

A number of objectors, which include State/Central Governments/ Undertakings/Departments have raised the issue of completion of various schemes for which the share of the money towards the development charges had already been deposited with the erstwhile DVB.

Some Manufacturers Associations have stated that Samaipur (Badli) is an approved, fully electrified, industrial area having complete industrial network. The Associations have objected to the Petitioner's treatment of the area as unauthorized and collection of developmental charges thereof. The Associations have requested the Commission to intervene and direct the Petitioner to stop collecting development charges, which are applicable to unauthorised areas. The respondents have added that consumers of this area had already paid huge charges under the Voluntary Load Enhancement Scheme launched by the former DVB and therefore, there exists no excuse for treating them as unauthorized.

The DSIDC has submitted that it is the DISCOM's responsibility to lay its own infrastructure for distribution of electricity and not charge for the same from a Government agency. The DSIDC has submitted that since it is involved in just the development of the land to be used by prospective consumers, the Petitioner should not ask for any contribution from them for the electrification of the area as was being done by the erstwhile DVB.

The DSIDC has added that despite having paid 50% of the cost of electrification to DVB, the schemes have not been completed on time, leading to hardship to the consumers. The DSIDC has

specifically stated that the DSIDC scheme at Bawana was not a part of the Transfer Scheme while allocating assets to the Petitioner, and even the revenue was not accounted for. The Petitioner has sought financing from DSIDC for the Bawana project and offered three financing options of which one of the options was accepted by DSIDC with some improvements. Later, the Petitioner has asked for the complete cost of electrification (without any return) from DSIDC except fifty percent share of the 11 kV system, which the Petitioner will be contributing. The DSIDC has objected to this and stated that the Petitioner should not ask DSIDC to pay for creation of assets, without any return, to be owned by the Petitioner. The DSIDC has, therefore, requested Commission to direct the Petitioner to refrain from asking for any share towards cost of electrification from them, and to return the cost of electrification already paid by the DSIDC. Additionally, the DSIDC has asked the Commission to direct the Petitioner to fulfill its obligation of providing electricity to its consumers in line with the provision of the Indian Electricity Act

The DDA has stated that according to the Electricity Rules and Act, it is the responsibility of the DISCOMs to develop and provide the electricity supply to consumers at their premises. The DDA is, therefore, of the opinion that the DISCOM should not ask the consumers for any development charge. The DDA has further submitted that it had been giving land to the erstwhile DVB, for installation of grid sub/station at a nominal lease rent of Rs 1/-, since DVB was a Government agency. The DDA wishes to revise the policy of allotment of land to the electricity companies and also its policy on cost fixation. The DDA has stated that it will charge the cost of land given to the DISCOM for putting up Sub-Stations or distribution

lines at the rate prevalent in the locality with due consideration to the size, development and location of the plot.

The DDA has stated that in the ARR Petition, the contribution deposited by DDA has been wrongly termed as Consumer Contribution. The DDA is of the view that the contribution made by DDA to the erstwhile DVB should be shown separately in the ARR, and not under the head of 'consumer contribution' since DDA is not a consumer. It has been further submitted that according to the Transfer Scheme and the Share Agreement, the principle objective was to reduce the funding by the Government and therefore, the deposit made by the DDA should be shown separately in ARR.

The DDA has stated that despite having contributed 50% of the expenditure involved in electrification, the work has not been completed either by the DVB or the Companies, and because of this it is facing a lot of hardship and litigation from prospective consumers. The DDA has further submitted that the DISCOMs, despite having received huge amounts from them, the details of expenditure undertaken towards the works has not been provided, neither to the DDA nor to the Commission.

The DDA has made a reference to the Agreement about the deposit works to be carried out at various voltage levels by the TRANSCO and the DISCOMs. The DDA has mentioned that while the DISCOMs in their respective ARRs have considered the amount to be spent on the electrification schemes under the deposit works in capital expenditure, the amount received from various contributors including DDA has not been considered as a source of funding for the capital expenditure.

2.32.2 Response of the Petitioner

With regard to the objection relating to land charges, the Petitioner has stated that as far as land for grid substation is concerned, the existing practice of charging for the land should continue. This is because the land is essentially required for creating the infrastructure to provide a public utility service and not to serve the Petitioner's own business interest. Further, charging for the land at any other rates than presently being charged would only adversely impact the consumer's interest by increasing the tariff to meet the additional depreciation charges, interest and return on the higher capital base.

In the matter of contributions made by the DDA, the Petitioner has submitted the following arguments

- The recovery of capital investment is done through depreciation, interest and the same shall be phased out over the useful life of assets. The Company has further submitted that the capital expenditure to the extent funded by the consumers through consumer contribution/deposit work after privatization has been included in the fixed assets and the consumer contribution shall be shown as liability in the accounts of the company. In the Company's view, BYPL has the obligation for maintenance and replacement of these assets and has hence included such assets under fixed assets.
- Erstwhile DVB has retained the deposits received before privatization. BYPL will therefore need to borrow for executing these schemes. Such assets shall be grouped under fixed assets. Regarding completion of the works for which contribution has been received by erstwhile DVB, it is submitted that these funds

- have been retained by DVB and have not been made available to the Petitioner. This aspect has already been covered in the ARR petition filed by the BYPL.
- The logistics of executing the backlog of works has to be balanced with other considerations such as maintenance of supply to existing consumers, system augmentation, etc. Also, only a portion of the works would be completed in the year for which the ARR has been filed and the projections have been made accordingly.

As regards the electrification cost, separate proposals have been submitted by the Petitioner to the Honorable Commission under Schedule of Miscellaneous Charges, which have also been made public. The charges as approved by the Commission will be applicable.

2.33 Electrification of New Areas

2.33.1 Response From Stakeholders

The DDA has stated that the Licensees are supposed to lay down or place electric supply lines for the conveyance and transmission of energy. The DDA had been extending grants to the erstwhile DVB for the purpose of electrification of the areas developed by them. The DDA has referred to Schedule 'D' of the Transfer Scheme 2001, which specifies that the ownership of the transmission line, step up/ step down transformer etc. is vested with the DISCOMs. The DDA has opined that under these conditions there is no reason for it to provide funds to the Petitioner, more so, as it is the responsibility of the Licensee/Petitioner to electrify the areas developed by the DDA. The DDA has submitted that though it has paid 50% of the cost of electrification to the DVB, the ownership of the assets have been shown to be that of the Petitioner which is against the basic principle.

2.33.2 Response of the Petitioner

In response to the objection relating to electrification of new areas, the Petitioner has submitted the following

- Normally, the land developing agency should lay the required electrical infrastructure just as in the case of other services like water, sewerage, roads, etc., which it recovers through levy of development charges from allottees. Further, the Company will necessarily have to seek loans for investment, which will have to be recovered through tariffs, which would mean that all the consumers will have to bear the burden of an investment which will benefit only a few in a particular area.
- By paying for the construction of the infrastructure, the consumers ensure that the electricity service is delivered to them and they are able to participate in the creation of the system from which they derive the benefits of electricity service. If this cost were to be borne by the Utility, it would mean that all consumers of the Utility would pay for its recovery. This would mean a higher tariff for consumption for all consumers. Thus, it is only proper that the consumers who create the demand should pay for the creation of the facilities that would deliver their requirements and not the other consumers.

2.34 Electrification of Harijan Basties and Tubewells

2.34.1 Response From Stakeholders

The DDA has submitted that the GNCTD has refused to provide the cost of electrification of Harijan

Basties and tubewells to the DISCOMs and have asked them to make the investment from their own resources. The DDA is of the opinion that the Petitioner should not ask DDA for the cost of electrification and that the Government funds also cannot be provided to privatised DISCOMs for building their asset base.

2.35 Demand Forecasting

2.35.1 Response From Stakeholders

The Delhi Transco Limited has provided a comparison of the projected category-wise energy realization for FY 2002-03 and FY 2003-04 based on the Commission's Order for FY 2001-02, and the projections for the FY 2002-03 and the FY 2003-04 as provided in the ARR, for each of the DISCOMs. The TRANSCO has stated that the per unit revenue realization of the three DISCOMs has been projected to reduce during the FY 2002-03 and the FY 2003-04 despite the improvement in collection efficiency and reduction in AT&C losses. The TRANSCO has provided calculations to support this statement. The TRANSCO has requested the Commission to scrutinize the ARRs of the DISCOMs on the factual position with regard to the consumer mix.

2.35.2 Response of the Petitioner

The Petitioner has submitted that the revenue realization projected by the Petitioner has been supported with all the required details. The Petitioner has further stated that submissions have been made to the Commission with details of actual expenses, revenue from sale of power, collection and AT&C Losses. Also, the actual sale figures up to 31.3.03 have been provided (based on the billing records) to the Commission.

2.36 Commission's Views

The Commission has taken note of the various comments/objections made and appreciates the keen participation in the process by the various stakeholders to provide vital feedback to the Commission on various issues.

Ever since it commenced its operations, the Commission has made a conscious effort to bring about a degree of transparency in the tariff setting process. Such transparency is necessary for instilling confidence in the Utilities as well as to bring about a greater understanding and appreciation of the complexity of the issues involved amongst the consumers at large.

The privatisation of the distribution business of the erstwhile DVB and the multi-year Policy Direction framework laid out by the Government for the five years beginning FY 2002-03 has not only thrown up certain regulatory challenges in its wake for the Commission, but has required a higher level of interaction with the stakeholders at large than being undertaken in the existing process. As discussed in the earlier Chapter, the Commission organised an interactive session with select stakeholders before the public hearing to explain the mechanics of the framework and its implications on the rate-setting procedure traditionally being followed in Delhi. The Commission felt it necessary to encourage the level and quality of the participation within the limited time frame.

The Commission made a beginning in addressing the challenges brought in by the modifications in the regulatory framework through its BST Order dated February 22, 2002. However, the Commission felt the lack of policy precedents existing in the country to provide the required guidance and

support to effectively tackle the issues at the implementation level in the privatised and multi-year framework. The Commission signed a MoU with the Public Services Commission of Maryland, USA on February 3, 2002 to tap international expertise available in the sector regulation, and had been interacting with them on various issues.

Further, the Commission has also realised that the foundation stone of any meaningful regulation of the Utilities is to have an effective platform for exchange of operational and performance related information with the Utilities throughout the year, rather than the interactions being limited to yearend submission of filings. In the instant case, the Commission required the Utilities to indicate detailed information/ reasons for their state of affairs as well as the steps proposed to be undertaken for improving the situation over an extended period. In certain cases, the Commission also undertook visits for actual ground verification of the information being submitted by the Utilities and made the Utilities aware of the shortcomings in their information systems and processes. With the objective of aiding information availability for quicker processing of the Petitions, the Commission has awarded a contract to build a Regulatory Information Management System (RIMS) to a consultant. The contract aims at building an MIS with pre-defined information formats, accessible to the Utilities through the Internet, for periodic update. The work is likely to be completed by October 31, 2003. The Commission expects that this would help the Utilities and the Commission to come to a common understanding about the level, form and diversity of information to be made available for processing of the ARR petitions. This would also ease the pressure placed on the Utilities in the existing set-up to provide the desired information within a limited period for year-end

review of operations thus, improving its reliability and consistency.

The Commission is also alive to the fact that improvement in service standards should go hand in hand with the operational improvement envisaged in the Policy Direction framework over the five-year period beginning FY 2002-03. For this purpose, such standards on various aspects have to be notified and adequately disseminated amongst the consumers to enforce and ensure compliance. The Commission, with this objective, has notified the following Regulations:

- (i) Performance Standards (Metering & Billing) Regulations dated August 19, 2003. The Regulations outline the procedure for resolution of consumer complaints related to Metering & Billing including:
 - Procedure for lodging of complaints by the consumer;
 - Procedure for resolution of the complaint by the Utility;
 - Time-frame for resolution of complaint by the Utility;
 - Procedure for dissemination of information regarding the name and contact telephone number of the Utility personnel to be informed in case of delay in the redressal of the complaint;
 - Periodic status update to the Commission on pending complaints
- (ii) Complaint Handling Procedure dated June 3, 2003. It relates to detailed procedures in respect of all of the above, mentioned in (i), in regard to power supply failure on various accounts, voltage fluctuations, and outages.

(iii) Schedule of miscellaneous charges for rendering various services to the consumer, not covered as a part of the Tariff Schedule brought out by the Commission in the Tariff Order for a year.

Section 28(7) of the Delhi Electricity Reform Act, 2000 sets out the overall principles for the Commission to determine the tariffs to categories of consumers defined and differentiated according to the consumer's load factor or power factor, the consumer's total consumption of energy during any specified period, or the time at which supply is required. The overall mandate of the Act to the Commission is to adopt factors which would encourage efficiency, economic use of the resources, good performance, optimum investments and other which the Commission matters considers appropriate keeping in view the salient objects and purposes of the provisions of this Act.

The Commission recognises the impact of good tariff design in promoting efficient consumption. In the Tariff Order of 23.05.01, the Commission had rationalised some of the tariff related issues including the provisions of Tariff Schedule. The Commission also introduced kVAh billing for high voltage consumers to encourage them to improve power factor. In the present Order, apart from bringing tariffs for the subsidized consumers closer to the average cost of supply, the Commission has made certain changes in the existing structure to encourage consumption efficiency and to simplify the existing structure in response representations being made by various respondents in this regard, during the current tariff process.

With this background, the Commission now proceeds to provide its views on the various issues raised by the respondents in the previous sections.

2.36.1 Procedural Issues

2.36.1.1 Consolidated Petition

As regards provision of a consolidated petition for FY 2002-03 and for FY 2003-04, along with incorporation of all additional information submitted by the DISCOMs during post filing interactions till admission of the petition, the Commission has already discussed the background of the same in Chapter 1 of this Order. The Commission does not agree with the views of certain respondents that not making public the original filings has led to a lack of transparency. The Commission has explained earlier that the Original Petitions required significant additional information/ clarifications, and hence were not admitted by the Commission. In the interest of simplicity and to avoid multiplicity of documents, the Commission directed the Utilities to submit a Consolidated Petition. Further, the original petitions along with the communications from the Commission and additional submissions made by the Companies during post admission interactions was available for inspection at the Commission's premises for the interested stakeholders.

2.36.1.2 Presentation by the Commission

In regard to the presentation made by the Commission to select stakeholders on the ARR and tariff determination process on April 5, 2003 at the Commission's premises, the Commission has elaborated the same in Chapter 1 of this Order. As the presentation was intended to explain to the stakeholders the process of tariff determination and the framework of the Policy Directions rather than the content of the petitions, the argument that the

petitioners should have made the presentation instead of the Commission is not tenable.

2.36.1.3 Time provided to stakeholders for response

The Commission also considers the time provided to the stakeholders for responding to the petitions as reasonable, considering that the public notice in the newspapers was brought out by the Commission on March 7, 2003 and the last date of submission of responses was further extended from April 15 to April 21, 2003.

The Commission would also like to inform the DDA that the section 62 of the Delhi Electricity Reform Act, 2000 (Act) requires that any proposed modifications in the Government Rules and Commission's Regulations has to be placed before the Legislative Assembly for approval. By no stretch of imagination can revision in tariff be equated to a change in the Government Rules or the Commission's Regulations. Further, determination of tariff is solely the prerogative of the Commission and the Commission does not have to seek the Government's approval for any revision in tariff.

2.36.1.4 Filing of tariff petition

Regarding the issue of filing of Tariff Petition and making it public, the Commission would like to clarify that the Policy Directions envisage a uniform retail tariff regime for all the three Distribution Companies.

The Commission clarifies here that the tariff rates applicable to various categories during a period are only a means of allocation of recovery of the ARR for the period from the consumers of the area. A revision in tariffs is required if the projected revenue from prevailing tariffs for an ensuing period (usually a financial year) is insufficient to meet the projected revenue requirement for the year

approved (by the Commission). The individual Revenue Requirements and revenue gap of the TRANSCO and the Discoms would then have to be consolidated by the Commission to compute the overall revenue requirement and revenue gap for a period, and approve tariffs to recover the revenue gap either in full or partially, while bridging the remaining gap through other means, including State Government subsidy.

The tariff proposals could have been filed by the DISCOMs either to bridge their revenue gap at existing tariffs or suggesting appropriate levels and structure for various categories based on operational and administrative ease, the objective of moving towards the cost to serve, incentives or other such considerations. This could have been useful for the Commission while approving the level and structure of the uniform retail tariffs applicable to all the DISCOMs. Similarly, the TRANSCO could have proposed an appropriate structure of the Bulk Supply Tariff so as to provide efficiency signals to the DISCOMs within the overall framework of the Policy Directions.

However, all the Companies only submitted their ARRs and requested the Commission to determine the tariffs in accordance with the Policy Directions framework. The DISCOMs also suggested certain tariff rationalization measures in their petition for the consideration of the Commission. The Commission admitted the petitions of the Companies after seeking additional information/clarifications on a number of issues as elaborated in Chapter 1 of this Order. The Commission, subsequently, directed the DISCOMs to submit a comprehensive tariff rationalization proposal instead of making piecemeal recommendations through ARR petition or during post admission interactions with the Commission. This was complied with, by the

DISCOMs. The Commission has taken note of the proposal as also the concerns raised by the various stakeholders on tariff related issues such as tariff rationalization, tariff structure amendment, etc. while determining the tariffs for various consumer categories in this Order.

2.36.2 Quality of Filing and Additional Information

2.36.2.1 Transaction related documents

As regards the transaction related documents like RFQ, RFP, Copy of Bids submitted by Bidders, Share Acquisition Agreement, Shareholder's Agreement, etc., the Commission would like to clarify that all these transaction documents related with the privatisation of the DISCOMs have not been made public by the Government. The Commission is of the opinion that all information related to privatisation and pertinent to the ARR and Tariff determination process is available either in the Transfer Scheme and the Policy Directions issued by the Government or in the petitions made by the DISCOMs.

2.36.2.2 Adequacy of information

In regard to the adequacy of information, the Commission would like to bring to the notice of the stakeholders that significant information has been exchanged with the Companies in an iterative process in order to fill the data gaps in the respective ARR Petitions, even after the admission of the petitions. The Commission has also obtained the actual cost, revenue and investments related data for the period July 2002-March 2003 from the petitioners. As mentioned in Chapter 1 of this Order, the Commission also undertook visits to the offices of the DISCOMs to understand the process of data capture primarily in regard to billings and collections for individual districts and to serve as a cross-check for the overall numbers submitted by

the petitioner for the entire DISCOM. The Commission staff further undertook field visits in petitioner's area at some select locations to review the physical progress of the Capital Works and Repairs and Maintenance works. Thus, all possible efforts have been made by the Commission to make realistic projections for FY 2003-04 considering the limited operating history available for the Companies in the instant process.

2.36.2.3 Audited accounts

Regarding the non-availability of the audited accounts along with the ARR Petition, the Commission concurs with the Petitioner's view that the filing and finalisation of ARR involves projections for ensuing period on the basis of the past trends and the actual data available for the current year. The Commission is of the opinion that it is not possible for the Petitioner to provide the audited accounts for the current year along with the ensuing year petition, because according to the Commission's Guidelines Revenue and Tariff Filing (Guidelines for ARR and Tariff Filing), the ARR Petition for the ensuing year should be filed before 31st December of the current year, and the audited accounts are finalised only after the completion of the financial year. The audited accounts of the Companies for the previous year were not available as the Companies were not in existence during the period.

2.36.3 Policy Directions and reform process

The policy formulated and Directions issued thereto by the Government of NCT of Delhi in exercise of its powers under section 12 of the Act are binding on the Commission. The Commission, therefore, does not have any further view in the matter. Furthermore, this aspect has been discussed and addressed in the BST Order.

2.36.4 Compliance with Directives

The Commission would like to inform the objectors that the directives in the RST Order dated 23rd May 2001 pertained to the erstwhile DVB, while the BST Order dated 22nd February 2002 pertained to TRANSCO/DISCOMs. The Commission has revisited the directives made earlier, and has issued fresh directives to the petitioner in this Order incorporating the earlier ones, wherever relevant. These directives are discussed in Chapter 7 of this Order.

2.36.5 AT&C Loss

2.36.5.1 Policy Directions on AT&C loss

The Commission would like to highlight that the Policy Directions required the Commission to determine the opening level of AT&C loss for each DISCOMs through an Order, which were to be the opening levels of AT&C losses for the purposes of bidding. This base level of losses for each DISCOM was determined by the Commission vide its Order of February 22, 2002. The Policy Directions further indicated that the AT&C loss for the purpose of tariff computation by the Commission for each DISCOM in a year shall be based on the opening AT&C loss and the reductions proposed for the year in the accepted bid of the investor selected by the Government for purchase of 51% equity in the distribution company. The year-wise loss reduction trajectory that was agreed between the successful investors and Government, at the time of privatisation, forms a part and parcel of the Policy Directions issued by Government. The Policy Directions also stipulate the mechanism for treatment of under-achievement and overachievement of loss reduction with respect to the accepted bid levels and minimum levels specified by the Government. The losses for each of the five years beginning FY 2002-03 for tariff determination

purposes has, thus, been laid out very clearly in the Policy Directions and are binding on the Commission. The Commission, therefore, does not have any furthers view in this matter.

2.36.5.2 Over/underachievement by DISCOMs

The Commission would also like to clarify that the 16% return on equity is subject to the achievement of AT&C loss reduction committed by the Distribution Companies during the year. Any underachievement in relation to the bid level shall be to the account of the petitioner. The underachievement in the case of the petitioner for the current year with respect to the bid level is 5.43%. However, the Commission has as per the policy direction, taken the loss for the current year as per the bid level loss reduction vis-à-vis the opening loss as per the BST order. This amounts to a revenue shortfall (loss) of about Rs.75 crore to the petitioner in the FY 02-03.

2.36.5.3 Pace of AT&C loss reduction

The Commission also agrees with the view of certain respondents that the reduction in losses should be higher during the initial years, since the base level losses are very high. Further, the significant investments under APDRP scheme, along with other capital and R&M investments approved for FY 03 and FY 04, were not envisaged at the time of bidding,. This includes system augmentation and commercial loss reduction measures on account of energy audit activities like metering and billing, consumer coding, feeder and Distribution Transformer (DTR) metering, part outsourcing of metering & billing proposed during the two years. The Commission, therefore, expects that the higher investments during the initial two years of the fiveyear period should lead to a far more aggressive technical and commercial loss reduction than the

target of 17%, to be achieved during the five-year period.

2.36.5.4 Training personnel to detect theft

Training people to detect theft of energy is an operational matter and is within the purview of the DISCOMs. The DISCOMs may consider the suggestion proposed by a respondent and implement the same, if found feasible.

2.36.6 ARR and Revenue Gap for FY 03 and FY04

2.36.6.1 Revenue gap estimations

As regards the concerns raised by the respondents relating to expenses and Revenue Gap estimations/projections of the Petitioner, the Commission has already elaborated on this aspect earlier while dealing with the concerns regarding the quality of information and additional information.

The Commission reiterates that the BST and RST have been determined in line with the Policy Directions of the Government. The Commission has explored various practical means of bridging the revenue gap, before deciding the extent of revenue gap to be met through increase in tariffs. The Commission has examined the petitions critically and has accepted the petitions with due regard to the provisions of the Act as well as the ARR and Tariff Guidelines issued by the Commission.

2.36.6.2 Scrutiny of expenditure and revenue components

The Commission has considered the prudence of expenditure projected by the Utilities, the actual expenditure in FY 2002-03, as well as the committed Government support, while determining the revenue requirement and the category-wise tariffs to meet the revenue requirement. Detailed analysis of all the expenses and the revenue components,

in regard to its prudence and methodology of projections, has been provided in the relevant sections of Chapters 4 and 5 respectively.

The Commission has critically examined all the heads of expenditure and revenue while determining the ARR as discussed in Chapters 3 and 5. As a result of detailed analysis of various expenses, the Commission has seen the prudence of each item. The final numbers are as under:

Table 2.1: ARR excluding power purchase

Description	FY 02-03(9months)			FY 03-04	
	Petition	Commission	Petition	Commission	
Expenditure (A)	209.67	145.04	306.41	208.96	
Return on Equity and Free Reserves (B)	15.82	14.70	24.81	22.43	
Non-Tariff Income (C)	15.07	13.28	20.95	18.08	
ARR excluding Power Purchase Cost	210.42	146.46	310.27	213.31	

The Commission would like to inform the objectors that the R & M expenses have been validated to the extent possible and projections have been made after considering the available actual data for FY 03. The Commission directs the DISCOMs and TRANSCO to maintain separate data of actual items issued from stores for R & M activities.

2.36.7 Treatment of past Arrears Collected

The Commission would like to clarify that 20% of the past arrears of DVB collected by the Petitioner has been considered as revenue for meeting the Annual Revenue Requirement. The details of the methodology adopted by the Commission in this regard has been elaborated in the relevant section of the Order at para 3.9 The Commission has opined that 80% of collected arrears payable to Holding Company under the Transfer Scheme

should remain in the sector and be passed on to TRANSCO. Accordingly, the Government has been asked to revisit the issue and make suitable amendment in the public interest.

2.36.8 Depreciation charges

The Companies Act, 1956 allows the DISCOMs to claim depreciation even for assets added during the year on a proportionate basis. However, under the Schedule VI, the depreciation for a year is

allowed only on assets at the beginning of the year. For the purpose of ARR and tariff determination, the Commission has considered depreciation only on assets at the beginning of the year as per details in para 3.6 of the Order.

2.36.9 Investments

The Commission has held detailed discussions with the DISCOMs and scrutinized the investments already made as well as the investments proposed to be made by the DISCOMs, especially their preparedness for the summer months. The Commission has also conducted sample checks on the investments – starting from the material procurement process to installation of equipment and issue of completion certificates.

The Commission has obtained the details with respect to scheme wise investment proposed by the Petitioner, details of actual investments undertaken during the period July 2002 to March 2003, and the Petitioner's preparedness for executing the works proposed under the capital investments for the FY 2003-04. The Commission has taken into account these details while determining the capital investments for the purpose of determination of the ARR as detailed out in para 3.4.1

However, the Commission would like to bring to the notice of the Petitioner that mere consideration of the investments in the ARR does not imply approval of such investment by the Commission. The Commission has directed the Petitioner to obtain the approval of all the capital investment schemes completed during the FY 2002-03, and proposed during the FY 2003-04 (Reference para 3.4.2).

The Commission would also like to clarify to the objector that the capital investments are not considered under the revenue expenditure. In the revenue expenses, only the capital related charges, viz. interest payable on the loans as well as the depreciation are considered.

2.36.10 Non-Tariff Income

The Commission has considered the rebate on early payment of power purchase bills as well as the 20% of the arrears of DVB collected by DISCOMs, while computing the income of the DISCOMs. Meter rent is not exactly charged to recover the cost of the meter and provides a source to meet to some extent the fixed costs for the DISCOM. If the meter rent is not charged, then this part of the revenue requirement will have to be recovered through some other charges or through tariffs. The Commission has eliminated the meter rent and has introduced two-part tariff with the fixed charge component as has been elaborated in Chapters 4 and 5.

The Commission has scrutinized all the components of Non-Tariff Income in detail for prudence and methodology adopted for estimation. The Commission has also considered the actual non-tariff income for the period July 2002-March 2003 for making the projections for FY 2003-04. Detailed analysis of the Non tariff Income is provided in the relevant section of Chapter 3.

2.36.11 Return on Equity

The Commission would like to inform the objector that the system of ARR and Tariff determination being followed by the Commission gives due weightage to the efficiency of operations and only prudent expenditure is allowed to be recovered though tariffs. The paying capacity of the DISCOMs will be determined after considering the prudently incurred expenses as well as the revenue. The Policy Directions issued by the Government before privatization of the DISCOMs clearly lays down that the 16% return is applicable on the equity and free reserves of the DISCOM. In this instance, the Schedule VI provisions of return on capital base will not be applicable for the five-year transition period.

2.36.12 Class Embedded cost

The Commission is of the opinion that in the absence of critical data and information required for estimating class embedded cost (such as allocation of the difference between the energy input and energy billed across consumer categories and the information on asset classification), estimation of embedded cost would be based on several assumptions, and therefore the results of such estimation may not be reliable. However, the Commission would move to this approach in the years to come gradually and with reliable data being available.

2.36.13 Tariff Policy

The Commission has noted the suggestions made by the respondent regarding factors to be considered in the determination of tariffs. The Commission would like to assure the respondents, that all the relevant factors have been considered in the Tariff Determination, and the Commission has attempted to strike a balance between the interests of the consumers and the Utilities as has been elaborated in Chapter 4. In the matter of passing on the benefits of AT&C loss reduction, the Commission would mention that the mechanism adopted for tariff determination has in-built provision for passing through the benefits of loss reduction to the consumers. The retail supply tariff so determined by the Commission would take into account the impact of the loss reduction achieved by the DISCOMs and, therefore, no separate Order in this regard is warranted.

2.36.14 Tariff Structure / Rates

2.36.14.1 LT and HT tariffs

The consumers should appreciate that the reasons for the differential tariff within industrial sector are primarily historical, and cannot be done away overnight. The Commission would like to inform the objectors that all over the country, differential tariffs exist for industries operating at LT and HT. Moreover, the cost of supply at higher voltages is lower than that at lower voltages, as additional expenditure has to be incurred on account of transformation and distribution at lower voltages. Thus, there is an economic rationale in shifting higher loads to supply at higher voltage. All over the country, there is a move towards higher tariffs for LT industry vis-àvis HT industry, on account of the higher cost of supply at LT level. The Commission feels that existing tariff differential for LT and HT on the basis of load, with LT tariff effectively lower than HT tariff, is not appropriate. Over a period of time, the Commission will endeavour to remove this anomaly in tariff for LT and HT supply and aim at making the tariff cost reflective.

Also, for linkage of tariffs to the voltage level cost of supply the data availability to determine the voltage level cost of supply is a constraint, and hence the Commission has attempted to reduce the existing difference between LT and HT tariffs by having lower increases in HT tariff than LT tariff.

2.36.14.2 Concessional tariff for senior citizens

The Commission is of the opinion that it is not practical to have a separate category with lower tariffs for senior citizens, considering the difficulties in implementation and ensuring that the connection is being used by senior citizens only. Similarly, the Commission has decided not to include the subcategory of social welfare organizations under domestic category, to prevent misuse of this provision.

2.36.14.3 Tariff Comparison with Other States

The Commission has analysed the average power purchase cost and the retail tariffs in neighbouring States in Chapter 6 of the Order.

2.36.14.4 Reduction of cross-subsidies

In view of the substantial difference in tariff between the industrial, commercial and domestic categories, the Commission is of the view that it may not be feasible to have the same tariff for these categories, as it would result in a tariff shock.

Similarly, the Commission is of the opinion that it is not feasible to have only two consumer categories, viz domestic and non-domestic, as it will also result in tariff shock. Commission agrees that the cross-subsidies need to be reduced and has kept this aspect in mind while determining the category-wise tariffs. At the same time, the consumers should appreciate that elimination of cross-subsidy is a gradual process and cannot be achieved overnight.

Similarly, the suggestion to retain only one slab in domestic category is not practical, in view of the substantial amount of intra-class cross-subsidy prevalent in the existing tariff structure. However, the Commission accepts the need to reduce the number of slabs in the domestic category, but has

not done so on account of lack of consumption data at different levels. The DISCOMs have been directed to maintain data on the consumption of domestic consumers for every slab of 50 units and submit the same to the Commission alongwith their next ARR and Tariff Petition, to enable the Commission to structure the slabs in the desired manner (Ref. para 1.1.1). The Commission has attempted to reduce the cross-subsidy by balancing relief measures through rationalisation of tariff as also the tariff rates. This has been further discussed in Chapter 5.

2.36.14.5 Induction furnace and industrial load

The Commission is of the opinion that the comparison between induction furnace units and the MES and the NDMC, who are bulk licensees, is incorrect. The Commission is of the view that it is not advisable to charge differential tariffs for furnace and other load, as this may give rise to unfair practices, and there is a possibility that the furnace consumption may be shown under other industrial load to avoid higher bill. Moreover, charging separate tariffs will require separate metering. Thus, the Commission does not see any merit in the suggestion to treat the furnace block separately, and, accordingly, induction furnace category has been merged with industrial category so that more sub-categories and classes within the tariff structure are not introduced.

The Commission agrees that the condition relating to the presence of four Executive Engineers for restoration of power supply for induction furnace units may not be practical. However, this issue does not relate to the ARR and Tariff Determination process. The DISCOMs are requested to give this matter some thought and come up with an alternative solution to this problem. However, the Commission does not believe that there is any

tangible loss to DISCOM in shifting the induction furnaces from the special category to the general category.

2.36.14.6 Rebate for hours not supplied

The Commission is aware that the break down in supply causes hardships to continuous process industries such as induction furnaces. At the same time, there are situations where supply breakdowns are unavoidable. The Commission intends to issue a Grid Code and a Distribution Code as well as a Consumer's Charter which will specify the consequences of such supply breakdowns and the procedure to be followed in such cases, notwithstanding that Complaint Handling Procedure and Regulations to deal with the same have been issued/notified. The fixed charge, however, is levied to recover the fixed costs and cannot be linked to supply without hours of compete data/information on system operation as has been discussed in Chapter 4. These aspects will be addressed in the Consumer Charter as well.

2.36.14.7 Categorisation of signals and blinkers

The Commission would like to clarify that separate tariffs are already specified for streetlights, under the category, "Public Lighting". The Commission is of the opinion that the signals and blinkers serve a purpose similar to streetlights and should have the same tariff. Hence, the category of "Public Lighting" will now include street lights and signals and blinkers.

2.36.14.8 Statutory provisions on factors governing tariff design

Referring to the ruling of the Supreme Court regarding differentiation between consumers, it is apprised that the Commission has been constituted under the Delhi Electricity Reform Act, 2000, and hence the provisions of the Electricity Regulatory

Commissions Act, 1998 are not applicable to it. The Commission notes that the factors determination of tariff, such as power factor, load factor etc., are the stated factors considering the objectives of the Act. However, considering the ground realities and historical prospective, the Commission feels that these objectives of the Act can be achieved gradually and in a phased manner. Towards this end, the Commission has endeavour accordingly to reduce cross-subsidies as discussed in Chapter 5 and kVAh based tariff has been introduced wherever feasible.

The Commission's endeavour is to have a simple and rational tariff structure that is easy to understand and implement. With this in mind, the Commission has attempted to substantially simplify the tariff structure in this Order.

2.36.14.9 Load violation surcharge

The Commission has considered the views expressed by stakeholder on the levy of load violation charges and has rationalised the provision for its levy so that the consumers will now have to pay only the bulk supply tariff without any surcharge instead of the existing 30% surcharge on demand plus energy charges. Further, the billing demand is now based on MDI reading or sanctioned load, whichever is higher, instead of connected load, which depended on manual verification.

2.36.14.10 Normative consumption surcharge

The Commission has considered the effectiveness of surcharge for consumption in excess the normative consumption and has decided to do away with the concept of normative charges as has been discussed in Chapter 4.

2.36.14.11 Lower tariffs for higher consumption

As regards the provision for lower tariffs for higher consumption, the Commission is of the view that in the current context of shortages, and the fact that electricity has to be generated from scarce natural resources like coal and gas, there is no rationale for giving any incentive for higher consumption.

2.36.14.12Tariff for MES outside the area of licence

As regards the applicability of licensee tariff to all areas where MES is operating, the Commission is of the opinion that the licensee tariff is applicable only for the licensed area as defined in the license of the MES. As far as the area outside the license area is concerned, the Commission is of the view that the licensee tariffs are not applicable to these areas. However, the Commission accepts that in these areas where MES is taking HT supply as a bulk consumer for predominantly residential purposes, the tariff applicable to domestic category with HT supply at single delivery point (CGHS) should be applicable.

2.36.14.13Categorisation of Cinema Halls

As was discussed in the Order dated 23.05.01, the Commission is of the opinion that cinema halls are commercial ventures and should be charged at non-domestic/commercial rates, as is the current practice. Other State Electricity Regulatory Commissions (SERCs) too have held that the cinema halls should be charged at 'commercial' rates.

2.36.14.14Mushroom cultivation

The Commission would like to bring to the notice of the objector that the 'mushroom cultivation' is a category that is being charged at subsidized rates. The Commission does not see any merit in the suggestion that the other consumers should bear the distribution cost and mushroom cultivation should be charged at BST. Irrespective of the quantum of power consumption, both poultry farming and mushroom cultivation are comparable in so far as they are both agro-related activities of commercial nature.

2.36.14.15Increase in expenditure to be borne by DISCOMs

The Commission has to balance the interests of the consumers as well as the Utilities. The Commission does not agree with the view that the DISCOMs should bear the increase in expenses. The Utilities are entitled to ask for tariff revision once a year, to match their legitimate expenses.

2.36.14.16Tariff for Railways

As regards the linking of Railway tariff with the power purchase cost from the Central Generating Stations (CGS), the Commission is of the opinion that the total power purchases from different sources are consumed across all the consumer categories and, therefore, does not agree to the request of linking the cost of power purchase to tariff of one particular category. The determination of tariff for all the consumer categories is based on the pooled cost of power purchase, which is included in the Annual Revenue Requirement of the Utilities.

As regard to the request of Railways for single part tariff, the Commission opines that the two-part tariff structure is more scientific in nature, since it allows the Utility to recover certain component of its fixed cost through the levy of fixed charges. The Commission is moving towards the implementation of two-part tariff for all categories of consumers. Further, the demand charges for Railways in Delhi which are applicable on simultaneous maximum demand is no longer applicable since supplies at

the existing two points are made by different DISCOMs.

2.36.14.17Rebate in CGHS tariff

As regards the rebate applicable to Co-operative Group Housing Societies (CGHS), the Commission is of the opinion that the existing rebate of 15% is appropriate, and has been approved by the Commission in its Order of 23rd May 2001 after consideration of all the relevant factors.

2.36.14.18Tariff for Jails/Nari Niketans/Poor Houses etc.

According to the existing tariff structure, entities such as Jails/ Nari Niketans/ Poor Houses, etc. fall under Non-Domestic category. The other entities mentioned by DDA fall under the Domestic Category in the existing tariff structure. At this stage, when the Commission is moving towards rationalisation of the tariff structure and tariffs for all the consumer categories, it may not be appropriate to shift certain sub-categories towards the subsidised category. Further, if these entities feel that they should be shifted to Domestic Category, they may approach the Government for the subsidy.

2.36.15 Minimum Charges and Fixed/Demand Charges

It is a well-accepted economic principle that the fixed costs of the Utility should be recovered to a certain extent through fixed charges to ensure revenue stability. At the same time, if the entire fixed cost is recovered through fixed charges, then the Utility will have no incentive to increase the sales. Hence, the Commission has determined tariffs such that a reasonable part of the fixed costs are recovered through fixed charges. Historically, the fixed recovery has been done through a mix of minimum charges and fixed charges. The minimum

charges guarantee a certain amount of recovery to the Utility. However, the Commission is of the view that recovery of fixed costs through fixed/demand charges is a better and more transparent alternative as compared to minimum charges, and has hence replaced minimum charges with fixed charges.

The fixed charges are usually levied on the basis of demand charges on sanctioned load or contract demand/billing demand.

The Commission does not agree with the statement that the film industry is a seasonal industry and hence there should be two levels of contract demand in the year.

The Commission is of the opinion that the concept of billing demand is to recover the fixed cost incurred by the Utility in meeting the load imposed by the consumer on the system. In order to systematically plan the network and related infrastructure, the Utility requires the HT consumers having demand meters to opt for a Contract demand, based on which the Utility plans its infrastructure. In other States, the billing demand is considered as the maximum demand or a certain percentage (usually from 75 to 80%) of the contract demand, whichever is higher. However, in Delhi the cushion of 60% is already provided in the definition of contract demand, which says that the contract demand shall not be less than 60% of the sanctioned load. Hence, the Commission is of the opinion that the Billing Demand should be levied on the maximum demand or the contract demand, whichever is higher.

2.36.15.1 Demand violation surcharge

The Commission is of the opinion that the increase in the demand by any consumer category leads to overloading in the system feeding the point of supply and increases losses in the network. Further, it could also cause stressful conditions on the regional network, thus compromising on the continuity of supply to other consumers availing supply in the region. The Commission is of the view that if the billing demand is equated to the maximum demand or contract demand, whichever is higher, then there is no incentive for the consumer to manage his load. The imposition of the demand surcharge is, therefore, in order. The Commission has, however, rationalised the levy of demand violation surcharge, which is now leviable @ 30% on excess demand only instead of 30% on total demand plus energy charges.

2.36.16 Late Payment Surcharge (LPSC)

The LPSC is intended to act as a deterrent to the consumers so that they make their payments on time. The LPSC is not intended to act as a source of income for the Utility. The Commission also agrees that the LPSC rate should be same for all consumer categories. The Commission is of the opinion that the existing DPS rate of 2% is very high and has reduced it to 1.5% per month for all consumer categories.

2.36.17 Mode of making payments for electricity bills

The Commission is of the opinion that the suggestion of implementing 'Electronic Clearing Service' for direct debit from the consumer's bank account is a good suggestion and should be considered by the DISCOMs. The DISCOMs should also consider the options for payment of electricity bills through the internet as is being done in other cities. As regards the issue of providing receipts for payments made through the 'drop-box' mechanism, this is an issue to be sorted out by the DISCOMs. However, the objector appreciate that in all other instances where payments are made through drop boxes, receipts are not issued. The Commission has noted the initiative made by the petitioner to provide an online assistance to its customers wherein details regarding consumption, billing etc. would be available.

2.36.18 Time of Day (ToD) Tariff

The Commission would like to inform the objectors that ToD tariffs have been implemented in several States in the recent past, where they have been quite effective in shifting part of the load from peak hours to off-peak hours. The Commission is of the opinion that the fears expressed by the objectors regarding ToD tariffs are unfounded and there is no reason to believe that the implementation of ToD tariffs would lead to harassment and the billing would become more complex. The ToD meters have been standardized and the time slots can be programmed quite easily.

The Commission is of the opinion that it is essential to flatten the load curve, by applying Demand Side Management techniques and encouraging off peak hour consumption. Towards this, the Commission would like to introduce Time of Day (ToD) tariffs for the LIP and MLHT categories, where ToD meters have already have been installed. However, there are quite a few issues, which need to be gone into. These have been discussed in detail in Chapter 4. Accordingly the Commission shall take it up separately later during the course of the year.

2.36.19 Low Power Factor (LPF) surcharge

The LPF surcharge for low power factor is currently applicable for the categories, which do not have kVAh tariffs and are, by and large, metered using electro-mechanical meters. These existing meters

cannot read power factor or the kVAh consumption.

The Commission is of the opinion that the LPF surcharge should be levied as a deterrent so that consumers maintain the required level of power factor (PF). However, the methodology usually adopted by the utility staff for checking the PF is not appropriate. The Commission is of the view that the levy of LPF surcharge should be linked to the actual PF of the consumer as recorded by the electronic meter/measuring equipment. The Commission has, therefore, decided that henceforth LPF surcharge shall be levied only when it is established by measurement with equipment/meter that the power factor is lower than the requisite level. Moreover, the DISCOM should ensure that the consumer is made fully aware of the consequences of having a lower PF and the need to maintain the capacitor banks in a working condition. This will ensure that the consumers do not have to face any harassment.

2.36.20 kVAh based tariff

The Commission is of the opinion that kVAh (or kWh plus kVARh) tariff provides sufficient incentive for the consumers to maintain the required PF. The Commission has discussed this aspect in detail in Chapter 4 and has directed the DISCOMs to record and submit kVAh (and kWh plus kVARh) consumption data for consumers having electronic meters, so that the Commission has sufficient data to modify the tariffs accordingly, as well as consider implementation of kVAh (or kWh plus kVARh) tariffs for other consumer categories in the subsequent Order.

2.36.21 Power Factor Rebate

The Commission is of the opinion that incentive for higher Power Factor is inbuilt in a kVAh based tariff structure, as the kVAh (or kWh plus kVARh) recordings will be lesser if the PF is high. This will incentivise the consumers to install capacitor banks to improve the PF, which in turn will reduce the kVAh consumption.

2.36.22 Connected Load

The Commission has deliberated in detail on the definition of Connected Load in its first Order on Tariff Rationalisation. Further, the definition of Connected Load was modified based on the inputs received from the various stakeholders and consumers in the Tariff Order issued by the Commission on 23rd May 2001. The Commission feels that the definition of Connected Load as defined in the Order of 23rd May 2001 is appropriate and hence does not warrant any change.

The concept of connected load implies that only equipment that are connected to the system should be considered for computing the connected load. The Commission agrees that the load of the DG sets should not be considered while computing the Connected Load for consumers.

2.36.23 Misuse charges

The Commission has considered the views expressed by the DISCOMs as well as the objectors regarding the levy of misuse charges.

The Commission notices that most of the provisions of misuse are violations of some existing law or Conditions of Supply or the Agreement done by the consumer with the utility. Taking note of the various arguments, the Commission has decided to abolish all the existing provisions of misuse, including that of the requirement of valid MCD licence and Lal Dora Certificate. However, the use of electrical load for category of use other than that for which it was

sanctioned shall constitute violation and hence has been retained (with slight modification).

2.36.24 Energy Consumption Formula

The Commission is of the opinion that the norms approved by the Commission for the assessment of consumption in case of defective meters vide its Order of 23rd May 2001 are appropriate, and hence do not warrant any further modifications.

2.36.25 Rebates on Power Consumption

The Commission is not in favour of giving any special rebate to any consumer category, other than those available for supply at higher voltages.

2.36.26 Bulk Supply Tariff

The Commission has determined the BST and the RST within the framework of the Act and the Policy Directions issued by the Government. This includes the committed Government support as well as balancing of the BST with the ability to pay of the DISCOMs as well as the ARR of the TRANSCO.

2.36.27 Procedure for getting connection and load sanction

This is not a matter within the purview of the ARR and tariff determination process, and relates to the Performance Standards (Metering & Billing) Regulations of the Commission. The Commission will take up these issues separately, after obtaining the views of the DISCOMs and other stakeholders.

2.36.28 Quality of Service

The consumers should appreciate that it is less than a year since the private Companies have taken over the DISCOMs and it is unrealistic to expect that the quality of supply would improve within this short span. There are both technical aspects, which require substantial investments, as well as human issues related to consumer complaint handling, etc., which the DISCOMs are focusing on. The

Commission is hopeful that with the expenditure being towards capital investments and also for repair and maintenance, the Companies will be able to achieve substantial progress in improvement in quality and consumer service. The Commission has held detailed discussions with the DISCOMs and scrutinized the investments already made as well as the investments proposed to be made by the DISCOMs, especially their preparedness for the summer months.

The Commission intends to issue Grid Code and Distribution Code as well as a Consumer Charter to ensure minimum quality of supply to consumers.

2.36.29 Tariff for Delhi Metro Rail Corporation

The Commission would like to clarify to that any tariff determined by the Commission continues to be in force till it is revised by the Commission. Hence, the tariffs determined for FY02 continue to be valid till such time the Commission does not revise the tariffs through a subsequent Tariff Order.

The Commission would also like to inform that determination of tariffs within the NCT of Delhi falls within the purview of the Commission and any bilateral/multilateral agreements between the TRANSCO/DISCOMs and the DMRC are not valid without the approval of the Commission. The Commission has kept all the issues in mind while determining the tariff applicable for DMRC. The Commission has accepted the request of the DMRC and has treated it like a bulk consumer with a single part tariff. Detailed discussions on the matter are at para 1.1.

The Commission is considering the license application of the DMRC alongwith the license Petitions of the DISCOMs and will dispose these Petitions following the due processs.

2.36.30 Remittance of Electricity Tax to MCD

This is essentially a matter to be discussed between the MCD and DISCOMs. The Companies' accounts are subject to audit by internal and external auditors and the Commission does not intend to audit the accounts to ensure that the correct amount is forwarded to the MCD.

2.36.31 Development Charges and Deposit Works

The Commission has taken note of the concerns raised by the authorities and consumers towards completion of works for which the contribution has already been made to erstwhile DVB. The Commission has also noted the response of the Petitioner regarding completion of deposit works, and the mechanism proposed by them for funding these deposit works in the ARR.

The Commission notes that this mechanism ensures that the development work is undertaken only when required. Further, contribution by consumers in the form of development charges for the infrastructure development for supplying electricity to new areas is an established practice in most of the States. However, the share of consumer contribution towards the development cost varies across States. In case of Delhi, the development cost of new areas has been shared in the ratio of 50:50 between the Utility and the developing agency. In case of areas where the development cost is not being shared by the developing agency, the same is to be borne by the consumers.

The Commission feels that it is not appropriate to change the condition pertaining to the sharing of the development cost of new area, as it will tantamount to differentiation in share cost borne by the consumers who had taken the connections earlier and those who would be taking the connections henceforth. Therefore, the existing

provisions of sharing of developing costs between the Utility and the consumers for the new works is retained.

At the time of restructuring of DVB, there existed some incomplete capital works (deposit works) pending execution by the DVB. The contributions by the developing agencies/consumers for all such works were, however, made to the erstwhile DVB. The Shared Facilities Agreement executed at the time of restructuring stipulate that "All capital works below 33 kV voltage level shall be to the account of DISCOMs whether such capital works are in progress or nearing completion or otherwise yet to commence. The Government, Transco, Holding Company or any other entity will not be called upon to contribute any amount towards such capital works notwithstanding that advances have been received in the past and have not been fully utilised for execution of such work."

The Petitioner has considered these deposit works as part of the capital investments, and consequently proposed the funding of such works in the Annual Revenue Requirement. During the public hearing proceedings TRANSCO mentioned that for capital works to be completed by the DISCOMs, the contribution made by some developing agencies towards execution of these deposit works have been refunded by TRANSCO to these agencies.

The Commission also approached the Government for seeking clarifications and position on the issue of deposit works. The Government in its response has reproduced the relevant provisions of the Shared Facilities Agreement as mentioned above and has not elucidated in the matter further.

In view of the above, the Commission is of the opinion that it is not appropriate to consider the funding of the total cost of deposit works as capital

investments in the ARR has to be limited to 50% of the cost of works. Considering that the cost of these deposit works to be shared in the proportion of 50:50 between the Utility and the consumers/developers, the Commission has taken the funding to the extent of 50% of the cost of these deposit works while estimating the ARR.

The Commission is also concerned about the noncompletion of these pending deposit works by the Petitioner particularly in case for DDA and DSIDC.

In this context, the Commission asks the Government to resolve the issue of deposit works execution within a period of two months from the date of this Order, in consultation with the TRANSCO, DISCOMs and the developing agencies such as DSIDC,DDA etc., A specific forward path needs to be drawn for executing these works, addressing various issues such as:

- Details of deposit works to be executed
- Works to be executed by TRANSCO and each DISCOM
- Funding arrangements

As regards the cost of the land to be recovered by DSIDC or DDA for the existing land transferred to NDPL, the Commission is of the view that this issue may be settled amicably between the DSIDC, NDPL and Government. The cost of new land to be paid by NDPL to DSIDC or DDA may be bilaterally negotiated and agreed between the two parties, as the matter does not fall within the purview of the Commission. Any hike in land price however ultimately result in tariff hike and hence it would need to be priced keeping interest of the consumers in view.

2.36.32 SPD Connections

As regards Single-Point Delivery (SPD) connections, the Commission clarifies that issues regarding these connections is not the subject matter of this ARR and tariff determination exercise and shall have to be dealt with as per the statutory provisions.

The Commission, however, directs the petitioner and the SPD contractors to settle modalities of working of the system under applicable legal provisions and to apprise the Commission of the same within 6 months' time. In the interim period the Commission opines to continue with the existing arrangement, subject to the condition that new rates of tariff as approved in this Order shall be applicable to both SPD contractors and the consumers.

2.36.33 Maintenance of Street Lights

It has been discussed and addressed under para 1.1 of Chapter 5.

2.36.34 Meters and Transformers

2.36.34.1 Joint meter reading

The requirement of joint metering has been in vogue to protect the interest of both, the consumer as well as the Utility. This procedure minimizes the disputes on metering at a later stage and therefore the practice should continue.

2.36.34.2 Replacement of meters

Replacement of meters is the responsibility of the DISCOMs and the DISCOMs have submitted details of the meter replacement programme to the Commission. The Commission would like to inform the objector that the old electromechanical meters are subject to mechanical wear and tear and tend to record lower consumption over a period of time. Moreover, these meters are also more susceptible to tamper. The replacement of such meters with

electronic meters will enable the Utility to record the consumption more accurately as well as reduce the chances of tampering. The DISCOMs have submitted that the existing meters are being replaced by electronic meters, which is a good step.

2.36.34.3 Meter rent

The Commission has removed the concept of meter rent and minimum charges in this Order, detailed rationale for which has been discussed in the relevant section of the Order. In lieu of the meter rent and minimum charges, the Commission has introduced fixed charges for all categories where minimum charges were applicable earlier. The Commission clarifies that for new consumers, the first meter will be installed at the cost of the DISCOM. Thereafter, in case of damage to the meter, the existing provisions of the 'Performance Standards (Metering and Billing) Regulations' will apply.

2.36.34.4 Bills on the basis of voters' list

The Commission rejects the suggestion that the electricity bills should be prepared on the basis of the voters' list as the bills have to be prepared and delivered on the basis of the consumer database.

2.36.35 Provisions of Tariff Schedule and Conditions of Supply

2.36.35.1 Sub-station space for bulk connection

The Commission is of the opinion that the requirement of substation space for installation of transformers for bulk consumers is a genuine requirement and is unavoidable. At the same time, there is some merit in the objection that there is an element of discrimination between consumers when one consumer has to give the land free of cost to the DISCOM, and the transformer installed on this land is used to supply to other consumers

who have not contributed to the cost of land. However, this is not a matter within the scope of the ARR and Tariff Determination process. The Commission will discuss the feasibility and practicability of implementing some mechanism whereby the consumer who provides the land is compensated to some extent by sharing the cost of the land between the beneficiaries.

Since this is not a tariff related issue, the Commission shall take it up separately, accordingly not included the following provisions of the existing Tariff Schedule. However, till such time, the said provisions are amended they shall continue to apply.

"2.3 Unless otherwise agreed to or specified: All loads above 100 kW including lighting load under any category of supply shall normally be given on HT.

2.4 The Board/licensee may supply load above 100 kW on LT (Low Tension) under the following circumstances:

i) Where it is felt that installation of Board's/ licensee's substation at the applicant's premises apart from meeting the load of the applicant, shall also be beneficial to the Board/licensee in improving the distribution system in the area and for meeting the load requirements of other consumers. Under this category, the applicant shall provide built-up space for the sub-station as per the requirements of Board/licensee at a perpetual lease of Re.1/- per annum. Such consumers shall be billed under MLHT/LIP ((Mixed Load High Tension/Large Industrial Power) Tariff of supply at 11 kV (kilo Volt) with an additional charge of 10% to cover the cost of transformation losses and maintenance of 11 kV system. Load on LT upto 30% of the installed transformer capacity, subject to a maximum of 200 kW, shall be made available to the consumers, in whose premises the Board's/licensee's sub-station is installed.

ii) Where a consumer has load requirement of more than 100 kW but is not in a position to take the supply on 11kV due to non-availability of any space for electric sub-station, such consumers may be supplied load up to 200 kW/plot on LT system from Board's/licensee's general distribution network, subject to technical feasibility. Such consumers shall be billed under relevant category of tariff.

Board/licensee shall not connect installations, which include motors of 5 BHP (Brake Horse Power) and above, welding sets, battery chargers, induction/arc furnaces and rectifiers of any capacity, unless the same are provided with shunt capacitors (except equipment with built in capacitors) of adequate rating so as to maintain the average power factor above/at 0.85 (lag). The existing consumers having installations with 5 BHP & above motors, welding transformers, battery chargers, induction/arc furnaces and rectifiers of any capacity, shall also provide & maintain the required capacitors in proper working order, failing which the connection(s) shall be liable for disconnection without prejudice to the right of the Board/licensee to levy and recover the surcharge for Low Power Factor (LPF) as per the provisions of the Schedule."

2.36.35.2 Provisions for Assessment of Energy in existing Tariff Schedule

There have been divergent suggestions on provisions of assessment of energy, on issues such as number of hours, load factor for assessment of energy etc., from various stakeholders.

The theft, pilferage or unauthorised use of electricity shall be charged as per provisions of the Electricity Act, 2003 and Regulations of the

Commission and till such time the subject matter is covered by the Regulations, the following formula shall be used for assessment of consumption of energy.

Assessment of Energy in cases of theft/pilferage

Energy consumption assessment formula

Units assessed = $L \times D \times H \times F$, where

i) L is load (connected/declared connected/sanctioned load whichever is higher) in kW where kWh rate is applicable and in kVA where kVAh rate is applicable

ii) D is working days per month, during which theft/pilferage is suspected and shall be taken for different categories of use as below:

a) Continuous industry 30 days

b) Non-continuous industry 25 days

c) Domestic use 30 days

d) Agriculture 30 days

e) Non-Domestic (continuous)

viz. Hospitals, hotels and restaurants, guest houses, nursing homes, petrol pumps 30 days

f) Non domestic (general) i.e. other than (e)

25 days

- iii) H is use of supply hours per day, which shall be taken for different categories of use as below:
- a) Single shift industry (day/night only)

10 hrs.

b) Non-continuous process industry (day & night)

20 hrs.

- c) Continuous process industry 24 hrs.
- d) Non-domestic (general) including restaurants

11hrs.

Hotels, hospitals, nursing homes guest houses, petrol

pumps 20 hrs.

e) Domestic 8 hrs.

f) Agriculture 10 hrs.

iv) F is load factor, which shall be taken for different categories of use as below:

a) industrial 60 %

b) non-domestic 60%

c) domestic 40%

d) agriculture 100%

e) direct theft 100%

Pilferage of Energy in Temporary Connections

Pilferage of energy detected during marriages and other occasions for temporary connections shall be assessed as under:

Units assessed = $L \times D \times H$, where

L = Load (connected/declared connected/sanctioned load whichever is higher) in kW where kWh rate is applicable and in kVA where kVAh rate is applicable

D = No. of days for which supply is used

H = 12 hours

Note: i) In case the investigating officer has reasons to substantiate higher consumption pattern, other than proposed above in a particular case, it could be worked out giving reasons in his report. The competent authority will pass speaking orders.

ii) In case the assessment bill worked out on the above basis falls short of minimum charges /minimum consumption guarantee charges, as the case may be, the latter shall be applicable.

iii) The working hours for purpose of assessment in the cases of bonafide domestic use for operating domestic water pump, microwave ovens, washing machines and petty domestic appliances etc. shall not be considered for more than two hours working per day on 100% load factor and petty domestic appliances with fractional horse power capacity less than 200 watts e.g. mixers, grinders and hair dryers shall not be taken into account.

Assessment of Energy in Other Cases

When the meter is faulty

As and when the meter is detected to be faulty either by DVB or by consumer, the calculation for estimation of energy (for the period meter is defective) shall be made based on the pattern of consumption available for a period of past six months when the meter was functional and the pattern of consumption recorded in the six months succeeding the replacement of the defective meter. The final adjustment for the said period shall be made based on the pattern of consumption recorded during this total period of twelve months."

2.36.35.3 Violation of 'Performance Standards (Metering & Billing) Regulations' by DISCOMs

The DISCOMs are directed to strictly adhere to the guidelines set in the 'Performance Standards (Metering and Billing) Regulations'. In case there are any lapses on the part of the DISCOMs in adhering to these performance standards, then the consumers should come forward and report it to the Commission under the relevant provisions of the Regulations.

2.36.35.4 Clubbing of more than one connection for classification under SIP or LIP

The Commission is of the opinion that if separate connections have been taken in distinct portions of a building under different names, then the load should not be clubbed together for classification under SIP or LIP, unless it can be proved that the connections for one portion is used to supply other portion(s) or the connections are used in a unified premises.

2.36.35.5 Intimation for installation of Change-over switch

As regards intimation to the DISCOM for installation of the change-over switch, the Commission is of the opinion that it is in the consumer's interest to keep the DISCOM informed in this regard, as the definition of connected load clearly states that if two equipments are connected through a change-over switch (such that at any point in time only one of the two equipments can be used), then for the purposes of assessing the connected load, only the load of the higher rated equipment will be considered.

2.36.35.6 Material used by SPD contractors

The DISCOM is within its right to insist that the material used by the SPD contractor should conform to the specifications issued by the DISCOM as it is the responsibility of the DISCOM to ensure safety and system stability within its area of operations. Costing of spares is an operational matter and the Commission would not like to intervene in this matter. The objector should bear in mind that the DISCOMs are also subject to certain checks and balances and are subject to their audits. The Commission has also conducted sample checks on the procurement system followed by the

DISCOMs to ensure that due procedure is being followed.

2.36.35.7 Data extraction mechanism for DVB arrears

The software used by the DISCOM is upto the discretion and opinion of the DISCOMs management, and the Commission would not like to comment on this aspect. However, the Commission has conducted sample checks on the billing and collection data submitted by the DISCOMs. The Commission is of the view that the DISCOMs may not be asked to give access to its data extraction system to the Delhi Power Company Limited (DPCL) and TRANSCO. The Commission has also commissioned a study for designing and implementation of a Regulatory Information Management System (RIMS), which will cover all these aspects.

2.36.36 Concept of Meter Reading Cards

The Commission is of the view that such a kind of self-assessment is not practical. However, a pass book type of system, which records the consumption and payment history may be considered by the DISCOMs.

2.36.37 Energy Requirement and Power Shortage

The Commission has considered all these issues and has reconciled the discrepancy with the DISCOM. The Commission has projected the energy input requirement of the Petitioner on the basis of the projected sales, and the energy requirement has been balanced with the energy being sold by the TRANSCO.

2.36.38 Upgradation of Distribution system

The Commission has considered the views of the objector and has considered the R&M expenses and the capital expenditure programme in line with the requirements of the system.

2.36.39 Demand Forecasting

The Commission has verified the projected sales and computation of revenue by the DISCOMS after careful scrutiny and has rectified errors, wherever required, to arrive at the correct assessment of revenue. For FY 2003-04, the Commission has projected the category-wise sales based on the past trends.

3. Analysis of Annual Revenue Requirement

3.1 Introduction

Section 28 (5) of Delhi Electricity Reform Act, 2000, requires that a licensee shall provide to the Commission, at least 3 months before the ensuing financial year, all details of its calculation of the expected aggregate revenue from charges for that financial year, which the licensee is permitted to recover pursuant to the terms of its license. The section further stipulates that the licensee shall also furnish such further information as the Commission may reasonably require to assess the licensee's calculations.

Pursuant to the above stipulation, and consequent to restructuring of the DVB in July 2002, the Commission, in August 2002, issued the revised guidelines for the methodologies and procedures to be adopted by the TRANSCO and DISCOMs for filing of the ARR. As already explained in Chapter 2, according to the Policy Directions issued by the Govt. of NCT of Delhi, bulk supply tariff for supply of energy from TRANSCO to DISCOMs is required to be determined based on the paying capacity of each DISCOM. The forms contained in the guidelines call for a variety of information/data relating to expenditure, return, various performance parameters etc. Typically, the Annual Revenue Requirement of the licensee consists of the following major items:-

- (a) Expenses:-
 - Employee expenses
 - Administrative and General expenses
 - Repairs and maintenance expenses
 - Interest expenditure

- Depreciation
- (b) Return on Equity
- (c) Taxes on Income

The Commission has considered the various submissions made by the Petitioner over the course of the ARR and tariff determination process and has carefully analyzed the different heads of the expenditure to project the realistic level of allowable expenditure in FY 2002-03 (9 month period from July 2002 - March 2003) and FY 2003-04. The process of ARR determination extended beyond 31 March, 2003, and therefore the Commission obtained the details of actual expenses and revenue for nine month period July 2002-March 2003. The detailed analysis of each head of expense is discussed in the sections below. The Annual Revenue Requirement (ARR) has been determined on the following broad principles:

- For FY 2002-03, the Commission has considered the actual expenses and income of BYPL to determine the ARR after ensuring that the expenses satisfy the requirement of reasonable prudence
- For FY 2003-04, the Commission has estimated the expenses by considering a reasonable increase in the operating expenses such as Employee cost, A&G and R&M allowed for FY 2002-03, after annualization and considering the extent of capital and R&M works to be executed during FY 2003-04
- The Commission has first determined the ARR excluding power purchase expenses and then added the power purchase cost to estimate the Revenue Gap at existing BST.

In the following paragraphs, the various elements of ARR are discussed:-

3.2 Employee Expenses

3.2.1 Petitioner's Submission

In its Petition, BYPL has projected the employee expenses as Rs. 104.30 crore for the period July 2002 - March 2003. Further, the Petitioner has proposed capitalization @ 14.76% of the gross employee cost, thereby resulting in a net employee cost of Rs 88.91 crore. The Petitioner has justified the projected employee expenses on the basis that fresh recruitment of manpower was required in the fields of power distribution, financial management, billing etc.

For the purpose of projecting the employee expenses during FY 2003-04, the BYPL has assumed an increase of 6.74% in all the major components like salaries, DA, staff welfare expenses and other allowances over the annualized levels of FY 2002-03. The Petitioner has estimated employee expenses for FY 2003-04 at Rs 145.78 core., and after considering capitalization of the employee expenses, the net employee expenses estimated by the Petitioner works out to Rs 114.03 crore.

The Petitioner has estimated the contribution to Terminal Benefit fund @ 29.33% of the basic pay and DA taken together, 11% towards the leave encashment and 18.33% towards pension, gratuity etc.

3.2.2 Commission's Analysis

The Commission has analyzed the employee expenses proposed by the Petitioner along with the methodology adopted for estimation of the expenses. The employee cost proposed by BYPL for FY 2002-03 (nine months) is significantly higher than that proposed in the earlier order of the

Commission. During the technical sessions, the Commission directed BYPL to submit the actual employee expenditure incurred during the nine months of FY 2002-03. Accordingly, BYPL submitted the details of actual employee expenses at Rs 80.92 crore for the period July 2002- March 2003.

The Commission has analyzed the total actual employee expenses of the five successor entities, i.e. GENCO, TRANSCO and the three DISCOMS. As the total employee expenses of all the five successor entities during FY 2002-03 is slightly higher than the actual employee expenses of erstwhile DVB in FY 2001-02, the Commission has considered the actual employee expenses of each successor entity while determining their ARR.

During the Technical Sessions the Petitioner has revised the contribution to 26% of basic pay and DA taken together from the level of 29.33% submitted earlier. The Commission has considered the Terminal Benefit contribution at 26% of Basic Salary and Dearness Allowance taken together for the purpose of estimating this component of the employee costs. The difference between the actual terminal benefits for FY 2002-03 and the terminal benefits estimated at 26% contribution is however being considered as a part of the Terminal benefit projection for FY 2003-04.

The BYPL has further submitted the provisional accounts for the period July 2002-March 2003, in which employee expenses have not been capitalised. Since the assets capitalized during the nine months of FY 2002-03 are very minimal, no capitalization of the employee expenses has been considered by the Commission during FY 2002-03. Accordingly, the Commission has approved all the components of the employee expenses actually incurred by the Petitioner, aggregating to Rs 80.92 crore for FY 2002-03 (nine months).

For estimating the employee expenses for FY 2003-04, the Commission has projected each component of the employee expenses rather than applying a growth rate on the overall employee expenses of FY 2002-03. The critical assumptions made by the Commission with regard to the projections for FY 2003-04 are stated below:

- Salary: Growth of 3% considered in average salary per employee per month over FY 2002-03 levels.
- Dearness Allowance: Increase of 6.09% considered over the average DA per employee per month in FY 2002-03, assuming DA revision twice in a year.
- Adhoc payment on Corporatization: Projection based on Rs 500/- paid to each employee transferred from the Delhi Vidyut Board (DVB)
- Terminal Benefits: Contribution to Terminal Benefit Liability Funds considered at 26% of the Salary and Dearness Allowance for FY 2003-04. In addition, the difference between the actual contribution towards terminal benefit and the terminal benefit for FY 2002-03 estimated @ 26% of basic pay and DA, has been adjusted in the Terminal Benefit contribution approved for FY 2003-04.
- Other components: Other heads such as staff welfare, other allowances, medical reimbursements, bonus/ex-gratia, etc. considered on proportionate basis based on the actual expenses during FY 2002-03.

Based on the above assumptions, the employee expenses for FY 2003-04 have been approved at Rs 125.89 crore as against Rs 145.78 crore proposed by the Petitioner. For FY 2003-04, the Commission has

considered capitalization @ 10% of the gross employee costs.

The Table 3.1 provides a snapshot view of the employee expenses as proposed by BYPL in the Petition and as approved by the Commission.

Table 3.1: Employee expenses

(Rs.	Cr	01	e	1

Components	FY 2002-	03 (9 months)	FY	2003-04
Components	Petition	Commission	Petition	Commission
Salaries	37.13	44.35	52.84	60.00
Dearness Allowance	16.61	16.68	23.64	23.24
Terminal Benefits	14.24	9.00	20.27	28.01
Other Costs	36.32	10.89	49.03	14.63
Total Employee expenses	104.30	80.92	145.78	125.89
Less: expenses capitalized	15.39	0.00	31.75	12.59
Net Employee expenses	88.91	80.92	114.03	113.30

3.3 Administrative & General Expenses

3.3.1 Petitioner's Submission

In its Petition, the BYPL has projected gross A&G expenses of Rs 17.46 crore and net A&G expenses of Rs 14.88 crore for FY 2002-03 (nine months).

The Petitioner for the purpose of projecting the A&G expenses for the FY 2003-04 has assumed growth of 11% over the annualized levels of FY 2002-03 (nine months).

3.3.2 Commission's analysis

During the technical sessions, the Commission directed the BYPL to submit the actual A&G expenditure incurred during the nine months of FY 2002-03. BYPL submitted the actual A&G expenses incurred during FY 2002-03 (nine months) at Rs 7.75 crore. The Commission has analyzed the total actual A&G expenses of all the five successor entities i.e. GENCO, TRANSCO and three DISCOMS. The total actual A&G expenses of all the five successor entities is much less than the actual A&G expenses of erstwhile DVB for the year 2001-02.

Since the actual A&G expenses in well within the levels approved in the BST Order, the Commission considers the actual A&G expenses incurred by the Petitioner during FY 2002-03 (nine months) as reasonable. Hence, the Commission approves A&G expenses at Rs 7.75 crore for FY 2002-03 (nine months).

For FY 2003-04, the Commission has separately projected individual components of A&G expenses. The average growth rate in most of the components has been considered at 8% over the annualized amounts for FY 2002-03 while some of the components such as insurance, and consultancy charges, have been considered at annualized levels of FY 2002-03. The total A&G expenses for FY 2003-04 estimated by the Commission works out to Rs 10.81 crore. The Commission has however not capitalized A&G expenses.

Table 3.2 provides a summary of the A&G expenses as proposed by the Petitioner and as approved by the Commission.

(Rs. Crore) **Table3.2: A&G Expenses** FY 2002-03 (9 months) FY 2003-04 Components Commission Petition Petition Commission Gross A&G 17.46 7.75 26.24 10.81 expenses Less: 2.58 0.00 5.72 0.00 expenses capitalized Net A&G 14.88 7.75 20.52 10.81

3.4 Capital Investment & R&M Expenses

expenses

In the context of the capital expenditure and R&M works, the Commission is of the opinion that since the distribution system inherited by the BYPL from the erstwhile DVB was in a dilapidated condition, substantial improvement is required to be undertaken for strengthening of the system. The improvement in system through capital works can

be achieved over a period of time, hence during the initial period, substantial R&M works was required to be undertaken during FY 2002-03, in order to maintain system reliability and ensuring quality supply to consumers. BYPL commenced operations in July 2002, when the system was overloaded due to high temperature coupled with high humidity arising from the severe summer. Since the need of the hour at that time was to attend to breakdown repairs on immediate basis, BYPL could not have taken up capital works at that time, and the focus was primarily on R&M. Consequently, the capital expenditure incurred in FY 2002-03 was very low. The Commission understands and accepts the compulsions of the BYPL in this aspect. However, the Commission opines that going forward, capital expenditure has to be undertaken on priority, and must accordingly intensify during FY 2003-04.

Bulk of the capital works planned by BYPL would be executed during FY 2003-04 and get completed by June 2004. Substantial portion of capital works proposed by BYPL is under APDRP scheme and the

projects proposed to be undertaken under these schemes have been approved by technical agencies, viz. WAPCOS and PGCIL.

According to the APDRP Scheme of the Central Government, all the approved schemes under APDRP are to be executed by June 2004. The Commission expects that most of the APDRP schemes would be

completed during FY 2003-04 for strengthening the system, improving reliability and to cater to the additional load in the system.

The Commission is also aware that one of the reasons for delay in APDRP scheme is delay in release of Grants and Loans under the APDRP funding scheme. The Commission has taken up the matter with the Government to expedite the

release of funds under APDRP Scheme. The Commission is of the opinion that the schedule for executing the capital works should not suffer due to delay in release of funds from the Government. In case of delay in release of APDRP funds, the BYPL may consider alternative sources of funding towards these capital investments. However, BYPL has to obtain prior approval for such changes in the financing mix.

The Commission expects that the execution of capital works will result in strengthening the distribution system, which in turn shall call for lesser R&M works. For instance, the frequent transformer failures require more R&M works, but with the replacement of transformers under various capital works schemes, the rate of transformer failure will fall thus reducing the overall value of R&M works. However, the benefits of capital investment under APDRP scheme and in non-APDRP schemes would start accruing upon the completion of capital works under these schemes. At the same time, the BYPL shall need to prudently shift the focus of R&M from emergency repairs to preventive maintenance and other areas such as improving safety and service.

In the above context, another relevant point is that the works shall be progressively completed over the year and benefits of capital works shall start flowing accordingly. In the meantime, to meet the summer crisis and to cater to the additional load, substantial R&M works will also be required during the year FY 2003-04.

Considering these above aspects the Commission

Table 3.3: Investment Plan (Rs. Crores)

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Works	Total for 2 years (upto June 2004)	FY 2002-03 (9 months)		FY 2003- 04
	Petition	Petition	Actual	(Revised)
Total	427	129	42	386

has analysed the Capita Investments, R&M works submitted by the Petitioner, and the same are discussed below.

3.4.1 Investments

3.4.1.1 Petitioner's submission

In its Petition, the BYPL has proposed an investment of Rs. 427 crore during the period July 2002 to June 2004, comprising Rs 291 crore under APDRP schemes, Rs 107 crore as deposit works and the remaining Rs 29 crore as non-APDRP works. BYPL has proposed capital investments in the following areas:

- Augmentation and strengthening of network
- Installation / repair of capacitors
- Loss reduction
- Energy Auditing
- Other capital expenditure like land for new grid stations/sub-stations, construction improvement of buildings, procurement of fault locating vans, IT backbone to streamline operations and procurement communication equipment to expedite information flow between various offices/personnel.

During the Technical Sessions, the Commission directed the Petitioner to submit the status of the actual capital expenditure made during the period July 2002 to March 2003 and the preparedness to execute the capital investment proposed during FY 2003-04.

Accordingly, the BYPL submitted the details of the actual capital investments for the period July 2002 to March 2003 at Rs 41.58 crore and the revised investment plan for FY 2003-04 at Rs 386 crore as shown in Table 3.3.

3.4.2 Commission's Analysis

The Commission has analyzed the submissions made in the Petition and the subsequent revisions proposed by the Petitioner in the area of investments. The Commission has held detailed discussions with the Petitioner and scrutinized the investments already made as well as the investments proposed to be made, especially with regard to the preparedness for the summer months. The Commission has conducted sample checks on the investments starting from the material procurement process to installation of equipment and issue of completion certificates.

The actual investments made by the Petitioner during July 2002 - March 2003 is only Rs 41.58 crore as against the original investment plan of Rs 129 crore for the period. For FY 2002-03 (nine months), the Commission has considered the actual investments made during the period for ARR determination.

Further, as explained subsequently, the Commission has considered the cost of new meters and transformers installed against defective meters and transformers as a part of capital investment, and not R&M expenses as proposed by BYPL. Thus, the total investments considered by the Commission for the period July 2002 to March 2003 is Rs 56.36 crore.

The Commission has considered the investments in FY 2003-04 based on following aspects:

In regard to investments in FY 2003-04, the Commission

expects that substantial portion of APDRP schemes will be completed in FY 2003-04. The Commission expects 90% of the total APDRP works to be undertaken upto June 2004, to be executed during FY 2003-04. The Commission directs the Petitioner to ensure that the investments proposed under APDRP

schemes for FY 2003-04 must be completed to avail the benefits of the scheme and quarterly progress report is submitted to the Commission. Further, the Commission also directs the Petitioner to obtain Commission's approval for all the capital investment schemes.

The Commission has considered the investments of Rs 233.60 crore under APDRP Schemes for FY 2003-04.

The Commission has considered 80% of total non-APDRP investments (actual investments for the ninemonth period and proposed investment for FY 2003-04) to be completed by the end of FY 2003-04. Thus, the investments considered by the Commission under Non-APDRP schemes during FY 2003-04 works out to Rs 5.59 crore.

The treatment of deposit works has been elaborated in section 2.32. The Commission has considered the total investments against Deposit works as proposed by the Petitioner. However, in the ARR determination, the Commission has considered funding of 50% of the investments proposed against deposit works.

The summary of the investments proposed in the Petition and as considered by the Commission is provided in Table 3.4.

Table 3.4: Capital investments

(NS. CIOIE)

Description	FY 2002-03 (9 months)		FY 2003-04	
Description	Petition	Commission*	Petition	Commission
Total Investments	129.00	56.36	386.00	335.50

*Includes Rs 14.78 crore on account of cost of meters and transformers shifted from R&M Expenses to Capital Expenditure

3.4.3 R&M Works

3.4.3.1 Petitioner's submission

The BYPL has projected R&M expenses of Rs 42.00 crore in FY 2002-03 (nine months), and Rs 54.30 crore for FY 2003-04. The Petitioner has stated that

heavy expenditure was required to be incurred mainly on installation and maintenance of transformers and capacitor banks. The Petitioner has also planned preventive maintenance schedule in order an efficient a distribution system.

3.4.3.2 Commission's analysis

The Commission has analyzed the R&M expenses proposed by the Petitioner. During the Technical Sessions, the Commission directed BYPL to submit the actual R&M expenditure incurred during the nine months of FY 2002-03. BYPL submitted the actual R&M expenditure incurred during the nine months of FY 2002-03 at Rs 37.31 crore.

The Commission directed BYPL to submit the detailed break up of R&M Expenses, which BYPL submitted. On examination of the composition of R&M Expenses, it was found that BYPL has considered the cost of meters and transformers replaced against defective meters and defective transformers in the R&M expenses. Further, the cost towards equipment of street lights and maintenance contracts for lighting mast was included in R&M Expenses.

As regards the meters replaced against defective meters, the Commission is of the opinion that as new meters have been installed and most of the defective meters cannot be repaired and used again, the cost of new meters should be considered in the Capital Investment.

Regarding replacement of transformers, the Commission opines that ideally the defective transformers should be replaced with repaired transformers and not with new transformers. In this regard, BYPL informed the Commission that during the initial stages when BYPL commenced operations, the repaired transformers available in the stores were negligible and hence BYPL has

replaced the defective transformers with new transformers instead of replacing with repaired transformers. As new transformers have been put in use, the cost of these new transformers should be considered as a part of the Capital Investment and not part of R&M works.

Accordingly, the Commission has considered the cost of around Rs 14.78 crore towards new meters and transformers in the Capital Investments and not in the R&M Expense as proposed by BYPL.

Further, the cost of around Rs. 1.18 crore towards equipment of street lights and maintenance contracts for lighting mast has not been considered as a part of R&M Expense. After deducting the cost of new meters and transformers and adjusting for the cost towards new equipment of street light maintenance, the actual R&M expenses for the period July 2002 - March 2003 works out to Rs 21.35 crore. The Commission has approved the R&M expenses at the level of Rs 21.35 crore for FY 2002-03 (nine months).

As elaborated in earlier section, the Commission expects that with the execution of capital works under various schemes, the extent of R&M works will reduce over a period of time thus reducing the R&M expenses.

In view of the forgoing considerations, for FY 2003-04, the Commission has estimated the R&M expenses at Rs 31.31 crore, based on actual R&M expenses for the nine months of FY 2002-03 and considering the other factors such as system requirements etc.

The Commission directs the Petitioner to maintain a separate record of the items issued from the Stores for the R&M works and submit the same to the Commission along with the details of actual R&M works carried out at the end of each quarter. The

Report on transformer failure rate should also be submitted on a quarterly basis along with the above data on R&M items issued.

Table 3.5 provides a summary of the R&M expenses of BYPL, as proposed by the Petitioner and as approved by the Commission.

(Rs. Crore) Table 3.5: R&M Expenses FY 2003-04 FY 2002-03 (9 months) Component Petition Commission Petition Commission Total R&M 42.00 21.35 54.30 31.31 expenses

For estimating the other components of the Annual Revenue Requirement such as Interest Charges, Depreciation, Return on Equity and Free Reserves, it is essential to analyse the Investments and the Means of Financing.

3.5 Asset Capitalization

3.5.1 Petitioner's Submission

In its Petition, the BYPL has proposed to capitalize Rs 102.63 crore of investments made during FY 2002-03 (nine months) in the same financial year. For FY 2003-04, the Petitioner has proposed capitalization to the extent of Rs 281.11 crore.

In the subsequent submissions made by the the Petitioner, actual assets capitalized during FY 2002-03 (nine months) have been reflected at Rs 7.87 crore.

3.5.2 Commission Analysis

The Commission has analyzed the capitalization proposed in the ARR Petition and the subsequent submissions made by the Petitioner and has considered the capitalization of assets in FY 2002-03 on the basis of actual capitalization during FY 2002-03. Further, the Commission has also

considered the capitalization of new meters and transformers (considered by Commission as a part of capital investment) as these replacements have already been made.

The Commission is of the opinion that it is not practically possible to capitalise the entire

> investments made during the year in the same financial year. There will always be some schemes against which the works will be in progress and the entire investment against those schemes will not be completed during

the year.

For FY 2003-04, capitalization has been considered based on the assumption that the Capital Works in Progress (CWIP) carried forward from FY 2002-03 and 80% of the fresh investments proposed during FY 2003-04 will be capitalized during FY 2003-04. Based on this assumption, the Commission has considered capitalization to the extent of Rs 312.13 crore during FY 2003-04.

The summary of asset capitalization and the closing balance of original fixed assets at the end of the financial year as proposed in the Petition, and as

Table 3.6:		(Rs. Crores)			
Commonant	FY 2002-	03 (9 months)	FY 2003-04		
Component	Petition	Commission	Petition	Commission	
Opening balance of fixed assets	360.00	360.00	462.63	382.70	
Addition during the year	102.63	22.70	281.11	312.13	
Closing balance of fixed assets	462.63	382.70	743.74	694.83	

Table 3.6: Asset Capitalisation

considered by the Commission is summarized in Table 3.6

3.6 Depreciation

3.6.1 Petitioner's submission

The BYPL submitted that fixed assets worth Rs 360 crore were transferred to it through the Transfer Scheme. Further the Petitioner proposed additions to fixed assets at Rs 102.63 crore during the nine

months of FY 2002-03 and Rs 281.11 crore during FY 2003-04. BYPL proposed the depreciation charges @ 6.69% on the original cost of fixed assets at the beginning of the respective years. For FY 2003-04, the Petitioner has assumed that all the assets would be added during the mid of the period 1 April,2003 to 31 March,2004 and depreciation has been charged accordingly. Based on these principles, the Petitioner proposed the depreciation charges at Rs 21.70 crore for the nine months of FY 2002-03 and Rs 49.93 crore for FY 2003-04.

3.6.2 Commission's Analysis

From an accounting perspective, Depreciation is a charges to the Profit and Loss account to reflect a measure of the wearing out, consumption or other loss in value of a depreciable asset arising from use, efflux of time or obsolescence through technology and market changes. Depreciation is calculated as a fair charge on the value of the asset in each accounting period over the expected useful life of the asset.

From a regulator perspective in the electricity sector, Depreciation is an important element of fixed cost. Depreciation is not a cash outflow for a utility and it is built into the tariff computation with a view to providing the utility a source of funding to repay installments of debt capital. In the real world, few lenders extend commercial loans at tenures beyond 5-10 years, which is a much lower figure than the useful life of most plant and equipment. Therefore, if accounting rates of depreciation were to be used for tariff computation, a utility is unlikely to be able to generate sufficient cashflow from operations to service debt capital. Therefore, regulatory practice may allow utilities to build in a higher depreciation in their tariffs, thereby enabling them to repay loans within a reasonable horizon (that is acceptable to lenders). In case the quantum of loan repayment exceeds the amount under depreciation, the Utilities may be allowed to build a higher depreciation (also known as 'advance against depreciation') into their tariffs, so as to be able to service the loans. Once the loan is repaid, the excess depreciation charged by the Utility is adjusted against the depreciation due in future years, by not allowing depreciation till such time the normal cumulative depreciation matches the actual cumulative depreciation charged.

BYPL has not taken any loan in FY 2002-03 and hence there is no incidence of loan repayment. However, the BYPL has proposed to utilize the unutilized depreciation to fund its capital investment. The Commission has considered BYPL's proposal and is of the opinion that utilizing the depreciation to fund the capital investment is appropriate, and has hence considered the unutilised depreciation as a means of finance for capital investment.

3.6.2.1 Asset Block on which depreciation is applicable

The BYPL has considered depreciation expenses on the assets capitalized during FY 2002-03 in accordance with the Companies Act, 1956. However, Schedule VI of the Electricity (Supply) Act states that depreciation expenditure is allowed only on the Gross Fixed Assets at the beginning of the year. As BYPL came into existence on 1 July 2002, the depreciation expense for FY 2002-03 should be computed on the basis of the GFA as on 1 July 2002.

In the BST Order of February 2002, the Commission had directed the DISCOMs and the TRANSCO to submit their Fixed Asset Registers (FAR) by 30 June 2002. However, the Fixed Assets Register has not been submitted even at the time of filing the ARR Petition with the Commission in March 2003.

Subsequently, BYPL submitted the Fixed Assets Register in May 2003. This FAR does not provide details of the date of acquisition of all assets, fair life thereof and the cost of each asset. The completeness and non-omission of any item in this respect has not been certified by the BYPL. The Commission has taken a very serious view of the non-submission of the detailed FAR, despite the Commission granting sufficient opportunities to the Petitioner for submission of the FAR. The Commission hereby directs the petitioner to remove all the shortcomings in the FAR by 31.07.2003.

The Transfer Scheme notified by the GNCTD on 20.11.2001 stipulates the opening Balance Sheet of all the companies, which provides details of gross fixed assets, accumulated depreciation and net fixed assets for each company. The valuation of the assets is based on the business valuation method. For all practical purposes, in the absence of availability of the data in respect of historical cost of assets, this valuation methodology may have to be used for estimating the depreciation in future years.

Accordingly, the Commission has computed the depreciation expense for FY 2002-03 based on the GFA as on 1 July 2002. For FY 2003-04, the Commission has computed depreciation on the opening GFA as on 1 April 2003, by adding the assets capitalized during FY 2002-03.

3.6.2.2 Depreciation Rate

Keeping in view the non-availability of the Fixed Asset Register, in the BST Order the Commission had considered a weighted average depreciation rate of 6.69% based on the weighted average depreciation rate of DVB's transmission and distribution assets in FY 1999-00 and FY 2000-01.

In the absence of the detailed FAR, the Commission has considered other options to assess the depreciation due to the Petitioner. The bulk of the fixed assets of the BYPL are expected to be classified under lines and cable network. The latest Ministry of Power (MoP) depreciation norms for licensees notified in March 1994 specify the fair life of the lines and cables network at distribution voltages as 25 years. The Commission has applied the principle of depreciating the asset over its residual life, such that 90% of the asset value is depreciated over the fair life of the asset. As the bulk of the assets would be classified under the lines and cables network, the average fair life of the asset base has been considered as 25 years for the purpose of estimating the depreciation. In this method, the average depreciation for the lines and cable network works out to 3.75%. The Commission has hence considered the depreciation rate as 3.75% for the purposes of this ARR. The Commission is of the view that in the future, the depreciation computed at the rate of 3.75% may be higher or lower than the rate based on the actual FAR, and is of the opinion that this can be adjusted against the actual depreciation chargeable, under the truing up mechanism.

The Commission is of the view that as depreciation is a non-cash expenditure and there is no scheduled loan repayment, the reduction in the depreciation expenditure will not affect the Petitioner's operations as all legitimate and prudent expenditure is being considered for the purposes of determination of the ARR. It, therefore, follows that when the loan repayment commences in future, then the Petitioner may require higher cashflow to meet the repayment obligations. In such case, the Commission opines that it would be appropriate to consider various mechanisms to enable building in

a higher cashflow, including an advance against

Expenses and one month cash expenses i.e., salary and A&G expenses.

Table 3.7: Depreciation

		(Ks. Crore)		
Component	FY 2002-03 (9 months)		FY 2003-04	
Component	Petition	Commission	Petition	Commission
Original cost of fixed assets	360.00	360.00	462.63	382.70
Addition during the year	102.63	22.70	281.11	312.13
Depreciation charges	21.70	10.13	49.93	14.35

The utilization of depreciation as considered by the Commission is summarized in Table:3.8

depreciation.

Table 3.7 provides a summary of the Depreciation as proposed by the Petitioner and as approved by the Commission for both the years.

3.6.2.3 Depreciation Utilisation

As there is no loan repayment liability during the period July 2002 to March 2003 and during FY 2003-04, the repayment liability is very nominal, the Commission has considered utilization depreciation for meeting the working capital requirement. Since the depreciation amount is insufficient to meet the working capital requirements during the respective years, there is no unutilized depreciation left to fund the capital expenditure. The utilization of depreciation has been considered in accordance with the following priority order

- Loan Repayment, if any
- Capital Investment
- Working Capital Requirement

The Working Capital Requirement has been estimated by considering two months R&M

Table 3.8: Utilisation of depreciation(Rs. Crore)

Description	FY 2002-03 (9 months)	FY 2003-04
For Debt Repayment	0.00	4.34
For Working Capital Requirement	10.13	10.02
For Capital Investment	0.00	0.00
Total Depreciation	10.13	14.35

3.7 Means of Finance

3.7.1 Petitioner's Submission

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The BYPL has proposed funding of the capital expenditure through a mix of APDRP funds, depreciation, consumer contribution, cash, internal accruals and domestic loans. The means of finance proposed for the capital investments suggested in the Petition and the revised means of finance for revised capital investments as submitted by the

Table 3.9: Means of Finance (Rs. Crore)

Source of Funds	FY 2002-03 (9 months)	FY 20	03-04
	Petition	Petition	Revised
Consumer Contribution	8.00	10.00	10.00
Cash	2.00	2.00	
APDRP Grant			82.25
APDRP Loan			82.25
Depreciation	-	ı	22.20
Internal Accruals	14.20	24.81	24.80
Commercial Debt	104.60	261.16	164.50
Total Funds	128.80	297.97	386.00

Petitioner is summarised in the Table 3.9.

3.7.2 Commission's Analysis

The Commission has analyzed in detail the Means of Finance proposed by the Petitioner in its ARR Petition and the subsequent submissions. The Commission's views on Means of Finance are as follows:

3.7.2.1 APDRP Funds

In its Petition, the BYPL has submitted that APDRP funds have not been considered as a source of financing the capital expenditure owing to the

Table 3.10: Means of Finance (Rs. Crore)

Source of	FY 2002-03 (9 months)		FY 2003-	04
fund	Petition	Commission	Petition	Commission
Consumer Contribution	8.00	8.0	10.00	10.67
Cash	2.00		2.00	
APDRP Grant				65.49
APDRP Loan				65.49
Internal Accruals	14.20	12.95	24.81	22.43
Commercial Debt	104.60	30.21	261.16	123.28
Depreciation	-		-	
Total Funds	128.80	51.16	297.97	287.35

uncertainty of timing of its availability due to securitization issues between Gol and GNCTD.

The tripartite agreement between GoI, GNCTD and Utilities of Delhi has been executed in March 2003. The Commission is of the view that with the execution of this agreement, the APDRP funds will be available during FY 2003-04. The Commission has also written a letter to the Govt. for expediting the release of APDRP funds. Therefore, the Commission has considered the APDRP funds as available to finance the capital investments during the year 2003-04.

The Commission has first considered funding of the capital expenditure through a mix of consumer contribution, APDRP funds, internal accruals and commercial borrowings. The depreciation during the two years is insufficient to meet the working capital requirements during the respective years, hence there remains no depreciation to fund the capital expenditure. For FY 2003-04, the APDRP funds equivalent to 50% of total APDRP investments for the period July 2002 to March 2004 have been considered as a source of funding. The balance funds requirement has been considered to be met by a combination of Equity (Free Reserves) and Debt. The Debt: Equity ratio of 70:30 (normative debt:equity ratio) has been considered for funding the balance fund requirement

The Table 3.10 provides a summary of the Means of Finance as proposed by the Petitioner and as approved by the Commission for both the years.

3.8 Interest Expenditure

3.8.1 Petitioner's Submission

The Petitioner has assumed an interest rate of 12% and a repayment period of 10 years on the commercial borrowings while estimating the interest expenditure. Further, the Petitioner has considered the interest on estimated working capital. The total interest expenditure estimated by the Petitioner in the Petition is Rs 1.76 crore for the period July 2002 to March 2003 and Rs 31.92 crore for FY 2003-04.

3.8.2 Commission's Analysis

The Commission has assumed the following parameters for computing the interest charges on APDRP Loans and Commercial Borrowings, considered as source of funds for meeting the total fund requirement towards capital investment.

- On APDRP loan, an interest rate of 12% has been assumed
- On commercial borrowings, an interest rate of 11% has been assumed considering prevailing long term lending rates.

The unutilised depreciation after debt repayment has been considered to meet the working capital requirement. As unutilised depreciation is inadequate to meet the entire working capital requirement, the Commission has considered the working capital loans to meet the balance working capital requirement and the interest on this loan has been estimated at rate of 12%.

As elaborated in section 3.7, the Commission has considered a notional debt equity ratio of 70:30 and correspondingly the interest expense has been allowed on the notional debt component.

The summary of interest charges as proposed in the Petition and as considered by the Commission is provided in Table: 3.11

Table : 3.11: Interest Charges

(Rs. Crores)

	FY 2002-03 (9 months)		FY 2003-04	
Component	Petition	Commission	Petition	Commission
Interest charges	1.76	2.48	31.92	15.44

3.9 Arrears to Holding Company

In the Transfer Scheme, notified by the Government of NCT of Delhi on 20th November, 2001, the following has been stated:

"All the receivables from sale of power to consumers of the erstwhile Board other than to the extent specifically included in Schedules D, E and F shall be to the account of Holding Company. The DISCOMs will be authorized to realize the receivables of the Holding Company in their respective area of supply. Upon realization of such receivables of the Holding Company the same shall be shared between the Holding Company and the DISCOMs in the ratio 80:20".

These specified receivables are the past dues against the power sold by the erstwhile Delhi Vidyut Board (DVB), prior to its restructuring. These receivables have been passed on to the distribution companies and are reflected in their balance sheets, as assets. According to the terms of the Transfer Scheme, the Holding Company is to receive 80% of the receivables while the balance 20% would be retained by the distribution

companies. In the ARR Petitions filed by the three distribution companies, while 20% of the receivables have been accounted as non-tariff income, the remaining 80% is treated, as expense, and passed on to the Holding Company. This would, of course, increase the revenue gap which would, in turn, imply that tariffs would have to be raised.

It is the considered view of the Commission that the 80% of the receivables which is going to the Holding Company should, in fact, go to

Delhi Transco Ltd., to be ploughed back into the sector. This would be the most logical course of action since at the time of the calculation of the Bulk Supply Tariff in February, 2002, the entire receivables was taken into account as an income being generated within the sector. It is to be borne in mind that, as mentioned above, in case 80% of the receivables is repatriated to the Holding Company, the consumers of Delhi would have to incur the burden by way of an enhanced tariff shock. In this context, the Commission also notes that in determination of AT&C losses, no distinction is made between the amounts realized against current billing and amounts realized against the past receivables. The Commission is of the view that it could not possibly have been the intention of the GNCTD, while drafting the Transfer Scheme, that the expense is passed on to the consumers. It would, indeed, be ironical if the consumers of Delhi were to bear the burden of the receivables, estimated at close to Rs. 200 crore during financial year 2002-03 (09 months) and financial year 2003-04, in the post privatization period In the case of BYPLL, the actual arrear figures for the year 2002-03 are Rs. 25.82 crore and for FY 2003-04 the arrears has been estimated as Rs. 23.38 crore.

In view of the above, the Commission asks the GNCTD to revisit this matter and issue an appropriate amendment to the Transfer Scheme. In so far as the present Petitions are concerned, the Commission has considered 80% of the collected arrears remaining within the sector while determining the annual revenue requirements.

3.10 Return on Equity

3.10.1 Petitioner's Submission

The BYPL has submitted that the Policy Directions stipulate a return of 16% on equity and free reserves invested towards the capital investments. The BYPL has considered 100% of the Return on Equity earned during the year as free reserves to be invested towards the funding of capital investments. The BYPL has therefore computed Return on Equity @ 16% on the equity according to the opening balance sheet and 100% of the free reserves. BYPL has estimated Return on Equity for the period July 2002 to March and for FY 2003-04 at Rs 15.82 crore and Rs 24.81 crore, respectively.

3.10.2 Commission's Analysis

The Commission has undertaken a detailed analysis of the investments and means of finance proposed by the Petitioner. Details of investments and means of finance considered by the Commission have been provided in earlier sections.

According to the Policy Directions, the Return of 16% is applicable on Equity and Free Reserves invested into the assets. However, the approval of Commission has been obtained for the free reserves invested towards the funding of the capital investments.

As elaborated in the earlier sections, the Commission has considered funding of investments through internal accruals to the extent of Rs 12.95 crore during FY 2002-03 (nine months) and Rs 22.43 crore during FY 2003-04, respectively.

The Petitioner has included return on the entire amount of free reserves used to fund capital expenditure during the year in the revenue requirement. The Commission is of the opinion that the capital investment will be spread across the year and free reserves will also be correspondingly invested across the year. Therefore, for estimating the return on equity, the Commission has considered the average of the opening and closing free reserves used for funding capital investments.

Table 3.12: Return on Equity estimated by the

Petitioner: (Rs. Crores)	
Component	FY 2002-03 (9 months)	FY 2003-04
Equity Capital	116.00	116.00
Free Reserves	15.82	39.04
Total Equity & Free Reserves	131.82	155.05
16% Return on Equity & Free Reserves	15.82	24.81

Based on this, the Commission has estimated the Return on Equity and Free Reserves at Rs 14.70 crore for the period July 2002 to March 2003 and Rs 22.43 crore for FY 2003-04. The extent of Free Reserves considered for funding capital investments and the return on equity and free reserves proposed in the Petition and considered by the Commission for determining ARR is summarised in the Table:3.12 and Table 3.13.

Table 3.13: Return as estimated by the Commission (Rs. Crores)

	(10: 010103)				
	Component	FY 2002- 03 (9 months)	FY 2003- 04		
Α	Equity Capital	116	116		
В1	Opening Free Reserves	0.0	12.95		
B2	Addition during the year	12.95	22.43		
B3= B1+B2	Total Free Reserves	12.95	35.37		
C=(B1+B3)/2	Average Reserves	6.47	24.16		
D=A+C	Total Equity & Free Reserves	122.47	140.16		
E=D*16%	16% Return on Equity & Free Reserves	14.70	22.43		

3.11 Taxes on Income

3.11.1 Petitioner's Submission

In the Petition, the BYPL has submitted that the taxes on income has been calculated at the rate of 36.75% (prevailing tax rate for companies plus surcharge @ 5%) on the grossed up value of (a) allowable profits and (b) contingency reserve assets

3.11.2 Commission's Analysis

The Commission would like to highlight that the tax liability as estimated by the Commission for FY 2002-03 (nine months) has turned out to be much lower than the tax liability estimated by the Petitioner in the ARR Petition which was derived by the grossing up method. This is mainly on account of the difference in depreciation expenses allowed under the Income Tax Act and depreciation as per the books of Accounts. The Petitioner is allowed a higher depreciation under the Income

Tax Act, on account of which the taxable income and hence the income tax is lower. The Commission has hence considered the tax liability as estimated

based on the Provisional Accounts in the ARR for FY2002-03.

By the same token, it is expected that the tax liability in FY2003-04 would also be lower than the tax liability projected in the ARR Petition for FY2003-04. The Commission has hence attempted to project the income tax liability more realistically by the following method:

The RoE assured to the Petitioner is the regulatory Profit after Tax. The Profit before Tax has been computed by dividing Profit after Tax by (1 -Income Tax rate). The regulatory depreciation considered by the Commission has then been added to the regulatory PBT, while the estimated income tax depreciation has been deducted from the above sum, to arrive at the PBT in line with the Income Tax Act. The income tax depreciation has been estimated by applying the class-wise IT depreciation rates to the class-wise asset details submitted by the Petitioner in the summary FAR. As PBT comes out as negative, the Minimum Alternate Tax (MAT) will be applicable on the Profit before Income Tax (PBIT), in accordance with the IT Act. The actual tax liability will be considered by the Commission under the 'truing up' mechanism in case there is a difference between the actual tax liability and the estimated tax liability.

The Commission also recognizes the fact that in the above method of estimating tax liability, there is a possibility that in some years, the tax liability may be higher in the scenario when tax depreciation is lower than the book depreciation.

Table 3.14: Taxes on income

(Rs. Crore)

Component	FY 2002-	03 (9 months)	FY 2003-04		
Component	Petition	Petition Commission Petition Commis		Commission	
Taxes on income and profits	10.53	0.00	16.57	2.69	

The Table 3.14 provides the taxes on income as proposed by the Petitioner and as considered by the Commission for determining the ARR.

3.12 Total Expenditure

The tables 3.15 provide a summary view of the various expenses as proposed by the Petitioner and as approved by the Commission for FY 2002-03 (nine months) and FY 2003-04. Detailed analysis of each expense head has already been provided in the above sections.

Table 3.15: Total Expenditure Excluding Power Purchase Cost (Rs. crore)

	FY 2002-	03 (9 months)	FY 2003-04		
Description	Petition	Commission	Petition	Commission	
Employee expenses	104.30	80.92	145.78	125.89	
A&G expenses	17.46	7.75	26.24	10.81	
R&M expenses	42	21.35	54.30	31.31	
Depreciation	21.70	10.13	49.93	14.35	
Interest charges	1.76	2.48	31.92	15.44	
Arrears to Holding Company	26.5	20.66	24.00	18.71	
Other Admissible expenses	1.00	0.00	1.00	0.52	
Total Gross Expenditure	214.72	143.28	333.17	217.04	
Less: Expenses capitalized	17.97	0.00	47.13	12.59	
Total Net Expenditure	196.75	143.28	286.04	204.45	
Contingency Reserves	2.31	1.76	3.72	1.82	
Income Tax	10.53	0.00	16.57	2.69	
Installment of Written Down amounts	0.08	0.00	0.08	0.00	
Total Appropriations	12.92	1.76	20.37	4.51	
Net Expenses incl. Spl Appropriations	209.67	145.04	306.41	208.96	

3.13 Non Tariff Income

3.13.1 Petitioner's Submission

In its Petition, the BYPL has projected non-tariff income of Rs 15.07 crore for FY 2002-03 (nine months) and Rs 20.95 crore for FY 2003-04. The Petitioner has projected a 2% growth in the income from sale and repair of lamps during FY 2003-04. For the purpose of estimating the rebate on power purchases, the Petitioner has considered a rebate of 2.5% per month for the number of days payment

is made before the due date. The commission on collection of Electricity Duty has been estimated @3% of the total electricity duty collected during the respective years.

3.13.2 Commission's Analysis

During the Technical Sessions, the BYPL on Commission's directions submitted the actual Other Income during the nine months of FY 2002-03. Accordingly, BYPL submitted the details of the actual Non-Tariff Income during the period July 2002 to March 2003 at Rs 13.28 crore. The income from the maintenance of streetlights, which has been considered by Petitioner in revenue from tariffs, has been considered by the Commission under non-tariff income. The commission on collection of Electricity Duty has been estimated at 3% of the electricity duty actually collected during FY 2002-03. For the remaining components, Commission has approved the figures based on the actual income submitted by the Petitioner.

The Commission approves non-tariff income at Rs 13.28 crore for FY 2002-03 (nine months).

For FY 2003-04, the Commission has projected non-tariff income based on the following assumptions

Income from compulsory investments estimated on the basis of level of compulsory investments at the end of FY 2002-03, in accordance with the Schedule VI of the ES Act 1948.

Rebate on power purchase for
FY 2003-04 has been estimated
based on actual rebate earned during 9 months of
FY 2002-03.

 Income from maintenance of street lights considered by annualizing figures for 12 months based on actual income for 9 months of FY 2002-03

 Commission on the collection of the electricity duty based on 3% of the Electricity Duty projected to be collected by the Petitioner.

Based on these assumptions, the

Commission has estimated the non-tariff income for FY 2003-04 at Rs 18.08 crore.

The Table 3.16 provides a summary of the Non-tariff Income, as proposed by the Petitioner and as approved by the Commission.

3.14 Revenue Requirement Excluding Power Purchase Cost

The Revenue Requirement excluding Powe

Table 3.16: Non-Tariff Income

Components	FY 2002-	03 (9 months)	FY 2003-04	
	Petition	Commission	Petition	Commission
Commission on collection of electricity duty	0.86	1.06	1.24	1.43
Rebate on Power Purchases	5.13	8.00	7.46	10.67
Other income	0.52	4.22	0.75	5.99
Sale & repair of lamps and other apparatus	3.26	-	4.43	1
Recoveries against theft & pilferage	5.30	-	7.07	-
Total Non-tariff Income	15.07	13.28	20.95	18.08

^{*} Income from Sale & repairs of lamps and other app and Recoveries from theft & pilferage is accounted for in Revenue from tariffs

Purchase Cost for FY 2002-03 (nine months) and for FY 2003-04 as estimated by the Petitioner and as approved by the Commission is provided in the table 3.17.

Table 3.17: Revenue Requirement excluding Power Purchase Cost

(Rs crore)

(Rs crore)

Description	FY 2002-	03 (9 months)	FY 2003-04	
Description	Petition	Commission	Petition	Commission
Expenditure (A)	209.67	145.04	306.41	208.96
Return on Equity and Free Reserves (B)	15.82	14.70	24.81	22.43
Non-Tariff Income (C)	15.07	13.28	20.95	18.08
ARR excluding Power Purchase Cost	210.42	146.46	310.27	213.31

4. Tariff Philosophy and Rationalisation Measures

4.1 Introduction

Subsequent to the unbundling of Delhi Vidyut Board into six successor entities through the Transfer Scheme, which was made effective from 1st July 2002, and the issuance of Policy Directions by the Government, the process of submission of tariff proposal by the respective licensees and its approval by the Commission was required to be different from the conventional one Conventionally, a utility files the tariff proposal based on the revenue gap between proposed Annual Revenue Requirement and the revenues at existing tariff of that utility alone. The tariff proposal is given to bridge this revenue gap and is a distribution of various expense items in the ARR on the various categories of consumers.

The Policy Directions require the tariffs to be determined such that they are uniform for all consumer categories across all Distribution Companies, which makes the Tariffs of the Licensees interlinked with each other. Thus, in their Petitions, the Licensees submitted that they are not in a position to file a detailed tariff proposal and prayed to the Commission that their tariff may be determined as per the provisions of the Act and the Policy Directions.

Under these circumstances, the Commission made the Petitions public on 7th March 2003 clearly indicating the above position in the advertisement. Further, as stated in para 1.3.3.2, the Commission made a presentation to select stakeholders on the petitions filed by DISCOMs and TRANSCO and requested the stakeholders to suggest measures for rationalization of tariff.

In order to make the inter-linkages between tariffs of all the licensees more clear and better appreciated, the Commission puts forth its vies on the fundamental concepts of tariff determination under the framework of Policy Directions.

4.2 Concept of AT&C losses

4.3 Principles of AT&C loss determination set in the Policy Directions

The Government has set out the principles on which the measure of efficiency called "Aggregate Technical and Commercial Loss" (AT&C loss) shall be determined. This has been defined in para 9 of the notification dated 22.11.03 as follows:

4.3.1.1 Para 9. Notification dated 22.11.01

"The Government is of the view that the clearest measures of overall efficiency of the distribution business is the differences between units input into the system and the units for which payment is collected. The Governments is of the considered views that losses of any kind, technical, non technical or non-realisation of payments, ultimately, amount to loss in revenues. Efficiency gains must embrace all these aspects. Hence, the losses should be measured as the difference between the units input and the units realised (units billed and collected) wherein the units realised will be equal to the product of units billed and the collection efficiency, where, collection efficiency is defined as the ratio of actual amount collected and amount billed. The difference between the units input and the units realised are hereinafter referred to as "AT&C Loss" (Aggregate Technical Commercial Loss). The Government, as a matter of policy, decides that the AT&C Loss shall be the

basis for determination of tariffs and also for computation of incentives for better performance."

For clarification of the principles on which AT&C losses defined in para 9 of notification dated 22.11.03, the Government gave a working of AT&C losses in para 10 of the said notification as follows:

4.3.1.2 Para 10. Notification dated 22.11.01

"The AT&C loss level for each distribution company for the year 2000-01, based on the above, has been worked out as under:

		Central East	South East	North North West
а	Units Input at 66/33kV (MU)	4439	6853	4424
b	Units Billed (MU)	1967	3627	2518
С	T&D Losses (%) [c=(a-b)/a]	55.7	47.1	43.1
d	Amount Billed (Rs. crores)	740	1326	965
е	Amount Realised (Rs. Crores)	650	1200	856
f	Collection Efficiency (%) [f=e/d]	87.9	90.5	88.7
g	Units Realised (MU) [g=bXf]	1728	3284	2234
h	AT&C Loss (%) [h=(a-g)/a]	61.1	52.1	49.5

The Commission will consider the above percentage of AT&C loss level and determine the base AT&C loss levels, which shall be the opening levels of losses for the purposes of bidding and shall reflect the actual levels, on the principles set out above and based thereon determine the tariff, wholesale, bulk, grid or retail, as the case may be."

Subsequently, the Government clarified vide its letter dated 29th January 2002 that the AT&C losses for the period 2000-01 specified in the said notification are only indicative and need to be treated as such. It would be the prerogative of the

Commission to determine the AT&C loss levels for the DISCOMs.

4.3.2 Explaining the Concept of AT&C loss

As per the Policy Directions, the determination of AT&C loss for each DISCOM involves the estimation of (i) T&D loss (the difference between the units input and the units billed into the DISCOM as a ratio of the energy input into the DISCOM, which we shall hereinafter call as Distribution & Billing Loss), (ii) Collection efficiency, as the ratio of amount collected to amount billed (iii) Units realised, as the product of units billed and the collection efficiency (iv) AT&C loss, as the difference between units input and units realised into the DISCOM as a ratio of units input into the DISCOM.

The above principles translate into the following equations:

where,

D&B Loss = Distribution & Billing Loss

D&B Loss_{PU} = Per Unit Distribution & Billing Loss

%D&B Loss = Percent Distribution & Billing Loss

UI = Units Input

UB = Units Billed

UR = Units Realised

AB = Amount Billed

AR = Amount Realised

CE_{PU} = Per Unit Collection Efficiency

%CE = Percent Collection Efficiency

AT&C Loss = Aggregate Technical & Commercial Loss

AT&C Loss_{PU} = Per Unit Aggregate Technical & Commercial Loss

AT&C Loss = Percent Aggregate Technical & Commercial Loss

For the sake of convenience, the per unit quantities, viz. Per Unit D&B Loss, Per Unit Collection Efficiency and Per Unit AT&C Loss, shall be referred to without the "per unit" phrase unless otherwise required by the context. Thus, D&B Loss shall denote Per Unit D&B Loss, Collection Efficiency shall denote Per Unit Collection Efficiency and AT&C Loss shall denote Per Unit AT&C Loss. The percentage values for these quantities can be easily computed from these per unit values by multiplying the same with 100. Hence, 0.9 value of per unit Collection Efficiency denotes 0.9x100 = 90% Collection Efficiency in percentage terms.

Eq. 4.7 above can be re-written as:

Using Equation 4.4, the Equations 4.6 and 4.10 reduce to:

4.3.3 Effect of time lag in billing and collection

The Equations given in the preceding section are valid for any length of period. Ideally, all these quantities must be taken for the period, which corresponds to the actual period during which energy was purchased and sold by the utility in real time. But it is not happing.

To further explain this point, let us assume that energy purchased by the utility in a particular month, say month x, (and hence sold/supplied to consumers in that month only) gets billed in the next month, x+1, i.e. the utility send bills to consumers for the consumption of this month in the next month. Thus, there exists a time lag of 1 month in knowing the units and amount billed corresponding to units input in any month.

Similarly, there is a time lag between the billing and corresponding actual collection for that billing because of the time given to the consumers for depositing the bills. Assuming that this lag is also of 1 month, it may be seen that corresponding to units input in month x, units & amount are billed in month x+1 and collections are made in month x+2.

In this simplistic example, we may say that for units input for 1-year period spanning from April this year to March next year, the corresponding units billed and amount billed should be taken for the 1-year period from May this year to April next year and the collections correspond to the period June this year to May next year.

The above explanation is, however, for a very simplistic ideal case based on many assumptions such as:

 Reliable monthly data for the entire year is available

and

- The monthly data corresponds to the actual number of days for the month
- Billing cycle for all consumers is equal to one month
- All the energy supplied to consumers in a particular month gets billed in the next month, i.e. the billing does not get delayed beyond one month
- Monthly billing is accurate, based on actual consumptions and without any provisional billing and disputed bills
- The collections in a particular month relate to the pre-preceding month only

The Commission feels that such an ideal situation is practically non-existent and most of the assumptions given above are difficult to be satisfied under practical circumstances.

4.3.4 Month-wise analysis of Collection Efficiency and AT&C Losses

In this para, the Commission has attempted to explain the variations in monthly losses and collection efficiency and their relationship with annual values.

Let the monthly values be represented as follows:

 AR_1 , AR_2 ,....., AR_{12} = Amount Realised during month 1, 2, 3,...., 12 of the year respectively

 AB_1 , AB_2 ,....., AB_{12} = Amount Billed during month 1, 2, 3,....., 12 of the year respectively

CE₁, CE₂,...., CE₁₂ = Collection Efficiency for month 1, 2, 3,...., 12 of the year respectively

And the yearly values as:

AR = Amount Realised for the entire year (for all months 1, 2, 3,....., 12 of the year), i.e.

$$AR = AR_1 + AR_2 + \dots + AR_{12} \dots 4.13$$

AB = Amount Billed for the entire year (for all months 1, 2, 3,....., 12 of the year), i.e.

$$AB = AB_1 + AB_2 + \dots + AB_{12} \dots 4.14$$

CE = Collection Efficiency for the entire year (for all months 1, 2, 3,....., 12 of the year), i.e.

$$CE = \frac{AR}{AB}$$
 4.15

By definition of Collection Efficiency, the monthly Collection Efficiencies are:

Substituting the values of AR from Equation 4.13 in Equation 4.15 we get,

$$\begin{split} CE &= \frac{AR_1 + AR_2 + + AR_{12}}{AB} \\ CE &= \frac{AR_1}{AB} + \frac{AR_2}{AB} + + \frac{AR_{12}}{AB} \\ CE &= \frac{AR_1}{AB} \times \frac{AB_1}{AB_1} + \frac{AR_2}{AB} \times \frac{AB_2}{AB_2} + + \frac{AR_{12}}{AB} \times \frac{AB_{12}}{AB_{12}} \\ &= \frac{AR_1}{AB} \times \frac{AB_1}{AB_1} + \frac{AR_2}{AB_2} \times \frac{AB_2}{AB_2} + + \frac{AR_{12}}{AB} \times \frac{AB_{12}}{AB_{12}} \\ &= \frac{AR_1}{AB} \times \frac{AR_1}{AB_1} \times \frac{AR_2}{AB_1} + \frac{AR_2}{AB_2} \times \frac{AR_2}{AB_2} + + \frac{AR_{12}}{AB} \times \frac{AR_{12}}{AB_{12}} \\ &= \frac{AR_1}{AB} \times \frac{AR_1}{AB_1} \times \frac{AR_2}{AB_1} + \frac{AR_2}{AB_2} \times \frac{AR_2}{AB_2} + + \frac{AR_{12}}{AB} \times \frac{AR_{12}}{AB} \times \frac{AR_{12}}{AB_1} \\ &= \frac{AR_1}{AB} \times \frac{AR_1}{AB_1} \times \frac{AR_2}{AB_1} \times \frac{AR_2}{AB_2} \times \frac{AR_2}{AB_2} + + \frac{AR_{12}}{AB} \times \frac{AR_{12}}{AB} \times \frac{AR_{12}}{AB_1} \\ &= \frac{AR_1}{AB} \times \frac{AR_1}{AB} \times \frac{AR_2}{AB_1} \times \frac{AR_2}{AB_2} \times \frac{AR_2}{AB_2} + \\ &= \frac{AR_1}{AB} \times \frac{AR_1}{AB} \times \frac{AR_2}{AB_1} \times \frac{AR_2}{AB_2} \times \frac{AR_2}{AB_2} + \\ &= \frac{AR_1}{AB} \times \frac{AR_1}{AB_1} \times \frac{AR_2}{AB_2} \times \frac{AR_2$$

Rearranging the above Equation gives,

$$\begin{split} CE &= \frac{AR_1}{AB_1} \times \frac{AB_1}{AB} + \frac{AR_2}{AB_2} \times \frac{AB_2}{AB} + + \frac{AR_{12}}{AB_{12}} \times \frac{AB_{12}}{AB} \\ Or \\ CE &= CE_1 \times \frac{AB_1}{AB} + CE_2 \times \frac{AB_2}{AB} + + CE_{12} \times \frac{AB_{12}}{AB} \quad ... 4.18 \\ Or \\ CE &= CE_1 \times W_1 + CE_2 \times W_2 + + CE_{12} \times W_{12} \end{split}$$

where W_1 , W_2 ,...., W_{12} are calculated from monthly amount billed as a proportion of total amount billed during the year and represent the weights of monthly collection efficiencies in the overall collection efficiency for the year.

Thus, the collection efficiency for the year as a whole is the weighted average of collection efficiencies for individual months.

As an illustration let us take monthly data for Central East Delhi Electricity Distribution Company Ltd. (CEDEDCL, now called BYPL), given in the Joint Petition filed on 21.12 2001 by TRANSCO and DISCOMs, which is given in Table 4.1.

Table 4.1: Data for CEDEDCL for Apr-00 to Oct-01

	Units	Units	Amount	Amount
Month	input	billed	Billed	Realised
A 00	(MU)	(MU)	(Rs. Cr.)	(Rs. Cr.)
Apr-00	368	131	53	54
May-00	437	144	56	52
Jun-00	412	158	62	58
Jul-00	413	171	65	58
Aug-00	422	170	65	53
Sep-00	418	172	65	56
Oct-00	382	180	64	49
Nov-00	313	164	63	56
Dec-00	323	143	58	49
Jan-01	337	183	65	50
Feb-01	280	175	63	46
Mar-01	318	163	58	74
Apr-01	335	146	56	57
May-01	429	165	62	45
Jun-01	432	175	63	50
Jul-01	453	198	77	64
Aug-01	437	201	80	61
Sep-01	412	209	84	62
Oct-01	368	197	81	61

Graph 4.1 gives the monthly and 12 month collection efficiency variations for the data given in Table 4.1. From the Graph the following can be observed:

- Monthly collection efficiencies have very high variations with no particular trend as compared to 12-month (yearly) values
- The variation in monthly figures of collection efficiencies is less with time lag taken into

- consideration as it tries to correlate the data more closely by taking corresponding values.
- The 12-month collection efficiency values have very small variation and gives a definitive trend of collection efficiency.

Moreover, the deviation in 12-month collection efficiency by taking the time lag into consideration and that obtained without taking time lag into consideration (i.e. the quantities used for calculation of collection efficiency are taken for the same 1-year period) is not significant. This deviation, however, is significant if these quantities are calculated for one-month period mainly because of the following two factors responsible for variations in monthly values of Units and Amount Billed:

- cyclical variation in these quantities over the months of an year due to seasonal effect
- the rising trend due to growth in demand over the months/years

Therefore, it may not be necessary to differentiate between 12-month collection efficiency calculated with data considering time lag and that without time lag.

Similar analysis can be done for the AT&C losses also, which leads to the following result:

where W_1 , W_2 ,....., W_{12} are calculated from monthly units input as a proportion of total units input during the year and represent the weights of monthly AT&C losses in the overall AT&C losses for the year.

Thus, the AT&C loss for the year as a whole is also a weighted average of AT&C loss for individual months.

Graph 4.2 gives the monthly and 12-month AT&C loss variations for the data given in Table 4.1. The inferences are similar to those found in the case of collection efficiency.

Although AT&C loss for a particular month might be very high or very low, the overall AT&C loss for 12-month period calculated at the end of any month has minimal variation giving a definitive trend and hence shall give more appropriate picture of AT&C loss movement.

4.3.5 District-wise analysis of AT&C losses

The above analysis of AT&C losses was at the level of DISCOM as a whole. The same analysis can be done for individual districts within the DISCOM as well. Analysis of the district-wise data for AT&C loss is crucial for numerous reasons, including:

- to assess the loss position in various districts
- to justify the investments proposed by the Companies
- to assess the revenue position of the individual districts of the DISCOM
- to verify the authenticity of the overall loss levels submitted by the petitioner
- to ensure equitable allocation of returns resulting from efficiency improvements between the consumers and the DISCOM.
- to assess the uniformity of development of the entire DISCOM and to ensure increasing levels

of consumer service in all parts of the NCR of Delhi

The processing of the loss information of the various districts of the DISCOM, thus, is a crucial step in the analysis of overall AT&C losses. The petitioner had cited metering constraints to establish inability to provide the information on AT&C losses. Recognising this, the Commission, hereby, directs the petitioner to provide meters at the periphery of each district within next three months, and start compiling the corresponding district-wise information on a month-to-month basis to be submitted along-with next ARR filling.

4.4 Implications of the Policy Directions on Tariff Determination Process

4.5 Conventional tariff determination process

Under the Sixth Schedule of the Electricity Supply Act, 1948, the conventional process of tariff fixation requires determination of Annual Revenue Requirement (ARR) based on prudently incurred expenses of the licensee, and then to design tariffs for recovery of this ARR by allocating costs components of this ARR into various consumer categories.

The method enables a utility to collect all its prudently incurred expenses, in addition to a regulated return on prudent investment. The formula adopted for calculation of annual revenue requirement (ARR) is as follows:

$$ARR = [RB \times ROR] + E_D + E_{O&M} + T$$

Where,

- i) ARR = the total annual revenue requirement of the utility
- ii) RB = the rate base (required investment) of the utility = Capital base in case of a licensee

iii) RoR = the allowed rate of return on investment (debt and equity) = Reasonable return in case of a licensee

iv) ED = annual depreciation expense

v) E_{O&M} = annual operation & maintenance (O&M) expense

vi) T = annual taxes paid by the utility

In the next stage, the regulator has to make suitable allocation of revenue requirement to various classes of consumers, which may allow the utility to recover this revenue through tariffs. The tariff for various categories of consumers based on the existing and desired levels of the following factors:

- Embedded cost of service at admissible losses
- Marginal cost of service
- Social considerations
- Cross-subsidies and subsidies
- Geographical, seasonal and time differentiation

4.5.1 For Transmission Licensee

Conventionally, the bulk supply tariff (BST) for the transmission licensee (TRANSCO), which it may charge from the distribution licensees (DISCOMs and NDMC/MES) to whom it is supplying power, is determined on average cost of supply principle, derived as follows:

- The ARR of TRANSCO is determined on the above stated lines
- BST is calculated as-

$$BST = \frac{ARR_T}{\left(UI_1 + UI_2 + UI_3 + UI_4\right)} \times 100 \4.20$$
 where,

ARRT = ARR of TRANSCO

 UI_1 , UI_2 , UI_3 = Units input into each of the three DISCOMs

UI₄ = Units input into NDMC & MES

The revenue to be received by TRANSCO from the four licensees would be BSTx UI₁, BSTxUI₂, BSTxUI₃ and BSTxUI₄ respectively.

4.5.2 For Distribution Licensee

The conventional process of ARR and retail supply tariff (RST) determination for a DISCOM is as follows:

- The ARR of the DISCOM is determined on the above stated lines with power purchase cost taken at the determined by BST for TRANSCO
- Average RST is calculated as-

$$AverageRST_1 = \frac{PPC_1 + ARR_1}{UB_1} \dots 4.21$$

where,

AverageRST₁ = Average RST for DISCOM1

PPC₁, = Power purchase cost of DISCOM1

ARR₁, = ARR of DISCOM1 excluding power purchase cost

UB₁, = Units billed by DISCOM1

The RST for individual categories are determined in view of various factors mentioned in para 4.5 above.

Similarly, the RST for other DISCOMs may be determined. It may be seen that RST for individual DISCOMs is independent of the others and is dependent on the average BST of TRANSCO. The RST for individual DISCOMs will tend to be different due to different operating characteristics, such as units purchased, units sold, losses, consumer mix etc. Hence, there is no necessity to process the ARR and Tariff petitions of the DISCOMs simultaneously

once TRANSCO's ARR and BST have been determined.

4.6 Tariff determination process under Policy Directions

The Policy Directions make ARR and Tariff determination of TRANSCO and the DISCOMs intertwined as explained in the following paragraphs.

4.6.1 For Distribution Licensee

4.6.1.1 Policy Directions on Tariff Determination

The Policy Directions distinctly set the principles on which tariff for the Transmission and Distribution Licensees is to be determined. Extracts from the Policy Directions relevant to determination of tariff for Distribution Licensees are reproduced hereunder for convenience.

4.6.1.2 Para 1. Notification dated 31.05.02

"AT&C losses for the purposes of tariff computation shall be based on the values of reduction in AT&C loss each year for the years 2002-03, 2003-04, 2004-05, 2005-06 & 2006-07 indicated in the bid submitted by the Purchaser and as finally accepted by the Government (hereinafter referred to as the "Accepted Bid"), over the opening level of AT&C loss approved by DERC for each distribution company in the Tariff Order dated 22.02.2002."

4.6.1.3 Para 13, Notification dated 22.11.01

"From the date of issuance of these directions till the end of 2006-07 and subject to provision of paras 11 and 12 above and all expenses that shall be permitted by the Commission, tariffs shall be determined such that the distribution licensees earn, at least, 16% return on the issued and paid up capital and free reserves (excluding consumer contribution and revaluation reserves but including

share premium and retained profits outstanding at the end of any particular year) provided that such share capital and free reserves have been invested into fixed or any other assets, which have been put into beneficial use for the purpose of electricity distribution and retail supply and provided further that such investment of such share capital and free reserves has the approval of the Commission."

4.6.1.4 Para 14, Notification dated 22.11.01

"Retail tariffs for the three distribution licensees shall be identical till the end of 2006-07, i.e., consumers of a particular category shall pay the same retail tariff irrespective of their geographical location."

4.6.1.5 Inter-linkages between ARRs and tariffs of licensees

Under a conventional tariff determination process, as explained above, the ARR and BST for TRANSCO is independent of the ARRs and Tariffs for DISCOMs. Moreover, the ARR and Tariff of a DISCOM depends on the BST of TRANSCO and its internal parameters, but they are independent of ARRs and Tariffs of other DISCOMs.

The Policy Directions require the retails supply tariffs (RST) to be the same for all the licensees and the tariff is to be determined such that distribution licensees earns at least 16% return on equity and free reserves. Further, the AT&C losses for the purpose of tariff determination shall be taken as the AT&C loss levels committed by the distribution licensees.

The provision of uniform retail tariff makes it necessary that the retail tariff for all the DISCOMs is determined simultaneously by considering their ARRs collectively. Further, the provision of 16% return translates into a situation wherein after covering all their prudently incurred expenses, the DISCOM get 16% return. In other words, out of the revenues, from

tariff and other charges, available with the DISCOMs, the DISCOM gets clear return of 16%.

The existing levels of RST and AT&C losses are such that the revenues available with a DISCOM, i.e. RSTxUnits Realised = RSTx(1-AT&C loss), is insufficient to meet the ARR of DISCOM if it is calculated as per conventional process with average BST of TRANSCO for its power purchase cost. Thus, the RST as calculated by equation 4.25 shall be required to meet the revenue requirement of TRANSCO and DISCOMs. But at existing RST and AT&C loss level, this revision in RST shall mean high tariff shock for consumers. In order to avoid this tariff shock, the Government has stepped in and has issued the Policy Directions whereby with assumptions of reasonable tariff increases the shortfall in revenue requirement shall be filled by loan support to TRANSCO. The Government has estimated this support amount to be about Rs. 3450 Crores over the five-year period of Policy Directions. The DISCOMs shall pay to TRANSCO the Bulk Supply Price from their revenues after meeting all their prudently incurred expenses and the 16% return. In other words, the Bulk Supply Tariff for the DISCOM is to be determined based on its paying capacity after meeting all its expense other than power purchase (i.e. ARR excluding power purchase cost). Also, the total ARR of the DISCOM, including power purchase cost, is equal to the revenues which it get from tariffs and other charges leaving no revenue gap for the DISCOM.

The above scheme makes the determination of BST for each DISCOM independent of the ARR of TRANSCO, as it is solely decided by the revenues from tariffs and other charges and the ARR excluding power purchase cost of the DISCOM. That is to say that BST payable to TRANSCO cannot be determined by TRANSCO's ARR, but needs to be

determined from ARRs of individual DISCOMs. This makes it necessary to process petitions from TRANSCO and DISCOMs simultaneously to arrive at the BST and revenue gap figure of TRANSCO.

Further, without having the knowledge the operating parameters of the other DISCOMs and the pace at which the revenue gap in the sector is to be bridged, it is difficult for a DISCOM to propose a tariff increase. This is further made difficult by the provision of having uniform retail tariffs for all the DISCOMs, which requires that after taking into account the Government support, the committed AT&C losses the total revenue gap of the DISCOMs and licensees has to be bridged through such uniform retail tariff. Hence the Commission has been requested to determine the tariffs as per the provisions of Policy Directions and the Act.

4.7 Treatment of over/under-achievement

4.7.1 Policy Directions on over/underachievement

The paras of the Policy Directions relevant to determination of sharing of revenues in case of over/under-achievement for Distribution Licensees are reproduced hereunder.

4.7.1.1 Para 2, Notification dated 31.05.02

"The following shall be the method of computation and treatment of over achievement and underachievement for the years 2002-03 to 2006-07:-

i. In the event the actual AT&C loss of a distribution licensee in any year is better (lower) than the level based on the minimum AT&C loss reduction levels stipulated by the Government for that year the distribution licensee shall be allowed to retain 50% of the additional revenue resulting from such better performance. The balance 50% of additional revenue from such

better performance shall be counted for the purpose of tariff fixation.

- ii. In the event the actual AT&C loss of a distribution licensee in any year is worse (higher) than the level based on them AT&C loss reduction levels indicated in the Accepted Bid for that year, the entire shortfall in revenue on account of the same shall be borne by the distribution licensee.
- iii. In the event the actual AT&C loss of a distribution licensee in any year is worse (higher) than the level based on the minimum AT&C loss reduction levels stipulated by the Government for that year but better (lower) than the level based on the AT&C loss reduction levels indicated in the Accepted Bid for that year, the entire additional revenue from such better performance shall be counted for the purpose of tariff fixation.

Provided further that's for paras 2(i), 2(ii) and 2(iii) above, for every year, while determining such additional revenue or shortfall in revenue the cumulative net effect of revenue till the end of the relevant year shall be taken, in regard to over achievement/under-achievement and appropriate adjustments shall be made for the net effect.

The opening levels AT&C loss approved by the DERC, AT&C loss reduction indicated in the Accepted Bid and the minimum AT&C loss reductions levels stipulated by the Government for each distribution company are given in the table below.

Central East Delhi Electricity Distribution Company Limited

		2002-	2003-	2004-	2005-	2006-
		03	04	05	06	07
Opening	57.2					
Accepted Bid		0.75	1.75	4.00	5.65	5.10
Minimum		1.50	5.00	5.00	5.00	4.25

South West Delhi Electricity Distribution Company Limited

		2002- 03	2003- 04	2004- 05	2005- 06	2006- 07
Opening	48.1					
Accepted Bid		0.55	1.55	3.30	6.00	5.60
Minimum		1.25	5.00	4.50	4.50	4.00

North North West Delhi Distribution Company Limited

		2002- 03	2003- 04	2004- 05	2005- 06	2006- 07
Opening	48.1					
Accepted Bid		0.5	2.25	4.5	5.5	4.25
Minimum		1.50	5.00	4.50	4.25	4.00

4.7.2 Explaining the treatment of over/underachievement

For the purpose of explaining treatment of over/under-achievement, we shall denote the Accepted Bid level of AT&C loss by AT&ClossB, the minimum AT&C loss level stipulated by the Government as AT&ClossM and the Actual AT&C loss achieved by the DISCOM as AT&ClossA, over the opening loss level for that DISCOM.

Rearranging equation we get,

$$\frac{\text{UB}}{\text{UI}} \times \frac{\text{AR}}{\text{AB}} = 1 - \text{AT \& C'Loss} ... 4.22$$

Or

$$AR = \frac{AB}{UB} \times UI \times (1 - AT \& C'Loss) \dots 4.23$$

Or

$$AR = AVBR \times UI \times (1 - AT \& C'Loss) \dots 4.24$$
 where,

Let the amount actually realized be AR_A, then using equation..... the amount actually realized can be written as.

 $AR_A = AVBR \times UI \times (1 - AT \& C'Loss_A)$ 4.26 and the amount which would have been realized had the bid level of AT&C losses been achieved is (AR_B),

Thus, AVRR can also be used in equations and in place of AVBR.

4.7.2.1 Shortfall in revenue due to underachievement

In case of underachievement, $AT&C'Loss_A$ is more than $AT&C'Loss_B$ and the underachievement in losses is $AT&C'Loss_A$ – $AT&C'Loss_B$. The shortfall in revenue (R_U) due this underachievement is,

 $R_{\rm U} = {\rm AVBRxUIx}({\rm AT \& C'Loss}_{\rm A} - {\rm AT \& C'Loss}_{\rm B}) \ . \ 4.32$ As per para 2(ii) of the notification dated 31st May 2002, this entire shortfall in revenue shall be borne by the distribution licensee.

4.7.2.2 Additional revenue due to overachievement

In case of overachievement, AT&C'LossA less than AT&C'LossB and the overachievement in losses is AT&C'LossB – AT&C'LossA. The additional revenue (Ro) due this overachievement is,

$$R_{O} = AR_{A} - AR_{B} \dots 4.33$$

Substituting the values of AR_B and AR_A from equations and , we get,

 $R_{\rm O}={\rm AVBRxUIx}({\rm AT~\&~C'Loss}_{\rm B}-{\rm AT~\&~C'Loss}_{\rm A})$. 4.34 In case, AT&C'Loss_A is more than or equal to AT&C'Loss_M , as per para 2(iii) of the notification dated 31st May 2002, the entire additional revenue given by equation..... shall be counted for the purpose of tariff fixation.

In case, AT&C'Loss_A less than AT&C'Loss_M, as per para 2(i) of the notification dated 31st May 2002, the additional revenue given by equation..... shall be treated as follows:

 The part of additional revenue (ROUM) obtained due to the part of AT&C'Loss loss reduction upto minimum stipulated level is,

This part of additional revenue shall be counted for tariff fixation.

 The other part of additional revenue (ROAM) obtained due to the part of AT&C'Loss loss reduction above minimum stipulated level is,

This part of additional revenue shall be distributed in a proportion of 50% and 50% between the distribution licensee and tariffs for the consumers.

4.8 Regulatory Issues

4.8.1 Treatment of DVB arrears payable to Holding Company

As discussed in Chapter 2, as per the provisions of the Transfer Scheme, the amount of DVB arrears realized by the DISCOM shall be shared between in the Holding Company and DISCOM in a ratio of 80%:20%. The Commission feels that the amount corresponding to 80% of realized DVB arrears would have been available in the sector to reduce the overall revenue gap, had DVB continued to be in existence. This outflow of money from the sector due to the above said provision is not intended and thus to avoid the burden of this amount to be passed on in tariff, the Commission has requested the Government to revisit the said provision.

4.8.2 Truing-up mechanism

While estimating the ARR and the revenues of the petitioner, the Commission has relied on the available and the information assumptions regarding the extent of variations in the parameters in future as compared to their existing levels. The Commission recognises that after the expiry of the year and the actual operational data is made available by the utility, the actual ARR and revenue figures would be different from the above estimates because the parameters on which these estimates are based shall be different from those, which were assumed by Commission. After determining the prudence of each component of ARR and revenues, the Commission would take up truing-up of the ARR and revenue figures considered earlier.

4.9 Rationalisation of Tariff

4.9.1 Petitioner's Proposal

4.9.1.1 Load Violation Charges

The Petitioner has stated that under the existing tariff mechanism, if the connected load including lighting, fan and power load of the otherwise LT connection is found more than 100 kW, the bulk supply (MLHT/LIP) tariff under relevant category on LT along with load violation charges @ 30% on the demand charge plus energy charges are charged till the load is brought within SIP/NDLT limit. This is verified by the Licensee on submission of fresh Test Report and payment of necessary charges. In such cases billing demand is treated as 100% of connected load. The Petitioner has proposed that where the connected load is found to be more than 100 kW, the Billing Demand should be determined as the higher of maximum demand or the sanctioned load.

4.9.1.2 Billing Demand

The Billing Demand as per the existing tariff schedule is determined as the maximum of:

- 1) The Contract Demand
- 2) The maximum demand indicated by the meter during the billing cycle or
- Highest off he sanctioned/connected/ declared connected load wherever contract demand has not been provided in the Agreement.

The Petitioner has proposed a change in the determination of billing demand. The Petitioner has proposed that the Billing Demand should be determined as the highest of the following:

 Maximum Demand recorded in the meter for that period

- 2) 80% of contract demand or
- 3) Peak Load Drawal

4.9.1.3 Charges during Peak Load Hours

The Petitioner has requested that the provisions 4.11 and 4.12 of Delhi Electricity Control Order1959 (DECO)9, which prohibit use of power for running air conditioners and operation of industries during peak load period, should be repealed. The Petitioner has suggested implementation of differential tariffs for consumers with contract demand in excess of the existing limit of 100 kW to be extended upto 50 kW after two part billing is introduced for such consumers. The Petitioner has proposed a surcharge of 50% for use during peak load hours.

4.9.1.4 Tariff for Traffic Lights

The Petitioner has stated that the charges for Signals, Blinkers, Sirens and Police Booths have remained at the same levels since 1997 and need revision. The Petitioner has suggested that these charges should be revised upwards and clearly specified in the Tariff Order.

4.9.1.5 kVAh Billing for Energy Charges

The Petitioner has suggested that switching over to kVAh based tariff from the existing kWh based tariff will encourage consumers to use shunt capacitors locally and use energy efficient devices. The Petitioner has added that it is installing only electronic meters for all consumer categories. The Petitioner has stated that there is a strong case for kVAh based metering for all poly phase consumers. However, as it requires a massive program for replacement of all the existing electro-mechanical meters with electronic meters with kVAh reading facility, the Petitioner has proposed that initially the Commission may consider implementing kVAh-

based tariff for consumers with load of 50 kW and above.

4.9.1.6 SPD Connehctions in Unauthorized Colonies/ J.J. Bastis

The Petitioner has stated that since JJ Bastis have come up on public land and their continuance at these locations remains in a state of flux, it may be prudent to continue with the existing scheme of single point delivery connection (SPDC), as this would help curtail the losses. The Petitioner has endorsed the erstwhile DVB's policy of assuming individual consumers to be in the lowest slab of domestic tariff.

In unauthorized colonies, the Petitioner has submitted that SPDC scheme may be continued till techno-economically viable alternate mechanisms are evolved in consultation with the Commission. The Petitioner has proposed to streamline the SPDC scheme to ensure conformity with the requirements of electrical protection and safety, monitoring of the franchisees to ensure compliance with laid down norms and protect consumer interest.

4.9.1.7 Time of Day (ToD) metering

The petitioner has submitted that as the implementation of Time of Day metering may require certain programming and software changes, a detailed note on Time of Day metering shall be submitted separately.

4.9.2 Commission's Views

4.9.2.1 Rationalisation of Tariff categories

The Commission has noted there is widespread demand for rationalising the Tariff categories by reducing the number of categories and reducing subsidies and cross-subsidisation as per provisions of section 28 of the Act. The Commission has also taken a note of the fact that the cross-subsidisation

among various categories has been in existence due to historical reasons and social compulsions. This has ultimately led to the situation where some categories of consumers, such as domestic and agriculture, are much below the cost of service while the others are paying above this cost of service. Although the Commission is desirous of having cost reflective tariffs for each category and has been making efforts to eventually move towards cost of service, changing the existing tariffs to reflect cost of service shall cause high tariff shocks to the subsidized/cross-subsidised categories while the tariffs for cross-subsidising categories may go down. Also, the revenue implication of reduction of subsidy/cross-subsidy elements has to be seen vis-à-vis requirement of increasing the tariff in line with the Policy Directions and inflationary increases so as to possibly limit the Government assistance as loan to the committed level. This implies that such subsidized categories will have severe tariff shock, on one-hand because of removal of subsidy/cross-subsidy element, if the subsidies/cross-subsidies are removed at one go. On the other hand, the tariff for cross-subsiding categories will reduce.

With the objective that the sector gap, presently being funded by loan assistance from Government, has to be finally reduced to zero to make it self-sustainable through sharing of this burden by utility and consumers through reductions in losses and reasonable increases in tariffs. The average cost of supply will have inflationary increases and will have to be adjusted for gains through loss reduction. The balance share of this gap will be required to be bridged through tariff increases. However, the Commission will take care that the increase in subsidizing categories is lower than that in subsidized categories so that over time the tariff for

all the categories converges to average cost of supply.

4.9.2.2 Induction Arc Furnace and Minimum Consumption Guarantee Charges for them

As another rationalization measure the induction arc furnace category has been merged with the main LIP category for tariff purposes. The Commission has noted that minimum consumption guarantee charges are for the following reasons:

- To ascertain the utility with some minimum returns from this category and to reduce the propensity to steal electricity by these consumers
- To have some compensation for low power factor of such loads which could not be measured by previously installed meters

The Commission feels that the installation of electronic meters and introduction of kVAh metering for this category, shall take care of these requirements. Considering this, the Commission has abolished these charges for this category.

4.9.2.3 Categorisation of Traffic Signals

Presently, a flat rate of Rs. 210 per Traffic Signal Point per month is applicable on Traffic Signals. This rate was fixed by erstwhile DVB and Commission's Order dated 23.05.02 does not cover Traffic Signal as a separate category.

Since the Traffic Signals are placed on a footing similar to that of Public Lighting, the Commission opines that it should be placed under Public Lighting category and be charged accordingly.

4.9.2.4 Amalgamation of separate domestic lighting and power connections

Where separate meters for domestic lighting/fan and power are in existence under different K.Nos.,

the billing at present is done separately for domestic lighting/fan and domestic power connection. For historical reasons, presently the tariff for domestic lighting/fan connection is the normal domestic tariff with applicable slabs, while the entire consumption for domestic power connection is billed at the highest slab tariff of domestic. The Commission feels that in order to rationalise the categorization, there is no need to treat domestic light and power connections separately and has amalgamated the two by taking total consumption of the two connections as consumption for single amalgamated connection. Thus, the Commission has decided that where separate meters, under different K. Nos., for domestic lighting/fan and domestic power, are in existence at the same premises, the billing shall be done under domestic category for total consumption of all such connections/meters taken together.

4.9.2.5 Domestic consumers paying flat rates on plot size basis

The Commission has noted that some domestic consumers in regularised/unauthorized colonies, left-out pockets and villages are billed on flat rates on plot size basis at the rates in the existing Tariff Schedule. This Schedule also says that as and when the utility installs energy meters, the energy charges shall be payable as per the tariff applicable to relevant category of supply.

Although the Commission has approved new rates of tariff for this category, the petitioner is directed to install meters for all such consumers by 31st October 2003, so that they may be billed on applicable tariff rates thereafter.

4.9.2.6 Agricultural Tariff above 10 kW

The Commission is of the view that for agricultural activities specified in the Tariff Schedule, load upto 10 kW only may be permitted under agriculture tariff. For load above 10 kW and for purposes other than agriculture the consumer may take a separate connection, which may be treated under relevant tariff category of use. If the load is more than 10 kW and is used for agriculture purpose only, the consumer may get the load divided and take supply through two meters, but the agriculture tariff shall be available for only one meter and upto a load of 10 kW. The other connection will be treated as non-domestic.

4.9.2.7 Change of category from LT to HT and change of 100 kW limit

Existing provisions of Tariff Schedule lay down the procedure for levy of LIP/MLHT tariff and load violation charges @ 30% on demand charges plus energy charges in cases where the connected load of the otherwise LT connection is found to be more than 100 kW.

Some stakeholders have requested to raise this limit of 100 kW, delineating the LT and HT (Bulk) consumers, to 200 kW. The reason stated is that compulsory use of equipment, such as effluent treatment plant, safety etc., under different laws makes the load of the industry more than 100 kW and also in the present context 100 kW limit is small. Levy of high charges on this account is also a source of harassment to the consumer by the utility staff.

The petitioner on the other hand is not agreement with the suggestions of the stakeholders on enhancement of the limit of 100 kW and in fact has asked for reduction in this limit.

On this issue, the Commission has already expressed its opinion that it wishes to gradually move towards cost of supply. This principle requires that consumers be differentiated as per cost of serving them. Since the cost of serving the consumer depends upon, inter-alia, the voltage at which supply is taken by the consumer, the Commission feels that differentiating consumers on the basis of load is not correct. Instead consumers must be differentiated with respect to voltage of supply. Towards this end, the Commission had also given a directive to erstwhile DVB for preparation and submission of base paper on voltage-linked tariff.

The Commission wishes to gradually move towards voltage-linked tariff and directs the petitioner to submit a base paper on voltage-linked tariff by 31st October 2003. The petitioner is also directed to maintain and submit information/data in the formats of specified by the Commission for arriving at voltage linked tariff for each of the consumer categories along with next filling. Hence, at present the Commission decides that status quo, in regard to the limit for bulk connection at 100 kW, will continue.

However, the provision of levying 30% load violation charge, on demand plus energy charges, is dispensed with and only the provision for higher bulk tariff stands made in the new Schedule.

4.9.2.8 Misuse of Electricity

Large number of consumers from the domestic, industrial and commercial categories have protested the levy of charges on account of misuse of electricity. The industrial consumers have strongly expressed the view that the requirement of MCD licence should be abolished at least in the approved industrial areas and the utility should not be allowed to earn revenue on account which is

primarily a responsibility of the concerned authorities. A lot of consumers have also suggested to withdraw the provisions of misuse on account of subletting. Further, it has been submitted that such provisions cause harassment to the consumers at the hands of utility staff and lead to corruption and malpractices.

Existing provisions of Tariff Schedule consider the following cases as misuse of electricity:

- i) Use of electrical load for category of use other than that for which it was sanctioned, viz.
 - a) Domestic connections used for nondomestic or industrial purposes
 - b) Non-domestic connection used for industrial purposes.
 - c) Agriculture connection used for domestic, non-domestic, industrial or farm house etc.
 - d) Industrial connection used for non-domestic purposes
 - e) Use of electrical load for industrial purposes without valid municipal licence.
- ii) Extension of electricity outside the premises by any industrial consumer.
- iii) Feeding from any live connection to any premises having connection lying disconnected due to any reason.
- iv) Bringing three different single-phase connections to one place to make three phase supply.

Having analysed the matter, the Commission notices that all the above provisions of misuse, except i)(a) to i)(d) are violations of some existing law or Conditions of Supply or the Agreement done by the consumer with the utility. Taking note of the various arguments, the Commission has decided to abolish all the existing provisions of misuse, including

that of the requirement of valid MCD licence and Lal Dora Certificate. However, the use of electrical load for category of use other than that for which it was sanctioned shall constitute violation and hence has been according retained (with slight modification).

4.9.2.9 Minimum Charges

The Commission has discussed in detail the issue of Minimum Charges in para 2.3.10.10 in its Order dated 23.05.01, bringing out the concept of Minimum Charges as mechanism to ensure minimal returns and difficulties associated with the use of Minimum Charges. The Commission had, therefore, not allowed any increase in Minimum Charges and had directed DVB to prepare a base paper on devising a system based on meter ratings (a few the standards) SO that reliance sanctioned/connected load may be dispensed with for the purpose of estimation of minimum charges. The DVB expressed reservations in shifting to a system based on meter rating stating that it would have required a lot of inventory of meters of various specifications.

Presently, Minimum charges are being levied on consumers such as domestic, NDLT and SIP who are paying only energy charges subject to a minimum charge and are not paying two part tariff, i.e. fixed charges and energy charges. Those paying fixed charges, such as LIP and MLHT, along with energy charges pay the fixed charges in the form of demand charges.

The Commission has again deliberated on the issue of issue of Minimum Charges. The Commission has noted the submissions made by many stakeholders that such charges lead to wastage of energy and are against the concept of conservation of energy particularly in a demand constrained situation of Delhi. The objectors have stated that a consumer

should pay only for the actual consumption of electricity. The Commission agrees that such a concept may lead to excess use of electricity by the consumers upto their minimum charges limit, but such excess consumption should be discouraged during peak hours and not during non-peak hours.

Keeping in view various dimensions in this regard, the Commission moves to introduce "Fixed Charges" in the tariff as discussed in the following paras.

4.9.2.10 Fixed Charges in lieu of Minimum Charges and Meter Rent

The Commission feels that to move towards cost of supply, it is desirable to have two-part tariff imposed on all categories of consumers. The fixed charge component reflecting the fixed cost of providing the service to the consumer and the energy charge component reflecting the cost of energy actually consumed should ideally be taken in the two-part tariff. Also, the fact that Minimum Charges is not an appropriate method of recovering fixed charges as it may lead to underrecovery and more importantly highly fluctuating recovery of fixed charges over the years by the utility. As such, the Commission has decided to move towards this concept of two-part tariff for all the categories of consumers and abolish the Minimum Charges altogether. Thus, the Commission has introduced fixed charges on the basis of sanctioned load/MDI reading (in kW), whichever is higher, for all the categories on which Minimum Charges were payable. If the fixed charges are based on MDI reading, an additional amount proportional to Maximum Demand in excess of the sanctioned load shall be payable as surcharge. This is required to circumvent the situation of underreporting of loads and to do away with the

requirement of calculating the connected load if the meter is functioning properly.

Considering the fact that levy of fixed charges based on actual fixed cost per kW on the consumers already paying more than minimum charges in these categories shall cause severe tariff shock to such consumers, the Commission has restricted the fixed charges to a level which is even much below the existing Minimum Charges. To further reduce this tariff shock and to rationalize the fixed charges, the Commission has abolished levy of meter rent for all categories of consumers.

The data provided by the petitioner was not amenable to conversion for fixed cost determination attributable to the consumer on per kW basis. Since the Commission would like to move towards cost of supply in future, the Commission directs the petitioner to compile data in the prescribed formats with suitable modifications, if required, so as the information on fixed cost of service can be correctly determined and present the same with next ARR/tariff filing.

Since the petitioner has submitted that it shall be installing electronic meters gradually for these categories of consumers, the Commission feels that before imposing fixed charges on MDI reading along with surcharge, the consumer should be given a chance to get his load enhanced. The petitioner should, therefore, advise the consumer to get his load enhanced and the levy on account of such MDI reading shall not be done unless the consumer has been advised for load enhancement and till a period of 4 months has elapsed from the date of receipt of such advice by the consumer or installation of electronic meter, whichever is later.

4.9.2.11 Demand Charges and rebate for hours not supplied

The Commission feels the need to rationalise the levy of surcharge of 30%, where MDI reading exceeds contract demand by more than 5%, on total demand plus energy charges. It is decided that it shall now be levied only on the maximum demand shown by MDI in excess of the contract demand, thus, making the consumer liable to pay surcharge for the excess demand only and not for the total demand and energy charges.

Some stakeholders have demanded that a rebate in Demand Charges should be given by the petitioner if supply is not given for more than a minimum number of hours in a billing cycle.

The Commission has examined the issue from various angles including the ground realities. Firstly, in the absence proper logging and maintenance of data, the number of hours not supplied is a grey area. Secondly, it needs to be known that what are the reasons for hours not supplied and to whom these are attributable. The load shedding might be required due to system constraints of the utility, and reasons beyond the control of the utility such as Grid requirements. Given the present status of infrastructure, presently it is not possible to introduce such performance based rates, but the Commission would like to move towards performance based regulation from the current predominantly rate of return regulation in due course of time.

The Commission, therefore, directs the petitioner to start developing the database for the consumers, for whom electronic meters have been/are being provided by taking data logs each time the reading is done, and submit a report on the analysis of such database with the next filling. Such database should inter-alia include the details such

as consumption of each consumer with respect to time for the entire billing cycle in the area supplied by feeders/sub-station through which load shedding is done, the number of hours not supplied for each area and the consumers affected therefrom alongwith the reasons for load shedding.

4.9.2.12 Definition of Connected and Sanctioned Load

The Commission had first decided on the definition of connected/sanctioned load, after detailed analysis and with the involvement of stakeholders in the public process, in its Order on Rationalisation of Tariff for Delhi Vidyut Board dated 16.01.01. During the proceedings on the petition for ARR of DVB for 2001-02, the Commission again sought responses from the stakeholders and the definition of connected/sanctioned load was accordingly modified slightly.

Some of the stakeholders have now suggested to take MDI reading as the connected load for consumers having electronic meters installed, while the petitioner also has not given any concrete or convincing argument to support a change in the definition of connected/sanctioned load.

The Commission feels that for the reasons given by the stakeholders, the definition of connected/sanctioned load do not need a change. As such, the existing definition of connected/sanctioned load shall continue to be applicable.

The Commission has, however, tried to rationalise/restrict the application and use of the definition of connected load by ways such as abolition the minimum charges. The definition of connected load shall, therefore, be required to be used only in cases of assessment of energy and application of bulk category (>100 kW) tariff in

cases of use of more than 100 kW load by non-bulk consumers (<100 kW).

4.9.2.13 Concept of Normative Consumption

AT present surcharge @ 30% is levied on the energy charges for the consumption in excess of normative consumption.

The Commission has noted the reservations shown by some stakeholders on the levy of surcharge on account of consumption being in excess of normative limit and has carefully analysed the reasons for its implementation.

The concept of normative consumption takes care of the following two factors:

If a consumer is actually using more than his sanctioned load his consumption will be out of proportion to his sanctioned load and he should have actually taken higher load and paid bills accordingly. Normative surcharge ensures that the consumer either gets his sanctioned load enhanced commensurate with his consumption or he pays surcharge for excess consumption.

In demand constrained situation it may be desirable to have some restrictive measures on the usage of electricity by the consumers. Normative surcharge acts as a deterrent for consumers to restrict their consumption to certain limit.

The Commission is of the opinion that the first factor discussed above is not the right way to check consumer's load, instead the fixed charges based on sanctioned load/MDI reading take care of the load of the consumers. The second factor is not an efficient way of restricting load, what is actually required is reduction in load during peak hours and enhancement of load during non-peak hours. This factor is, thus, best addressed by ToD metering discussed later.

To rationalise this issue, the Commission has, therefore, decided to do away with the concept of normative consumption for levy of surcharge and has deleted the provision of application of surcharge on account of consumption in excess of normative limit.

4.9.2.14 Low Power Factor (LPF) Surcharge

Large number of stakeholders have opposed the levy of LPF surcharge by the petitioner stating that as per provisions of Conditions of Supply of the petitioner the petitioner is required to install the required capacitors if the consumer fails to provide the same and the cost of which may be recovered from the consumers. The petitioner should, therefore, first install the required equipment and thereafter the maintenance/replacement may be done by the consumer. They have also complained about the harassment by utility staff on this account. Some stakeholders have suggested that the provision of LPF surcharge may be removed if all consumers are billed on kVAh basis, which has inbuilt penalty/incentive for low/high power factor.

At present most of the SIP/NDLT consumers are having electro-mechanical meters. The petitioner has submitted that it has plans to install electronic meters for all consumers in the SIP/NDLT categories. The Commission has already discussed the application of this provision on LIP/MLHT consumers through its Order dated 16.01.01, who are being billed on kVAh basis. However, as long as all the consumers in the SIP/NDLT category are metered (with electronic meters capable of recording kVAh consumption), kVAh based tariff cannot be introduced in these categories and hence this provision shall be required to be maintained till all the electronic meters are installed by the petitioner.

The Commission, hereby, directs the petitioner to complete installation of electronic meters for all the

consumers, except those upto 10 kW being supplied on single phase, of SIP/NDLT categories by 31st March 2004 so that kVAh (or kWh and kVARh) system of billing energy could be appropriately considered for introduction next year. However, the petitioner shall not replace the electronic meters provided by the erstwhile DVB unless there are compelling reasons to do so.

The Commission opines that LPF penalty should be levied only when it is established by measurements with equipment/meters that the average power factor of the installation is less than the required value and the power factor correction equipment provided is either non-functional or inadequate. Before imposing LPF penalty, the consumer should be given a chance to bring his power factor within acceptable limits. The petitioner should, therefore, advise the consumer to bring his power factor within specified limits and also suggest measures, including specifications of equipment required, in such advice. If the consumer fails to comply with the power factor requirement within one month from the receipt of advice, the petitioner should install the requisite equipment at the cost of the consumer to be included in his subsequent bill. Thereafter, it shall be the responsibility of the consumer to maintain and enhance/reduce the capacity of correction equipment as per his load requirement so as to be within specified limits of power factor. For consumers getting electronic meters installed, the levy on account of such low power factor shall not be done unless the consumer has been advised for equipment installation and till a period of 4 months has elapsed from the date of receipt of such advice by the consumer or installation of electronic meter, whichever is later.

4.9.2.15 kVAh billing

Commission has also considered the request of certain stakeholders that kVAh based tariff should be introduced for consumers having electronic meters. The pre-requisite for introduction of kVAh based tariff in a particular category is that all the consumers in that category are having meters, such as electronic trivector meters, which can record kVAh consumption. The Commission had, therefore, introduced kVAh based tariff in the LIP/MLHT categories in its Order dated 16.01.01 as all the consumers in these categories had the requisite metering in place.

The petitioner has submitted that it is installing electronic meters for SIP/NDLT consumers. Since all the consumers in this category do not have electronic meters it is presently not possible to introduce kVAh based tariff for these categories of consumers. Since kVAh based tariff takes care of power factor of the consumer and encourage efficient use of electricity, the Commission would like to gradually switch to such basis for all category of consumers. Higher power factor eventually helps the system by lesser loading and reduction in losses.

4.9.2.16 kVAh vs kWh & kVARh based tariff

It has been suggested by stakeholders that although kVAh based tariff takes care of the power factor of the consumer and helps in reduction of system losses, it also has certain disadvantages. From kVAh reading, the consumer does not directly come to know what his power factor is and is not in position to take corrective action accordingly. Thus the intended benefit of power factor improvement actually may not be derived. The solution to this problem lies in having a tariff based on two components of kVAh reading i.e. kWh and kVARh.

The Commission agrees with the above suggestions made by the stakeholders and further notes that with the implementation of Availability Based Tariff (ABT) from December 2002, charges shall also be payable by the utility for kVARh drawl depending upon grid voltage conditions. As such it is more appropriate to bill consumers also on kWh and kVARh basis.

As kWh and kVAh based tariff gives the benefits of kVAh tariff alongwith the indication to consumer about his power factor and also matches with ABT concept, the Commission is inclined to switch to kWh and kVARh based tariff for all categories of consumers. But implementation of kWh and kVARh based tariff requires data on operational history with details on these parameters. Since such details are not available now, the Commission is not switching over to kWh and kVARh based tariff. Hence, the petitioner is directed to maintain data on average power factor, kWh, kVAh and kVARh consumption for consumers already having electronic meters installed and for others as soon as electronic meter gets installed and present the same to the Commission with next filing.

4.9.2.17 Time of Day (ToD) Metering

The load requirement of consumers keeps on varying at different times of the day. At any time of the day, the system as a whole experiences a load, which is arithmetic sum of individual loads of all the consumers at that time. But the system peak load during the day is not equal to the sum of individual peak of each of the consumers but is less than this sum. This is so because the individual peaks occur at different points of time, and hence cannot be added directly. This phenomenon is called diversity in usage and is measured by diversity factor as follows:

$DiversityFactor = \frac{SumOfIndividualMaximumDemands}{I}$ Simul tan eous Maximum Demand4.37

Here simultaneous maximum demand refers to the system peak demand. Thus, by the argument given above it follows that the Diversity Factor is always more than one. Lesser is Diversity Factor closer in time the individual maximum demands are and vice versa. Thus, Diversity Factor gives some indication about the co-incidence or noncoincidence of individual peak demands and the system peak demand.

It is well known that by controlling the price of electricity, it is possible to motivate individual consumers to either reduce/increase or shift their consumption from one point of time to another during the day, i.e. the consumer can be motivated to change his consumption pattern during the day. It is desirable from the system point of view to reduce peak demand and encourage consumption/enhance load during off peak hours. This can be done by the following methods:

- Providing incentives to consumers for shifting their consumption to off-peak hours
- Providing dis-incentives to consumers for consumption during peak hours, and
- A combination of the above two.

The above methods require differential tariffs for different time slots of peak and off-peak hours. This concept of having time differentiated tariffs is called ToD Tariff and the related metering capable of recording such time differentiated consumptions is called ToD metering.

In other words, the objective of ToD metering is to shift the time of peak demand, thereby flattening the load curve and making the diversity factor closer to unity.

Major advantage of reducing the peak demand through ToD metering, as a tool for Demand Side Management, is that it allows the utility to reduce its generation/power purchase requirement, which reduces the overall cost of supply. Another advantage, which the utility has, is that the load factor of the system improves due to shifting of some peak load to off peak hours and leads to flattening of load curve. Improved load factor causes the Plant Load Factor of the generating stations to improve, thus reducing the generation cost. The consumers ultimately get benefited by availing power at lower rates during off-peak hours and also by reduction in supply costs of the utility. The incidence of load shedding is also reduced due to reduction in the peak load.

Some of the stakeholders including the petitioner have recommended the introduction of Time of Day (ToD) metering.

Due to aforesaid reasons the Commission feels a need to incentivise off-peak consumption, while dis-incentivising peak hour consumption for bulk consumers, so that such consumers are motivated to shift from peak to off-peak hours.

Following issues are relevant for introduction of ToD metering:

- Meters with facility to provide time differentiated consumption data is a prerequisite
- Mechanism by DISCOMs for ensuring supply to consumers who opt to shift to off-peak hours
- The time slots of hours for which differential tariff is to be given
- Tariff differential for these slots
- Intending consumers to make commitment so that load shedding is accordingly matched

In view of the above, the Commission feels that before introducing the concept of ToD metering and taking a final view in the matter, the above issues are debated with the stakeholders. The Commission, therefore, directs the petitioner to maintain a time-differentiated data for consumers with ToD metering facility, and prepare a base paper on ToD metering covering all the above issues, including inferences from the data, and submit it the to the Commission by 31st October 2003.

4.9.2.18 Tariff under Single Point Delivery Connection (SPDC) system

This issue has been discussed earlier at para 2.28 of Chapter 2.

4.9.2.19 Consumption by employees of erstwhile DVB

On the issue of consumption by employees of erstwhile DVB, the Commission directs TRANCO and DISCOMs to evolve a mechanism for payments and accounting either at inter-company or at individual employee level and submit a report on the same by 31st October 2003.

4.9.2.20 Late Payment Surcharge

Many stakeholders have contested the high rates of late payment surcharge (LPSC) being levied by the petitioner particularly when interest rates have drastically come down and are expected to go down further in future. Some of the stakeholders have suggested a ascending rates based on time slabs for the period by which payment is delayed. Some stakeholders have argued that when utility imposes a penalty for late payment of bills in the form of LPSC at such high rates, the utility should also give an equivalent rebate if the bill is deposited before the due date for the period the

payment has been made earlier at the same rates of LPSC.

The Commission is of the view that the payments of dues for electricity already consumed by the consumer must be prompt and within the due date. As such, to maintain payment discipline, a rebate for timely payment of bills may not be allowed. Allowing rebates not only makes the computations complex but also means effectively lowering the tariff rates. The Commission, therefore, has rationalsed the LPSC rates to be at 1.5% per month for all categories of consumers vis-a-vis 1.5% for domestic and agriculture and 2% for others.

5. Revenue Gap and Tariff Design

5.1 Introduction

already discussed, subsequent to unbundling of Delhi Vidyut Board into six successor entities through the Transfer Scheme, issuance of Policy Directions by the Government and the privatization of the distribution business of erstwhile DVB effective from 1st July 2002, the process for determination of tariff for the Companies and its approval by the Commission diverges somewhat from the conventional methodology being followed till date in Delhi and in other States. Conventionally, a utility files its ARR and the tariff proposal based on the revenue gap/surplus between the proposed Annual Revenue Requirement (ARR) for a period and the projected revenues at existing tariff of the utility for the period. The tariffs are proposed by the utility so as to bridge the projected revenue gap at existing tariffs and so that the Revenue Requirement is recovered from the various categories of consumers.

The present framework including the Policy Directions require, *inter-alia*, that the retail tariff for the three distribution licensees shall be identical till the end of 2006-07, i.e., consumers of a particular category shall pay the same retail tariff irrespective of their geographical locations. The Companies have relied on the above framework to submit only their respective ARR proposals, leaving the tariff determination to the Commission.

The privatization package envisages turnaround of the distribution business well within five years, based upon certain assumptions in terms of loss reduction trajectory, tariff increases, investments etc. and a Government support of approximately Rs. 3450 Crores to TRANSCO (to bridge the revenue gap between its revenue requirement and the bulk supply price which it may receive from the distribution licensee based on their paying capacity).

In the context of the current petition(s), the Commission has been apprised that based on the committed AT&C loss reduction trajectory by the selected bidders, assumed tariff increases of 10% per year for FY 03 and FY 04, a Government support of Rs. 2624 Crores (comprising Rs. 1364 Crores for FY 03 and Rs. 1260 Crores for FY 04) has been envisaged for the two years.

The previous retail tariff revision took place effective from June 2001 and, as already explained in the previous Chapters, neither the ARR proposal nor the tariff proposals were filed for the year 2002-03 by the erstwhile DVB. No tariff revisions could, therefore, be made by the Commission during the year.

The combined revenue gap for the sector approved by the Commission stands at Rs. 296 crore for FY 03 (nine months) and FY 04, as against Rs. 1775 crore proposed by the Companies for the two years. The above revenue gap has been arrived after accounting for the committed AT&C loss reduction by the DISCOMs, State Government support of Rs. 2624 Crores for the two years and the permitted level of expenses under various heads. The approved retail tariffs, as discussed in this Chapter, have been computed so as to recover this gap from various categories. It may be noted here that the Government support of Rs. 2624 crores for the two years comprise about 76% of the total sector support envisaged by the Government for the five years beginning FY 2002-03. Any lower

revenue mobilization from tariff increases would have a direct bearing on the proportion of this five-year support being utilized during the first two years, and compromising the flexibility of the Commission in the future years.

The Commission also expects that with the capital and R&M works approved, energy auditing measures, improvement in metering, billing & collection procedures proposed by the petitioner, the actual achievement in AT&C loss reduction by the Companies shall be far higher than the bid levels, easing the upward pressure on retail tariffs in future. However, in view of the present context, an upward revision of retail tariffs has become inevitable in the long-term interest of the sector and the consumers.

5.2 Inputs for Tariff Design

Following are the major inputs having bearing on tariff designing and the same are briefly discussed:

- Cost of service
- Cross-subsidisation in tariff structure
- Consumer-mix and demand forecast
- AT&C losses

5.2.1 Cost of service

In assigning the revenue requirement, a suitable allocation of revenue requirement is made to various sectors of services, viz. generation cost, transmission cost and the distribution cost. The relative burden of constituent consumer categories is assessed and on the basis of cost imposed on the system, it is decided as to how much share is due to which category of consumers. Although, it shall be equitable to have the embedded cost in designing the tariff for different consumer categories as briefly explained above, it calls for a detailed database of

allocated costs. Such allocations in the determination of embedded cost is done on the basis of following factors:

- Voltage of supply
- Power factor
- Load factor
- Time of use of electricity
- and Quantity of electricity consumed etc.

While the erstwhile DVB was urged to maintain the requisite database, it failed to do so and in the meantime the new private companies have also not succeeded so far. The Commission, therefore, decided to adopt the average cost of service as a guiding principle in this regard.

5.2.2 Cross-subsidisation in tariff structure

The Commission recognizes the need for elimination of cross subsidization, however, it is equally incumbent on the Commission to keep in mind the historical perspective for the need to continue with cross-subsidy for some time. However, the Commission is gradually moving away from the regime of cross-subsidy in a phased manner. Accordingly, in today's scenario, it is the agricultural and domestic category of consumers who stand to benefit from the cross-subsidy, which is being provided by industrial and non-domestic consumers.

5.2.3 Consumer-mix and demand forecast

5.2.3.1 Petitioner's submission

For the nine-month period July 02 to March 03, the petitioner, in its petition, had estimated the category wise sales considering the actual sales during the 4-month period from July 02 to November October 02 and then estimated the sales for balance 4 months.

For FY 04, the petitioner has first annualized the 9-month estimated sales and then considered growth rates of 4.6%, 6.8% and 0.3% for domestic, non-domestic, and LIP categories respectively. No growth, however, has been considered for other categories.

A summary of the sales submitted by the petitioner and that considered by the Commission is given in Table 5.1.

5.2.4 AT&C Losses

The concept of AT&C loss and its implications on

5.2.3.2 Commission's Analysis

The Commission obtained the details of actual category-wise sales during the nine-month period of FY 03 and has considered the same for determining the revenues from sales for this period.

Table 5.1: Summary of category-wise sales (in MU) for the period July 2002 to March 2003 and FY 2003-04

Category	July 2	002 - Marc	2003-04		
Calegory	Petition	Actual	Commission	Petition	Commission
Domestic	1074	963	963	1498	1567
Non-Domestic	362	398	398	510	639
Industrial	391	350	350	522	536
Public Lighting	46	23	23	61	37
Agriculture	1	1	1	1	1
Railway Traction	0	0	0	0	0
Total	1873	1734	1734	2592	2781

determination of tariff have been discussed in detail in Chapter 4.

For FY 04, the Commission has forecast the category-wise demand for consumers of all the DISCOMs considering growth rates during preceding 6 years, the actual sales during the 9month period of FY 03 and the load shedding during FY 03. This has been done by considering year-on-year variations in category-wise sales, the compounded annual growth rate (CAGR) and allocating the load shedding to various consumer categories. This total demand forecast for all the DISCOMs has then been allocated to each DISCOM in proportion to its share in the total actual sales for each category during nine-month period of FY 03.

The petitioner has not projected any growth in the industrial consumption; the Commission is, however, of the view that industrial consumption will increase on account of development of new industrial areas such as Bawana and relocation of industries to such areas. This was also confirmed by DSIDC during discussions with the Commission.

The sales level of 26 MU to DMRC, proposed by the petitioner, has been accepted by the Commission.

5.2.4.1 Petitioner's submission

The petitioner has submitted that the actual AT&C losses at the time of commencing operations were higher than the opening loss level determined by the Commission in its Order dated 22.02.02. Further, the petitioner submitted that it has considered the accepted bid level of AT&C loss to be achieved in 9-month period of FY 03 instead of 12-months.

For FY 04, the petitioner has considered the AT&C loss at the committed level.

5.2.4.2 Commission's Analysis

The Commission obtained the details of actual AT&C loss for the nine-month period of FY 03, which stood at 61.8-% and was more than the committed level of 56.45%. In line with the Policy Direction, the Commission has considered the actual AT&C loss of 56.45%.

The Commission has considered the AT&C loss of 54.70% for FY 04 in line with the committed reduction for FY 04. Summary of petitioner's

Table 5.2: AT&C loss for July 2002 to March 2003 and FY 2003-04

Descripiton	20	02-03 (9 /	2003-04				
Description	Petition	Actual	Commission	Petition	Commission		
Energy Input (MU)	3609	3625	3625	4920	5280		
Units Billed (MU)	1873	1734	1926	2592	2782		
Units Realized (MU)	1573	1381	1578	2229	2392		
AT&C Loss (MU)	2035	2243	2046	2691	2888		
AT&C Loss (%)	56.41%	61.89%	56.45%	54.70%	54.70%		

submission and approval by the Commission is given in Table 5.2.

5.3 Revenue gap at existing tariff

5.3.1 Revenue from existing tariff

Revenue from existing tariff is required to be estimated to assess whether the annual revenue

requirement is met with the existing tariff at the approved sales. If a

Government etc.

	DIO CICI NO			<u> </u>	
Particulars		FY 2002	FY 2003-04		
raniculais	Petition	Actual	Commission	Petition	Commission
Revenue Collection	603	525	600	860	857

Table 5.3: Revenues collected (Rs. Crores)

Rs 53.24 Crore, respectively. revenue gap exists, the same needs to be bridged by means such as tariff increase, support from

The Commission has obtained the details of actual revenues, billed and collected, during the ninemonth period of FY 03.

For FY 04, the Commission has computed the revenue at the existing tariff from the estimated sales figures (Table 5.1.) and from other charges such as load violation charges, normative charges, shunt charges etc., which have been related to the actual revenue available from these charges for FY 03. The revenues estimated by the petitioner and those considered by the Commission are given in Table 5.3.

5.3.2 Power Purchase Cost of the petitioner at existing BST

Table 5.4 provides the Power Purchase cost as

proposed by the Petitioner and as considered by the Commission at the existing Bulk Supply Tariff.

5.3.3 Revenue gap of the petitioner

The revenue gap at existing retail supply tariffs and existing bulk supply tariff has been computed as given in Table 5.5.

The "Revenue Gap for the period July 2002 to March 2003 and for the FY 2003-04 has been estimated by the Commission as Rs 25.47 Crore and

5.3.4 Contribution of additional revenues revision of retail tariff

The Commission has determined the retail tariff keeping in view the overall sector revenue gap.

5.4 Previous revision of Tariff

The previous revision of retail supply tariff took place in 2001, when the Commission issued the Tariff Order for DVB on May 23, 2001 and the revised tariff was made applicable from 1st June 2001. Subsequently, the BST payable by the three DISCOMs was determined by the Commission in its Bulk Supply Tariff (BST) Order dated February 22, 2002. Since Fuel Adjustment Charge (FAC) is not being levied separately and is merged in the retail tariff, determined by the Commission in its Order dated 23.05.01, there has been no increase in the

Table 5.4: Power purchase cost at existing RST

table 5.4. Fower purchase cost at existing 651					
	FY 2	.002-03 (9 m	FY 2003-04		
Description	As per Actual		As per	As per As per	
	Petition		Commission	Petition	Commission
Energy Input (MU)	3609	3625	3625	4920	5280
Power Purchase Cost* at existing BST (Rs. Crore)	477	479	479	650	697

*At existing BST of 132.09 paise/unit

Table 5.5: Revenue gap at existing tariffs (Rs. Crores)

Description		3 (9 months)	FY 2003-04		
Description	Proposed	Commission	Proposed	Commission	
Expenses (A)*	209.67	145.04	306.41	208.96	
Return (B)*	15.82	14.70	24.81	22.43	
Non-Tariff Income (C)*	15.07	13.28	20.95	18.08	
Revenue Requirement (A+B- C) excl. Power Purchase Cost*	210.42	146.46	310.27	213.31	
Revenue realized at existing Tariffs	603	600	860	857	
Power Purchase cost at existing BST	477	479	650	697	
Revenue Gap	84	25	100	53	

*Refer Table 3.17

retail tariffs for the consumers for the last 2 years.

5.5 Tariff Design

The Commission has modified the existing tariffs keeping in mind the factors discussed in preceding sections as well the billing impact on the consumers. As discussed in Chapter 4, the Commission has substantially simplified and rationalized the tariff categories and the tariffs, by measures such as implementing two-part tariffs, merging of slabs and sub-categories, etc. Determination of tariffs for different consumer categories has also taken into consideration the long-term objective of moving the tariffs for all categories towards cost of supply.

The Commission has debated on the issue regarding phasing out of cross subsidy but has taken a conscious decision to lay more emphasis on matters of rationalisation of tariff, at least for the purposes of the present Order. The Commission feels that removal of cross subsidy can only be a sequel to rationalisation since it would be difficult to undertake removal of cross subsidy alongwith rationlisation on account of the negative impact on revenues. Accordingly, the Commission has taken several measures towards rationalisation in this Order, such as, abolition of minimum charges

and also meter rent, removal of misuse charges on account of non-availability of MCD license, abolition of the normative consumption concept, imposition of demand violation surcharge on excess demand only, merging of the induction furnace with the LIP category etc. It is the strong belief of the Commission that the industry would welcome the steps initiated towards rationalisation like removal

of the need for an MCD license, rationalisation of the demand violation surcharge, etc. It has to be borne in mind that the monetary relief, which the industry would get from these measures, would considerably reduce the real impact of the tariff hike.

The Commission is aware of the fact that in the domestic category the increase of about 22% on an average against the overall hike of about 15% in the previous Retail Tariff Order, issued in May 2001, had led to a lot of resentment. In the present Order, the tariff hike for the domestic category has been limited to about 5% only. There is no doubt that a part of the burden for this is going to fall on the other categories as well. However, as mentioned earlier, if the rationalisation measures are taken into consideration, the real impact of tariff on the consumers will be much less. The Commission, therefore, is of the view that with this approach, the interests of all the consumer categories have been taken care of. The Commission shall concentrate on reducing the cross-subsidy further in the next tariff order by which time the impact of the measures of rationalisation, as suggested in this Order, would be clear and evident.

5.6 Domestic Tariff

5.6.1 Consumer profile

Domestic tariff is applicable for the lighting/fan and power consumption of residential consumers, hostels of recognised/aided educational institutions and stair case lighting in residential flats, compound lighting, lifts & water pumps or drinking water supply and fire fighting equipment, etc. in Cooperative Group Housing Societies (CGHS), bonafide domestic use in farm houses, etc. The domestic consumers account for approximately 54% of the total billed units and contribute around 38% to total revenue.

5.6.2 Approved Tariff

The existing tariff and the approved tariff for domestic category are indicated in Table 5.6.

The Commission has designed the tariff structure for domestic consumers keeping in view the following factors:

5.6.3 Abolition of minimum charges and meter

A large number of consumers had expressed reservations against the levy of minimum charges suggesting that they are against the concept of energy conservation and lead to wastage of energy. An efficient method of charging, called two-part tariff, has also been suggested by some stakeholders.

The Commission feels that although there is widespread dissatisfaction against minimum charges (i.e. Rs. 60/kW equals to 40 units/kW @ Rs. 1.50/unit), it is hard to believe that in a city like Delhi the consumption level of consumers could be so

Table 5.6: Domestic Tariff

	Ex	isting Tariff		Approved Tar		
Sub-category	Minimum Charges (Rs./kW/month)	Units/ month	Energy Charges (p/u)	Fixed Charges (Rs./kW/ month)	Units/ month	Energy Charges (p/u)
Domestic Lighting/Fan and		Lifeline upto 50 units	125	-	-	-
Power (Single Delivery Point and Separate Delivery Points/Meters)	60	0-100 101-200 201-400 Above 400	1502103 00360	10	0-100 101-200 201-400 Above 400	175 235 325 385
Domestic Lighting /Fan and Power on 11 kV single delivery point for CGHS and other similar group housing complexes	Rs. 150/kVA of maximum demand	Consumption / month First 22.2% Next 22.2% Next 44.4% Next 11.2%	Energy Charges 150 210 300 360	10	Consumption/ month First 22.2% Next 22.2% Next 44.4% Next 11.2%	Energy Charges 175 235 325 385
Domestic Lighting/Fan and Power Connections in Regularised/ Unauthorised Colonies, Left Out Pockets and Villages both Electrified and Unelectrified. Plot sizes: i) up to 50 Sq. yds. ii) between 51-100 Sq. yds. iii) between 101-150 Sq. yds. iv) between 151-200 Sq. yds. v) more than 200 Sq. yds. only through installation of meters by DVB	-	-	Rs 150 Rs 225 Rs. 360 Rs 510 Same as 1.1	-	-	Rs 175 Rs 295 Rs. 410 Rs 575 Same as 1.1

low that their energy charges could be below minimum charges, unless the premises are locked or are very thinly inhabited. The only other reason for paying minimum charges seems to be that the meters are not recording the consumption properly for various reasons, such as, defective/slow running meters, dishonest abstraction of energy etc. The Commission believes that once the correct energy consumption is recorded, the concept of minimum charges shall lose its relevance in most of the cases excepting those where the premises remain unoccupied etc.

5.6.4 Introduction of two part tariff

The Commission has received the suggestion from the stakeholders to introduce the concept of twopart tariff, which is more appropriate than minimum charges for recovery of fixed costs on account of the infrastructure.

Considering the views expressed the by stakeholders and in its continued and constant effort to rationalise the tariff structure, the Commission introduces two-part tariff in domestic category. Accordingly, meter rent and minimum charges are abolished for domestic category of consumers. The first part called the fixed charges in two part tariff represents the fixed component of charges which is independent of consumption level and depends on the fixed cost incurred by the utility in providing the electricity supply. The second part called the energy charges in two-part tariff represents the variable component of charges, which depends solely on the consumption level.

5.6.5 Subsidy

Analysis of the ARRs of TRANSCO and DISCOMs has brought forth the fact that the average cost of service to the consumer even on benchmarking the AT&C losses at 20% would work out to 340

paise/unit (approx.). The domestic consumers enjoy a substantial benefit of subsidy as long as their average tariff is lower than the cost of service.

it will be noticed from the approved tariff (Table 5.6) that with the removal of the minimum charges in the revised tariff, the monthly bill for consumers with a consumption of less than 40 units/kW/month is lower than that under previous applicable tariffs. This has been graphically represented in Graph 5.1. Graph 5.2 reveals that all the domestic consumers with 1 kW load would continue to pay tariffs below the cost of service upto a consumption level of approximately 500 units per month, (after working out cost of service even at 20% AT&C loss). In fact, the benefit of subsidized tariff remains available up to a consumption level of about 2000 units per month.

While domestic consumers are being highly subsidized, the industrial and non-domestic consumers are paying higher than the average cost of supply.

While revising the tariff for domestic category, in continuation of the philosophy of previous Tariff Order, the Commission has progressed somewhat further on the path of reduction of the above cross-subsidies available to it.

5.6.6 Minimisation of tariff shock

At present, even though the rates applicable for the domestic consumers have a substantial element of cross-subsidy, in determining the tariffs, the Commission has ensured that the billing impact on the consumers is minimized. The Commission has attempted to minimise the effects of tariff shock, particularly on the economically vulnerable segments of society, by so designing the tariffs for different slabs.

At the introduction stage, the fixed charges for domestic category have also been kept very low in order to avoid the tariff shock.

Further, to avoid possible harassment of consumers in the context of checking up the connected load the utility staff, the fixed charges have been made applicable on the sanctioned load or maximum demand (in case MDI meter is installed) in kW, whichever is higher.

5.6.7 Reduction in the number of consumption slabs

The Commission has received suggestions as regards reduction/modification in the number of consumption slabs in the domestic category. The Commission agrees that there is a need to reduce the number of slabs by merging slabs. However, the existing consumption slabs are such that any merger of slabs is likely to result in a tariff shock for some consumers. Hence, the slabs have to be created such that the billing impact is minimised. For doing such an analysis, the Commission would require detailed consumption data for small sized slabs, to arrive at the conclusion of merging or splitting various slabs. In the absence of requisite details, the Commission has retained the existing slabs in the domestic category under the current Order. At the same time, the Commission directs the petitioner to maintain consumption data for the domestic category in blocks of 50 units, i.e. 0-50 units. 51-100 units, 101-150 units, etc. and submit it to the Commission alongwith the next ARR and Tariff Petition to enable the Commission to re-design slabs depending on the consumption pattern.

5.6.8 Lifeline Concept

The Commission, in its Order dated 23.05.01, had discussed the concept of lifeline for the consumers in the lowest income bracket with consumption of around 50 units per month, which meets the

requirement of electricity to the bare minimum extent. The Commission, having introduced the concept of fixed charges in lieu of minimum charges, has analysed the impact of the revised tariff on the consumers in lifeline category. Table 5.7 gives comparison of billing impact on the lifeline consumers at existing and new tariff. It may be seen that with the new tariff the consumers within the 50 units/ month lifeline consumption level shall pay even less than the existing bill upto a consumption level of 35 units. Even thereafter the impact on the bill amount is much less as compared to other high consumption consumers.

The reduction in bill amount is basically because of two rationalization measures, viz. abolition of compulsory minimum charge of Rs. 60/- per kW per

Table 5.7: Billing Impact on Lifeline category

Table 0.7. D	94.7		
Consumption	Bill Amount	Billing	
(units/ month)	at existing	at revised	Impact
,	tariff	tariff	(Rs.)
10	72	27.5	-44.5
20	72	45	-27
30	72	62.5	-9.5
40	72	80	12
50	74.5	97.5	23

month and meter rent of Rs. 12 per month.

Considering the above, the Commission feels that having a separate sub-category by the name of lifeline is redundant and has eliminated the lifeline sub-category in the domestic category.

5.6.9 Domestic power

Domestic power connection in a premises, with separate meter and having different K. No., is currently charged at the highest slab rate of single connection for domestic light/fan and power. The existing charge for domestic power connection is 360 paise per unit. The Commission is of the opinion that there is no economic rationale for having separate tariffs for such connections, in the same

premises having light/fan connection also, solely because their consumption is recorded by separate meters. In fact, the concept of separate metering started in the days when the tariff for lighting/fan consumption and power consumption was different. The Commission has, merged this category with the domestic category, and the consumers under this category will now pay the same rates as the domestic category for both lighting and power consumption.

5.6.10 Domestic lighting/fan & power on 11 kV single delivery point for CGHS and other similar Group Housing Complexes

The Commission has considered the average consumption level of 450 units in line with the philosophy adopted earlier. The Commission finds that the ultimate effect of the above formulation is arriving at a multiplication factor of 2.7844 [i.e. (22.2x1.75 + 22.2x2.35 + 44.4x3.25 + 11.2x3.85)/100],which is in fact the weighted average of tariff under different slabs for 450 units of consumption. The Commission, therefore, finds that such a complex calculation methodology for billing is not necessary and a much simpler course of action would be to resort to billing by multiplying total energy consumption with the single per unit charge of Rs. 3.018. A rebate of 15% shall be available on the energy charges, as the sub-distribution expenses including capital investment, metering, billing and collection are to the account of the CGHS. The minimum charges and meter rent have been replaced with fixed charges on the basis of the sanctioned load or maximum demand, in kW, whichever is higher.

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

The Commission has assigned energy consumption levels to different categories on the same basis as

last year. Accordingly, it has been presumed that the consumption level of consumers occupying plots of size 0-50, 51-100, 101-150, and 151-200 square yards would be 100, 150, 200 and 250 units respectively. The rates payable in lump sum each month have been determined by applying domestic category rates to these consumption levels.

As mentioned in Chapter 4, although the Commission has approved new rates of tariff for this category, Commission expects the petitioner to install meters for all such consumers, so that they may be billed on applicable tariff rates thereafter. When all such consumers have been metered, this category would be abolished.

5.7 Non-Domestic Tariff

Non-domestic category of consumers consist of two sub-categories viz. Non-domestic Low Tension (NDLT) with load upto 100 kW and Mixed Load High Tension (MLHT) with load more than 100 kW.

5.7.1 Approved Tariff

The existing tariffs and the revised tariffs for non-domestic category have been presented in the Table 5.8.

5.7.2 Non-Domestic Low Tension (NDLT)

5.7.2.1 Consumer profile

This category covers LT non-domestic consumers of load upto 100 kW having connected load (other than the industrial load) for lighting, fan & heating/cooling power appliances in all non-domestic establishments. This category also includes, but is not limited to, schools/colleges, hospitals, railways (other than traction), hotels & restaurants, cinemas, banks, shops, poultry farms, horticulture, etc. They consume approximately 15% of the total billed units.

Table 5.8: Non-Domestic Tariff

	Existing Tariff			Approved Tariff			
Sub-category	Minimum Charges (Rs./kW/month)	Demand Charges (Rs./kVA/month)	Energy Charges (p/u)	Fixed Charges (Rs./kW/ month)	Demand Charges (Rs./kVA/ month)	Energy Charges (p/u)	
Non-Domestic (Low Tension)–NDLT-I a) single phase (<10 kW) b) three phase (>10 kW)	200 300	•	440 500	20 20	1	475 515	
Non-Domestic Light/Power on 11 kV Single Delivery Point or Commercial Complexes-NDLT-II	200/kVA on billing demand	-	500 (with 15% rebate)	20	-	515 (with 15% rebate)	
Mixed Load (High Tension)- MLHT a) Supply on 11 kV b) Supply on LT (400 Volts)	-	150 200	(paise/ kVAh) 390 465	-	150 200	(paise/ kVAh) 425 500	

The tariffs for non-domestic consumers have been revised considering the following:

5.7.2.2 Normative consumption

As discussed in Chapter 4, the surcharge @ 30% on consumption in excess of prescribed normative consumption has been abolished. This is expected to give substantial relief to honest consumers, whose actual consumption used to exceed the normative limit.

5.7.2.3 Disparity between Three Phase & Single Phase Consumers

In the previous Order, the Commission had noted that there is no rationale for having differential energy charges for single phase and three phase consumers. Therefore, the Commission initiated the process of reducing the difference in tariffs for three-phase and single-phase consumers. As observed in the previous Order, eliminating this rate differential and simultaneously increasing the tariffs of both these types of connection would have a big impact on the single-phase consumers; accordingly, the differential has to be gradually eliminated. In this Order, therefore, the Commission has still maintained the differential but has reduced the disparity further by increasing the energy

charge for single-phase category at a higher rate as compared to that of three-phase supply.

5.7.2.4 Minimum charges and meter rent abolished

The minimum charges and meter rent have been abolished due to the reasons explained in preceding section of domestic consumers and the concept of fixed charges has been introduced. The rates of fixed charges and energy charges have been fixed keeping in view that net billing impact of these charges and withdrawal of minimum charges and meter rent is minimal.

5.7.2.5 Non-domestic connections at 11 kV single delivery point for commercial complexes etc.

The energy charges for 11 kV single delivery point commercial complexes will be the same as that applicable for three-phase NDLT consumers, with a 15% rebate on the energy charges.

5.7.3 Mixed Load High Tension (MLHT)

5.7.3.1 Consumer Profile

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

domestic/non-domestic establishment, pumping loads of Delhi Jal Board/DDA/MCD etc. They consume approximately 6% of the total billed units.

5.7.3.2 Abolition of meter rent

Meter rent including that of associated equipment has been abolished.

5.7.3.3 Difference between tariff applicable for MLHT consumers taking supply at 11 kV and those taking supply at 400 V

The MLHT consumers availing LT supply are required to pay a higher demand charge, as compared to MLHT consumers availing supply at 11 kV. The higher the voltage of supply, lower the system losses and hence the consumption by MLHT consumers at

5.8 Industrial Tariff

Industrial category of consumers consist of two subcategories viz. Small Industrial Power (SIP) with load upto 100 kW and Large Industrial Power (LIP) with load more than 100 kW.

5.8.1 Approved Tariff

The existing and approved charges for industrial consumers have been presented in Table 5.9.

5.8.2 Small Industrial Power (SIP)

5.8.2.1 Consumer profile

This category consists of industrial consumers with load up to 100 kW including lighting, heating and cooling load. Their consumption is approximately 12% of the total billed units.

Table 5.9: Industrial Tariff

	Existing Tariff			Approved Tariff		
Sub-category	Minimum Charges (Rs./kW/month)	Demand Charges (Rs./kVA/month)	Energy Charges (p/u)	Fixed Charges (Rs./kW/ month)	Demand Charges (Rs./kVA/ month)	Energy Charges (p/u)
Small Industrial Power - SIP	200	-	410	20	-	445
Industrial Power (SIP) on 11 kV Single Delivery Point for Group of SIP Consumers	200	-	410 (with 15% rebate)	20	-	445 (with 15% rebate)
Large Industrial Power LIP a) Supply on 11 kV b) Supply on LT (400	-	150 200	(paise/ kVAh) 340 425	-	150 200	(paise/ kVAh) 375 450

LT voltages has to be discouraged. The Commission believes that with gradual movement towards voltage linked tariff, irrespective of load of the consumer, with tariff for higher voltage being lower than that for low voltage shall discourage consumers to opt for LT connections particularly for loads higher than 100 kW.

For supply at 33/66 kV, consumers will get a rebate of 2.5% on the energy charges on 11 kV rates and a rebate of 4% for supply at 220 kV. The demand charge shall continue at the existing level.

5.8.2.2 Normative consumption

As in the case of NDLT consumers, the surcharge @ 30% on consumption in excess of prescribed normative consumption has been abolished for SIP consumers also. As already stated this is expected to give substantial relief to honest consumers, whose actual consumption used to exceed the normative limit.

5.8.2.3 Rationalisation of sub-categories

The Commission has merged the sub-categories, viz. non-continuous industry and continuous

industry, as there was no difference in tariffs except for the normative consumption levels. As the concept of normative surcharge has been dispensed with, sub-categories under SIP category shall not exist.

5.8.2.4 Abolition of minimum charges, meter rent and misuse on account of non-possession of valid MCD licence

The minimum charges and meter rent are abolished and to cover the fixed costs, fixed charge per kW is introduced. Again at the stage of introduction of fixed charges concept, the same is kept at a low level with a view to avoid heavy billing impact.

Misuse charges, hithertofor being levied on account of not having valid municipal licence, shall not be applicable.

5.8.2.5 SIP connections at 11 kV single delivery point for group of SIP consumers

The SIP group consumers availing supply at 11 kV at single delivery point will have a rebate of 15% on energy consumption charges, as compared to the SIP tariffs.

5.8.3 Large Industrial Power (LIP)

5.8.3.1 Consumer profile

This category includes large industrial consumers having load above 100 KW including lighting load. This category accounts for 10% of the total billed units.

5.8.3.2 Abolition of minimum consumption guarantee charges for induction are furnace consumers

As discussed in Chapter 4, the Commission has merged the induction/arc furnace sub-category with the main LIP category. The "minimum

consumption guarantee charges", which differentiated the two categories, stand abolished.

5.8.3.3 Difference between tariff applicable for LIP consumers taking supply at 11 kV and those taking supply at 400 V

LIP consumers availing LT supply are required to pay a higher demand charge, as compared to LIP consumers availing supply at 11 kV. The higher the voltage of supply, lower the system losses and hence the consumption by LIP consumers at LT voltages has to be discouraged. The Commission believes that with gradual movement towards voltage linked tariff, irrespective of load of the consumer, with tariff for higher voltage being lower than that for low voltage shall discourage consumers to opt for LT connections particularly for loads higher than 100 kW.

For supply at 33/66 kV, consumers will get a rebate of 2.5% on the energy charges on 11 kV rates and a rebate of 4% for supply at 220 kV. The demand charge shall continue at the existing level.

5.9 Agricultural Tariff

5.9.1 Consumer profile

The agriculture connection is available for tube wells for irrigation, threshers and kutty cutting in conjunction with pumping load for irrigation purpose for load up to 10 kW and lighting load for bonafide use in 'Kothra'. The percentage share of agricultural consumption is only around 0.5% of the total billed units.

Historically, agricultural consumers have been paying tariffs much below the cost of service. The tariff of this category has to be increased gradually, so that over a period of time the tariff reflects the cost of service. The Commission has also observed that the consumption reported under misuse in this

category is higher than the consumption recorded under legitimate use, which indicates that several consumers are opting for agricultural connections and misusing it for other purposes. Rationalising the agriculture tariff shall discourage such misuse.

The Commission has also introduced fixed charges for the agricultural category in line with the principle of introducing fixed charges for all consumer categories. Simultaneously, as for all other categories the Commission has abolished rent for agricultural consumers also.

5.9.2 Approved Tariff

The existing and approved charges for agricultural consumers have been presented in Table 5.10.

Table 5.10: Agriculture Tariff

Existing '	Tariff	Approved Tariff			
Minimum Charges (Rs./kW/month)	Energy Charges (p/u)	Fixed Charges (Rs./kW/ month)	Energy Charges (p/u)		
-	75	10	110		

5.10 Mushroom cultivation

5.10.1 Submission from mushroom cultivators

The mushroom cultivators have requested for maintaining parity in comparative rates between agricultural tubewell connections and mushroom cultivation. They have also requested that their tariff should not be more than twice that of agricultural category. They have stated that their consumption is very high on account of the heavy refrigeration requirement in mushroom cultivation. They have stated that since the cost of power is almost 40% of the product cost, its comparison with poultry farms is unjustified. The cultivators have stated that mushroom cultivation is an agricultural activity and should be treated at par with agricultural category.

The mushroom cultivators have supported their argument by stating that the Hon'le High Court of Delhi in its Order dated 17.1.2003 have held that

mushroom cultivation is an agriculture activity. It is neither a commercial activity nor industrial activity.

5.10.2 Commission's view

The Order dated 17.01.03 of Hon'ble High Court on the review petition of mushroom cultivators states as follows:

'Mushroom has been held to be commercial activity which is a factual error inasmuch as even in the "Order on Annual Revenue Requirement for Financial Year 2001-02 and Tariff Determination Principles for the Years 2002-03 till 2005-06 for Delhi Vidyut Board", issued by Delhi Electricity Regulatory Commission, mushroom cultivation at page 68 has been classified under agriculture category. As such, the prayer made in the application deserves to be

allowed, holding that mushroom is an agriculture activity. It is neither a commercial activity, nor industrial activity."

From the quoted judgement of Hon'ble High Court of Delhi, the Commission notes that Hon'ble High Court has allowed the prayer made by mushroom cultivators in the application only to the extent that the factual error of holding mushroom cultivation as commercial activity is to be corrected in line Commission's Order dated 23.05.01.

As deliberated in its Order dated 23.05.01, the Commission is not in agreement with this view. It feels that mushroom cultivation is akin to commercial activity and its comparison with tubewells, used for agricultural purposes, is inappropriate. However, keeping in view that the tariff hike should not be too high, the Commission has determined the tariffs for mushroom cultivation.

As with all other categories, minimum charges and meter rent have been abolished and fixed charges have been introduced for this category.

5.10.3 Approved Tariff

The existing and approved tariffs for agricultural consumption and mushroom cultivation are given in Table 5.11.

Table: 5.11: Tariff for Mushroom Cultivation

Existing '	Tariff	Approved Tariff		
Minimum Charges (Rs./kW/month)	Energy Charges (p/u)	Fixed Charges (Rs./kW/ month)	Energy Charges (p/u)	
100	200	20	250	

5.11 Public Lighting and Signals/Blinkers

5.11.1 Public Lighting

5.11.1.1 Consumer profile

Tariff for this category is applicable to all street lighting consumers including MCD, DDA, PWD/CPWD, Slums. The public lighting consumption is 1.3% of total billed units.

5.11.1.2 Petitioner's submission

The petitioner has submitted that since the exercise of commissioning and maintaining light mast entails considerable resources and good engineering processes and practices due to its height and associated gears as compared to normal lighting poles. As such a nominal charge of Rs. 60 per point per month is inadequate for maintaining lighting mast. The petitioner has proposed a separate provision of maintenance charge of Rs. 500 per month per lighting mast point to cover its cost.

5.11.1.3 MCD's submission

In its letter dated 15th February 2003, MCD had stressed on the need for transparency in costing of spares. It stated that issue of street lights involves not only maintenance but also shifting of existing services and erection of new poles. It further stated that suitable arrangements need to be made to ensure that street lights are properly working at cutting edge level as MCD's attempts to do physical checks may not necessarily lead to best

results in ensuring that the maintenance standards are properly set so that there is accountability. It also submitted that there is no foolproof system to ascertain as to how much amount has been collected and remitted to MCD as Electricity Tax by the DISCOMs.

5.11.1.4 Petitioner's response to MCD's submission dated 15th

February 2003

The petitioner has stated that it purchases spares in transparent manner and its accounts are subject to internal as well as external audit as per Company Law. The petitioner has suggested signing of a maintenance contract on lump-sum price per pint basis. Similar suggestion has been made for shifting of services, road widening etc.

In light of the dilapidated condition of street lighting in Delhi, the petitioner has suggested that civic authorities may undertake complete renovation and modernization. Alternatively, a Street Lighting Corporation may be set up for this purpose.

In regard to the issue of electricity tax, the petitioner has submitted that it is paying electricity tax @ 3.96% of the total collection as against 2.45% by erstwhile DVB. This percentage was worked out taking into account 5% tax rate on energy charges, which form part of total bill amount. This calculation has been stated to be checked by MCD.

5.11.1.5 MCD's response to petitioner's response as

Vide its letter dated 20th May 2003, MCD has conveyed its objections/suggestions on cost of maintenance of street lights and on the response of the petitioner in this regard.

MCD has submitted that existing maintenance charge is already on the higher side, which were

increased by 20% from Rs. 50 to Rs. 60 in Commission's Order dated 23.05.01 despite objections filed by MCD in this behalf and particularly when the cost of spares is borne by the consumer. MCD has requested the Commission to determine its tariff taking into account the followina:

- Some mechanism for in-built provision of rebate to the extent of 40% be provided in the tariff for the percentage of street lights which are out of order
- Purchase and accounting of equipment and spares to be transparent to ensure quality and economy
- All proposals involving shifting of services due to road widening should be referred to the Expert Technical Committee set up by Delhi Transco Ltd. with prior approval of Principal Secretary (Power), Government

Regarding the proposal of the petitioner to have maintenance contract on lump-sum basis, the MCD have said that it is vague and no comment can be given in the absence of details thereof. The suggestion made by the petitioner to set up a 'Street Light Corporation' is not technically feasible and is violative of the provisions of clause (o) of section 42 of the DMC Act which mandates maintenance of street lights as one its obligatory functions.

MCD has stated that in the absence fo rate analysis and justification of cost, the rates asked by the petitioner are prima-facie irrational and illogical. MCD has stated that the suggestion for execution of an MOU between MCD & DISCOMs for future maintenance of street lights can be examined by it after it has been put up to the Commission for its tariff.

On the issue of remittance of electricity tax, the MCD have stated that the said tax is not being deposited after deducting the collection charges and there is need of greater transparency in this regard.

MCD submitted that the above are its interim observations and will submit the finalized proposal to the Commission by 30th June 2003.

5.11.1.6 Commission's view

The Commission has examined the responses given by the petitioner and the MCD in detail. In response to the MCD's letter dated 15th February 2003, the Commission had written to MCD on 28th February that the issues in the said letter shall be taken up during the next tariff hearing process and MCD would be associated in this process. As such, inspite of not having received any objection in response to the public notice given by the Commission, it invited MCD for making submissions during public hearing on 14th May 2003. However, MCD did not participate in the public hearing. The Commission, vide its letter dated 14th May 2003 again advised MCD to submit its views on the petitions by 20th May. On MCD's letter dated 20th May, the Commission, in its letter dated 23rd May 2003, communicated to MCD that there seems to be wide differences, both in regard to the scope of works and maintenance charges as made out by the petitioners and the MCD. The Commission said that in the absence of a clear-cut proposal, particularly on the scope of works, it is difficult to take a rational approach and, therefore, requested that MCD and DISCOMs may jointly work out a clear-cut proposal for consideration of the Commission. A copy of this letter was sent to DISCOMs also.

Under the circumstances, the Commission directs

MCD to jointly work out a clear-cut proposal with

DISCOMs, giving the details of scope of works and maintenance charges, and submit it to the Commission within the next two months. Since it is a matter of public service, the Government is also requested to ensure that MCD and DISCOMs conclude for finality in the matter. The Commission decides that status quo be maintained in the meantime. For the purposes of estimating revenue, the Commission has considered the revenue from maintenance charges under 'Other Income' @ Rs. 60/month/street lighting point and has not considered this income under income from tariffs. This is a provisional treatment of the matter, pending a final view as above. The adjustments in revenues of the petitioner on this account shall be done at the truing up stage.

5.11.2 Signals & blinkers

The Traffic Police has submitted that the Commission may specify the tariff applicable for signals and blinkers at par with the tariff applicable for public lighting. In view of the similarity and commonality between them, the Commission sees merit in the suggestion and has included signals and blinkers as a sub-category within public lighting category.

5.11.3 Approved Tariff

The existing and approved tariffs for public lighting and signals/blinkers are given in Table 5.12.

5.12 Railway Traction

5.12.1 Consumer profile

The consumption of Railway Traction is around 1% of the total billed units.

5.12.2 Capacity Blockage Charges

The petitioner is supplying power for the Railway traction through one phase while the other two phases remain unutilized/blocked. The levy of capacity blockage charges shall continue in accordance with the mutually agreed formula followed in the past. The capacity blockage charge is applicable to consumers drawing power at 33/66 kV on single phase @ Rs. 25000/- per month upto contract/maximum demand of 5 MVA. For contract/maximum demand of above 5 MVA, the capacity blockage charge is determined according to the formula: Rs. 1260 x (2.97A+5), where 'A' is the contract demand or maximum demand in MVA, whichever is higher.

5.12.3 Simultaneous maximum demand

After re-organisation of the erstwhile DVB and privatization of distribution business, the two supply points for Railway Traction fall separately within the jurisdiction of two distribution companies with one supply point in each company. As the petitioner is supplying power for Railway Traction only at one point, the concept of simultaneous maximum demand has lost its relevance.

5.12.4 Approved Tariff

The Commission approves the tariff for Railways (both demand and energy charges) as the tariff for LIP consumers along with the levy of capacity blockage charges.

Table: 5.12: Tariff for Public Lighting

Table: 5.12: Tariff for Public Lighting							
		Existing	g Tariff	Approved Tariff			
Sub-category		Maintenance Charges (Rs./light point/month)	Charges Charges CI		Energy Charges (p/u)		
	Public Lighting	60	360	60*	385		
	Sianals & blinkers	_	Rs. 210/month	_	385		

*tentatively applicable as discussed above

5.13 Delhi Metro Rail Corporation Ltd. (DMRC)

5.13.1 DMRC's submission

DMRC has submitted that it is engaged in the activities of providing Mass Rapid Transit System for Delhi and is a public utility and social sector project having many social benefits, which would be bestowed upon a section of traveling public, majority of whom belong the economically weaker sections of society. In connection with the above activities, DMRC requires electricity to run metro trains, for ancillary activities, for operational requirements, for supply to commercial, domestic and other establishments inside the metro stations and for real estate to be developed outside metro stations.

DMRC has submitted that in its application dated 25th July 2002 for grant of licence and subsequent pleadings, including application dated 18th December 2002 may be read as a part of the objections/suggestions for current proceedings. In its application dated 18th December 2002, it had stated that its tariff may be determined based on the average cost of supply of TRANSCO and a nominal amount to cover overheads of concerned DISCOM.

DMRC has submitted that on 6th November 2002, the Government had convened a meeting of DMRC, TRANSCO and the three DISCOMs and certain matters relating to tariffs applicable to DMRC were discussed in the said meeting. The extracts of minutes of this meeting are:

"Principal Secretary (Power) pointed out that the DISCOMs had already agreed in discussion in September that they would be submitting proposals to DERC, for treating DMRC as a special category of consumer, recommending tariff based upon the actual cost of supply without either the cross-

subsidy or subsidy elements, and the approximate implications of this had also been indicated to DMRC. This position will stand. This meant that the basis for tariff to be proposed to DERC by the DISCOMs for the metered power supply to DMRC would be TRANSCO's total cost including the cost of power purchase which would come to approximately Rs. 2.60 per unit during the current year. In case of supply on 66 kV, however, it was agreed that the DISCOMs would add their own reasonable service costs. Principal Secretary (Power) noted that this was only reiteration of what had already been agreed."

DMRC has submitted that unlike other consumers, all infrastructure and facilities after the point of interconnection with TRANSCO/DISCOM system are established, maintained and operated by DMRC at its own cost and the TRANSCO/DISCOM do not incur any dedicated expense for supply to DMRC. As such, the tariff for DMRC should be single part, based on number of units consumed and the two-part tariff has no application to the nature of consumption by DMRC.

DMRC has argued that since the last tariff order dated 23.05.01 of the Commission related to FY 2001-02, which expired on 31st March 2002, the tariff determined for FY 2001-02 cannot have any application for subsequent periods i.e. from 1.4.2001 onwards till the tariff is determined after giving all opportunity of parties. It has, therefore, submitted that the above tariff terms may be made effective from 5th September 2002 (i.e. the date from which DMRC started operations) onwards and DISCOMs may be directed to carry out adjustments for amounts claimed by DISCOMs after this date.

In respect of power factor of DMRC & service charges incurred by DMRC on power supply within stations, 220 kV to 415 V for private parties for

passenger amenities in the stations of DMRC, it has submitted that:

- Power factor for the 220 kV supply being availed at ISBT is above 0.9, and
- The power supply to private parties is being metered. The proportionate service charge on cost basis for supply of electricity to private parties for passenger amenities by DMRC including maintenance and operation of 220 kV substation, 33 kV/0.4 kV substation and LT system till point of supply, energy loss etc., works out to about 80 paise per kWh and this expenditure would need to be reviewed every year.

DMRC has raised objection against high rate of 2% as LPSC considering present interest rates and against charges for meter rent as DISCOMs are not incurring any expense on this account.

5.13.1.1 Response from Government

The Government vide its letter no. PS(P)/38/DERC/196 dated 16th May 2003 has confirmed that it supports the proposal reflected in the extracts of minutes cited by DMRC viz. that DMRC may be treated as a special category of consumer whose tariff would be based upon the actual cost of supply excluding both the subsidy and cross-subsidy elements.

The Government has also clarified that its view as stated above are not to be construed as policy direction under section 12 of the Delhi Electricity Reform Act, 2000, and there is no question of any financial implications for the Government or for Delhi Transco Limited.

5.13.1.2 MCD's response on electricity tax to DMRC

MCD has raised objection against giving exemption to DMRC from payment of electricity tax. MCD has

stated that as per Article 287 of the Constitution, the Railways are exempted from payment of this tax. However, DMRC does not fall within the meaning of 'Railways' under Article 287 of the Constitution. As such MCD is not constitutionally bound to give exemption to DMRC in this regard. Also, as per provisions of section 113 of the DMC Act, the electricity tax is not a mandatory tax, but can be defined as a discretionary tax and the Bye-Laws made under the Act also do not provide for any exemption.

5.13.1.3 Commission's view

After considering and analysed in detail the submissions made by the petitioner and DMRC and also the response from the Government. The Commission recognises that DMRC is a social sector utility for the public of Delhi and its viability is greatly impacted by the prices of electricity. Being a new consumer at 220 kV and with its differentiating nature of services and operations, the Commission is inclined to agree with the view of the Government that DMRC may be treated as a separate category of consumers whose tariff would be based upon the actual cost of supply excluding both the subsidy and cross-subsidy elements. This will also be in line with the objective of the Commission that it has to move towards cost of supply for all categories of consumers. Accordingly, the Commission has determined the tariff for DMRC on the basis of actual cost of supply by TRANSCO to DMRC and the nominal component of overheads of the DISCOM. However, the Commission is not in agreement with the view of the petitioner that two part tariff in case of DMRC has no application. But for the want of requisite details to carry out computations for the fixed and variable cost components, the Commission has for the purpose

of this Order, determined a single part tariff for DMRC.

As regards the proposal of the petitioner regarding ring fencing of DMRC for the purpose of computation of AT&C losses, the Commission opines that though DMRC is a separate category of consumers, it is in any case a consumer of DISCOM. Accordingly, it cannot be ring-fenced merely on the plea that it was not envisaged in Privatisation Scheme of DVB.

The Commission would like to clarify that the tariff determined by it remains valid for a period till another tariff order is issued. As such, the tariff determined in Order dated 23.05.01 continued even after 31.04.02. As with all other categories of consumers, provision for LPSC rate of 1.5% and abolition of meter rent is applicable to DMRC also.

5.13.2 Tariff for DMRC

In view of the above, the Commission approves a tariff of 230 paise/kVAh for DMRC.

5.13.3 Tariff for commercial and other establishments being supplied by DMRC

The Tariff for commercial and other establishments being supplied by DMRC in its premises shall be the same as for other consumers of the same category.

For making adjustments in billing by the petitioner in relation to such consumers, a suitable arrangement may be mutually agreed to between DMRC and the petitioner, within one month of the issue of this Order, failing which matter may be referred to the Commission.

5.14 Temporary Supply

In the existing tariff schedule, there are five subcategories under the temporary connection. The Commission has rationalised the tariffs applicable for the consumers availing temporary supply. The demand charges shall be 50% (instead of 100%) of the relevant category in case of temporary connections for a total period less than 16 days. The Commission has further reduced the temporary surcharge from the existing 50% to 30% level for temporary connections with the respective category tariffs.

5.15 Treatment of Revenue Gap

5.15.1 Revenue Gap for FY 2002-03 (nine-months)

As given in Table 5.5, the revenue gap of the Petitioner for the nine-month period of 2002-03 works out to Rs. 25.47 Crore, which shall be refunded by TRANSCO in the power purchase bill of the Petitioner for the month of July 2003.

5.15.2 Total Revenue from Approved Tariffs for FY 2003-04

Table 5.13 summarizes the revenue from the existing and approved tariffs (excluding electricity duty).

The total revenue in FY 2003-04 from existing and 977 Crores respectively.

In addition to the above, the existing revenue of Rs.

Category	Revenue from existing tariff	Revenue from Approved Tariff	% Increase in average tariff
Domestic	370	395	6.75%
Non-domestic	316	318	0.3%
Industrial	234	244	4.54\$
Agriculture			
Railways			
Public Lighting	19	20	4.96%
Total	939	977	3.99%

Table 5.13: Revenue from existing and approved tariff (Rs. Crores)

65 Crores from Miscellaneous charges is expected to go down due to rationalization measures taken by the Commission and are estimated to be of the order of Rs. 53 Crores.

Total revenue for FY 2003-04, thus comes to Rs. 1029 Crores at approved tariffs, including revenue from miscellaneous and other charges.

The approved tariffs are appended to this Order as Tariff Schedule for the FY 2003-04.

5.15.3 Approved Bulk Supply Tariff

With the approved level of revenues and the ARR excluding power purchase cost, the paying capacity of the petitioner is Rs. 665 Crores.

The units purchased by the petitioner from TRANSCO have been estimated at 5280 MUs. The approved BST of the petitioner, thus comes to 125.94 paise/unit.

6. Power Purchase Costs and Retail Supply Tariffs across States

6.1 Introduction

Generation and Power Purchase Expenditure is the single largest expense of any Electricity Supply Utility. In Delhi, power purchase cost comprises approximately 95% of the total estimated revenue requirement of Delhi Transco Limited. Power purchase cost is a function of not only generation within the State and power imported from outside the State, but also of the generation and power purchase mix. Hence, in comparing tariffs across States, one needs to appreciate the variance in tariffs on account of the sources from where the power is procured. In the following section, the Commission has compared the tariffs across various neighbouring States in the context of their generation mix and the sources of power.

6.2 Sources of Power

Delhi Transco Limited sources most of its energy requirements from sources outside the State. A comparison of energy available from the sources within the State and the energy purchased from other sources mainly Central Generating Stations (CGS) is presented in the Table 6.1.

Table 6.1: Energy Input Mix

Table 8.1. Lifetgy Input Mix							
Source	Delhi	Punjab	Rajasthan	Uttar Pradesh			
Own Generation	17%	59%	40%	51%			
Power Purchase from other sources	83%	41%	60%	49%			

6.2.1 Generation within the State

The average cost of energy available from the sources within the State also varies across the States and is a function of hydro-thermal mix, vintage of the stations, proximity to the fuel source, etc.

In Delhi, generation from own sources account for about 17% of the total energy requirements. The generation capacity in the State comprises primarily of coal and gas based stations, with no hydel capacity. Most of the generating stations located in Delhi are of old vintage, small size, and consequently have higher heat rates. Owing to these factors, the cost of generation of power from these stations is higher in comparison to generation costs of other States. The neighbouring States like Punjab, Rajasthan, etc. not only have substantial hydro generating capacity, but also possess significant shares in the large inter-State hydel complexes.

Punjab meets about 49% of its total power requirement through generation from own sources, out of which around 19% is from hydel generation. In addition, Punjab gets about 10% of its total power purchases from BBMB hydel power stations. Rajasthan meets about 40% of its total power requirement through generation from own sources, of which around 3.5% is from hydel generation. In addition, Rajasthan gets about 14.5% of its total power purchases from hydel stations such as Bhakra, Dehar, Pong and Chambal complex. Uttar Pradesh meets 51% of its total energy requirement through own sources, in which hydro generation accounts for about 4% of the total generation of the State. Due to the above reasons, the average cost of generation from own sources in Delhi is relatively higher as compared to that of neighbouring States.

6.2.2 Power Purchase from Central Generating Stations – A Comparison

The average cost of power purchase from the Central Generating Stations varies across the States

and is a function of each State's share in various Central Generating Stations. The Table 6.2 provides a snapshot view of the shares of various states in the Central Generating Stations.

Table 6.2: State share in CGS

Source	Delhi	Punjab	Rajasthan	Uttar Pradesh
Singrauli	11.25%	10.00%	19.50%	37.68%
Rihand	13.75%	11.00%	14.00%	32.57%
Unchahar-	6.90%	8.57%	6.19%	59.52%
Unchahar- II	14.94%	14.28%	13.55%	30.69%
Anta	14.26%	11.69%	24.32%	21.75%
Auriya	13.46%	12.52%	12.32%	32.06%
Dadri (G)	12.73%	15.90%	11.41%	29.60%
Dadri (T)	90.00%	0.00%	0.00%	10.00%
NAPP	14.31%	11.59%	14.37%	31.30%
RAPS-B#3	15.00%	0.00%	85.00%	0.00%
RAPS-B#4	35.00%	0.00%	20.00%	0.00%
Bairasiul	11.10%	46.67%	0.00%	0.00%
Salal	11.62%	26.60%	2.95%	6.95%
Tanakpur	12.81%	17.93%	11.53%	22.64%
Chamera	7.90%	10.20%	19.60%	20.27%
Uri	11.04%	13.75%	8.96%	20.06%

As evident from the table, Delhi has the highest allocation in NCTPP Dadri Thermal Power Station. Among other thermal plants, the cost of energy generated by Dadri is the costliest. Most of the sources of power purchase by Delhi are high cost sources, with Delhi purchasing approximately 47% of its energy from NTPC. Delhi also purchases energy from BTPS (around 25% of the energy requirement of Delhi), which being an old load centre power station has high fuel costs.

In addition to higher allocation in the high cost thermal stations, Delhi's share in the Central Sector Hydel Stations is much lower than the shares of most neighbouring States. Power purchase from NHPC comprises only 4% of Delhi's energy requirement. It can be seen that the share of Punjab in hydro power stations of Bairasiul, Salal, Tanakpur, Chamera and Uri far exceeds that of Delhi.

Further, Delhi also has a higher share in nuclear-based generating Stations as compared to some neighbouring States. Punjab, for example, has no share in the relatively costly Nuclear Power Station viz., RAPS-B#3 and RAPS-B#4, while Delhi purchases 2.5% of its energy requirement from NPC.

On account of the above reasons, the average power purchase cost of Delhi is among the highest in the Northern Region. A comparison of the average costs of power purchase is provided in Table 6.3.

Table 6.3: Average cost of power (paise/kWh)

Power Purchase from	Delhi (FY03)	Punjab (FY03)	Rajasthan* (FY02)	Uttar Pradesh (FY03)
Sources within the State	190	96**	212	145
Central Sector and Other Sources	205	174	199	181
Average Cost of Power Purchase	203	126	202	164

^{*} As in RERC order of FY 2001-02.

Incidentally, it has been observed that despite the fact that the peak load in Delhi normally coincides with the peak in the northern grid, load shedding in some of the neighbouring States is more than that in Delhi. This is because TRANSCO has tied up with various sources including bilateral arrangements with other States. This has improved the reliability of power supply in Delhi but at an additional cost. Delhi's power system, however, strengthening of the transmission, sub-transmission and distribution system as the existing system may not be capable of absorbing more than 3600-3700 MW owing to transmission / sub-transmission constraints.

^{**} Only Variable Costs

6.3 Comparison of Retail Tariffs

Despite high costs of power purchase due to the drawal from costly sources both within the State and from the Central Sector and due to higher costs of increased reliability by excess scheduling, the retail tariffs in Delhi for various consumer categories continue to be among the lowest amongst the neigbouring States. The comparison of retail tariffs for Delhi as approved by the Commission with the retail tariffs prevalent in the neighbouring States and some other States is provided in Table 6.4.

Table 6.4: Retail Tariffs prevalent in neighbouring States

Category	Delhi (FY 2003-04)	Haryana Tariff order of FY 02)	Uttar Pradesh (Tariff order for FY 04)	Rajasthan* (Tariff Order for FY 02)	Punjab (Tariff Order for FY 04)	Maharastra (effective from January 1, 2002)
Domestic						
Energy charge (paise/kWh)						
0-40 units	175	263	190	170	206	100 (0-30 units) & 255 (31-100 units) (additional 10 paise per unit (upto 30 units) and 20 paise per unit (above 30 units) is charged as T&D loss charge)
41-50 units	175	363				
51-100 units	175		275	275		
101-200 units	235				344	295 (additional 20 paise per unit as T&D loss Charge)
201-300 units	325					
301-400 units	325	428	320		364	455 (additional 20 paise per unit as T&D loss charge)
above 400 units	385					
Fixed charge (per month)	Rs. 10/ kW	Nil	Rs. 50 per connection per month (< 1kW connected load)	Rs 50 per connection upto 50 units and Rs 75 per connection for above 50 units	Nil	Rs 20 per connection (upto 30 units)
			Rs.100 per connection per month (connected load between 1 kW and 4 kW)			Rs 30 (above 30 units, single phase),
			Rs. 250 per connection per month (for connected load > 4 kW)			Rs 75 (above 30 units , three phase).
						Additional fixed charge of Rs 75 per 10 kW or part thereof above 10 kW

Category	Delhi (FY 2003-04)	Haryana Tariff order of FY 02)	Uttar Pradesh (Tariff order for FY 04)	Rajasthan* (Tariff Order for FY 02)	Punjab (Tariff Order for FY 04)	Maharastra (effective from January 1, 2002)
Minimum Charge		Rs. 60 (upto 1 kW), Rs 40 for every additional kW		Rs 65 (95) in rural (urban) area upto 50 units and Rs 90 (120) in rural (urban) area above 50 units	Rs 30 per kW per month	
Non Domestic / Commercial						
Energy charge (paise/kWh)						
0-100 units	475 1-ph 515 3-ph (upto 100 kW) 425/ kVAh (HT above 100 kW) 500/ kVAh (LT above 100 kW)	419	400	450	417	250
above 100 units				490		410 (100-200 units) & 500 (above 200 units)
Fixed charge (per month)	Rs. 20/ kW (upto 100 kW) Rs. 150/ kVA (HT above 100 kW) Rs. 200/ kVA (LT above 100 kW)	Nil	Rs. 80 / kW	Rs 80 (120) per connection upto (above) 100 units for load upto 5 kW		Rs 70 per connection (single phase)
				Rs 40 /kW for load above 5 kW		Rs 125 per connection (three phase)
				Rs. 60/kVA of Billing Demand for HT Supply		Additional fixed charge of Rs 125 per 10 kW or part thereof above 10 kW

Category	Delhi (FY 2003-04)	Haryana Tariff order of FY 02)	Uttar Pradesh (Tariff order for FY 04)	Rajasthan* (Tariff Order for FY 02)	Punjab (Tariff Order for FY 04)	Maharastra (effective from January 1, 2002)
Minimum Charge		Rs. 120 (upto 1 kW), Rs. 100 for every additional kW or part thereof	Rs. 260 / kW / month	Rs. 140 / service (Rs. 200 / service) in rural (urban) areas for consumers with SCL upto 5 kW and consumption upto 100 units, Rs. 180 / service (Rs. 240 / service) in urban (rural) areas for consumers with SCL upto 5 kW and consumption above 100 units	Rs. 110 per kW per month	
				Rs. 180 / kW for consumers with SCL above 5 kW		
Agriculture				KVV		
Metered (Energy Charge, paise/kWh)	110			90 (General Category), 165 (Nursery), 165 (Wells in urban areas & 24 hour supply feeder), 275 (Farm House)	57 paise per unit or Rs 60/BHP/Month (with subsidy), 200 paise / kWh or Rs. 205 / BHP / Month (without subsidy)	
0-100		65	60 (rural), 200 (urban)			90 (additional 10 paise per unit as T&D loss charge)
101-150		53				
151-200		46				
> 200 Irr tubewells, augmentatio n canals & lift irrigation		38 400				
Fixed charge	10	Nil	Rs 10 (20) per BHP per month in rural (urban) areas	Rs. 45 per month		Rs 10 per BHP per month

Category	Delhi (FY 2003-04)	Haryana Tariff order of FY 02)	Uttar Pradesh (Tariff order for FY 04)	Rajasthan* (Tariff Order for FY 02)	Punjab (Tariff Order for FY 04)	Maharastra (effective from January 1, 2002)
Minimum charge		Rs. 540, Rs. 410, Rs. 335 and Rs. 218/BHP/year (at various depth levels). Rs. 150/BHP/month (for direct irrigation tube wells, augmentation canal and lift irrigation	Rs. 50 (120) per BHP per month for rural (urban) areas	Rs. 200/HP/month (Upto 3 HP for wells in rural areas and Rs. 50/HP/month for each subsequent HP), Rs. 450/HP/month (upto 3 HP forNursery and urban areas and 24 hr. supply), Rs. 700/HP/month (upto 3 HP for farm houses and Rs. 220 for each subsequent HP)		
Unmetered (Energy Charge)				Rs. 85/HP/month (General Category and Special General Category), Rs. 175/HP/Month (Wells in urban areas and 24 hour supply feeder)		
Fixed Charge		Rs. 104/BHP/month (upto 100 BHP), Rs. 75/BHP/month (for next 50 BHP), Rs. 60/BHP/month (for next 50 BHP) and Rs. 48/BHP/month (above 200 BHP)	Rs. 60/BHP/month (< 5 kW), Rs. 70/BHP/month (> 5 kW) (Additional Charge of Rs. 20/connection /month for two lamps of 60 Watts each)	Rs. 15 per month		Rs. 110/BHP/month (additional Rs. 10/HP/month as T&D loss Charge)
Industrial Energy						
charge (paise/kWh)						
Small Industrial	445	428 (LT Industry defined as upto 70 kW)	370 (without TVM, and with TVM but no supply during restricted hours), 405 (with TVM and supply during restricted hours)	344	315	240 (0-1000 units), 300 (1001-15000 units), 340 (more than 15001 units), additional 25 paise per unit is charged as T&D loss Charge

Category	Delhi (FY 2003-04)	Haryana Tariff order of FY 02)	Uttar Pradesh (Tariff order for FY 04)	Rajasthan* (Tariff Order for FY 02)	Punjab (Tariff Order for FY 04)	Maharastra (effective from January 1, 2002)
Medium Industrial				372	357	
Fixed Charge						
Small	Rs. 20/ kW	Nil	Rs. 60/BHP or part thereof/month (without TVM)	Rs 30 per HP	Nil	Rs. 60 per HP per month (for 50% of Santioned Load)
Medium			Rs. 80/kVA of BD/month (with TVM))	Rs 45 per HP of SCL or Rs 75 per kVA of BD		
Minimum Charge						
Small		Rs. 120 per kW (for Connected Load upto 20 kW), Rs. 150 per kW (for Connected Load above 20 kW)	Rs. 3360/BHP or part thereof/year (without TVM)	Rs. 140/HP/Month	Rs. 90/kW/month	
Medium			Rs. 4740/kVA or part thereof/year (with TVM but no supply during restricted hours)	Rs. 150/HP/Month (for consumers with SCL between 25- 150 HP or MD upto 50 kVA	Rs. 120 / kW / month	
			Rs. 5100/kVA or part thereof/year (with TVM and supply during restricted hours)	Rs 260/kVA of BD per month for consumers having contract demand (MD exceeding 50 kVA)		
Large Industry						
Energy Charge (paise/kWh)	375/ kVAh (HT) 450/ kVAh (LT)	409	350/kVAh	401	366	280 (additional 30 paise per unit as T&D loss Charge)
Demand / Fixed charge (per month)	150/ kVA (HT) 200/ kVA (LT)		Rs. 180/kVA	Rs. 90/kVA of billing demand		Rs. 300/kVA/mont h
Minimum Charge		Rs. 250 per kVA of Contract Demand (HT industrial, steel furnaces, Rolling Mills)	Rs. 5100 / kVA/year	Rs. 440 per kVA of BD per month, Rs. 700 per kVA of BD per month (for arc furnaces), Rs. 520 per kVA of BD per month (for others)	Rs. 120 / kW / month	

7. Directives

7.1 Introduction

The Commission has issued certain directives to the utilities operating in the State from time to time, in order to improve the functioning of the electricity sector in the State in terms of operational efficiency, costs, and quality of service. In order to evaluate the progress made by the petitioner towards the achievement of the directives issued by the Commission, it is imperative to understand the rationale behind issuance of the directives. The Commission has been constituted under the Delhi Electricity Reform Act, 2000 (Act), and section 11(1)(d) of the Act mandates the Commission to promote competition, efficiency and economy in the activities of the electricity industry. Similarly, section 11(1)(m) mandates the Commission to regulate the working of the licensees in the National Capital Territory of Delhi, and to promote their working in an efficient, economical and equitable manner. Thus, the thrust of these enabling provisions in the Act is on improving the operational efficiency of the utilities operating in the State to provide better quality of supply and service to the consumers at optimum costs.

The directives issued by the Commission are intended to have beneficial effects both in the short and long term. For instance, a directive to reduce the T&D losses over a period of time is a long-term directive, while the directive to prepare the Fixed Asset Register is a short-term directive, and both result in long-term benefits to the sector. Compliance with the directives issued will benefit all the stakeholders in the electricity sector on a long-term basis.

7.2 Directives in the Retail Supply Tariff Order dated 23rd May 2001

7.2.1 Rationale behind the directives

The Commission issued its first Retail Supply Tariff (RST) Order in May 2001 for the revision of Retail Supply Tariff for the erstwhile DVB. In this Order, the Commission had issued specific directives to DVB, which were based on the then prevailing system requirement. The directives were issued to DVB with principal objectives of (i) improvement in operational efficiency and (ii) ensuring the capability of furnishing basic information that was critical for restructuring and privatisation of DVB The Directives related to diverse areas, such as, T&D loss reduction, metering & billing, Management Information System (MIS), R&M works and Investments, and energy audit. The rationale behind the issuance of some of these directives is elaborated in the subsequent paragraphs.

The directive for conducting real time energy audit was issued with the objective of rendering the process of energy audit more effective by identifying the areas of energy leakage. Similarly, the Commission issued directions for the implementation of a robust MIS, to enable the DVB to maintain data in an organised manner so that the data requirements for ARR filling could be adequately and efficiently met with. The metering and billing function is another area where the Commission had directed the DVB to streamline its systems, to enable it to control the enormous revenue leakage that was taking place on account of inadequate metering infrastructure and weak commercial control mechanisms.

The erstwhile DVB had made some progress on the various directives issued in the RST Order and the brief summary of progress made by DVB on these directives is presented in the following paragraphs.

7.2.2 Progress made by DVB in compliance of directives

Management Information System and compilation of data in the prescribed formats for Filing

In the joint petition filed for determination of Bulk Supply Tariff and Opening level of AT&C losses, data and information in some of the areas was provided in accordance with the prescribed formats.

Complete Energy Audit for one feeder each of the Circles

Conducted Energy Audit for one feeder in each Circle and submitted the energy audit reports to the Commission

Pilot Project for Real Time Energy Audit

Initiated a real time energy audit; however the same was discontinued due to cost implications

Time Bound Action Plan for Metering

Submitted detailed action plan on metering comprising existing metering plan, new metering policy and procurement of meters, etc

Billing

Decentralised computerised billing system implemented in two districts. Online billing system implemented in six districts

Electrification of pre 1993 regularised colonies

Submitted detailed report on background and policies for electrification of such colonies

Review of R&M Works

Submitted the quarterly report on R&M expenditure for first two quarters commencing June 2002

Plan for improving Collection Efficiency

Submitted the details of various actions taken such as reduction in provisional billing, drive for recovery by disconnection, extension of bill payment on holidays/Sunday, bill payment facility through credit card, cheque etc

Audited Accounts

Submitted the final accounts upto FY 2001-02 during the process of BST Determination

On the whole, it can be surmised that the erstwhile DVB (till such time as it existed) had made reasonable efforts to comply with the directives issued by the Commission.

7.2.3 The directives in the context of a privatised electricity sector

The power sector in Delhi has undergone a drastic transformation since the time the Commission issued the directives in the RST Order. Consequent to the unbundling of the erstwhile DVB and the reform of the power sector of Delhi during 2002, the distribution business of Delhi is being managed by the three private Distribution Companies and the transmission function being undertaken by Delhi Transco Limited.

As a result of changes in the sector structure with the notification of the Transfer Scheme and the issuance of the Policy Directions by the GNCTD, the Commission has reviewed the relevance of these directives to the successor entities of DVB. Based on this review, the Commission feels that some of the directives given in the RST Order are not very relevant in the current framework, as explained in the next paragraph.

The various directives issued in the RST Order on T&D losses, such as, "complete energy audit", "pilot project for real time energy audit", and "improvements in metering and billing system", were given in the background of the DVB being unable to assess its T&D losses, and to enable the DVB to come up with an action plan to reduce losses. However, in the context of the Policy Directions and the bid level and minimum level AT&C loss targets specified in the Policy Directions, this directive is no longer relevant since it is inherently incumbent on the DISCOMs to adopt such methods on their own in meeting their committed loss levels. Similarly, the directive for improving collection efficiency has lost its direct significance, as the lack of collection efficiency will reflect in the AT&C loss. As per the policy directions, the Companies are bound to achieve the bid level AT&C losses on year-to-year basis during the five-year period from FY 2002-03 to FY 2006-07. The Companies have to undertake these steps to assess the technical and commercial losses at various levels, to ensure that they meet the targeted reduction in AT&C loss levels, as their returns are linked to achievement of AT&C loss reduction. Effectively, the Policy Directions has set the targets for the Distribution Companies for the reduction in AT&C losses, thereby eliminating the need for loss reduction targets by way of specific directives by the Commission.

Similarly, the directive pertaining to the preparation of a base paper on minimum charges is also no longer relevant, since the Commission has replaced the minimum charges with fixed and demand charges for all consumer categories in this Order.

However, there are quite a few directives of the RST Order that are still relevant in today's context, and it is essential for the Petitioner to ensure compliance with these directives for improving the operational efficiency and the quality of data that is made available.

Further, the Commission issued the Bulk Supply Tariff Order in February 2002. The Commission issued certain directives through the BST Order which were meant for the unbundled entities in the sector, and therefore, retain their relevance and applicability to the successor entities.

The progress achieved by the Petitioner towards the directives relevant in the current framework (post privatisation) is discussed below.

7.2.4 Management Information System

The Commission has been directing the utilities to develop a robust MIS that could provide the required data for facilitating appropriate decision making at the right time. A robust MIS will ensure that the data required by the Commission is available with the utilities, in a manner that facilitates efficient access and amenability to intelligent processing. The Commission appointed a consultant for designing and implementing а Regulatory Information Management System (RIMS) to facilitate a smooth and seamless exchange of data regularly between the utilities and the Commission, in place of the prevailing practice of sharing data one a year at the time of the ARR filing. The utilities would ensure that their internal MIS is compatible with the requirements of an efficient ARR filing system, and dovetails with the RIMS developed by the consultant.

7.2.4.1 Progress achieved by BYPL

In its ARR and Tariff Petition for the period July 2002 to March 2003 and for the FY 2003-04, BYPL has provided some data in some of the areas in accordance with the Formats of the Commission.

However, the Commission is not content with the overall quality of data submitted by the Petitioner.

The Petitioner has stated that it procures A-class items through e-procurement, which has considerably reduced the cost of procurement of such items. As an intermediate step towards implementation of SAP, the Petitioner has adopted Project Material Management System (PMMS) for all its procurement activities. Though BYPL has achieved considerable reduction in procurement cost through the implementation of PMMS, the Petitioner proposes to replace the existing system with SAP. In addition to this, the Petitioner is installing software systems for billing and payroll activities.

7.2.5 Metering

Metering is another area of concern for the Commission, in view of the high level of D&B losses in the DISCOMs areas.

7.2.5.1 Progress achieved y BYPL

BYPL has submitted that it has undertaken initiatives like replacement of defective meters, electrification, and metering of JJ Clusters and unauthorized colonies. BYPL has proposed to replace electromechanical meters with static electronic meters. The Petitioner has reported that presently all the bulk consumers (load greater than 100 kW) are provided with electronic trivector meters with advanced features like optical port, TOD and historical log (downloadable through MRI). Further, BYPL has mentioned that static trivector (whole current and LTCT) meters which are suitable for TOD metering, load survey and AMR are being installed for the NDLT and SIP consumer categories. The Petitioner has stated that it will replace all the three phase LT meters by December 2003.

BYPL has further stated that it has ordered Grid Meters for installation at the receiving end at inter-Company transfer point, to serve as check meters. The Petitioner expects these meters to be supplied and installed by October 2003.

Meters on all 11 kV feeders emanating from Company's 66/33 kV grid sub-stations are expected to be installed by November 2003, and meters on distribution transformers are expected to be installed by February 2004.

7.2.6 Billing

On the same lines as metering, the Commission opines that billing efficiency is also very crucial to reduce the D&B losses in the system. It is essential to have a computerized billing system to track the consumption pattern, which will throw up cases where the billing pattern has not been followed.

7.2.6.1 Progress achieved by BYPL

In the area of billing, BYPL has proposed investment for streamlining and improvement of the billing system, and has submitted that it is in the process of building its database. BYPL has further mentioned that the billing of LIP consumers is being done on the basis of new billing system created by the Petitioner, while the billing system for the SIP and domestic consumers is in the process of consolidation and data is being migrated to an integrated billing software. The Petitioner has further mentioned that all its billing activities are being outsourced.

7.2.7 Preparation of Fixed Asset Register

The Commission in its BST Order had directed the Petitioners to finalize the Fixed Asset Registers separately for the successor entities by June 30, 2002.

7.2.7.1 Progress achieved by BYPL

The Company came into existence on July 1, 2002 and sought extension till December 31, 2002 to submit the Fixed Asset Registers, which the Commission granted. However, the Petitioner did not submit the FAR by December 31, 2002. Subsequently, the Petitioner has now submitted the summary of the Valuation Report.

The Commission is concerned about the delay in submission of the FAR, despite the Petitioner's repeated that the FAR was ready and would be submitted soon. The Commission directs the Petitioner to submit the detailed FAR within one month of the issue of this Order.

The Commission in its BST Order had also directed the Petitioner to provide the break-up of Gross Fixed Assets and CWIP in the opening balance sheet of the DISCOM by June 30, 2002.

The Petitioner is yet to submit the details of the GFA and CWIP in the opening balance sheet of DISCOM. The Commission directs the Petitioner to submit the relevant details within one month of the issue of this Order.

7.3 List of New Directives

The Commission has also issued certain new directives, which have been detailed in the respective sections, and have been listed in this Chapter for easy reference:

Development charges and Deposit Works (2.36.31

In this context, the Commission requests the Government to resolve the issue of deposit works execution within a period of two months from the date of this Order, in consultation with the TRANSCO, DISCOMs and the developing agencies such as DSIDC,DDA etc., A specific forward path

needs to be drawn for executing these works, addressing various issues such as:

- Details of deposit works to be executed
- Works to be executed by TRANSCO and each DISCOM
- Funding arrangements

SPD Connections (2.36.32)

The Commission, however, directs the petitioner to settle modalities of working of the system under applicable legal provisions and to apprise the Commission of the same within 6 months' time.

Performance Standards (Metering Regulations) (2.36.35.3)

The DISCOMs are directed to strictly adhere to the guidelines set in the 'Performance Standards (Metering and Billing) Regulations'.

Investments (3.4.1)

While the Commission accepts the proposed APDRP investment plan at Rs 23.49 crore, it directs the Petitioner to ensure that the investments proposed under APDRP schemes for FY 2003-04 be completed to avail the benefits of the scheme and quarterly progress report be submitted to the Commission. Further, the Commission also directs the Petitioner to obtain the Commission's approval for all the capital investment schemes.

R&M Works (3.4.3)

The Commission directs the Petitioner to maintain a separate record of the items issued from the Stores for R&M works, and submit the same to the Commission along with the details of the actual R&M Works carried out at the end of each quarter. The Report on transformer failure rate should also be submitted on a quarterly basis along with the above data on the R&M items issued.

Arrears to Holding Company (3.9)

In view of the above, the Commission asks the GNCTD to revisit this matter and issue an appropriate amendment to the Transfer Scheme. In so far as the present Petitions are concerned, the Commission has considered 80% of the collected arrears remaining within the sector while determining the annual revenue requirements.

District-wise AT&C Losses (4.3.5)

The Commission, hereby, directs the petitioner to provide meters at the periphery of each district within next three months, and start compiling the corresponding district-wise information on a month-to-month basis to be submitted along-with next ARR filing.

Base paper on Voltage Linked Tariff (4.9.2.7)

The Commission wishes to gradually move towards voltage-linked tariff and directs the petitioner to submit a base paper on voltage-linked tariff by 31st October 2003. The petitioner is also directed to maintain and submit information/data in the formats of specified by the Commission for arriving at voltage linked tariff for each of the consumer categories along with next filing.

Information on Cost of Supply in prescribed formats (4.9.2.10)

Since the Commission would like to move towards cost of supply in future, the Commission directs the petitioner to compile data in the prescribed formats with suitable modifications, if required, so as the information on fixed cost of service can be correctly determined and present the same with next ARR/tariff filing.

Database for Consumers having electronic meters (4.9.2.11)

The Commission, therefore, directs the petitioner to start developing the database for the consumers, for whom electronic meters have been/are being provided by taking data logs each time the reading is done, and submit a report on the analysis of such database with the next filing.

Installation of Meters (4.9.2.14)

The Commission, hereby, directs the petitioner to complete installation of electronic meters for all the consumers, except those upto 10 kW being supplied on single phase, of SIP/NDLT categories by 31st March 2004 so that kVAh (or kWh and kVARh) system of billing energy could be appropriately considered for introduction next year. However, the petitioner shall not replace the electronic meters provided by the erstwhile DVB unless there are compelling reasons to do so.

Data on kVAh, kWh & kVARh (4.9.2.16)

The petitioner is directed to maintain data on average power factor, kWh, kVAh and kVARh consumption for consumers already having electronic meters installed and for others as soon as electronic meter gets installed and present the same to the Commission with next filing.

Base Paper on Time of Day (ToD) Metering (4.9.2.17)

The Commission, therefore, directs the petitioner to maintain a time-differentiated data for consumers with ToD metering facility, and prepare a base paper on ToD metering covering all the above issues, including inferences from the data, and submit it the to the Commission by 31st October 2003.

Consumption by employees of erstwhile DVB (4.9.2.19)

On the issue of consumption by employees of erstwhile DVB, the Commission directs TRANCO and

DISCOMs to evolve a mechanism for payments and accounting either at inter-company or at individual employee level and submit a report on the same by 31st October 2003.

Slabwise Consumption Data (5.6.7)

The Commission directs the petitioner to maintain consumption data for the domestic category in blocks of 50 units, i.e. 0-50 units. 51-100 units, 101-150 units, etc. and submit it to the Commission alongwith the next ARR and Tariff Petition to enable the Commission to re-design slabs depending on the consumption pattern.

Maintenance of Streetlights (5.11.1)

The Commission directs MCD to jointly work out a clear-cut proposal with DISCOMs, giving the details of scope of works and maintenance charges, and submit it to the Commission within the next two months.

8. Tariff Schedule for the Year 2003-04

8.1 Definitions

Act shall mean the Delhi Electricity Reform Act, 2000.

Supply Act shall mean the Electricity (Supply) Act, 1948.

Electricity Act shall mean the Indian Electricity Act, 1910.

Commission shall mean Delhi Electricity Regulatory Commission.

Licensee or License Holder shall have the same meaning as provided under clause (f) of subsection (1) of section 2 of the Act, its predecessor and successor entity(ies).

Rules shall mean Indian Electricity Rules, 1956.

Regulations shall mean the Regulations framed by the Commission.

Order(s) shall mean the Tariff Order(s) issued by the Commission from time to time.

Schedule shall mean this Tariff Schedule.

Consumer shall mean any person who is supplied with energy by licensee or the Government or by any other person engaged in the business of supplying energy to the public under the Act or any other law, for the time being in force, and includes any person whose premises are for the time being connected for the purpose of receiving energy with the works of the licensee, the Government or such other person, as the case may be.

Premises shall mean land or building or part thereof in respect of which separate meter or metering arrangements have been made by the licensee for supply of electricity.

Domestic Premises means premises for bonafide residential purposes.

Industrial Premises shall mean premises, including the precincts thereof, in any part of which an industrial activity is carried on.

Non-Domestic Premises shall mean all premises other than domestic, industrial or agricultural premises unless otherwise stated.

Billing Cycle shall mean the period for which the bill is raised.

Connected load shall mean the sum of the rated capacities of all energy consuming apparatus duly wired and connected to the power supply system including portable apparatus in the consumer's premises. Further, connected load shall be calculated after allowing a tolerance of 5%.

The connected load shall not include the load of spare plug sockets, stand by or spare energy apparatus installed authorisedly, consuming through change over switch, which cannot be operated simultaneously and load exclusively meant for fire fighting purposes. The equipment which is under installation and not connected equipment stored electrically, warehouse/showrooms either as spare or for sale is not to be considered as "connected load". Either heating or cooling use of these apparatus/loads shall be taken into account as per prevailing season (i.e. 1st April to 30th September for cooling use and 1st October to 31st March for heating use).

Sanctioned Load shall mean the load in kW/HP (kilo Watt/Horse Power) for which the licensee has agreed to supply from time to time subject to the governing terms and conditions. However, the sum

of the rated capacities of all energy consuming apparatus duly wired and connected to the power supply system including portable apparatus in the consumer's premises as also the load of all spare plug sockets is required to be got sanctioned. The load of 15-ampere plug sockets shall be taken as 500 watts and that of 5-ampere plug socket as 60 watts.

Change-over switch: The consumer shall be allowed the installation of change-over switch with the permission of the licensee, subject to the condition that the details of such energy consuming apparatus connected through change-over switch shall be specifically mentioned in the Test Report submitted by the consumer and verified as such at the time of release of load or any time thereafter. The higher of the capacities of these two energy consuming apparatus shall be taken into account while computing the connected load.

Contract Demand shall mean:

(a) The demand in kVA (kilo Volt Ampere) as provided in the agreement, for which the licensee makes specific commitment to supply from time to time subject to the governing terms and conditions. In any case, it shall not be less than 60% of the sanctioned load.

or;

(b) Higher of the sanctioned/declared connected load, wherever contract demand has not been provided in the agreement.

Maximum Demand shall mean the highest average load measured in kVA during any consecutive 30 minutes period of the billing cycle and shall be taken as the reading indicated by maximum demand indicator.

Billing Demand shall mean highest of the following

i) The contract demand,

ii) The maximum demand indicated by the meter during the billing cycle.

Demand Charges shall mean the amount chargeable for the billing cycle based upon the billing demand in kVA.

Fixed Charges shall mean the amount chargeable for the billing cycle based upon sanctioned load.

Energy Charges shall mean the charges for energy actually taken by the consumer in kWh (kilo Watt Hour) and kVARh (kilo Volt Ampere Reactive Hour), wherever applicable, in any billing cycle. This is in addition to demand/fixed charges, wherever applicable.

Two Part Tariff: The two-part tariff, where applicable, shall comprise of the demand/fixed charges, as the case may be, plus energy charges payable together for the billing cycle.

Average Power Factor: The average power factor shall be taken as the ratio of the kWh to the kVAh (kilo Volt Ampere Hour) supplied during the period.

Continuous Industries: The industries, which have been considered as continuous for grant of exemption from peak load hours restrictions.

Words or expressions occurring in this Schedule and not defined herein but defined in the Act/Supply Act/Electricity Act/Rules/Regulations/Orders shall bear the same meaning as in the Act/ Supply Act/ Electricity Act/ Rules/ Regulations/ Orders.

8.2 Violation of provisions of Schedule

8.2.1 Change of category from LT (Low Tension) to HT (High Tension) due to unauthorised load

8.2.1.1 Levy/withdrawal of bulk supply tariff

The cases of change of category from NDLT /SIP (Non-domestic Low Tension/Small Industrial Power) to MLHT/LIP (Mixed Load High Tension/Large

Industrial Power) due to unauthorised load shall be dealt as under:

i) In case the connected load including lighting, fan and power load of the otherwise LT connection is found to be more than 100 kW, the bulk tariff (MLHT/LIP) under relevant category on LT (400 V) shall be charged till the load is brought within SIP/NDLT limit and so verified by the licensee on payment of necessary charges by the consumer.

In such cases, the billing demand will be treated as sanctioned load or maximum demand, whichever is higher.

- **ii)** The above tariff will be levied for six months prior to date of detection retrospectively, unless conclusive evidence, to the satisfaction of the licensee, is produced by the consumer to substantiate that excess load beyond 100 kW was connected afterwards.
- **iii)** If during any subsequent inspection, within a year of previous inspection for verification of load and withdrawal of bulk tariff, the connected load is again found to be more than 100 kW, the bulk supply category of tariff shall be imposed again from the date of previous withdrawal.

8.2.2 Use of electrical load for category of use other than sanctioned category

- i) Use of electrical load for category of use other than that for which it was sanctioned shall be considered as violation of the provisions of Schedule, e.g.:
- a) Domestic connections used for non-domestic or industrial purposes
- **b)** Non-domestic connection used for industrial purposes.
- **c)** Agriculture connection used for domestic, non-domestic, industrial or farmhouse etc.

- d) Industrial connection used for non-domestic purposes
- ii) In the above case, total consumption shall be treated as consumption under category of use or the category for which sanction was given, whichever has the higher tariff and the consumer shall be billed accordingly.
- **iii)** The application of Tariff category mentioned above would have retrospective effect for the past six (6) months reckoned back from the date of detection unless evidence to the contrary is produced by the consumer.
- iv) Application of such Tariff shall be continued in the subsequent bills. However, where consumer pays the requisite Inspection Fee with a request for change of such tariff to that of use of the connection as per the sanctioned category, to the satisfaction of the licensee, the category of tariff shall suitably be changed after verification, from the date of consumer's request.

8.2.3 Cases not to be treated a violation of Schedule

The following shall not be treated as violation of the provisions of the Schedule:

- i) In case of domestic/non domestic connection(s), extension of supply from the live connection to other portion of the building/plot including for servant quarters, garages or for certain activities covering social requirements relating to religious functions, sports etc. in residential areas so long as the supply is not extended to any portion for which connection has been disconnected due to non payment of dues and there is no change in the category of use.
- **ii)** In industrial premises where the supply is used by one or more persons where partition in business takes place or division in the family occurs.

- **iii)** User of the connection changes due to succession.
- **iv)** Change of firm from Private Limited to Public Limited or vice-versa.
- v) Supply to activities incidental to main activity, for example supply to chemist shop in nursing homes and hospitals, tea shop/canteen/employees' cooperative store, dispensaries, retail outlets of own products etc. in an industry, puncture shop in petrol pumps etc. provided that the load for such activities remains within 10% of the sanctioned load or 10 kW, whichever is less.
- vi) Professionals such as Doctors, Engineers, Lawyers, CA's, Journalists and Consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or 50 Sq. meters, whichever is less.
- vii) For cottage industries operating in residence by family members only, where electricity is not used for processing/manufacturing of goods such as repair of shoes by cobbler, Dhobi where ironing of clothes is not done by electricity, stitching/knitting if machines are not operated with electricity, etc.
- v) In industrial premises where upto 10% of the sanctioned load or 10 kW whichever is less, is used for domestic/non-domestic purposes by any agency even other than the registered consumer provided that the main industrial activity for which the connection was sanctioned continues.

8.3 Installation of Shunt Capacitors

8.3.1 Low Power Factor (LPF) Surcharge

No consumer shall allow the average power factor of the supply taken by him to fall below 0.85. In case shunt capacitors of adequate ratings are not installed and maintained in proper working order or

average power factor is found to be below 0.85 on verification, an LPF surcharge @ 20% shall be levied on the demand/fixed charges, as the case may be, plus energy charges of the bill from the billing cycle of the date of inspection/verification.

LPF penalty should be levied only when it is established by measurements with equipment/meters that the average power factor of the installation is less than the required value and the power factor correction equipment provided is either non-functional or inadequate.

8.3.2 Applicability of LPF Surcharge

Billing of energy charges in case of MLHT and LIP consumers, where electronic tri vector meters have been provided, shall be done on the basis of kWh and kVARh recording of the meter. In such cases the above clause shall not be applicable.

8.4 Application

8.4.1 Contract Demand

The contract demand as per existing agreement shall be treated as deemed enhanced by the excess connected load declared by the consumer and accepted against the specific scheme announced by licensee.

8.4.2 Electricity taxes and other levies

The rates stipulated in the Schedule are exclusive of electricity tax and other taxes and charges, as levied from time to time by the Government or any other competent authority, which are payable extra.

8.4.3 Non-payment of bills

Non-payment of the bills including the supplementary bills on the due dates specified thereon shall be deemed to be breach of contract and would, therefore, attract penal action including disconnection of supply under the

provisions of Act/Supply Act/ Electricity Act/Rules/Regulations/Orders.

8.4.4 Surcharges

All surcharges shall be levied on the basic tariff applicable to the category of use or category of sanction, whichever has higher tariff.

8.4.5 Payments

In the event of the electricity bill rendered by the licensee, not being paid in full within the time specified on the bill, a surcharge @ 1.5% on the principal amount of bill which has not been paid shall be levied for each 30 days successive period or part thereof until the payment is made in full

without prejudice to the right of the licensee to disconnect the supply after due date in the event of non-payment in accordance with section 24 of Electricity Act. This will also apply to temporary connections, where payment of final bill amount after adjustment of consumption deposit, is not made by due date.

8.4.6 Interpretation/clarification

In case of doubt or anomaly, if any, in the applicability of tariff or in any other respect, the matter will be referred to the Commission and Commission's decision thereon shall be final and binding.

8.5 Tariff for the year 2003-04

		Category	Fixed Charges¹ (Rs./kW/month)	Demand Charges (Rs./kVA /month)		Charges e/kWh)
		ghting/Fan and Power (Single and Separate Delivery	10	-	Units/ month 0-100 101-200 201-400 Above 400	175 235 325 385
Domestic		ghting /Fan and Power on 11 kV point for CGHS and other similar complexes ²	10	-	Consumption/ month ³ First 22.2% Next 22.2% Next 44.4% Next 11.2%	Energy Charges4 175 235 325 385
1. Dom	Connections in Colonies, Left C Electrified and Plot sizes: i) up to 50 Sq. y ii) between 51- iii) between 10 iv) between 15	rds. 100 Sq. yds. 1-150 Sq. yds. 1-200 Sq. yds. 00 Sq. yds. only through	- - - -	- - - -	Rs 295 F Rs. 410F Rs 575 p	per month Per month Per month per month e as 1.1
stic	2.1.1 Non-Domestic (Low Tension) ⁵ –NDLT-I c) single phase (<10 kW) d) three phase (>10 kW)		20 20	-	475 515	
Non-Domestic		estic Light/Power on 11 kV Point or Commercial LT-II	20	-	5156 with a	rebate of 15%
2. No	a) Supply o	I (High Tension)-MLHT ^{7,8} on 11 kV on LT (400 Volts)	- -	150 200	425 Paise/kVAh ⁹ 500 Paise/kVAh	
	3.1.1 Small Indu	ustrial Power - SIP	20	-	445	
3. Industrial		Power (SIP) on 11 kV Single or Group of SIP Consumers	20	-		1 above ¹⁰ with e of 15%
3. Inc	3.2 Large Indus a) Supply on 11 b) Supply on LT	l kV	- -	150 200	375 Paise/kVAh ¹² 450 Paise/kVAh	
4. /	Agriculture		10	-		10
5. N	Aushroom cultivo	ation	20	-	2	250
, -		6.1 Street Lighting ¹³	-	-	3	385
6. F	Public Lighting	6.2 Signals & Blinkers	-	-	3	385
7. F	7. Railway Traction ¹⁴ (other than DMRC)		Capacity- blockage-fixed charges ¹⁵	As in 3.2	As	in 3.2
8. [Delhi Metro Rail C	Corporation (DMRC)	-	-	230 Pa	ise/kVAh

	Category	Fixed Charges ¹ (Rs./kW/month)	Demand Charges (Rs./kVA /month)	Energy Charges (Paise/kWh)
_	9.1 for a total period ofa) less than 16 daysb) more than or equal to 16 days	50% of the relevant category Same as that of relevant category	50% of relevant category Same as that of relevant category	higher by 30% (temporary surcharge) of the relevant category of tariff
y Supply	9.2 for residential cooperative group housing connections	Same as that of relevant category	-	domestic tariff without any surcharge ¹⁶
Temporary	9.3 for religious functions of traditional and established characters and cultural activities	Same as 1.1	-	Same as 1.1 without temporary surcharge
9. Tel	9.4 for major construction projects	Same as that of relevant category	Same as that of relevant category	Same as that of relevant category with temporary surcharge
	 9.5 for threshers a) during the threshing season for 30 days b) for extended period 	Electricity tax of MCD: Rs. 150 per connection	-	Flat rate of Rs. 3000 On pro-rata basis for each week or part thereof

¹ Fixed charges are to be levied on sanctioned load or MDI reading, whichever is higher, on per kW or part thereof basis. Where the MDI reading exceeds sanctioned load, a surcharge of 30% shall be levied on the fixed charges corresponding to excess demand in kW for such billing cycle.

Provided that all such connections, falling under the above establishments, which were being billed at domestic tariff by the erstwhile DVB shall be deemed to have Commission's approval.

² In case of co-operative societies having independent connection for common facilities through separate meter, energy charges for this connection shall be billed at highest slab tariff for domestic category.

³ The entitlement of various slabs under domestic category shall be worked out on pro-rata basis depending upon the duration of the billing cycle.

⁴ with a rebate of 15%

⁵ Connection sanctioned for dispensaries, Hospitals, Public Libraries, Schools Run/Aided by MCD/Government of NCT of Delhi and such other schools as recommended by Department of Education, Government of NCT of Delhi, Places of worship, Shelters for animals, Birds including, Go-sadans, Chaupals, Community halls in Rural Areas and J.J. Basties/Colonies, Recognised Centres for Welfare of Blind, Deaf and Dumb, Spastic Children and Physically Handicapped Persons, Working Women Hostels run/aided by MCD/Government, Cheshire Homes/Orphanages Charitable homes and Small Health Centres approved by Directorate of Health Services, Government of NCT of Delhi for providing Charitable Services only, electric crematoriums or any other similar establishment as may be approved by the Commission shall be billed at domestic category tariff, if such premises are being used exclusively for the specified purpose.

⁶ Where the MDI reading exceeds contract demand, a surcharge of 30% shall be levied on the demand charges corresponding to excess demand for such billing cycle.

⁷ Same as 4 above.

⁸ Same as 5 above

 $^{^{9}}$ The incumbent shall be entitled for a rebate of 2.5% on the energy charges on 11 kV rates for availing 3 phase supply on 33/66 kV and 4% for supply on 220 kV.

¹⁰ Same as 5 above.

¹¹ Same as 5 above

¹² Same as 8 above

¹³ Maintenance charges @ Rs.60 /month/ street lighting point shall also be payable along with fixed and energy charges

¹⁴ The above tariff is based on the supply being given through a single delivery and metering point at single voltage

¹⁵ Rs. 1260 x (2.97A + 5) where A is contract/maximum demand, whichever is higher, in MVA subject to a minimum of Rs. 25000

¹⁶ from the date of payment of their payable share in full towards electrification cost. Normal tariff available after one year from release of electrification scheme

8.6 Other Terms & Conditions of Tariff

	Category	Availability	Character of Service
1. Domestic	1.1 Domestic Lighting/Fan and Power (Single Delivery Point and Separate Delivery Points/Meters)	i) Available to residential consumers, hostels of recognised/aided educational institutions, stair case lighting in residential flats, compound lighting, lifts & water pumps etc. for drinking water supply and fire fighting equipment. In cooperative group housing societies etc. for bonafide use of lighting/fan and power, subject to the provision that the supply is at single delivery point for combined lighting/fan & power. ii) Where separate meters, under different K. Nos., for domestic lighting/fan and domestic power, are in existence at the same premises, the billing shall be done under domestic category for total consumption of all such connections/meters taken together. iii) Available, for loads upto 21 kW, to farm houses for bonafide domestic self use and bounded farm houses having minimum 50% of the total land for agriculture/vegetable cultivation.	AC 50 Hz, single phase, 230 Volts AC 50 Hz, three phase, 400 Volts for loads beyond 10 kW
	1.2 Domestic Lighting /Fan And Power on 11 kV single delivery point	Same as 1.1(i) and for CGHS flats and loads above 100 kW in case of individual	AC 50 Hz, three phase, 11 kV on single delivery point
	1.3 Domestic Lighting/Fan And Power Connections In Regularised/ Unauthorised Colonies, Left Out Pockets and Villages both Electrified and Unelectrified	Available to residential consumers for temporary electricity connection on single phase system of supply. As and when licensee installs energy meters, the energy charges shall be payable as per the tariff applicable to relevant category of supply.	AC 50 Hz, single phase, 230 Volts
2. Non-Domestic	2.1.1 Non-Domestic (Low Tension) – NDLT-I	Available to all consumers having load (other than the industrial load) upto 100 kW for lighting, fan & heating/cooling power appliances in all non-domestic establishments as defined below: i) hostels (other than those of recognised/aided educational institutes) ii) schools/colleges iii) auditoriums iv) hospitals, nursing homes/diagnostic centres v) railways (other than traction) vi) hotels and restaurants vii) cinemas viii) banks ix) petrol pumps x) all other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act. xi) cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery xii) farm houses being used for commercial activity xiii) any other category of consumers not specified/covered in any other category in this Schedule	AC 50 Hz, single phase, 230 Volts up to 10 kW load. AC 50 Hz, 3 phase, 400 Volts for loads above 10 kW and upto 100 kW
	2.1.2 Non-Domestic Power on 11 kV Single Delivery Point for Commercial Complexes-NDLT-II	Available to commercial complexes having load more than 100KW for group of consumers for their lighting, fan, heating/cooling power appliances for non-domestic use.	AC 50 Hz, 3 phase, 11 kV
	2.2 Mixed Load (High Tension)-MLHT a) Supply on 11 kV b) Supply on LT (400 Volts)	Available to consumers having load (other than industrial load) above 100 kW for lighting, fan, heating/cooling and power appliances in Domestic/Non-Domestic establishments including pumping loads of Delhi Jal Board /DDA/MCD and supply to Delhi Metro Rail Corporation (DMRC) Ltd. for their on going construction projects etc. Supply at extra high voltage (33 kV and more) may also be given	AC 50 Hz, 3 phase, 11 kV AC 50 Hz, 3 phase, 400 Volts

	Category	Availability	Character of Service
_	3.1.1 Small Industrial Power (SIP)	Available to Industrial consumers with load up to 100 kW including lighting, heating and cooling load.	AC 50 Hz, single phase, 230 Volts AC 50 Hz, 3 phase, 400 Volts.
3. Industria	3.1.2 Industrial Power (SIP) on 11 kV Single Delivery Point for Group of SIP Consumers	11 kV Single Delivery On single delivery point for group of SIP consumers provided load of any individual consumer does not exceed 100 kW	
	3.2 Large Industrial Power (LIP) a) Supply on 11 kV b) Supply on LT (400 Volts)	Available as primary power to large industrial consumers having load above 100 kW including lighting load. Supply at extra high voltage (33 kV and more) may also be given	AC 50 Hz, 3 phase, 11 kV AC 50 Hz, 3 Phase, 400 Volts
4. #	Agriculture	Available for load up to 10 kW for tube wells for irrigation, threshing, and kutti-cuting in conjunction with pumping load for irrigation purposes and lighting load for bonafide use in Kothra.	AC 50 Hz, Single Phase, 230 Volts
5. N	Aushroom cultivation	Available for mushroom growing/cultivation upto 100 kW.	AC 50 Hz, 3 Phase, 400 Volts up to 100 kW
6. Public Lighting	6.1 Street lighting	Available to all street lighting consumers including MCD, DDA, PWD/CPWD, Slums department General Conditions i) All incandescent lamps of 40 to 100 Watts except special lamps including fluorescent tubes shall be replaced after 1500 hours of service or earlier if burnt out. The special lamps including fluorescent tube, gas discharge or absorption lamps including fluorescent tube, gas discharge or absorption lamps together with ancillary equipment shall be replaced at the cost of the consumer. ii) The replacement cost of stolen and broken incandescent lamps and fluorescent tubes including all types of special lamps mentioned above shall be borne by the consumer.	AC 50 Hz, Single Phase, 230 Volts
	6.2 Signals & Blinkers	Available for traffic signals and blinkers of Traffic Police	AC 50 Hz, Single Phase, 230 Volts
	tailway Traction (other than RC)	Available for railway traction for connected load above 100 kW.	AC 50 Hz, single phase, 220/66/33 kV AC 50 Hz, 3 Phase, 220/66/33 kV
8. [Delhi Metro Rail Corporation	Available to Delhi Metro Rail Corporation (DMRC) (not for construction projects)	AC 50 Hz, 3 phase, 220/66/33/11 kV
	9.1(a) for less than 16 days 9.1(b) for more than or equal to 16 days	Available as temporary connection under the respective category	
upply	9.2 for residential cooperative group housing connections	Same as that of relevant category	AC 50 Hz, single phase,
9.Temporary S	9.3 for religious functions of traditional and established characters and cultural activities	Provided for religious functions of traditional and established characters like Ram lila, Dussehra, Janmashtami, Nirankari Sant Smagam, Gurupurb, Durga Puja, Id, Christmas celebrations, Easter, Pageants and cultural activities like NCC camps, scouts & guides camps etc. (normally for a period less than 10 days and extendable upto days	230 Volts AC 50 Hz, 3 phase, 400 Volts, AC 50 Hz, three phase, 11 kV
	9.4 for major construction projects	With loads more than 10 kW	
	9.5 for threshers	During the threshing season	

Dated: the 22nd November 2001

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI (DEPARTMENT OF POWER)

No.F.11(118)/2001-Power/2889

NOTIFICATION

No. F.11(118)/2001-Power/- In exercise of the powers conferred by section 12 and other applicable provisions of the Delhi Electricity Reform Act, 2000 (Delhi Act No.2 of 2001), and after considering the views expressed by the Delhi Electricity Regulatory Commission (hereinafter referred to as "Commission"), the Government of National Capital Territory of Delhi hereby notifies the following as policy directions to enable restructuring of the Delhi Vidyut Board and privatisation of the distribution business, relating thereto, namely:-

- 1. The Delhi Electricity Reform Act, 2000 (hereinafter referred to as the "Reform Act"), has been enacted by the Legislative Assembly of the National Capital Territory of Delhi, inter alia, to provide for the restructuring of the electricity industry, rationalisation of generation, transmission, distribution and supply of electricity, increasing avenues for participation of private sector in the electricity industry and generally for taking measures conducive to the development and management of the electricity industry in an efficient, commercial, economic and competitive manner in the National Capital Territory of Delhi and for matters connected therewith or incidental thereto.
- 2. The Reform Act has been enforced with effect from 3rd November, 2000 after receiving the assent of the President of India under the proviso to article 239AA(3) (c) of the Constitution of India.
- 3. Part V of the Reform Act (sections 14 to 18) deals with the reorganisation of the electricity industry. These provisions provide for incorporation and setting up of companies under the Companies Act, 1956 to take over the existing generating stations, transmission and distribution functions and assets from the Delhi Vidyut Board as provided in section 14. Sub section (6) of section 14 also provides for the companies to be Joint Venture Companies through a process of disinvestment in accordance with the Transfer Scheme to be notified under the Reform Act.

- 4. Section 15 speaks about the Transfer Scheme, namely, transfer of properties, interest in properties, rights, liabilities, etc of the Delhi Vidyut Board to the companies incorporated for generation, transmission, distribution, etc. as the case may be. It is envisaged that the Transfer Scheme may provide for formation of Joint Venture Companies and other schemes of division, amalgamation, merger, reconstruction and arrangement. Section 16 of the Reform Act deals with the transfer of personnel of Delhi Vidyut Board to the above successor companies.
- 5. The powers in regard to re-organisation of the Delhi Vidyut Board including in regard to the notification of the Transfer Scheme, transfer of properties, interest in properties, assets, etc. have been vested in the Government as per the provisions of sections 14to 18 of the Reform Act. In this connection, it is also relevant to note that clause (g) of sub section (2) of section 60 of the Reform Act empowers the Government to issue rules concerning preparation and implementation of the Transfer Scheme, transfer of assets, liabilities, personnel, etc. The Government is, therefore, empowered to determine the terms and conditions of the transfer.
- 6. As a part of the reform and restructuring of the Delhi Vidyut Board, the Government has been considering the terms and conditions of the Transfer Scheme to be issued, transfer of functions and assets, etc. of the Delhi Vidyut Board to the successor companies and also the process of disinvestment/privatisation of the successor companies. These are policy issues for the Government to decide as per the statutory powers vested therein under Part V of the Act. In addition to the above, the Government has the statutory powers to issue policy directions under sub section (4) of section 12 of the Reform Act, which the Government considers to be in public interest.
- 7. The Government has been deliberating on the effective disinvestment and privatisation of the distribution activities. The Government has received advice from various sources who have, consistently, maintained that for the effective re-organisation of electricity industry there is a need to privatise distribution. The Government has, therefore, decided as a matter of policy that the distribution activities of the Delhi Vidyut Board shall be privatised and the same is to be achieved as under.
 - (a) The generation functions are to be vested in Indraprastha Power Generation Company Ltd (GENCO).
 - (b) The functions in relation to transmission and bulk supply are to be vested in Delhi Power Supply Company Ltd(TRANSCO).

- (c) The functions regarding distribution and retail supply are to be vested in three distribution companies, namely, (i) Central-East Delhi Electricity Distribution Co. Ltd., (ii) South-West Delhi Electricity Distribution Co. Ltd., (iii) North North-West Delhi Distribution Co. Ltd.
- (d) The properties, interest in properties, liabilities, obligations, personnel, etc of the Delhi Vidyut Board are to be transferred to the above five companies on the terms and conditions which have been notified in the Transfer Scheme;
- (e) 51% equity shares in the threes distribution companies are to be offered to private sectors through a competitive bidding process.
- 8. The Government, after extensive and careful deliberation and taking into account the advice received, is of the opinion that the following aspects are important for effective re-organization of the Delhi Vidyut Board and for the sale of 51% equity shares in the distribution companies, namely:-
 - (a) Considering the circumstances prevailing in Delhi, it is of absolute necessity that a long term definitive loss reduction or efficiency gain programme is settled in the beginning to give certainty and to induce the investors to invest in the distribution and retail supply business in Delhi. It is difficult to get a private sector investors to purchase 51% equity shares in the distribution companies, if the reduction in loss levels or efficiency gains to be achieved are determined from year to year.
 - (b) Proposals for efficiency gains based on targets for loss reduction set on a normative and unilateral basis are fraught with difficulties because of the difference in the perceptions of the stakeholders particularly the Government, State Commission and the Licences. The previous experience of a presumptive determination of loss reduction or efficiency gain programme in other State has led to problems and has resulted in the investor losing confidence in the process. To attract the private sector investor, the Government is of the opinion that it would be appropriate that reduction in loss levels/efficiency gain to be achieved in the next five years be determined through competitive bidding, that is to say, through the play of market forces rather than being pre-determined unilaterally in the bidding documents. The competitive bidding process will produce an acceptable reduction/efficiency gain programme.
 - (c) Since the loss reduction or efficiency gain to be achieved by the distribution companies shall be the bidding criteria, the sale of 51% equity shares shall be offered at the face values. The consideration for equity shares will not be a bidding criteria.

- 9. The Government is of the view that the clearest measures of overall efficiency of the distribution business is the differences between units input into the system and the units for which payment is collected. The Governments is of the considered views that losses of any kind, technical, non technical or non-realisation of payments, ultimately, amount to loss in revenues. Efficiency gains must embrace all these aspects. Hence, the losses should be measured as the difference between the units input and the units realised (units billed and collected) wherein the units realised will be equal to the product of units billed and the collection efficiency, where, collection efficiency is defined as the ratio of actual amount collected and amount billed. The difference between the units input and the units realised are hereinafter referred to as "AT&C Loss" (Aggregate Technical and Commercial Loss). The Government, as a matter of policy, decides that the AT&C Loss shall be the basis for determination of tariffs and also for computation of incentives for better performance.
- 10. The AT&C loss level for each distribution company for the year 2000-01, based on the above, has been worked out as under:

		Central	South	North
		East	East	North West
a	Units Input at 66/33kV (MU)	4439	6853	4424
b	Units Billed (MU)	1967	3627	2518
С	T&D Losses (%) [c=(a-b)/a]	55.7	47.1	43.1
d	Amount Billed (Rs. crores)	740	1326	965
e	Amount Realised (Rs. Crores)	650	1200	856
f	Collection Efficiency (%) [f=e/d]	87.9	90.5	88.7
g	Units Realised (MU) [g=bXf]	1728	3284	2234
h	AT&C Loss (%) [h=(a-g)/a]	61.1	52.1	49.5

The Commission will consider the above percentage of AT&C loss level and determine the base AT&C loss levels, which shall be the opening levels of losses for the purposes of bidding and shall reflect the actual levels, on the principles set out above and based thereon determine the tariff, wholesale, bulk, grid or retail, as the case may be.

- 11. For the years 2002-03 to 2006-07, the AT&C loss levels for the purposes of tariff computation for the distribution licensees shall be the lower of the following:
 - (a) The AT&C losses derived on the basis of the opening AT&C loss taken for the purpose of bidding and the reductions proposed in the bid submitted by the purchaser selected as per the terms of the RFP document for "Privatisation of Electricity Distribution in Delhi" to be issued shortly by the Government for sale of 51% equity in the distribution companies; or

- (b) The AT&C losses derived on the basis of the opening AT&C loss for the purpose of bidding and the minimum reduction in AT&C loss stipulated by the Government.
- 12. For the years 2002-03 to 2006-07, in the event that the actual AT&C loss level of a distribution licensee for any particular year as determined by the Commission is better (lower) than the level proposed in the bid, the distribution licensee shall be entitled to retain 50% of the additional revenue resulting from such better performance. Notwithstanding the provisions of para 11, the balance 50% of additional revenue resulting from such better performance shall, however, be counted for the purpose of tariff fixation. While generally the incentive to be allowed to the licensee (including additional incentives by deviating from the principles laid down in the Sixth Schedule to the Electricity (Supply) Act, 1948), should be determined by the Commission on an annual basis, the Government is of the considered view that in the larger public interest and to effectively achieve the proposed disinvestment and privatisation, it is necessary to impart certainty to the incentives payable over a specified period and to make these incentives attractive as a part of the transfer arrangements, in order to ensure successful disinvestment. In the absence of such a certainty it may not be possible to attract private sector participation in the distribution of electricity.
- 13. From the date of issuance of these directions till the end of 2006-07 and subject to provision of paras 11 and 12 above and all expenses that shall be permitted by the Commission, tariffs shall be determined such that the distribution licensees earn, at least, 16% return on the issued and paid up capital and free reserves (excluding consumer contribution and revaluation reserves but including share premium and retained profits outstanding at the end of any particular year) provided that such share capital and free reserves have been invested into fixed or any other assets, which have been put into beneficial use for the purpose of electricity distribution and retail supply and provided further that such investment of such share capital and free reserves has the approval of the Commission.
- 14. The reorganisation of Delhi Vidyut Board will result in three separate distribution licensees. The Government, as a matter of policy, has decided that retail tariffs for the three distribution licensees shall be identical till the end of 2006-07, i.e., consumers of a particular category shall pay the same retail tariff irrespective of their geographical location.

- 15. The Government will make available to the Transmission Company an amount of the order of, approximately, Rs. 2600 crores during the period 2002-03 to 2006-07 as loan to be repaid by the Transmission Company to the Government in a manner agreed to between the Transmission Company and the Government. The Transmission Company will use the load to bridge the gap between its revenue requirements and the bulk supply price which it may receive from the distribution licensees.
- 16. To summarise, the Commission will decide on performance standards and other factors related to the discharge of the obligations by the distribution and retail supply licensees and determine the tariffs subject only to the requirements of consistency with these policy directions being the basis of the bidding process, viz., by taking into account the following:
 - (a) The AT&C loss programme is to be as per the bid submitted by the purchaser (selected bidder) as per para 11 above.
 - (b) Distribution licensees shall be entitled to retain 50% of the additional revenues from any AT&C loss reduction over and above the level proposed in the bid by the Purchaser (selected bidder) and this shall not be counted as revenue for the purpose of tariff fixation for the succeeding years. The balance 50% of the excess efficiency gain shall be counted as revenue for the purpose of tariff fixation.
 - (c) Distribution licensees earn, at least, 16% return on the issued and paid up capital and free reserves.
 - (d) The amount agreed to be made available by the Government to TRANSCO will be as a loan for the particular year.
- 17. Issuance of a tariff order of the distribution licensees will facilitate investors to have a full idea of the various elements (revenues, expenses) in the fixation of the tariffs. It is necessary for the Commission to issue order(s) determining the bulk supply tariff applicable to each of the three DISCOMS for purchase of electricity from TRANSCO. Such a tariff order for the DISCOMS may be issued before bidding. However, in order to ensure that the time gap between corporatisation and privatisation is minimal, the Transfer Scheme shall be made effective as close to the date of privatisation as possible. Thus, the Commission may issue the tariff order on the basis of the notified (but not effective) Transfer Scheme and in accordance with the provisions of these policy directions.
- 18. These policy directions have been issued in public interest so as to implement the reorganization of the electricity industry and privatisation of the distribution companies.

19. All the stakeholders, including the Commission and other authorities, shall be bound by the above policy directions from the date of issuance thereof till the end of year 2006-07.

By order and in the name of the Lt.Governor of the National Capital Territory of Delhi.

> -sd-(Ramesh Chandra) Principal Secy. (Power)

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI (DEPARTMENT OF POWER)

No.F.11(118)/2001-Power/187-193

NOTIFICATION

No. F.11(118)/2001-Power/- In exercise of the powers conferred under section 12 and other applicable provisions of the Delhi Electricity Reform Act, 2000 (Delhi Act No.2 of 2001) and pursuant to the decision made by the Government of National Capital Territory of Delhi on the restructuring of Delhi Vidyut Board and on the bids received for the privatisation of the distribution business, the Government of National Capital Territory of Delhi hereby notifies the following policy directions in amendment to the Notification No. F.11(118)/2001-Power/2889 dated 22nd November, 2001.

- 1. AT&C losses for the purposes of tariff computation shall be based on the values of reduction in AT&C loss each year for the years 2002-03, 2003-04, 2004-05, 2005-06 & 2006-07 indicated in the bid submitted by the Purchaser and as finally accepted by the GNCTD (hereinafter referred to as the "Accepted Bid"), over the opening level of AT&C loss approved by DERC for each distribution company in the Tariff Order dated 22.02.2002.
- 2. The following shall be the method of computation and treatment of over achievement and underachievement for the years 2002-03 to 2006-07:
 - i. In the event the actual AT&C loss of a distribution licensee in any year is better (lower) than the level based on the minimum AT&C loss reduction levels stipulated by the Government for that year the distribution licensee shall be allowed to retain 50% of the additional revenue resulting from such better performance. The balance 50% of additional revenue from such better performance shall be counted for the purpose of tariff fixation.
 - ii. In the event the actual AT&C loss of a distribution licensee in any year is worse (higher)than the level based on the AT&C loss reduction levels indicated in the Accepted Bid for that year, the entire shortfall in revenue on account of the same shall be borne by the distribution licensee.
 - iii. In the event the actual AT&C loss of a distribution licensee in any year is worse (higher) than the level based on the minimum AT&C loss reduction levels stipulated by the Government for that year but better(lower) than the level based on the AT&C loss reduction levels indicated in the Accepted Bid for that year, the entire additional revenue from such better performance shall be counted for the purpose of tariff fixation.

Dated: the 31st May, 2002

Provided further that for paras 2(i), 2(ii) and 2(iii) above, for every year, while determining such additional revenue or shortfall in revenue the cumulative net effect of revenue till the end of the relevant year shall be taken, in regard to over achievement/under-achievement and appropriate adjustments shall be made for the net effect.

The opening levels AT&C loss approved by the DERC, AT&C loss reduction indicated in the Accepted Bid and the minimum AT&C loss reductions levels stipulated by the Government for each distribution company are given in the table below.

Central East Delhi Electricity Distribution Company Limited

						(%)
		2002-03	2003-04	2004-05	2005-06	2006-07
Opening	57.2					
Accepted Bid		0.75	1.75	4.00	5.65	5.10
Minimum		1.50	5.00	5.00	5.00	4.25

South West Delhi Electricity Distribution Company Limited

						(%)
		2002-03	2003-04	2004-05	2005-06	2006-07
Opening	48.1					
Accepted Bid		0.55	1.55	3.30	6.00	5.60
Minimum		1.25	5.00	4.50	4.50	4.00

North North West Delhi Electricity Distribution Company Limited

						(%)
		2002-03	2003-04	2004-05	2005-06	2006-07
Opening	48.1					
Accepted Bid		0.5	2.25	4.5	5.5	4.25
Minimum		1.50	5.00	4.50	4.25	4.00

- 3. The Government will make available to the Transmission Company an amount of upto, approximately, Rs. 3450 crores during the period 2002-03 to 2006-07 as loan to be repaid by the Transmission Company to the Government in a manner agreed to between the Transmission Company and the Government. The Transmission Company will use the load to bridge the gap between its revenue requirement and the bulk supply price which it may receive from the distribution licensees.
- 4. The successor companies viz. GENCO, TRANSCO and the three distribution companies shall undertake to repay the loan payable to the Holding Company mentioned in relevant schedules of the Transfer Scheme, within thirteen years from

the date of transfer with a waiver on interest and moratorium on principal repayment for the first four years. Thereafter the loan would carry interest at the rate of 12% per annum and would be repaid in eighteen equal half yearly instalments.

Provided that in case of cumulative underachievement at the end of the fourth year in a distribution company, the waiver on interest and moratorium on principal repayment on Holding Company debt will be extended to the fifth year for the relevant distribution company. The principal repayment after such moratorium shall be in eighteen equal half yearly instalments. The additional funds available on account of extension of this moratorium on loan repayments will be utilised for meeting the shortfall in funds on account of underachievement. The distribution company will be free to raise other funds to meet its requirements, subject to the approval of the Commission.

By order and in the name of the Lt.Governor of the National Capital Territory of Delhi.

> -sd-(Ramesh Chandra) Principal Secretary (Power)

Annexure 2a-1

Public Notice for Response on the Petitions (Hindi)

Annexure 2a-2

Public Notice for Response on the Petitions (English)

Annexure 2a-3

Public Notice for Response on the Petitions (Urdu)

Annexure 2b-1

Public Notice for Extension of Time Limit for Response (Hindi)

Annexure 2b-2

Public Notice for Extension of Time Limit for Response (English)

Annexure 2b-3

Public Notice for Extension of Time Limit for Response (Urdu)

Annexure 2c-1

Public Notice for Response on Rationalisation of Tariff (Hindi)

Annexure 2c-2

Public Notice for Response on Rationalisation of Tariff (English)

Annexure 2c-3

Public Notice for Response on Rationalisation of Tariff (Urdu)

Annexure 3a

List of stakeholders invited for participation in presentation

SI-No-	Name	Designation	Address	Category	Timing
1.	Sh. T. R. Grover Sh. P. S. Bami		Delhi Power Consumers Guild S-371, Greater Kailash, Part-II, New Delhi-48		3.00 p.m.
2.	Sh. Bhuwan Mohan Sh. R. K. Jain		Shri Banarsidas Chandiwala Sewa Smarak Trust Society, Chandiwala Estate, Maa Anandmai Mara, Kalkaji, New Delhi – 19		3.00 p.m.
3.	Sh. Ranbir Singh	President	North Delhi Poultary Farmers Association, Vill. & P.O. Tajpur Kalan Delhi-110036	Association (Agricultural)	3.00 p.m.
4.			DMA Nursing Home & Medical Establishment Forum, DMA House, Medical Association Road, Darya Ganj, New Delhi – 2	Association (Commercial)	3.00 p.m.
5.	Sh. Rajan Gupta	President	National Association of Motion Picture Exhibitors, C/o Liberty Cinema, 19-B, New Rohtak Road, New Delhi-110005.	Association (Commercial)	3.00 p.m.
6.			Single Point Delivery Agency Holder Association 1, Khushal Complex, B-Block, Sant Nagar, Burari, Delhi – 110 054	Association (Contractors)	3.00 p.m.
7.	JN Puri	Secretary	Apartments Owners Association(Phase I) C-5/F DDA Flats Munirka, New Delhi-110067.	Association (Domestic)	3.00 p.m.
8.	Brig. T.R. Malhotra	President	Defence Colony Welfare Association B-16, Defence Colony, New Delhi-24.	Association (Domestic)	3.00 p.m.
9.	OP Sehgal	President	Federation of Residents Welfare Associations, Mayur Vihar Phase I Delhi-110091.	Association (Domestic)	3.00 p.m.
10.	Sh. P. Bhagat	Secretary	Rajinder Nagar Welfare Association, 19/37, Old Rajinder Nagar, New Delhi-110060.	Association (Domestic)	3.00 p.m.
11.	Sh. H.R. Verma	President	Residents Welfare Association, B-228, Yojana Vihar, Delhi-110092.	Association (Domestic)	3.00 p.m.
12.	Sh. Atma Ram	General Secretary	Residents Welfare Association, M-42, Lajpat Nagar-II, New Delhi-110024.	Association (Domestic)	3.00 p.m.
13.	Sh. K.C. Bhalla	President	Senior Citizens Neighbourhood Society, B-11, Green Park, New Delhi-110016.	Association (Domestic)	3.00 p.m.
14.	Sh. Ved Kumar	Secretary	Senior Citizens' Welfare Association, H/14-B, Saket, New Delhi-110017.	Association (Domestic)	3.00 p.m.
15.	Sh. Brij Sikka	President	South Patel Nagar House Owner's Association, 8/44,South Patel Nagar, New Delhi-110008.	Association (Domestic)	3.00 p.m.
16.	Sh. K.S. Lather	Secretary	Triveni Apartments Welfare Association (TAWA), SFS Flats, Sheikh Sarai, Ph-I New Delhi-110017.	Association (Domestic)	3.00 p.m.
17.	Sh B.S. Rao	General Secretary	Vasundhara Enclave Residents' Welfare Assn., A-6, CEL Apartt., Vasundhara Enclave, Delhi-110096.	Association (Domestic)	3.00 p.m.
18.	Sh. Arun Kumar	Secretary General	Federation of Residents Welfare Associations of Sarita Vihar, D-78, Sarita Vihar, New Delhi-110044.	Association (Domestic) (Federation)	3.00 p.m.
19.	Sh. S.R. Sangar	Secretary General	Federation of Indraprastha Extn. II Housing Societies, 81, Kiran Vihar, Delhi-92.	Coop Sty (Federation)	3.00 p.m.

SI-No-	Name	Designation	Address	Category	Timing
20.	Sh. K.G. Sehgal	Secretary	All India Govt. Employees Co-op. House Bldg Society, 20, Kiran Vihar, Delhi-92.	Coop Sty	3.00 p.m.
21.	Sh. J.N. Gupta	Secretary	Anand Niketan Co-operative Housing Society Ltd. Anand Niketan Club, E-91, Annand Niketan, New Delhi-21.	Coop Sty	3.00 p.m.
22.			Federation of Co-operative Group Housing Societies – Dwarka Ltd., 1017, Rajnigandha Apartments, Plot No.4, Sector-10, Dwarka, New Delhi – 45	Coop Sty	3.00 p.m.
23.	Sh. B.S. Kohli	Secretary	Ministry of S.R. & C.A. Co-operative House Building society Ltd. 165, Vigyan Vihar, Delhi-92.	Coop Sty	3.00 p.m.
24.	Sh. J.P. Menon	Secretary	The Railway Board Employees Co-operative Housing Society Ltd., D-227, Anand Vihar, Vikas Marg, Delhi-92.	Coop Sty	3.00 p.m.
25.	Sh. S.S. Saini	President	The Saini Co-op. House Bldg. Society Ltd., 168, Saini Enclave, Vikas Marg, Delhi-92.	Coop Sty	3.00 p.m.
26.	Sh. R.D. Gupta	President	The Srestha Co-op House Building Society Ltd., 100, Srestha Vihar, Delhi-92.	Coop Sty	3.00 p.m.
27.	Sh. T.K. Varghese	President	Young Friends Co-op G/H Society Ltd. Plot no.47, Sec-9, Rohini, New Delhi-85.	Coop Sty	3.00 p.m.
28.	Sh. G.B.Singh	Chief Executive	Confederation of Cooperative Housing Societies Vikas Marg, 85, Mausam Vihar, Delhi-51.	Coop Sty (Federation).	3.00 p.m.
29.	Sh H. R. Tyagi	Chairman	Association of Coop. Housing Society Ltd., 25, Ankur Apartt. 7-I.P.Extn. Mother Dairy Road, Delhi-92.	Coop Sty.	3.00 p.m.
30.	Sh. V.K. Agarwal	Chairman	Centre for Total Integration of Engineering Contracts Construction Technologies & Services for Development Tribhuvan'B-5/121, Yamuna vihar, Delhi-110053	Association (Engineer)	11.00 a.m.
31.	Sh. R.K. Gupta	General Secretary	All India Federation of Plastic Industries, Suite no. 17) 1st Floor, 40, DLF Industrial Area, Kirti Nagar, New Delhi-15.	Association (Industrial)	11.00 a.m.
32.	Sh. R.P. Varshey	Executive Director	All India Induction Furnaces Association, 209, MG House, Community Centre, Wazirpur Indl. Area, New Delhi-52.	Association (Industrial)	11.00 a.m.
33.	Sh. V.P. Bhardwaj	General Secretary	All India Plastic Industries Association, 203, Hansa Tower, 25, Central Market, Ashok Vihar, Phase-I, Delhi-52.	Association (Industrial)	11.00 a.m.
34.	Sh. Naresh Bajaj	Director	Apex Association of Wazirpur Industrial Area, C-55/2, Wazirpur Industrial Area, Delhi-52.	Association (Industrial)	11.00 a.m.
35.	Sh. A.K. Kaul	President	Badli Industrial Estate Association, Administrative Block Bldg, Badli Industrial Estate, Delhi-42.	Association (Industrial)	11.00 a.m.
36.	Sh. Vipin Gupta	Representative	Delhi Dal Mills (Millers) Association, 4064, Naya Bazar, Delhi-06.	Association (Industrial)	11.00 a.m.
37.	Sh. Rajesh Garg	Representative	Engineers Association, Y-35, Okhla Industrial Area Ph-II, New Delhi-110020	Association (Industrial)	11.00 a.m.
38.	Sh. Munshi Ram Kharbanda	President	Factory Owners Mayapuri Welfare Association, C-286, Ph-II, Mayapuri Indl. Area, New Delhi-64.	Association (Industrial)	11.00 a.m.
39.	Sh. O.N. Kapoor	Vice President North	Federation of Associations of Small Industries of India, 23-B/2, New Rohtak Road, New Delhi-110005.	Association (Industrial)	11.00 a.m.
40.	Sh. M.R. Gupta	President	Federation of Delhi Small Industries Associations, A-72, Naraina Industrial Area, Ph-I, New Delhi-28.	Association (Industrial)	11.00 a.m.

SI-No-	Name	Designation	Address	Category	Timing
41.	Sh. Anil Gupta	General Secretary	Friends Colony Industrialist Association (Regd), 26, Lane no.3, Friends Colony Indl. Area, G.T. Road, Shahdara, Delhi-95.	Association (Industrial)	11.00 a.m.
42.	Sh. R.K.Khetan and Sh. Ashok Jain	President	Jhilmil Industrialists Association,B-13/1, Jhilmil Industrial Area, G.T. Road, Shahdara, Delhi-110095.	Association (Industrial)	11.00 a.m.
43.			Mayapuri Industrial Welfare Association, "MIWA BHAWAN" Central Park, Block "B", Mayapuri Phase-I, New Delhi - 64	Association (Industrial)	11.00 a.m.
44.	Sh. Om Parkash	Jt. General Secretary	Mayapuri Small Industries Welfare Association, C- 194, Mayapuri Indl. Area, Ph-II, New Delhi-64.	Association (Industrial)	11.00 a.m.
45.	Sh. Vinod Kumar	President	Najafgarh Road Factories Association, 6-A, Industrial Area, Najafgarh Road, New Delhi-15.	Association (Industrial)	11.00 a.m.
46.	Sh. B.K.Jain	Chairman	Naraina Small Industries Welfare Association Phase I, Office no. 3, Plot no. 15-16,Office-cum- Shopping Complex, Naraina Indl. Area, Ph-I, New Delhi-28.	Association (Industrial)	11.00 a.m.
47.	Sh. Basant .Somani	President	Narela Industrial Complex Welfare Association, 215, DSIDC, Narela Industrial Park, Narela, Delhi- 40.	Association (Industrial)	11.00 a.m.
48.	Sh. Sushil Goel	President	North-West Industrial Federation, 118, SMA Cooperative Indl. Estate, G.T.K. Road, New Delhi- 110033.	Association (Industrial)	11.00 a.m.
49.	Sh. N.K. Khurana	General Secretary	Rewariline Small Industries Welfare Assn., C-120, Mayapuri, Ph-II New Delhi-64.	Association (industrial)	11.00 a.m.
50.	Sh. Asa Ram Sharma	General Secretary	Rural Area Manufacturer's Association, 2/95, Sunder Vihar, Delhi-42.	Association (Industrial)	11.00 a.m.
51.	Sh. Kamal Kiran Seth	General Secretary	Udyog Nagar Factory Owner's Association, Z-101 (Opp. H-18), Udyog Nagar, Rohtak Road, Delhi- 41.	Association (Industrial)	11.00 a.m.
52.	Sh. A.S. Kohli		Udyog Nagar Industrial Complex, Udyog Nagar, Rohtak Road, P.O. Nangloi, Delhi-41.	Association (Industrial)	11.00 a.m.
53.	Sh. Narender Kumar Aggarwal	General Secretary	Wazirpur Industrial Association, A-127, Wazirpur Indl. Area, Delhi-52.	Association (Industrial)	11.00 a.m.
54.	Sh. Raj Paul Gupta	General Secretary	Wazirpur Small industries Association, Adarsh Complex (2nd Floor), Community Centre, Wazirpur Industrial Area, Delhi-52.	Association (Industrial)	11.00 a.m.
55.	Sh. S.K.Tandon	General Secretary	Confederation of Delhi Industries and Cetp Societies, Plot no. 85, "C" Block Mayapuri Industrial Area, Ph-II, New Delhi-64.	Association (Industrial) (Federation)	11.00 a.m.
56.	Sh. H.S. Tandon	General Secretary	PHD Chamber of Commerce and Industry, PHD House, Opp. Asian Games Village, New Delhi-16.	Chamber Of Commerce	11.00 a.m.
57.	Sh. Rajender Chauhan	,	Bhartiya Mazdoor Sangh, 5239, Ajmeri Gate, Delhi	Employees' Association	11.00 a.m.
58.	Sh. V.S. Sharma	Addl. Commissioner	MCD Town Hall, Delhi	Government Deptt.	11.00 a.m.
59.	Sh. B.M Sukhija	Chief Engineer	NDMC, Palika Kendra, C.P., New Delhi	Government Deptt.	11.00 a.m.
60.	Sh. L.M. Sahore	General Managar	Northern Railway, Baroda House, New Delhi-01.	Government Deptt.	11.00 a.m.
61.	Sh. Deepak K. Sharma	Secretary General	Hotel & Restaurant Association of Northern India, 406/75-76, Manisha Building, Nehru Place, New Delhi-19.	Hotel (Association)	11.00 a.m.
62.	Sh. Anil Sood	Secretary	CHETNA, 132, Thapar Chamber-II, Opp. Kalandi Colony, Kilokari, Main Road, New Delhi	NGO	3.00 p.m.
63.	Sh. Pankaj Agarwal	Representative	Citizens Alliance for Promotion of Responsive Governance, 28/B/7/1, Jia Sarai (Near IIT Gate), New Delhi-16.	NGO	3.00 p.m.

SI-No-	Name	Designation	Address	Category	Timing
64.	Sh. K. K. Jhingar		Common Cause Common Cause House, 5, Institutional Area, Nelson Mandela Road, Vasant Kunj, New Delhi- 70	NGO	3.00 p.m.
65.	Sh. G.D. Gupta	Secretary	Delhi State Villages Development & Welfare Sangh, B-8/4, Ph-I, Badli Indl. Area, Bawana Road, Delhi-42.	NGO	3.00 p.m.
66.	Prof. Kamta Prasad	Chairman	Institute For Resource Management And Economic Development, 2B, Institutional Area, Karkardooma, Delhi-92.	NGO	3.00 p.m.
67.	Sh. A.K. Bhatnagar	General Secretary	Jan Shakti Vikas Samiti (Regd), IX/2596, Lane no. 17, Kailash Nagar, Delhi-110031.	NGO	3.00 p.m.
68.	Sh. Kailash Goduka	Secretary	PARIVARTAN 5B, Navkala Apartments, 14, I.P.Extn., Patparganj, New Delhi-92.	NGO	3.00 p.m.
69.	Sh. N.N. Singla	President	Pehchan Cheritable Trust (Regd), 301, Vikash Chamber, Ill Floor, D-2, Central Market, Prasant Vihar, Delhi-85.	NGO	3.00 p.m.
70.			Pragatisheel Mahila Samiti, Road No.12, Kothi No.28, Near Ring Road, East of Punjabi Bagh, New Delhi – 26.	NGO	3.00 p.m.
71.	Smt. Leena Srivastava	Representative	Teri, Darbari Seth Block, Habitat Place, Lodhi Road, New Delhi-03.	NGO	3.00 p.m.
72.	Sh. K. Ashok Rao	Convenor	The National Working Group on Power, J152, Saket, New Delhi-17.	NGO	3.00 p.m.
73.	Sh. Satish Kumar	Director	Delhi Metro Rail Corporation Ltd.NBCC Place,Bhisma Pitamah Marg, Pragati Vihar, New Delhi-03.	Utility	11.00 a.m.

Annexure 3b

List of respondents

List of respondents on the Petition for approval Annual Revenue Requirement for Financial Year 2002-03 (9-months) and 2003-04 by DISCOMs

R.No.	Name	Address	Category
R-01	Sh. V.K. Chawla	Naraina Small Industries Welfare Association- Phase – I Off No. 3, Plot No. 15-16, Office-cum-Shopping Complex Naraina Industrial Area, Phase – I New Delhi - 110028	Association (Industrial)
R-02	Sh. Suvashish Choudhary	Office of Deputy Commissioner of Police: Traffic 1st Floor, P.S. R.K. Puram, Sector- 12, New Delhi	Government Department
R-03	Sh. Rakesh Mehta	Municipal Corporation of Delhi, Town Hall, Chandni Chowk, Delhi - 110006	Government Department
R-04		Confederation of Indian Industries (CII)	Association (Industrial)
R-05	Sh. R.P. Varshney	All India Induction Furnaces Association, 203, M.G. House, Community Centre, Wazirpur Industrial Area, Delhi 110052	Association (Industrial)
R-06	Sh. Rajan Gupta	Bharatiya Mazdoor Sangh, 5239, Ajmeri Gate, Delhi	Association (Employees)
R-07	Sh, Anoop Singh	D1/103, MayaPuri Industrial Area, Phase – II, New Delhi - 110064	Individual
R-08	Sh. G.D. Gupta	Delhi State Villages Development & Welfare Sangh, B-8/4, Phase I, Badli Industrial Area, Bawana Road, Delhi 110042	Association
R-09	Sh. Ved Kumar	Senior Citizens' Welfare Association, H/14-B, Saket, New Delhi - 110017	Association (Domestic)
R-10	Sh. O.P. Kapoor	Mayapuri Industrial Welfare Association, "MIWA BHAWAN" Central Park, Block-B, Mayapuri Phase – 1, New Delhi - 110064	Association (Industrial)
R-11	Sh. Naresh Bajaj	Apex Association of Wazirpur Industrial Area, C-55/2, Wazirpur Industrial Area, Delhi - 110052	Association (Industrial)
R-12	Sh. Vijender Kumar Gupta	Municipal Corporation of Delhi, B-7, Vinoba Kunj, Plot No. 9, Sector – 9, Rohini, Delhi - 110085	Government Department
R-13	Sh. Narendra Kumar Agrawal	Wazirpur Audyogik Sangh, A-127, Wazirpur Industrial Area, Delhi - 110052	Association (Industrial)
R-14	Sh. Khushal Sharma	Single Point Agency Holder Association, 1, Khushal Complex, Sant Nagar, (Burari), Delhi - 110084	Association (Contractors)
R-15	Sh. Rajan Gupta	National Association of Motion Picture Exhibitors	Association (Commercial)
R-16	Sh. Ashok Bhatnagar	Jan Shakti Vikas Samiti, IX/2596, Lane No. 17, Kailash Nagar, Delhi - 110031	Association (Domestic)

R.No.	Name	Address	Category
R-17	Sh. N. K. Gupta	Delhi Development Authority Barracks, Sector D-4, Vasant Kunj, New Delhi	Government Department
R-18	Sh. T.K. Varghese	Young Friends CGHS, Plot No. 47, Sector 9 3333333, Delhi 110085	Association (Domestic)
R-19	Sh HD Joshi	Naraina Industries Association Phase I & II, A-5 Community Centre, N.I.A., Naraina Industrial Area Phase II, New Delhi-28	Association (Industrial)
R-20	Sh OP Gupta	All India Federation of Plastic Industries, Suite No.17, (1st Floor), 40, DLF Industrial Area, Kirti Nagar, New Delhi-15	Association (Industrial)
R-21	Sh Satish Kumar	Delhi Metro Rail Corporation Ltd., 3rd Floor, NBCC Place, Pragati Vihar, Bhishma Pitamah Marg, New Delhi-3	Utility
R-22	Sh MR Gupta	Federation of Delhi Small Industries Association, A-72,Naraina Industrial Area, Phase I, New Delhi-28	Association (Industrial)
R-23	Sh JP Dubey	AGRI PLUS INTERNATIONAL, F-14/14, Model Town II Stop, Delhi	Association (Agriculture)
R-24	Sh CSR Murthy, IDSE	Commander Works Engineer(AF) MES Tughlakabad, PO-Madangir, New Delhi-62	Govt Deptt/Licensees
R-25	Sh Sunder Lal	Energywatch, FISME Secretariat, B-4/161, Safdarjung Enclave, New Delhi-29	NGO
R-26	Sh Kamta Prasad	Institute for Resource Management And Economic Development, 2-B, Institutional Area, Karkardooma, Delhi-92	NGO
R-27	M/s Chander Mohini Mushroom & Agro Farms	M/s Chander Mohini Mushroom & Agro Farms, 11/25 Holambi Kalan, Alipur, Narela, Delhi-82	Individual
R-28	M/s M.R.Mushroom & Agro Farms	M/s M.R. Mushroom & Agro Farms, 10/20 Holambi Kalan, Alipur, Narela, Delhi-82	Individual
R-29	Sh. Harjeet Singh	Delhi State Industrial Development Corpn Ltd., A-3/4, State Emporia Building, Baba Kharak Singh Marg, New Delhi 110001	Govt Deptt
R-30	Sh. Harjeet Singh	Delhi State Industrial Development Corpn Ltd., A-3/4, State Emporia Building, Baba Kharak Singh Marg, New Delhi 110001	Govt Deptt
R-31	Sh. R.N. Gujral	Federation of Rohini Co-op Group Housing Socieites, Ahinsa Vihar, Plot No.27/1, Sector 9, Rohini, Delhi-85	Association (Domestic)
R-32	Smt. R.K. Singh	M-124, Greater Kailash I, New Delhi - 110048	Individual
R-33	Sh. K Ashok Rao	National Working Group on Power, J-152 Saket, New Delhi - 110017	NGO
R-34	Sh. AR Sharma	Rural Area Manufacturer's Association(Regd), Bawana Road, Samaipur Delhi - 110042	Association (Industrial)
R-35	Sh CK Bhardwaj	C-54/1, Wazirpur Industrial Area, Delhi - 110052	Individual
R-36	Sh Raja Beriwal	B-2/52, Rajasthali Apartsments, Pitam Pura, Delhi - 110034	Individual
R-37	Er SP Gupta	Delhi - 110034 Delhi Transco Ltd. 33Kv Grid S/Stn Bldg., IP Estate, Govt Delhi-2	
R-38	Sh Asad Wasi	PHD Chamber of Commerce and Industry Opp Asian Games Village, New Delhi-16	Association (Industrial)

R.No.	Name	Address	Category
R-39	Sh Sushil Goel	D-241, Ashok Vihar Phase I, Delhi - 110052	Individual
R-40	Sh Vijay Kumar Gupta		Individual
R-41	Sh Narottam Das	Northern Railway, Headquarters Office, Baroda House, New Delhi	Govt Deptt
R-42	Sh Kamal Kiran Seth	Udyog Nagar Factory Owners Association, Z-101, (Opp H-18) Udyog Nagar, Rohtak Road, Delhi-41	Association (Industrial)
R-43	Sh Vijnod Kumar	1/8 East Punjabi Bagh, New Delhi-28	Individual
R-45	Bindu Agnihotri	Delhi Power Co. Ltd., Shakti Sadan, Kotla Road, New Delhi-110002	Govt Deptt
R-44	Sh S.S. Mediratta	N.T.P.C Ltd., NTPC Bhawan, Core 7, SCOPE Complex, Institutional Area, New Delhi-3	Govt Deptt
R-46	Vijay Grover	North-West Industrial Federation, 118, SMA Cooperative Industrial Estate, G.T.K.Road, Delhi-33	Association (Industrial)
R-47	Sushil Goel	Rajasthani Udyog Nagar Manu.Asso. 1, Rajasthani Udyog Nagar , G.T.Karnal Road, Delhi-33	Association (Industrial)
R-48	HL Bhardwaj	Federation of Industries of India, B-30 Sagar Apartments, 6, Tilak Marg, New Delhi-110001	Association (Industrial)
R-49		Badli Industrial Estate Association, Administrativea Block Bldg., Badli Industrial Estate, Delhi-110042	Association (Industrial)
R-50	Sh. Raj Paul Gupta	Wazirpur Small Industries Association, Adarsh Complex, Community Centre, Wazirpur Industrial Area, Delhi - 110052	Association (Industrial)
R-51	Sh. Rajeev Sehgal	New Rohtak Road Manufacturers Association, D-26/15, Street No.4-C, Guru Gobind Singh Marg, Anand Parbat Industrial Area, Delhi - 110005	Association (Industrial)
R-52	Sh. G.M. Chopra	Senior Citizens' Forum, S-144, Greater Kailash II, New Delhi - 110048	Association (Domestic)
R-53	Sh Som Sikand	Sikand & Co.Scooter Division, 104 Bangla Sahib Road, Gole Market, New Delhi-110001	Individual
R-54	Sh T.R, Grover	Delhi Power Consumer's Guild, S-371 Greater Kailash Part II, New Delhi-110048	Association (Domestic)
R-55	Sh. SP Jain	The Manufacturers Welfare Association, B Block, G.T. Karnal Road, B-35/12, G.T. Karnal Road Industrial Area, Delhi - 110033	Association (Industrial)
R-56		Tiya Industries, A-28, Mayapuri Phase I, New Delhi-110064	Individual
R-57	Sh HC Aggarwal	HD-40, Pitampura, New Delhi-110088	Individual

R.No.	Name	Address	Category
R-58	Sh Suraj Prakash	Industrial Advisory Board (Govt of NCT Delhi), BG-7/18, Paschim Vihar, New Delhi-110063	Individual
R-59	Sh. S.K. Gupta	Vijay Enclave(Durgapuri), New Delhi	Individual
R-60	Sh. S.Kumar	Maharani Enclave, New Delhi	Individual
R-61	Sh Anil Sood	CHETNA, Society for Protection of Culture Heritage, Environment, Traditions and Promotion of National Awareness, 132 Thapar Chamber II, Opp Kalindi Colony, Kilokari, Main Ring Road, New Delhi-29	NGO
R-62	Roshan Lal Garg	2682/199, 1st Floor, Maharaja Agarsain Marg, Trinagar, Delhi-35	Association (Industrial)
R-63	Sh. Vipin Gupta	Delhi Dal Mills Association, 4064, Naya Bazar, Delhi - 110006	Association (Industrial)
R-64	Sh.Nirantar Kumar	A-24, Mayapuri Industrial Area Phase I, New Delhi - 110064	Association (Industrial)
R-65	Sh.Ravinder Nath Basal	A-48, 2 nd Floor, Wazirpur Industrial Area, New Delhi - 110052	Association (Industrial)
R-66	Sh.Anil Gupta	Friends Colony Industrialist Association Area, 26. Lane No.3, Friends Colony Industrial Area, G.T.Road, Shahdara, Delhi-95	Association (Industrial)
R-67		Pathick Engineering Works, A-44, Mayapuri Phase I, New Delhi-64	Individual
R-68	Sh VP Bhardwaj	All India Plastic Industries Association, 203, Hansa Tower, 25 Central Market, Ashok Vihar Phase I Delhi-52	Association (Industrial)
R-69	Sh. PC Garg	Engineers Association, Y-35, Okhla Industrial Area, Phase II, New Delhi-20	Association (Industrial)
R-70	Sh Vishal Jyoti	Supercircle Private Ltd B-45, Mayapuri Industrial Area Phase 1, New Delhi-64	Individual
R-71	Sh JR Jindal	Delhi Factory Owners' Federation, 13-C, Atma Ram House, 1 Tolstoy Marg, New Delhi-110001	Association (Industrial)
R-72	Dr. Devendra Kumar	Joint Committee of Residents Welfare Associations of Pitampura, ND68, Pitampura, Delhi-110088	Association (Domestic)
R-73	Sh. V.K. Khanna	New Town Coop. Group Housing Society Ltd. Sector 14 Extn, Rohini, Delhi.	Association (Domestic)
R-74	Sh. Arjun Manga	Beacon Electronics	Individual
R-75 R-76	Sh. Trilok Singh Consumer of NDPL		Individual Individual
R-76	Sh. Vinod Kumar	Najafgarh Road Factories Association (Regd.) 6-A, Industrial Area, Najafgarh Road, New Delhi-110015.	Association (Industrial)
R-78	Ms.Gita Dewan Verma	1356 D-1, Vasant Kunj, New Delhi-110070.	Individual

Annexure 3c

List of participants in public hearing

List of participants in public hearing on the Petition for approval Annual Revenue Requirement for Financial Year 2002-03 (9-months) and 2003-04 by DISCOMs

SI. No.	R.No.	Name	Address	Category	Date	Time
1.	R-01	Sh. V.K. Chawla	Naraina Small Industries Welfare Association- Phase – I Off No. 3, Plot No. 15-16, Office-cum-Shopping Complex Naraina Industrial Area, Phase – I New Delhi - 110028	Association (Industrial)	12.05.2003	10.00 A.M.
2.	R-05	Sh. R.P. Varshney	All India Induction Furnaces Association, 203, M.G. House, Community Centre, Wazirpur Industrial Area, Delhi 110052	Association (Industrial)	12.05.2003	10.00 A.M.
3.	R-10	Sh. O.P. Kapoor	Mayapuri Industrial Welfare Association, "MIWA BHAWAN" Central Park, Block-B, Mayapuri Phase – 1, New Delhi - 110064	Association (Industrial)	12.05.2003	10.00 A.M.
4.	R-11	Sh.R.L. Aggarwal	Apex Association of Wazirpur Industrial Area, C-55/2, Wazirpur Industrial Area, Delhi - 110052	Association (Industrial)	12.05.2003	10.00 A.M.
5.	R-19	Sh HD Joshi	Naraina Industries Association Phase I & II, A-5 Community Centre, N.I.A., Naraina Industrial Area Phase II, New Delhi-28	Association (Industrial)	12.05.2003	10.00 A.M.
6.	R-20	Sh OP Gupta	All India Federation of Plastic Industries, Suite No.17, (1st Floor), 40, DLF Industrial Area, Kirti Nagar, New Delhi-15	Association (Industrial)	12.05.2003	10.00 A.M.
7.	R-22	Sh MR Gupta	Federation of Delhi Small Industries Association, A-72,Naraina Industrial Area, Phase I, New Delhi-28	Association (Industrial)	12.05.2003	10.00 A.M.
8.	R-34	Sh. AR Sharma	Rural Area Manufacturer's Association(Regd), Bawana Road, Samaipur Delhi - 110042	Association (Industrial)	12.05.2003	10.00 A.M.
9.	R-38	Sh Asad Wasi	PHD Chamber of Commerce and Industry Opp Asian Games Village, New Delhi-16	Association (Industrial)	12.05.2003	10.00 A.M.
10.	R-42	Sh Kamal Kiran Seth	Udyog Nagar Factory Owners Association, Z-101, (Opp H-18) Udyog Nagar, Rohtak Road, Delhi-41	Association (Industrial)	12.05.2003	10.00 A.M.
11.	R-46	Vijay Grover	North-West Industrial Federation, 118, SMA Cooperative Industrial Estate, G.T.K.Road, Delhi-33	Association (Industrial)	12.05.2003	2.00 P.M.
12.	R-15	Sh. Rajan Gupta	National Association of Motion Picture Exhibitors	Association (Commercial)	12.05.2003	2.00 P.M.
13.	R-47	Sushil Goel	Rajasthani Udyog Nagar Manu.Asso. 1, Rajasthani Udyog Nagar , G.T.Karnal Road, Delhi-33	Association (Industrial)	12.05.2003	2.00 P.M.

SI. No.	R.No.	Name	Address	Category	Date	Time
14.	R-50	Sh. Raj Paul Gupta	Wazirpur Small Industries Association, Adarsh Complex, Community Centre, Wazirpur Industrial Area, Delhi - 110052	Association (Industrial)	12.05.2003	2.00 P.M.
15.	R-51	Sh. Rajeev Sehgal	New Rohtak Road Manufacturers Association, D-26/15, Street No.4-C, Guru Gobind Singh Marg, Anand Parbat Industrial Area, Delhi - 110005	Association (Industrial)	12.05.2003	2.00 P.M.
16.	R-66	Sh.Anil Gupta	Friends Colony Industrialist Association Area,26. Lane No.3, Friends Colony Industrial Area, G.T.Road, Shahdara, Delhi-95	Association (Industrial)	12.05.2003	2.00 P.M.
17.	R-69	Sh. P.C. Garg	Engineers Association, Y-35, Okhla Industrial Area, Phase II, New Delhi-20	Association (Industrial)	12.05.2003	2.00 P.M.
18.	R-07	Sh, Anoop Singh	D1/103, MayaPuri Industrial Area, Phase – II, New Delhi - 110064	Individual	13.05.2003	10.00 A.M.
19.	R-09	Sh. Ved Kumar	Senior Citizens' Welfare Association, H/14-B, Saket, New Delhi - 110017	Association (Domestic)	13.05.2003	10.00 A.M.
20.	R-14	Sh. Khushal Sharma	Single Point Agency Holder Association, 1, Khushal Complex, Sant Nagar, (Burari),Delhi - 110084	Association (Contractors)	13.05.2003	10.00 A.M.
21.	R-27		M/s Chander Mohini Mushroom & Agro Farms, 11/25 Holambi Kalan, Alipur, Narela, Delhi-82	Individual	13.05.2003	10.00 A.M.
22.	R-28		M/s M.R. Mushroom & Agro Farms, 10/20 Holambi Kalan, Alipur, Narela, Delhi-82	Individual	13.05.2003	10.00 A.M.
23.	R-31	Sh. R.N. Gujral	Federation of Rohini Co-op Group Housing Socieites, Ahinsa Vihar, Plot No.27/1, Sector 9, Rohini, Delhi-85	Association (Domestic)	13.05.2003	10.00 A.M.
24.	R-33	Sh. K Ashok Rao	National Working Group on Power, J-152 Saket, New Delhi - 110017	NGO	13.05.2003	10.00 A.M.
25.	R-35	Sh CK Bhardwaj	C-54/1, Wazirpur Industrial Area, Delhi - 110052	Individual	13.05.2003	10.00 A.M.
26.	R-36	Sh Raja Beriwal	B-2/52, Rajasthali Apartsments, Pitam Pura, Delhi - 110034	Individual	13.05.2003	2.00 P.M.
27.	R-39	Sh Sushil Goel	D-241, Ashok Vihar Phase I, Delhi - 110052	Individual	13.05.2003	2.00 P.M.
28.	R-40	Sh Vijay Kumar Gupta	BN-75(West), Shalimar Bagh, Delhi 110088	Individual	13.05.2003	2.00 P.M.
29.	R-52	Sh. G.M. Chopra	Senior Citizens' Forum, S-144, Greater Kailash II, New Delhi - 110048	Association (Domestic)	13.05.2003	2.00 P.M.
30.	R-54	Sh T.R, Grover	Delhi Power Consumer's Guild, S-371 Greater Kailash Part II, New Delhi-110048	Association (Domestic)	13.05.2003	2.00 P.M.
31.	R-58	Sh Suraj Prakash	Industrial Advisory Board(Govt of NCT Delhi), BG-7/18, Paschim Vihar, New Delhi-110063	Individual	13.05.2003	2.00 P.M.
32.	R-61	Sh Anil Sood	CHETNA, Society for Protection of Culture Heritage, Environment, Traditions and Promotion of National Awareness, 132 Thapar Chamber II, Opp Kalindi Colony, Kilokari, Main Ring Road, New Delhi-29	NGO	13.05.2003	2.00 P.M.
33.	R-2	Sh. V.P.Gupta	Office of Deputy Commissioner of Police: Traffic, 1st Floor, P.S. R.K. Puram, Sector- 12, New Delhi	Government Department	14.05.2003	10.00 A.M.

SI. No.	R.No.	Name	Address	Category	Date	Time
34.	R-12	Sh. Vijender Kumar Gupta	Municipal Corporation of Delhi, B-7, Vinoba Kunj, Plot No. 9, Sector – 9, Rohini, Delhi - 110085	Government Department	14.05.2003	10.00 A.M.
35.	R-17	Sh. N.K. Gupta	Delhi Development Authority Barracks, Sector D-4, Vasant Kunj, New Delhi	Govt Department	14.05.2003	10.00 A.M.
36.	R-21	Sh Satish Kumar	Delhi Metro Rail Corporation Ltd., 3 rd Floor, NBCC Place, Pragati Vihar, Bhishma Pitamah Marg, New Delhi-3	Utility	14.05.2003	10.00 A.M.
37.	R-24	Sh. Pradeep Aggarwal	Commander Works Engineer(AF) MES Tughlakabad, PO-Madangir, New Delhi- 62	Govt Deptt/Licensees	14.05.2003	10.00 A.M.
38.	R-29	Sh. S.C. Sharma	Delhi State Industrial Development Corpn Ltd., A-3/4, State Emporia Building, Baba Kharak Singh Marg, New Delhi 110001	Govt Deptt	14.05.2003	10.00 A.M.
39.	R-30	Sh. Harjeet Singh	Delhi State Industrial Development Corpn Ltd., A-3/4, State Emporia Building, Baba Kharak Singh Marg, New Delhi 110001	Govt Deptt	14.05.2003	10.00 A.M.
40.	R-37	Er SP Gupta	Delhi Transco Ltd., 33Kv Grid S/Stn Bldg., IP Estate, New Delhi-2	Govt Deptt	14.05.2003	10.00 A.M.
41.	R-41	Sh Narottam Das	Northern Railway, Headquarters Office, Baroda House, New Delhi	Govt Deptt	14.05.2003	10.00 A.M.
42.	R-44	S.S. Mediratta	N.T.P.C Ltd., NTPC Bhawan, Core 7, SCOPE Complex, Institutional Area, New Delhi-3	Govt Deptt	14.05.2003	10.00 A.M.
43.	R-45	Bindu Agnihotri	Delhi Power Co. Ltd., Shakti Sadan, Kotla Road, New Delhi-110002	Govt Deptt	14.05.2003	10.00 A.M.

Annexure 4

Activity Chart

Activity Chart for Critical Activities relating to deliberations on Petition

Date	Activity
21.11.2002	DISCOM directed to file ARR & Tariff Petition for the Financial year 2002-03(9 months ending March 2003) by 30.11.2002
30.11.2002	Filing of Petition for ARR for the years 2002-03(9 months).
16.12.2002	Basic gaps in the ARR Petitions communicated to the petitioner
19.12.2002	Detailed deficiency memo issued to the petitioner.
24.12.2002	First technical session held with the petitioner on the data gaps communicated to them.
01.01.2003	The petitioner directed to collect their letter no.nil dated 30.12.02 received on 31.12.02 as the same was submitted in disjointed manner, without page no., some unsigned papers and hence could not be taken on record.
01.01.2003	Filing of Petition for ARR for the year 2003-04.
08.01.2003	The petitioner submitted supplementary submissions on ARR petition for FY-02-03.
23.01.2003	Deficiency memo no-2 issued to the petitioner on AT&C losses, Capital expenditure, expenses, revenues etc.
10.02.2003	The petitioner submitted partial response to Commission's letter dated 23.1.2003 and submitted supplementary -3 for the year 2002-03.
21.02.2003	Meeting held with CEO's of Transco and Discoms to discuss various data gaps in the petition. The petitioner's advised to remove all deficiencies and to submit the composite proposal by 26.02.2003.
21.02.2003	The petitioner submitted supplementary -2 for the year 2002-03.
06.03.2003	Consolidated petition filed by the petitioner
06.03.2003	Commission admitted the petition.
7.03.2003	Public notice issued in newspapers requesting stakeholders to respond on the consolidated petitions of companies by 7 th April 2003.
10.03.2003	The petitioner directed to provide district/category-wise break up of revenue billed and realized and scheme wise details of capital investments.
11.03.2003	Letter addressed to the petitioner for a presentation on 20.3.03 on Augmentation of distribution system and status of capital investments.
13.03.2003	Notice to the petitioner for technical session to be held on 17.03.2003 to seek additional informations/clarifications on responses submitted and to provide the actual data upto February 2003.
13.03.2003	The petitioner requested for extension of time for submission of Distric wise billing data & capex details to 20.3.2003 and for category wise break up for districts a week thereafter.
17.03.2003	Technical session with Petitioners held.
20.03.2003	The petitioner in response to Commission's letter dated 10.3.2003 intimating that broad scheme-wise physical progress and proposed works for capital expenditure & break up of revenue details shall be submitted by 27.3.2003
31.03.2003	 The petitioner reminded to file revenue & capex details, which were to be submitted on 27th March, 2003 by 31.3.03 itself. Selected stakeholders invited to participate in the presentation on the ARRs of the Petitioners, on
05.04.0000	5 th April 2003, organized by the Commission
05.04.2003	Presentation on the ARRs of the Petitioners to invited stakeholders.
07.04.2003	 Public notice in newspapers for extension of time limit for Public response on ARR Petition to 16.4.03. Selected stakeholders who attended the presentation, also informed of the extended date of public response.
08.04.2003	The petitioner reminded that they are not furnishing the information and now has sought further extension to fill the responses on 12.4.03.
09.04.2003	Ist set of responses from the public sent to the petitioner for there response to the objector and to the Commission.
11.04.2003	Public notice seeking response from stakeholders on Tariff Rationalisation issues by 21.04.2003.
16.04.2003	The petitioner submitted certain ARR clarification for F.Y.2002-03 & F.Y.2003-04.
17.04.2003	 The petitioner directed to submit the required information by the extended date of 22.4.03. 2nd set of responses from the public sent to the petitioner for there response to the objector and to the Commission.
17.04.2003	The petitioner submitted the information regarding the Commission's Performance Standard Regulation (Metering & Billing) 2002 alongwith the tariff rationalization issues.

22.04.2003	3rd set of responses from the public sent to the petitioner for there response to the objector and to the Commission.
23.04.2003	The petitioner directed to give presentation to the Commission on 30.4.03 to review the status of Capex and R&M Works.
24.04.2003	The petitioner submitted the information on Sales & Revenue, Energy Input & Actual capital expenditure in response to Commission's letter dated 17.4.03.
25.04.2003	 The petitioner directed to attend technical session on 30.4.03 to discuss various aspect of Billing & collection and capital investments. The petitioner directed to submit the data/information latest by 30.4.03. 4th set of responses from the public given to the petitioner for reply thereon latest by 05.05.2003.
29.04.2003	The petitioner directed to submit the information latest by 30.4.03 in continuation to our letter dated 24.04.03.
30.04.2003	 Presentation given by the petitioner regarding the status of Capex & R/M Works. Technical session held with the petitioner
30.04.2003	 The petitioner directed to adhere to the time limits of 5th May for sending replies to all the public respones. GNCTD addressed to provide details & calculation of Rs.3450/- crores, support to DTL. The Petitioners and the GNCTD informed the schedule of Public Hearings on 12th, 13th and 15th May 2003.
1.05.2003	 The petitioner reminded to file information of scheme wise details of Capes & R&M works. The stakeholders who responded upto cut-off date of 25.4.03 invited, to attend the Public hearing in groups on 12th, 13th and 15th May 2003. GNCTD addressed to inform the status of funds earmarked under the APDRP schemes to be released to the DISCOMs.
02.05.2003	The petitioner submitted the information on Sales & Revenue, Energy Input and employees cost.
05.05.2003	The petitioner submitted the information on category wise details of Revenue, Energy Input, Collection & AT&C losses, collection against DVB arrears and Report on EHV & 11 kv and below schemes for Capex.
05.05.2003	The Commission's staff conducted the filed visits to the petitioner's office.
6.05.2003	The Commission's staff conducted the filed visits to the petitioner's office.
7.05.2003	 The petitioner submitted the replies to the 1st set of public responses The petitioner submitted the information on procurement and contract details in support of capex for FY 2003-04.
8.05.2003	The Petitioners submitted replies to the balance public responses.
9.05.2003	The Petitioners submitted the certificate from the Chartered Accountant for Actual sales & Collections for FY 2002-03.
10.05.03	GNCTD reminded to provide the detail calculations of Rs.3450/- crores, support to DTL.
12.05.03	 Public hearings conducted in two sessions. GNCTD addressed to consider foregoing the return of 16% on equity of Genco. GNCTD addressed to clarify the position regarding deposit works undertaken by the erstwhile DVB.
13.05.03	 Public hearings conducted in two sessions. Response of GNCTD received regarding calculations & assumption on support of Rs.3450/- crores to Transco Response of GNCTD received regarding the status of release of funds earmarked for APDRP.
14.05.03	Public hearing was conducted in one session on 14th May instead of 15th May 2003 which was the public holiday.
20.05.03	Response of GNCTD received regarding return on equity to Genco.
20.05.2003	The Petitioners submitted the partial information/data on R&M, Capex, A&G expenses and interest expenses.
21.05.03	 The Commission's staff conducted the filed visits to the petitioner's office. Meeting of Commission Advisory Committee held to discuss factual position of the petitions and other issues The petitioner addressed to clarify for a steady decline in collection efficiency beginning November 2002.
22.05.03	 The Commission's staff conducted the filed visits to the petitioner's office. Response of GNCTD received regarding deposit works undertaken by the erstwhile DVB.
23.05.03	The petitioner addressed to attend a technical session for clarification/further information on pending issues.
24.05.03	Technical session held with the petitioner.
28.05.03	The petitioner submitted balance information/data the information/data on Capital expenditure/Fixed Assets/Register/Kvah Billing/Metering/Billing & Collection except the provisional accounts.
06.06.2003	The petitioner submitted provisional accounts.
26.062003	Issue of Orders by the Commission