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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 March 3, 1999 and it became operational from December 10, 1999.

1.1.1 Functions of the Commission

Major functions assigned to the Commission under the Delhi Electricity Reform Act, 2000 (hereinafter referred to as 'DERA') 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 of electricity
- to promote competition, efficiency and economy in the activities of the electricity industry in the National Capital Territory 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
- to regulate the working of the licensees
- to adjudicate upon the disputes and differences between licensees

Major functions assigned to the Commission under the Electricity Act, 2003 (hereinafter referred to as 'EA 2003') are as follows:

- determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State;
- regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- facilitate intra-state transmission and wheeling of electricity;
- issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person,

and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licence;

- adjudicate upon the disputes between the licensees, and generating companies and to refer any dispute for arbitration;
- levy fee for the purposes of this Act;
- specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of section 79;
- specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- fix the trading margin in the intra-State trading of electricity, if considered, necessary; and
- discharge such other functions as may be assigned to it under this Act.

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, brought out the salient features of 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 specified the 'Guidelines for Revenue and Tariff Filing' for submission of their Annual Revenue Requirement and Tariff petitions by Delhi Vidyut Board in October 2000. 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 has issued thirteen Tariff Orders and notified nine Regulations as given in Tables 1.1 and 1.2, respectively. Four regulations are in the process of being notified, as given in Table 1.3. The Orders were issued after following the due process and all stakeholders were given an opportunity to present their viewpoints.

Table 1.1: Tariff Orders issued by the Commission

S. 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 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

4.	Order on ARR for July 2003 to March 2004 (9 months and Financial Year 2003-04) and determination of Retail supply tariffs for BSES – Yamuna Power Limited	26-06-2003
5.	Order on ARR for July 2003 to March 2004 (9 months and Financial Year 2003-04) and determination of Retail supply tariffs for BSES – Rajdhani Power Limited	26-06-2003
6.	Order on ARR for July 2003 to March 2004 (9 months and Financial Year 2003-04) and determination of Retail supply tariffs for North Delhi Power Limited	26-06-2003
7.	Order on ARR for July 2003 to March 2004 (9 months and Financial Year 2003-04) and determination of Bulk supply tariffs for Delhi TRANSCO Limited	26-06-2003
8.	Order on ARR for Financial Year 2004-05 and determination of Retail supply tariffs for BSES – Yamuna Power Limited	09-06-2004
9.	Order on ARR for Financial Year 2004-05 and determination of Retail supply tariffs for BSES – Rajdhani Power Limited	09-06-2004
10.	Order on ARR for Financial Year 2004-05 and determination of Retail supply tariffs for North Delhi Power Limited	09-06-2004
11.	Order on ARR for Financial Year 2004-05 and determination of Bulk supply tariffs for Delhi TRANSCO Limited	09-06-2004
12.	Order on ARR for Financial Year 2004-05 and determination of Generation tariffs for Indraprastha Power Generation Company Limited	09-06-2004
13.	Order on ARR for Financial Year 2004-05 and determination of Generation tariffs for Pragati Power Corporation Limited	09-06-2004

Table 1.2: Regulations notified by the Commission

S. No.	Title of Regulations
1.	Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001
2.	Delhi Electricity Regulatory Commission (Management and Development of Human Resources) Regulations, 2001
3.	Delhi Electricity Regulatory Commission (Appointment of Consultants) Regulations, 2001
4.	Delhi Electricity Regulatory Commission (Delegation of Financial Powers) Regulations, 2001
5.	Delhi Electricity Regulatory Commission (Grant of Consent for Captive Power Plants) Regulations, 2002 (Since Repealed)
6.	Delhi Electricity Regulatory Commission (Performance Standards – Metering & Billing) Regulations, 2002
7.	Delhi Electricity Regulatory Commission (Medical Attendance) Regulations, 2003
8.	Delhi Electricity Regulatory Commission (Redressal of Consumers' Grievances) Regulations, 2003
9.	Delhi Electricity Regulatory Commission (Guidelines for establishment of Forum for redressal of grievances of the consumer and Ombudsman) Regulations, 2003

Table 1.3: Regulations under process of notification

S. No.	Title of Regulations
1	Delhi Electricity Regulatory Commission (Procedure for filing appeal before the Appellate Tribunal) Regulations, 2005
2	Delhi Electricity Regulatory Commission (Treatment of Income from Other Business of Transmission Licensee and Distribution Licensee) Regulations, 2005
3	Delhi Electricity Regulatory Commission (Intra- State Trading) Regulations, 2005
4	Delhi Electricity Regulatory Commission (Terms and conditions for Open Access) Regulations, 2005

Further, in compliance to the provisions of Electricity Act, 2003, the Commission has issued the following Draft Regulations for public comments:

Table 1.4: Draft Regulations notified by the Commission

S.No.	Title of Regulation
1	Delhi Electricity Regulatory Commission (Metering and Billing) Regulations, 2004
2	Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2004
3	Delhi Electricity Regulatory Commission (State Advisory Committee) Regulations, 2005
4	Delhi Electricity Regulatory Commission (Levy and Collection of Fee and Charges by State Load Despatch Centre) Regulations, 2005
5	Delhi Electricity Regulatory Commission (Conduct of Business) Regulations, 2005

The Commission is actively considering the responses received from the public and will finalise the above Regulations in a short period.

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 DERA, 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 three 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 disbursed to 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 issued 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 December 21, 2001 for the determination of Bulk Supply Tariff for the period till March 31, 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 February 22, 2002.

Thereafter, the investors submitted the bids. 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 took over the transmission assets of DVB (as defined in the Transfer Scheme) and became authorised to commence electricity transmission and bulk supply business in the specified area of National Capital Territory of Delhi (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 the 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 DISCOM's 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.

1.2.6 ARR and Tariff Determination for FY 2002-03 and 2003-04

During the months of November and December 2002, the Transmission Company and three Distribution Companies filed their ARR and Tariff Petitions for the nine months of 2002-03 (July 2002

to March 2003) and for FY 2003-04. The Commission had a series of discussions with the TRANSCO and three DISCOMs wherein the Commission sought additional information, clarifications and justifications on various issues critical for admissibility of the Petitions. Subsequently, the Petitioners submitted the information and justifications. However, considering the series of submissions by the DISCOMs and with the passage of time, the Commission directed the DISCOMs to file Consolidated ARR Petitions for the nine-month period of FY 2002-03 and FY 2003-04. The DISCOMs filed the Consolidated Petitions during the first week of March 2003. The Commission admitted the Petition of TRANSCO and the three DISCOMs for further processing on March 6, 2003.

The Commission brought out a Public Notice on March 7, 2003 indicating the salient features of the Petitions and invited responses from the consumers and other stakeholders on the Petitions. However, the Commission did not receive adequate responses on the Petitions due to the fact that the Petitioners did not file a Tariff Petition and due to low awareness and appreciation of the tariff determination process based on the framework specified by the Government's Policy Directions. Due to the low response on the Petitions, the Commission made a presentation to select stakeholders and briefed them about the unbundling and privatisation process followed by the Government, the Policy Directions framework, the salient features of the Petitions, and the importance of the ARR Petitions for the tariffs to be approved by the Commission. The Commission sought responses from the participants on the ARR Petitions as well as suggestions on other related areas including tariff rationalization.

The Commission also brought out a public notice on April 11, 2003 and sought further suggestions/responses from the general public on other related areas of concern to the consumers including rationalization of tariff categories/sub-categories, tariff structure amendment, and other charges levied as per provisions of the Tariff Schedule. The Commission received a total of 78 responses from the various stakeholders. The Commission conducted the Public Hearings on the May 12, 13 and 14, 2003 in five different sessions. Subsequently, the Commission held discussions with the Petitioners and obtained the details of actual expenses, revenue and losses for the nine-month period of FY 2002-03 (July 2002 to March 2003).

The Commission, based on the detailed scrutiny of the Petitions and additional information/clarifications submitted by the Petitioners and after following the due public process, issued its Orders on the ARR and Tariff Petitions of TRANSCO and DISCOMs for FY 2002-03 (9 months) and FY 2003-04 on June 26, 2003.

1.2.7 Enactment of Electricity Act, 2003

The Electricity Act, 2003 (EA 2003), enacted in June 2003 repealed the Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commissions Act, 1998. It provides for increased competition in the sector by facilitating open access (permission to use the existing

power transfer facilities) for transmission and distribution, power trading, and also allows setting up of captive power plants without any restriction.

The Commission has examined the applicability of DERA and Policy Directions issued by the GNCTD subsequent to the enactment of the EA 2003. The Sections 185 (3) and 185 (2) (e) of the EA 2003 are the relevant Sections dealing with the applicability of the Delhi Electricity Reforms Act 2000 and the Policy Directions issued by the GNCTD under the provisions of DERA.

Section 185 (3) of the EA 2003 states that *"The provisions of the enactments specified in the Schedule, not inconsistent with the Provisions of this Act, shall apply to the States in which such enactments are applicable"*. The Delhi Electricity Reforms Act, 2000 has been listed under this proviso at Sl.No. 7 of the Schedule of EA 2003.

Further, Section 185 (2)(e) of the EA 2003 states that *"all directives issued, before the commencement of this Act, by a State Government under the enactments specified in the Schedule shall continue to apply for the period for which such directives were issued by the State Government"*.

From these two provisions of EA 2003, it can be interpreted that the provisions of DERA 2000 which are not inconsistent with the provisions of EA 2003 shall still be applicable to the State of Delhi and the Policy Directions issued by the GNCTD under the provisions of DERA shall be applicable till the period of Policy Directions i.e. 2006-07. The Commission, while analysing the Petitions and while issuing this Order has duly considered these provisions of the EA 2003 and has dealt with the matters accordingly.

Procedure envisaged in the EA 2003 for Tariff Order

Section 64 of the EA 2003 specifies the procedure to be followed for issuance of a tariff order. Sub-sections (1) and (3) of this Section of EA 2003 state as follows:

Sub-section (1): *"An application for determination of tariff under section 62 shall be made by a generating company or licensee in such manner and accompanied by such fee, as may be determined by regulations"*.

Subsection (3): *"The Appropriate Commission, shall within one hundred and twenty days from receipt of application under sub-section (1) and after considering all suggestions and objections received from the public:*

(a) issue a tariff order accepting the application with such modifications or such conditions as may be specified in that order:

(b) reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of this Act and the rules and regulations made there under of the provisions of any other law for the time being in force:

Provided that an applicant shall be given a reasonable opportunity of being heard before rejecting his application."

1.2.8 ARR and Tariff Determination for FY 2004-05

The TRANSCO, Indraprastha Power Generation Company Limited (IPGCL), Pragati Power Corporation Limited (PPCL) and the three DISCOMs filed their ARR and Tariff Petitions for FY 2004-05 in December 2003. The Commission had a series of discussions with TRANSCO, IPGCL, PPCL and the three DISCOMs wherein the Commission sought additional information, clarifications and justifications on various issues critical for admissibility of the Petitions. Subsequently, the Petitioners submitted the information and justifications. The Commission admitted the Petitions of TRANSCO, IPGCL, PPCL and DISCOMs for further processing on January 16, 2004.

The Commission brought out a Public Notice on January 17, 2004 indicating the salient features of the Petitions and invited responses from the consumers and other stakeholders on the Petitions. The Commission also brought out a public notice on February 14, 2004 and sought further suggestions/responses from the general public on the issues related to Tariff Rationalisation.

The Commission received a total of 78 responses from the various stakeholders. The Commission conducted the Public Hearings on April 7, 8 and 10, 2004 in five different sessions. Subsequently, the Commission held discussions with the Petitioners and obtained the details of actual expenses, revenue and losses for FY 2003-04.

The Commission, based on the detailed scrutiny of the Petitions and additional information/clarifications submitted by the Petitioners and after following the due public process, issued its Orders on the ARR and Tariff Petitions of TRANSCO, IPGCL, PPCL and the DISCOMs for FY 2004-05 on June 09, 2004.

1.3 Procedural History

1.3.1 ARR & Tariff filing by the Companies for FY 2005-06

1.3.1.1 Filing of petitions

The Petitioner, Delhi TRANSCO Ltd. (DTL), filed its petition for ARR approval and determination of Bulk Supply Tariff (BST) for FY 2005-06 on November 30, 2004. The IPGCL and PPCL also filed their Petitions for approval of ARR and determination of Tariffs for FY 2005-06, on November 30, 2004. The BSES Rajdhani Power Limited (BRPL) and BSES Yamuna Power Limited (BYPL) filed their ARR and Tariff Petition for determination of Retail Supply Tariff (RST) for FY 2005-06 on December 29, 2004.

Thereafter, the North Delhi Power Limited (NDPL) filed its petition for ARR approval and determination of RST for FY 2005-06 on December 31, 2004.

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

The Petitioner, in its Petition, has projected a Revenue Gap of Rs. 1304 Crore for FY 2005-06 and revenue gap of Rs. 344 Crore for FY 2004-05 considering the support from GNCTD of Rs. 138 Crore For FY 2005-06 and Rs. 690 Crore for FY 2004-05. The Petitioner has requested the Commission to determine its Bulk Supply Tariff, taking into account the provisions of the Transfer Scheme, the Policy Directions issued by the Government and filings made there under.

1.3.1.2 Interactions with the Petitioner

The submissions 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 27, 2005. The Petitioner made an additional submission on February 28, 2005 in respect of the gas restriction at the Gas Turbine Station and the PPCL.

The Distribution Companies, the IPGCL and the PPCL also provided similar information and clarifications on the issues raised in respect of their filings. The Commission admitted the Petitions for further processing on March 10, 2005.

1.3.2 Public Notice and response from stakeholders

1.3.2.1 Publicity given to the Proposal

The Petitioners brought out a Public Notice on March 14, 2005 indicating the salient features of their own Petition, and inviting responses from the consumers and other stakeholders on their own Petition. The Commission also brought out a Public Notice on March 24, 2005 indicating the salient features of all the Petitions for FY 2005-06, inviting responses from the consumers and other stakeholders on the Petitions submitted by NDPL, BRPL, BYPL, TRANSCO, IPGCL and PPCL, in accordance with the provisions of the Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001. The Public Notice was published in several dailies such as:

- The Hindustan Times and Indian Express in English;
- Dainik Jagran in Hindi; and
- Daily 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 14, 2005 onwards, between 11 a.m. and 4 p.m. on payment of Rs. 100/-. The Notice specified the deadline of April 14, 2005 for the receipt of responses/objections from the stakeholders which was subsequently extended till April 30, 2005. The complete copy of the Petitions was also put up on the website of the Commission, as well as that of the Petitioners.

1.3.3 Public Hearing

The Commission received 98 objections in all. Some objections were received after the deadline for submission of the responses. A detailed list of the respondents is attached with this Order as Annexure 3a. The Commission forwarded the objections to the Petitioner for submission of comments to the Commission with a copy to the Respondent. The Petitioner filed its responses to the comments/objections of the stakeholders by May 18, 2005. The Commission conducted the Public Hearings on May 24, 25 and 26, 2005. 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 Public Hearing process is attached with this Order as Annexure 3b. The entire proceeding was split across four different sessions catering to distinct groups of stakeholders as given in Table 1.5.

Table 1.5: Dates of Public Hearing

Date	Category
May 24, 2005 (Two Sessions)	Domestic, Co-operative Societies, and Commercial
May 25, 2005 (One Sessions)	Industrial Consumers and Associations
May 26, 2005 (One Session)	Government Departments, Utilities and NGOs

1.3.4 Post admission interactions

1.3.4.1 Discussions during technical sessions and presentation by the Petitioner

After admission of the ARR Petition, the Commission held further technical sessions with the concerned staff of the Petitioner to seek additional information and clarifications. Subsequently, the Commission sought additional information such as status of capital expenditure during FY 2004-05, proposed capital expenditure for FY 2005-06, power purchase quantum and expenses, and ABT. Subsequently, on April 12, 2005 the Commission directed the Petitioner to submit the Provisional Accounts for FY 2004-05 along with actual expenses and revenue for FY 2004-05. The Commission held a meeting on March 16, May 11, 2005 and May 27, 2005 and sought details on preparedness of the Petitioner for implementation of incentive/disincentive scheme w.e.f April 2005, intra-state ABT scheme, capital expenditure for FY 2005-06, and the actual capital expenditure for FY 2004-05.

1.3.4.2 Petitioner's responses to queries raised by the Commission

On February 22, 2005, the Petitioner made a presentation to the Commission on the status of the Capital Investments proposed by the Company in its Petition for FY 2004-05, R&M expenditure, A&G expenses, and its compliance with old and new directives. Subsequently, on April 12, April 25, May 24, May 27, and June 2, 2005, the Petitioner submitted the actual capital expenditure incurred during FY 2004-05 and funding of the same, details of loan arrangement, utilisation of depreciation, capitalization of expenses, capitalization of assets, source wise power purchase quantum and expenses.

1.3.4.3 Visits by the Commission

In addition to the interactions with the Petitioner in the Commission's office, the Commission also undertook several visits to the Petitioner's area during FY 2004-05 at some select locations to review the physical progress of the Capital Works and Repairs and Maintenance works.

1.4 Summary of the petition

The Petitioner has estimated the Annual Revenue Requirement (ARR) and Revenue Gap for FY 2005-06 at Rs. 5880 Crore and Rs. 1304 Crore respectively considering the support from GNCTD of Rs. 138 Crore For FY 2005-06. The Petitioner, while estimating the ARR for FY 2005-06 has also included certain elements of difference in expenses and revenue for FY 2004-05 under the truing up mechanism. The total amount of truing up included in the ARR for FY 2005-06 is of the order of Rs. 344 Crore. A snapshot of the ARR and revenue gap at existing tariffs is provided in the Table 1.6.

Table 1.6: Summary of ARR and Revenue of the Petitioner at existing BST and RST

Rs. Crore

Item	Unit	FY 2005-06
A. Power purchase cost	Rs Crore	5569
B. Expenditure other than power purchase cost	Rs Crore	163
C. Reasonable Return	Rs Crore	48
D. Amortisation of Regulatory Asset	Rs Crore	100
E. Annual Revenue Requirement	Rs Crore	5881
F. Less: Non Tariff Income	Rs Crore	87
G. Aggregate Revenue Requirement (ARR)	Rs Crore	5793
H. Less: Revenue at existing tariff	Rs Crore	4352
I. Less: Government support	Rs Crore	138
J. Revenue Gap for FY 2005-06 at Existing Tariffs excluding Revenue Gap for FY 2004-05	Rs Crore	1304
K. Revenue Gap for FY 2004-05	Rs Crore	344
L. Consolidated Revenue Gap	Rs Crore	1648

1.5 Layout of this Order

This Order is organised into 5 Sections. While the current Section gives the information about the Commission, the historical background and summary of the Petition, the second Section gives a detailed account of responses from stakeholders, Petitioner's comments and the Commission's views on the responses. Section 3 discusses the Annual Revenue Requirement and Section 4 focuses on the Tariff Philosophy and determination of Bulk Supply Tariff. Section 5 reviews the

Directives issued to the Petitioner in the Commission's Order dated June 9, 2004 on the ARR and Tariff Petition filed by TRANSCO for FY 2004-05 and also lists down the new directives issued in this Order.

2. On the Response from Stakeholders

The objections/responses mainly relate to Procedural issues, Privatisation Policy and Reform Process, Transition issues, Power purchase expenses, Transmission losses and other expenses.

2.1 Procedural Issues

2.1.1 Objections

Joint Committee of Residents Welfare Associations of Pitampura has objected to the procedure of inviting responses from the public. The objector submitted that the public notice published specifies that the response from consumers and stakeholders must be on affidavit, in triplicate and either in person or by post and email responses are not permitted. The Association commented that the practice adopted this year is a departure from past practice and wanted to know the purpose of affidavit and also why three copies are required. The Association mentioned that the procedure adopted this year creates an impression that DERC is not really interested in receiving responses but is putting the public notice only to meet statutory requirements.

Jhilmil DDA Flats Residents Welfare Association has suggested that the Commission should appoint an independent consultant in association with a NGO on behalf of consumers at large to analyse Tariff Petitions and represent viewpoint of consumers during the process of approval of ARR and determination of tariff for FY 2005-06.

Mr. N. Ahuja has submitted for the Commission's consideration that a brief summary of ARR and Tariff Petition be made available by the Commission in a manner which can be understood by a common man to solicit quality inputs from consumers.

The Peoples' Power Network comprising of World Wide Fund for Nature – India, Consumer Coordination Council and Parivartan has suggested that the Commission should conduct separate proceedings on the capital expenditure plans of the companies and in these proceedings, the Companies should be required to present their long term capital expenditure plans with a clear statement of objectives. It has also made the following submissions in respect of improvements or changes to the process:

- All calculation and spreadsheets of the Commission should be made public and available in electronic form.

- Periodic and public review of compliance with directions of the Commission on a quarterly basis

2.2 Privatisation Policy and Reform Process

2.2.1 Objections

M/s Praja has raised concerns with respect to repayment of Govt. Support after the transition period. The objector submitted that the transition period is going to end in two years and if the DISCOMs are free to buy power from other sources, how the TRANSCO will repay the loan of Rs 3450 Crore.

Senior Citizens' Forum has suggested a mid term review of the Policy Directions to effect the learnings from the experience of privatisation and protect the interest of consumers.

Shri. Ashok Rao has suggested that the Commission spell out the policy with regard to repayment of Govt. Support loan by DTL and its implications on consumer tariffs, as well as a policy with regard to the implications for consumer tariffs and reliability of supply after the end of the transition period.

Based on the Commission's viewpoint in the Order dated February 22, 2002 which was expressed as "... At this point, the Commission opines that any shortfall in revenue gap, if any, of TRANSCO during the term of five years over and above Rs. 2,600 Crore would have to be bridged in the form of Government support, sector efficiency improvements, any other suitable mechanism or a combination of all of the above, to be decided by the Commission at the appropriate stage.", Chetna has requested the GNCTD to clarify the basis and assumptions for initial level of subsidy support of Rs. 2,600 Crore, increase in subsidy support to Rs. 3,450 Crore and whether GNCTD would support any further shortfall in revenue gap alongwith the quantum of additional support, if any, and its source of funding.

2.3 Transition Issues

2.3.1 Objections

The Peoples' Power Network and the Consumer Coordination Council has expressed concern over the tariff structure in post-transition period including issues like whether the GoNCTD will provide additional support and how further loss reduction will be achieved. It has also requested the Commission to describe how the transition from uniform tariffs to company-specific tariff structure will be achieved once the transition period ends. It has also expressed concern over whether the DISCOMs will be free to buy power from any source after the transition period and in that event how will the loan of Rs. 3,450 crores be paid back by DTL.

2.4 Compliance with the Directives of the Commission

2.4.1 Objections

Several objectors including Chetna and Shri Vijay Kumar Gupta have submitted that though the Petitioners have been given sufficient time to comply with the various directions issued by the Hon'ble Commission in the Orders issued on June 9, 2004, the Petitioners have not complied with most of the directions and hence the ARR of the Petitioners should not be cleared in view of such non-compliance.

2.5 ARR and Revenue Gap

2.5.1 Objections

The major objection under this head relates 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 prudence, etc.

Shri Vijay Kumar Gupta has submitted out that all Petitioners have incurred expenditure on almost all heads in defiance of what was approved by the Hon'ble Commission in the Orders issued on June 9, 2004. He has pointed out that for all revenue related matters, the Govt. departments have established Preventive, Anti-evasion, Special Investigation, and Revenue Intelligence and Enforcement branches for the checking and surveillance of even the audited and assessed accounts of the concerned parties/Petitioners. These branches have imposed huge penalties while scrutinising the accounts of the Companies/Utilities/Petitions related to revenue. He has further submitted that the Commission should have strict checks and balances in respect of such matters because a huge amount of money is involved in the power sector of Delhi. He has mentioned that the Utilities in Delhi have exhausted almost the entire State Govt. support/grant for the power sector. Though there has been a heavy increase of retail tariff, a further increase in the same is being demanded and the same should not be allowed.

Residents Welfare Association, Rohini has inquired whether the Government has launched any inspection/check systems to control the expenditure.

Young Friends Co-op. Group Housing Society Ltd. submitted that they are unable to reconcile some of the data published in the Public Notice. The objector has pointed out discrepancy that TRANSCO's energy available for sale to DISCOMs is stated as 21806 MU, whereas the energy input of three DISCOMs adds up to only 19659 MU leaving an unexplained gap of 2237 MU.

Shri B N Ahuja of Lajpat Nagar has submitted that the details of expenses of the Utilities are not known. He has requested the Commission to examine these expenses at the micro level and bring them down to the essential minimum.

2.6 Power Purchase Expenses

2.6.1 Objections

M/s Praja has submitted that the power purchase cost is the highest component of TRANSCO's ARR and accounts for 96.36% of total ARR. The average power purchase cost projected by TRANSCO for FY 06 is Rs 2.45/kWh as compared to Rs 2.15/kWh in FY 05. It has further submitted that purchase from least cost power from CGS has reduced from 11877 MU in FY 05 to 10643 MU in FY 06 while the share of costliest source i.e. the Himachal Pradesh State Electricity Board (HPSEB) has increased by 257 MU. In FY 05, TRANSCO has claimed purchase of 1126 MU from HPSEB @ Rs 2.76/kWh. However the Himachal Pradesh Electricity Regulatory Commission's (HPERC) order for FY 05 shows that HPSEB sold power outside the State @ Rs. 2.41/kWh. Further HPSEB's own BST including transmission charges is only 187 paise/kWh for FY 05.

Referring to the Petitioner's claim that according to the PPA signed between the Petitioner and HPSEB on February 13, 2003, there is a tariff escalation of 6% over the previous year, the objector has submitted that there is no justification for such steep escalation when no fuel costs are involved and when HPSEB supplies hydel power. The objector has requested the Commission to look into this issue and disallow the escalation.

The objector further submitted that both the fixed and variable costs have also been increased considerably and TRANSCO has not provided any reason for the same. The objector has requested the Commission to scrutinise the power purchase cost in great detail to ascertain whether purchase decisions are prudent and necessary and whether the Utility has considered all the possible options before settling on those outlined in its ARR. The objector has also requested the Commission to investigate whether the increase in per unit cost of almost every power station – PPCL, GENCO, BTPS, etc. claimed by the Petitioner is justified. The objector has questioned whether the escalation is based on notional increase in variable costs or are they pass through of actual fuel cost escalation.

M/s Praja has also asked the Petitioner the reasons for entering into a PPA with HPSEB on a 24 hour basis rather than entering into a contract with HPSEB for peak power.

2.6.2 Response of the Petitioner

The Petitioner has submitted that the reason for reduction in energy purchased from CGS for FY 05-06 is due to reallocation of off peak surplus to the needy states in the Northern Region. Further, the petitioner has submitted that the cost of power purchase has been based on the proposed cost of Generation indicated by GENCOs in their petition submitted to the Commission. It has added that the final cost of Power purchase shall be fixed by the Commission.

The Petitioner has submitted that the power purchase costs from HPSEB is based on the PPA signed by the Petitioner with HPSEB. It has added that the supply from HPSEB has been of great help for meeting the load requirement of Delhi. Further the petitioner has stated that the power purchased from HPSEB is not costly as compared to the power available from some other sources like the power offered from Eastern region at Rs. 3.90 per unit. Further, the Petitioner has submitted that the reason for entering into a 24 hour PPA with HPSEB is due to the reason that hydro power is preferred on 24 hour basis from run of the river generating plants.

2.7 Transmission losses

2.7.1 Objections

M/s Praja has asked the petitioner for the break up of Transmission losses and rationale for PGCIL losses of 518 MU and TRANSCO's own losses of 296 MU. The objector has also raised the issue of transmission losses from HPSEB to the tune of 15% assuming the longest link route.

2.7.2 Response of the Petitioner

The Petitioner has submitted that the losses for FY 04-05 from the CGS is based on the monthly average transmission losses sourced from NRLDC. The loss data is as per the regional accounts prepared by NRLDC.

On the issue of transmission losses from HPSEB being about 15% assuming the longest link route, the Petitioner has stated that power purchased from HPSEB is delivered on Delhi periphery.

2.8 Interest on Long Term Loans

2.8.1 Objections

M/s Praja has asked TRANSCO to explain the steep increase in interest expenses from Rs. 5.97 crore in FY 04-05 to Rs. 27.8 crore in FY 05-06.

2.8.2 Response of the Petitioner

The Petitioner has submitted that the actual interest expense has increased due to the increase in loan amount from planned funds from Rs. 250 Crore to Rs. 483 Crore. Further, the interest capitalised has reduced from Rs. 16 Crore in FY 04-05 to Rs. 6.8 Crore in FY 05-06. Therefore, the net interest on loan has increased. The Petitioner has added that the actual interest capitalised, however, is subject to finalisation of accounts.

2.9 Auditors' Fee and Legal Charges

2.9.1 Objections

M/s Praja has submitted that auditors' fee and legal charges have not been shown separately but have been included under A&G expenses. It has requested the Commission to obtain the details of the same to ensure that these are not excessive.

2.9.2 Response of the Petitioner

The Petitioner has submitted that auditors' fee is estimated at Rs. 1.06 Crore for FY 2005-06 and the total expenses towards professional services viz. legal charges, consultancy, etc. is estimated at Rs. 0.73 Crore.

2.10 Truing up

2.10.1 Objections

M/s Praja has submitted that the truing up of Rs 344 Crore for previous year shortfall claimed by TRANSCO is exorbitant. The objector further suggested that the truing up which is not due to TRANSCO's ability to use the DVB arrears may be considered by the Commission.

The Peoples' Power Network and the Consumer Coordination Council have submitted that the trued up amounts from previous years should earn return at the rate of 70/30 Debt/Equity and not pure equity.

2.11 Wheeling Charges

2.11.1 Objections

Mr. Arun Kumar Dutta has asked TRANSCO to peg the wheeling charges below 10 paisa per unit for supply to DISCOMs.

2.11.2 Response of the Petitioner

The Petitioner has submitted that fixation of Tariff including wheeling charges is the prerogative of the Commission.

2.12 Other issues

2.12.1 Objections

M/s Praja has asked TRANSCO to explain the rationale for high amount of revenue realisation on account of UI. The objector has further submitted whether UI is being sold during peak hours.

2.12.2 Response of the Petitioner

The petitioner has submitted that the UI charges are fixed by CERC during low frequency regime on account of overdrawl made by other states in the region beyond their allocation.

2.13 Commission's views

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

For instilling confidence in the Utilities as well as to bring about a greater understanding and appreciation of the complexity of the issues involved, the Commission ever since its institution, has made conscious and continuous efforts to bring about transparency in the tariff setting process.

The Commission is of the opinion that for any meaningful regulation of the Utilities, an effective platform for exchange of operational and performance related information is required throughout the year, rather than having limited interactions during year-end submission of filings. Accordingly, the Commission required the Utilities to spell out detailed information/reasons for further improvement over the existing situation. The Commission also undertook visits for actual verification of the physical progress of various capital expenditure undertaken by the Utilities. The shortcomings in their information systems and processes were conveyed to the Utilities while eliciting improved performance. Information availability being the key to quicker processing of the Petitions, the Commission is in the process of developing and installing a Regulatory Information Management System (RIMS). The Commission has appointed a Consultant for developing the RIMS and the RIMS is likely to be operational by October 2005. The RIMS aims at building an MIS with pre-defined information formats, accessible to the Utilities through the Internet for periodic updates. RIMS is expected to 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 among others. It 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.

The Commission recognises the impact of the Petitions filed by the Utilities and the importance of the various issues raised during the public hearings and the comments made by the stakeholders. The Commission also appreciates the efforts of the stakeholders in bringing such issues to the notice of the Commission. However, the Commission would like to point out that several issues and comments, though important, are not relevant to the determination of the ARR and Tariff of the Utilities. Therefore, the Commission, while taking note of these issues, is not addressing such issues in this Order. The Commission will deal with such issues separately under the appropriate Forum constituted for this purpose or during the amendment of the Regulations issued by the Commission. The stakeholders may also approach the Commission separately on such issues.

With this background, the Commission now proceeds to provide its views on the various issues raised by the respondents for determination of ARR and Tariff of the Utilities.

2.14 Procedural Issues

At the outset, the Commission would like to clarify the procedure adopted by the Commission in inviting responses from the Stakeholders on the Petitions filed by the Utilities.

While processing the ARR and Tariff Petitions of the Utilities, the Commission in accordance with the provisions of the Electricity Act, 2003 directed the Utilities to publish the salient features of their Petition in leading newspapers. In compliance to the Commission's directive, the Utilities published the salient features of the respective Petitions. Subsequently, the Commission published the public notice summarising the ARR and Tariff Petitions of all the Utilities in one notice for inviting response from consumers and stakeholders. The Public notice published by the Commission specifies that the response from consumers and stakeholders must be on affidavit, in triplicate and either in person or by post and that email responses are not permitted. This practice is in line with the Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001. The Commission has not deviated from the standard practice followed by the Commission in inviting responses from the stakeholders and considering the same for meaningful interaction.

The Commission would also like to point out that submission of responses by stakeholders on affidavit is a legal requirement. However, the Commission has considered large number of responses and objections which have not been sworn on an affidavit.

As regards the availability of only a brief summary of ARR and Tariff Petition by the Commission, the Commission would like to bring to the notice of the stakeholders that this practice is followed by the Commission and the Commission publishes the salient features of all the Petitions in one public notice for inviting responses. This is also in view of the fact that the advertising costs are also high. The ARR Petitions are posted on the website of the Commission as well. Further, the Orders issued by the Commission on the ARR and Tariff Petition of the Utilities are reasoned Orders and all necessary explanation are given therein. For a better understanding of the ARR and Tariff Petitions, the Commission urges consumers to refer to the Orders on ARR and Tariff Petition issued by the Commission during the previous years. The Commission would also like to highlight that it is keen to encourage greater participation by various consumer groups and that the Commission will take appropriate steps for enhancing consumer awareness to enable consumers to better appreciate the Petitions filed by the Utilities.

As regard separate proceedings on capital expenditure plans of the Utilities, the Commission would like to bring to the notice of the stakeholders that in the Orders on ARR and Tariff Petitions of the Utilities for FY 2004-05, the Commission had directed the DISCOMs and TRANSCO to submit the complete Detailed Project Report (DPR) along with cost-benefit analysis for schemes costing more

than Rs 2 Crore for obtaining the scheme-wise investment approval from the Commission as per the terms and conditions of the License for Distribution and Retail Supply of Electricity within a month from the date of the issue of this Order. The Commission has also directed the Petitioner to submit the schemes for approval of the Commission for FY 2005-06, by September 2004. Therefore, the Commission has already instituted a separate process for the approval of the capital expenditure plans of the Companies. The Commission, after detailed scrutiny of each capital scheme, accords its approval to the capital expenditure schemes proposed by the Companies. The Commission does not feel the necessity to conduct separate public proceedings for approval of capital expenditure plan of the Utilities as this work is a continuous process spread over a period of few months.

In respect of making available the calculation and spreadsheets of the Commission, the Commission opines that detailed speaking Orders are issued by the Commission in respect of the ARR and Tariff Petitions filed by the Utilities covering various items which should serve the purpose of various stakeholders.

With regard to the review of compliance with directions of the Commission, the Commission would like to point out that the Commission reviews the compliance by the Utilities from time to time. The compliance of the directives by the Petitioner has been discussed in Section 5 of the Order.

2.15 Privatisation Policy and Reform Process

The Policy formulated and Directions issued by the Government in exercise of its powers under section 12 of the Delhi Electricity Reforms Act, 2000 are binding on the Commission. The Commission, therefore, does not have any further views in the matter. Furthermore, this aspect has been discussed and addressed in the Commission's Order on Bulk Supply Tariff and opening level of AT&C losses issued on February 22, 2002. The Commission suggests that the respondents may approach the appropriate agencies for seeking clarifications.

2.16 Transition Issues

The Commission would like to inform the stakeholders that the issues raised herein are not related to the ARR and Tariff Petition of the Utilities for FY 2005-06. The Commission will deal with the issue of tariff structure in post transition period at the appropriate time.

2.17 Compliance with the Directives of the Commission

The Commission would like to inform the stakeholders that it monitors the Petitioners' compliance with the directives at periodic intervals. The status and details of compliance by the Petitioner on the directives issued vide the Commission's Order dated June 9, 2004 has been elaborated in Section 5 of the Order.

2.18 ARR and Revenue Gap

The Commission would like to clarify that it has carefully examined all the elements of expenditure and revenue, and has not merely gone by the actual expenses as per the accounts of the Petitioner. The Commission considered the prudence of expenditure projected by the Petitioner, the actual expenditure in FY 2004-05, as well as the committed Government support, while determining the revenue requirement. A detailed analysis of all the expenditure and the revenue components, and the methodology of projection adopted by the Commission has been provided in Section 3.

As regards the objection that TRANSCO's energy available for sale to DISCOMs is stated as 21806 MU whereas the energy input of three DISCOMs adds up to only 19659 MU leaving an unexplained gap of 2237 MU, the Commission has analysed the detailed energy balance of the TRANSCO considering the energy to be supplied to the DISCOMs, NDMC and MES in Section 3 of this order.

2.19 Power Purchase Expenses

The Commission has examined the power purchase cost projected by the Petitioner for FY 2005-06 and the actual power purchase cost for FY 2004-05 while approving the power purchase costs. The details of power purchase costs have been deliberated upon in Section 3 of the Order.

On the objection that in FY 2004-05, the TRANSCO has claimed purchase of 1126 MU from HPSEB @ Rs 2.76/kWh while the HPERC Order for FY 2004-05 shows that HPSEB sold power outside the State @ Rs 2.41/kWh, the Commission would like to point out that the Commission has considered the power purchase cost from HPSEB on the basis of the PPA signed between the TRANSCO and the HPSEB.

In respect of the reason for entering into a PPA with HPSEB on a 24 hour basis rather than entering into a contract with HPSEB for peak power, the Commission would like to bring to the notice of the respondent that the erstwhile DVB had entered into an agreement with HPSEB for purchase of power on 'first charge and round the clock basis' as Delhi was short of power and supply from other sources was not forthcoming at that time. Power from HPSEB is available only up to October 2005.

2.20 Transmission losses

The Commission has examined the external transmission losses and losses in the own network of the Petitioner as projected by the Petitioner for FY 2005-06 and the actual transmission losses for FY 2004-05 while examining the energy balance for FY 2004-05 and FY 2005-06 in Section 3 of this Order.

2.21 Interest on Long Term Loans

The approach adopted by the Commission in respect of interest on long term loans has been deliberated in Section 3 of the Order.

2.22 Truing up

In respect of objection that the truing up of Rs 344 Crore for previous year shortfall claimed by TRANSCO is exorbitant, the Commission would like to bring to the notice of the respondent that the Commission has examined the truing up of various expenses/revenues of the TRANSCO while assessing the Annual Revenue Requirement of the TRANSCO in Section 3 of this Order. The Commission has trued up all the elements of ARR based on the actual expenses and income of TRANSCO after ensuring that the expenses satisfy the test of reasonable prudence.

As regards the suggestion that the trued up amounts should earn return at the rate in proportion of 70:30 Debt:Equity and not pure equity, the Commission would like to clarify that the carrying cost on trued up amounts as approved by the Commission for previous year is being allowed by the Commission with a normative Debt:Equity ratio of 70:30 and the same approach has been adopted by the Commission in its previous Orders also.

2.23 Wheeling Charges

The Commission would like to inform the stakeholders that the DISCOMs are not purchasing power from sources other than the TRANSCO. The DISCOMs pay a Bulk Supply Tariff to the TRANSCO as determined by the Commission on the basis of their paying capacity. Since the DISCOMs are not purchasing power from sources other than the TRANSCO at this stage, the issue of wheeling charges does not arise. The Commission will deal with this issue at the appropriate time.

2.24 Other issues

The Commission has considered the UI charges on the basis of the actuals submitted by the TRANSCO during the course of interactions held between the Commission and the TRANSCO.

3. Analysis of Annual Revenue Requirement

3.1 Introduction

Section 28 (5) of the Delhi Electricity Reform Act, 2000 requires a licensee to provide to the Commission, at least 3 months before the ensuing financial year, full 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 methodologies and procedures to be adopted by the TRANSCO and DISCOMs for filing of ARR. The forms contained in the guidelines call for a variety of information/data relating to expenditure, return, various performance parameters, etc.

The Commission in its Order issued on June 26, 2003 has proposed the truing up mechanism, under which the Commission has proposed to adjust the variation in the various elements of expenses and revenue figures considered in the Order with the actual expenses and revenue next year after determining the prudence of each component of ARR and Revenues. The principles of truing up mechanism are elaborated in Section 4 of the Order.

The Petitioner in its Petition for FY 2005-06 has submitted the revised estimates for FY 2004-05 and requested the Commission to true up the expenses and revenue based on the revised estimates.

The Commission has considered various submissions made by the Petitioner over the course of the ARR and tariff determination process and has carefully analysed the different heads of expenditure to true up the ARR for FY 2004-05 and to project the realistic level of allowable expenditure during FY 2005 –06. During the ARR and Tariff determination process for FY 2005-06, the Commission obtained the details of actual expenses and revenue for FY 2004-05. As the actual details of expenses and revenue for FY 2004-05 are available, the Commission has trued up all the elements of ARR based on the actual expenses and income of TRANSCO after ensuring that the expenses satisfy the test of reasonable prudence.

Typically, the Annual Revenue Requirement of the transmission licensee consists of the following major items: -

- a) Power Purchase Cost

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-
- b) Expenses: -
 - Employee expenses
 - Administrative and general expenses
 - Repairs and maintenance expenses
 - Interest expenditure
 - Depreciation
 - c) Return
 - d) Taxes on Income
 - e) Non Tariff Income

In the following paragraphs, the various elements of Annual Revenue Requirement are discussed:-

3.2 Power Purchase Quantum and Costs

The power purchase cost comprises more than 95% of the total estimated revenue requirement of the transmission company (TRANSCO). Hence, it is imperative that this element of cost is estimated with utmost care based on the most efficient way of procuring power from the successor generating company of DVB and other generating stations.

The Commission during the technical validation sessions has directed TRANSCO to submit the actual power purchase from all the sources and the power purchase cost for FY 2004-05. The Commission while approving the power purchase and power purchase cost has duly considered the actual details submitted by the TRANSCO.

3.2.1 Sources of Power

The Delhi TRANSCO Limited (TRANSCO) buys power from the following sources:

- Indraprastha Power Generating Company Limited (GENCO)
- Pragati Power Corporation Limited (PPCL)
- Badarpur Thermal Power Station
- Central Generating Stations of NTPC, NHPC, NJPC and NPC
- Power Trading Companies viz., Power Trading Corporation etc.
- Bilateral Purchases from Other States

The power purchase agreements (PPAs) entered by erstwhile DVB with Central Generating Stations and Badarpur TPS got transferred to TRANSCO as a successor entity. TRANSCO also purchases power from IPGCL, PPCL, PTC and other sources.

The actual energy purchased from various sources during FY 2004-05 and availability of energy for the year 2005-06 is discussed below.

3.2.2 Power Purchase from GENCO and PPCL Stations

Petitioners Submission

The TRANSCO in its Petition has estimated the revised power purchase for FY 2004-05 considering the actual energy purchased from April to September 2004 and by estimating the energy purchase from Oct 2004 to March 2005. TRANSCO submitted that the GENCO and PPCL have provided estimated availability for their stations based on certain parameters and maintenance schedules. Considering the availability provided by GENCO and PPCL, the Petitioner has estimated the power purchase from these sources during FY 2005-06.

Commission's Analysis

The GENCO and PPCL have separately submitted their ARR and Tariff Petitions for FY 2005-06 under the Electricity Act 2003. The Commission has examined the ARR and Tariff Petitions of GENCO and PPCL and has approved the generation from these stations and the fixed and variable costs in the Order issued on ARR and Tariff Petitions of GENCO and PPCL.

For FY 2004-05, the Commission has obtained the details of actual power purchase from GENCO and PPCL and has considered the same. For FY 2005-06, the Commission has considered the power purchase from these sources based on the generation targets approved by CEA. The CEA has approved the generation target of 970 MU from Rajghat Power Station of GENCO which corresponds to 82% PLF. However, IPGCL has approached the CEA to reduce the generation target for Rajghat Power Station from 970 MU to 870 MU. Therefore, for FY 2005-06, the Commission has considered the gross generation from this station as 870 MU, which corresponds to 73.6%PLF. The Power Purchase cost for FY 2004-05 (based on actuals) and projected power purchase cost for FY 2005-06 for these stations have been approved by the Commission in the Order on ARR and Tariff Petitions filed by GENCO and PPCL, respectively.

Power Purchase from GENCO and PPCL

Based on the above said orders of GENCO and PPCL, the summary of power purchase and total cost of power purchase from GENCO and PPCL as estimated in the Petition and as approved by the Commission is summarised in Tables 3.1 and 3.2 given below:

Table:3.1 Power Purchase from GENCO stations

Description	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Units Purchased (MU)	2369	2645	2693	3130	2993
Total Cost (Rs. Crore)	513	569	570	842	665
Cost per unit (Rs/kwh)	2.17	2.15	2.12	2.69	2.22

Table:3.2 Cost of Power Purchase from PPCL

Description	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Units Purchased (MU)	2134	2230	2450	2245	2328
Total Cost (Rs. Crore)	473	477	483	570	479
Cost per unit (Rs/kwh)	2.22	2.14	2.07	2.54	2.06

3.2.3 Badarpur Thermal Power Station (BTPS)

3.2.3.1 Petitioner's Submission

In its Petition, TRANSCO for FY 2004-05 has projected a revised quantum of power purchase from BTPS. It has projected a purchase of 4851MU as against the Commission's approval of 4566 MU. For FY 2005-06, TRANSCO has estimated purchase of 4972MU from BTPS and has estimated the power purchase cost considering the composite power purchase rate of 247paise/kwh.

3.2.3.2 Commission's Analysis

The tariff of Badarpur Thermal Power Station was earlier governed by the formula notified by Government of India (GoI). Accordingly for FY 2004-05, the Commission has gone by the actual power purchase and the cost of power purchase. For FY 2005-06, the Commission has estimated the power purchase based on generation targets approved by CEA.

The Central Electricity Regulatory Commission (CERC) has issued an interim order on the Petition filed by BTPS and has approved the two-part tariff for Badarpur TPS. The tariff approved by CERC for BTPS is Rs 220 Crore per annum as Annual Fixed Charges and Energy Charge of Rs 158.87 paise/kWh plus Fuel Price Adjustment (FPA) charge. For estimating power purchase cost for FY 2005-06, the Commission has considered the fixed charges as approved by the CERC and variable charges @ 180.75 paise/kWh (including FPA of 21.88 paise/kWh based on actual fuel price for FY 2004-05). The summary of power purchase and power purchase cost as estimated in the Petition and as estimated by the Commission for Badarpur TPS is given in the Table 3.3 given below:

Table:3.3 Cost of Power Purchase from Badarpur Thermal Power Station

Description	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Units Purchased (MU)	4566	4851	4969	4972	4740
Total Cost (Rs. Crore)	1078	1139	1162	1227	1077*
Cost per unit (Rs/kWh)	2.36	2.35	2.34	2.47	2.27*

3.2.4 * Considered based on CERC Order**3.2.5 Power Purchase from Central Generating Stations**

The Power Purchase Agreements signed by the erstwhile DVB with Central Generating Stations got transferred to the successor entity, viz. TRANSCO. TRANSCO has a firm share in the Central Generating Stations. In addition to the firm share allocation, most of the NTPC stations have 15% unallocated power. The distribution of this unallocated power among the constituents of Northern Region is decided by the Central Electricity Authority (CEA) from time to time based on power requirement and power shortage in different States. TRANSCO also gets a substantial portion of the unallocated share.

3.2.5.1 Energy Purchased during FY 2004-05

In the Petition, TRANSCO has estimated the energy purchase from the Central Generating Stations considering the actual energy purchased from April to September 2004 and by estimating the energy purchase from Oct 2004 to March 2005 based on past trends.

Commission's Analysis

During the technical validation sessions, the Commission directed TRANSCO to submit the details of actual power purchased and power purchase cost from all the sources for FY 2004-05. Subsequently, TRANSCO submitted these details to the Commission. The actual energy purchased from CGS during FY 2004-05 by TRANSCO has been considered by the Commission.

The energy purchases from the Central Generating Stations proposed by the Petitioner and as approved by the Commission for FY 2004-05 is provided in the Table 3.4 given below:

Table:3.4 Energy Purchased from Central Generating Stations for FY 2004-05

(in MU)			
Sl. No.	Station	Rev. Est. for FY 2004-05	Commission's Approval
I	NTPC		
1	Singrauli	1219	1242
2	Anta	294	291
3	Rihand	797	802
4	Auriya	474	414
5	Dadri (Gas)	566	559
6	Unchahar – I	187	183
7	Unchahar – II	371	376
8	Dadri (thermal)	4875	5170
II	NHPC		
1	Baira – suil	76	75
2	Salal	377	395
3	Tanakpur	52	58
4	Chamera- I	143	162
5	Chamera – II	313	306
6	Uri	271	241
III	NPC		
1	Napp	263	288
2	Rapp B#3	71	88
3	Rapp B#4	220	130
IV	NJPC	1275	1274
	Total	11847	12053

3.2.5.2 Energy Availability for FY 2005-06**Petitioner's Submission**

The energy available to TRANSCO from Central Generating stations is governed by the total share of TRANSCO (allocated + unallocated) in various Stations, projected gross generation and estimated auxiliary consumption of each Station.

The Petitioner while estimating the energy availability for FY 2005-06 has considered the firm allocation in Central Generating Stations based on the data as listed on the website of Northern Regional Electricity Board. The Petitioner further submitted that the Govt. of India has decided to

change the allocation pattern of Dadri (Thermal) to make the same on time slot basis as requested by TRANSCO. According to the decision, out of 90% share of Petitioner, 32.88% will be made available to Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPL) and 42.88% to Uttar Pradesh Power Corporation Limited (UPPCL) during the off peak hours (2300 hrs to 0530 hrs). The Petitioner further submitted that this arrangement is also proposed to be implemented during Nov 05 to Mar 06. Accordingly, the Petitioner has estimated the weighted average percentage allocation of Dadri Thermal Station considering the revised allocations during off peak period.

The Petitioner further submitted that the GoI has decided to change the basis of allocation from unallocated shares of Central Generating Stations from 'round the clock' basis to time-slot' basis, according to the requirements. The Petitioner has considered unallocated quota from each Station based on the weighted average unallocated quota available to Delhi during the various time periods of the year.

Commission's Analysis

Effective share

For estimating the energy availability from CGS, the Commission has first estimated the effective share of TRANSCO in CGS. As described in the earlier section, energy available to TRANSCO from Central Generating Stations depends upon the allocated share of the State in each of the sources of power and the unallocated share in each of the stations, which keep varying from time to time.

The Commission has considered the firm share as applicable in each Station in each of the Stations as notified by CEA for estimating the TRANSCO's effective share. The Commission has noticed that the share of various States in unallocated quota of CGS has been revised from 1 May 2005 onwards. The Commission has considered the share of TRANSCO in unallocated quota of CGS as applicable during various time slots from 1 May 2005 onwards till September 2005. For estimating the TRANSCO's share in unallocated quota for the period of October 2005 to March 2006, the Commission has considered the month-wise actual share of TRANSCO in unallocated quota for the respective period during the previous year i.e. during October 2004 to March 2005. As regard to weighted average share from Dadri Thermal Station, the Commission has considered the same as estimated by the Petitioner.

The effective share in various Central Generating Stations for FY 2005-06 as considered by the Commission is shown in the Table 3.5 given below:

Table:3.5 Effective Share of Delhi TRANSCO in Central Generating Stations during FY 2005-06

Sl. No.	Station	Capacity (MW)	Firm Share (%)	Share in unallocated quota (%)	Effective Share (%)
I	NTPC				
1	Singrauli	2000	7.50%	1.02%	8.52%
2	Anta	419	10.50%	1.02%	11.52%
3	Rihand – I	1000	10.00%	1.02%	11.01%
4	Rihand – II	1000	12.60%	1.28%	13.88%
5	Auriya	652	10.86%	0.70%	11.56%
6	Dadri (Gas)	817	10.96%	0.48%	11.44%
7	Unchahar – I	280	5.71%	0.32%	6.03%
8	Unchahar – II	420	11.19%	1.02%	12.21%
9	Dadri (thermal)	840	83.15%	0.00%	83.15%
II	NHPC				
1	Baira – suil	180	11.00%	0.00%	11.00%
2	Salal	690	11.62%	0.00%	11.62%
3	Tanakpur	94.5	12.81%	0.00%	12.81%
4	Chamera- I	540	7.90%	0.00%	7.90%
5	Chamera – II	300	14.87%	0.00%	14.87%
6	Uri	480	11.04%	0.00%	11.04%
III	NPC				
1	Napp	440	10.68%	1.24%	11.92%
2	Rapp B#3	220	0.00%	1.98%	1.98%
3	Rapp B#4	220	0.00%	1.98%	1.98%
IV	NJPC	1500	20.47%	0.85%	21.32%
	Total				

Generation (Plant Load Factor) and Auxiliary Consumption

Petitioner's Submission

Further, for projecting the energy availability from NTPC Stations, the Petitioner has considered the PLF based on estimates of PLF as considered by the Commission for FY 2004-05 in its order on ARR Petition of TRANSCO issued on June 9, 2004. For hydro plants, the Petitioner has estimated the energy availability based on the actual power purchase figures for the corresponding months of FY 2004-05.

The Petitioner has considered the auxiliary consumption of the Central Generating Stations based on the norms approved in the CERC guidelines as follows:

- Thermal Generating Plants : 9.5 % of Gross Generation
- Combined Cycle Generating Plants : 3.0 % of Gross Generation
- Hydro Generating Station : 0.5 % of Gross Generation
- Atomic Generating Plants : 9.5 % of Gross Generation

Commission's Analysis

The Commission has considered the generation from NTPC, NHPC and NPC stations based on the generation targets prescribed by CEA for FY 2005-06. The auxiliary consumption for each of the NTPC and NPC stations has been considered based on the norms approved in the CERC/Government guidelines.

The effective share of TRANSCO is applied on the Energy Sent Out to estimate the energy purchases from the respective Stations. The Table 3.6 given below provides the values of the key parameters considered by the Commission to project the energy available from the Central Generating Stations during FY 2005-06 and TRANSCO's share of energy in each station.

Table:3.6 Energy Availability from Central Generating Stations for FY 2005-06

Station	Capacity (MW)	Gross Gen (MU)	ESO (MU)	TRANSCO Share %	TRANSCO's share in ESO (MU)	
					Petition	Commission's Approval
NTPC						
Singrauli	2000	14655	13263	8.52%	1179	1130
Anta	419	2739	2657	11.52%	291	306
Rihand	1000	7577	6858	11.01%	772	755
Rihand Ph 2	1000	3291	2978	13.88%		413
Aurya	663	4210	4084	11.56%	483	472
Dadri Gas	817	5112	4959	11.44%	614	567
Unchahar-1	420	3150	2851	6.03%	186	172
Unchahar-2	420	3150	2851	12.21%	378	348
Dadri Thermal	840	6340	5738	83.15%	4303	4771
sub-total					8207	8934
NHPC						
Bairasul	180	730	725	11.00%	76	80
Salal	690	3082	3060	11.62%	377	356
Tanakpur	94.5	452	449	12.81%	52	57
Chamera I	540	1665	1653	7.90%	143	131
Chamera II	300	1500	1490	14.87%	239	221
Uri	480	2581	2569	11.04%	271	284
sub-total					1160	1129
NPC						

NAPP	440	2571	2321	11.92%	276	277
RAPP-3	220	1124	1017	1.98%	12	20
RAPP-4	220	1124	1017	1.98%	216	20
sub-total					504	318
NJPC	1500	6242	6205	21.32%	772	1323
Total CGS					10643	11703

3.2.5.3 Cost of Power Purchase from Central Generating Stations

The cost of power purchase from the CGS is governed by the notifications issued by CERC from time to time and the terms of the Power Purchase Agreement entered into with CGS.

Cost of Power Purchase for CGS Stations for FY 2004-05

Petitioner's Submission

In its Petition, the TRANSCO for FY 2004-05 has estimated the power purchase cost based on actual power purchase cost for the period April to September 2004 and by estimating the power purchase cost for October 2004 to March 2005. For estimating the costs of power purchase from NTPC and NPC stations, TRANSCO has estimated the fixed costs in accordance with the fixed charges as per CERC Orders and estimated the variable cost based on the actual variable cost per unit during April to September 2004.

Commission's Analysis

During the technical sessions, the Commission directed TRANSCO to submit the details of actual power purchased and power purchase cost from all the sources for FY 2004-05. Subsequently, TRANSCO submitted these details to the Commission. The actual fixed and variable cost for each Station has been considered by the Commission for the purpose of estimating the power purchase cost from CGS for FY 2004-05.

The summary of total energy purchased, fixed costs, variable costs and total costs as considered by the Commission based on actual costs during the year are provided in Table 3.7 given below:

Table:3.7 Fixed and Variable Cost of CGS Stations for FY 2004-05

Station	Power Pur MU	Cap Chg. Rs. Crore	Energy Chg Rs. Crore	En. Chg Rs/kwh	Total Rs. Crore	Total Rs/kwh
NTPC						
Singrauli	1242	31	99	0.79	130	1.05
Anta	291	10	38	1.30	47	1.63
Rihand	802	56	60	0.75	116	1.44
Aurya	414	17	56	1.35	73	1.77
Dadri Gas	559	24	92	1.64	116	2.08
Unchahar-I	183	12	20	1.09	32	1.74
Unchahar-2	376	26	41	1.08	67	1.78
Dadri Thermal	5170	311	814	1.58	1125	2.18
sub-total	9037	487	1219	1.35	1706	1.89
NHPC						
Bairasul	75	0.72	5.2	0.70	6	0.79
Salal	395	0.00	26.2	0.66	26	0.66
Tanakpur	58	2.19	4.0	0.69	6	1.07
Chamera-I	162	9.85	11.3	0.69	21	1.30
Chamera-II	306		69.71	2.28	70	2.28
Uri	241	48.06	16.7	0.69	65	2.69
sub-total	1237	130.53	63.5	0.51	194	1.57
NPC						
NAPP	288	0	63	2.18	63	2.18
RAPP 3	88	0	25	2.82	25	2.82
RAPP 4	130	0	37	2.83	37	2.83
sub-total	506	0	124	2.46	124	2.46
NJPC	1274		293.03	2.30	293	2.30
Total CGS	12053	618	1700	1.41	2318	1.92

Other Costs of CGS – Income Tax and Incentives***Petitioner's Submission***

In its Petition, TRANSCO has submitted that in addition to fixed and variable costs built into the tariff, the Central Generating Stations claim income tax, incentives, etc. The TRANSCO has estimated these charges based on total incentive and income tax billed during the previous years and the energy purchased during that year.

Commission's Analysis

The Commission has obtained the station wise details of actual income tax and incentive for FY 2004-05 and has considered the same. The income tax and incentive as considered by the Commission for FY 2004-05 is Rs 63 Crore and Rs 29 Crore, respectively.

3.2.5.4 Cost of Power Purchase for CGS Stations for FY 2005-06

Petitioner's Submission

In its Petition, TRANSCO has submitted that with the implementation of Availability Based Tariff with effect from 1st December 2002, the beneficiaries have to pay the capacity (fixed) charges based on allocation, and the energy charges based on scheduled energy, and for unscheduled interchange, if any, based on the average frequency during a block of 15 minutes. The TRANSCO has estimated the fixed costs and the capacity charges as fixed by the CERC for each station as on 31.3.2004 to arrive at the fixed costs for the CGS stations for the year 2005-06. As regard to energy charges of NTPC stations, the Petitioner has submitted that the energy charges are estimated considering the prevalent energy charges and by applying an escalation of 5% for coal, atomic and hydro based stations and 7% for gas based stations considering the inflation, WPI and CPI variations over the last year.

Commission's Analysis

The CERC has issued the “**Terms and Conditions of Tariff Regulations**” during March 2004 to be applicable from April 2004 onwards. In accordance with the Terms and Conditions, the NTPC and NHPC have submitted their Tariff Petitions to the CERC. For FY 2005-06, the Commission has estimated the fixed cost for the various Stations considering the annual fixed charges estimated by NTPC and NHPC in the Tariff Petitions submitted to CERC in proportion to the share allocation of TRANSCO in the respective Stations. The approved fixed cost of NTPC stations, TRANSCO's effective share allocation and fixed cost considered for FY 2005-06 is summarised below in Table 3.8 given below:

Table 3.8 Fixed Cost for NTPC Stations for FY 2005-06

(Rs. Crore)

Station	Annual Fixed Charges	Effective Share	Fixed Charges for TRANSCO
	Rs. Cr.	%	Commission
NTPC			
Singrauli	382	8.52%	32.50
Anta	103	11.52%	11.87
Rihand	380	11.90%	41.84
Auryia	189	11.56%	21.85
Dadri Gas	233	11.44%	26.70
Unchahar-1	161	6.03%	9.72
Unchahar-2	178	12.21%	21.70
Dadri Thermal	333	83.15%	277.03
Total			443.21

The Commission has estimated the power purchase cost for NHPC Stations based on the two-part tariff basis (capacity charge and energy charge) in accordance with the CERC Regulations on

Terms and Conditions of Tariff. The Commission has considered the Annual Fixed Charges based on the Petitions filed by NHPC except for Uri hydro Station, for which the Petition is yet to be filed by NHPC. In line with the CERC Orders, the energy charges for hydro stations have been estimated at 77 paise/kWh (100 % of the lowest variable cost of thermal stations in the region i.e. Rihand I). The Capacity Charge for each station has been estimated by deducting the total energy charges from the Annual Fixed Charges. The TRANSCO's share in Capacity Charges has been computed in proportion to its share in the saleable energy of the Station. The annual fixed charges of NHPC stations, Energy Charges, Capacity Charges, TRANSCO's effective share allocation and estimated fixed cost for TRANSCO for FY 2005-06 is summarised in Table 3.9 given below:

Table 3.9 : Annual Capacity Charges for NHPC Stations:

Station	Annual Fixed Charge (Rs. Crore)	Total Energy Charge (Rs. Crore)	Total Capacity Charge (Rs. Crore)	Effective Allocation of TRANSCO	Capacity Charges for TRANSCO (Rs. Crore)
Salal	178	178	---	11.62%	0
Bairasul	50	49	1.07	11.00%	0.12
Tanakpur	51	31	22.73	12.81%	2.91
Chamera I	212	112	113	7.90%	8.94
Chamera II	297	101	222	14.87%	32.99
Uri	514	175	385	11.04%	42.51

Variable cost for CGS stations during FY 2005-06***Petitioner's Submission***

The petitioner has submitted that the energy charges for the year 2005-06 are based on the average variable cost per unit paid to generating stations for the period April 2004 to September 2004, after adding an escalation of 5% for coal, atomic and hydro based stations and 7% for gas based stations keeping in view the inflation, WPI and CPI over the last year.

Commission's Analysis

The Commission has analysed the variation in monthly variable costs of NTPC stations for FY 2004-05. The variable costs have changed from month to month and no direct trend could be established. The variation on monthly basis may be mainly because of the Fuel Cost Adjustment component in the variable costs. The Commission has, therefore, projected the variable cost of coal based stations considering an increase of 3% over the average variable cost for FY 2004-05, while for gas based stations, the variable costs have been increased by 5%. The summary of variable cost as estimated in the Petition and as considered by the Commission is given in the Table 3.10 given below:

Table 3.10 Variable Costs for 2005-06 (Rs/kwh)		
Station	Petition	Commission's Approval
Singrauli	0.74	0.82
Anta	1.22	1.36
Rihand	0.72	0.77
Auriya	1.32	1.42
Dadri Gas	1.67	1.72
Unchahar-1	1.12	1.13
Unchahar-2	1.11	1.11
Dadri Thermal	1.56	1.62

As elaborated in earlier section, the energy charge for NHPC stations have been estimated at 77 paise/kWh. For NPC Stations, the Commission has estimated the power purchase cost considering the rates based on the actual per unit cost for FY 2004-05. The summary of power purchase from Central Generating Stations and the total fixed and variable cost as projected in the Petition and as considered by the Commission is given in the Table 3.11 given below:

Table:3.11 Power Purchase and Power Purchase Cost from CGS for FY 2005-06

Station	Energy Purchase (MU)		Total Cost (Rs. Crore)		Total Cost (Rs./kWh)	
	Petition	Commission's Approval	Petition	Commission's Approval	Petition	Commission's Approval
NTPC						
Singrauli	1179	1130	125	125	1.06	1.11
Anta	291	306	49	54	1.68	1.75
Rihand I	772	755	114	100	1.48	1.33
Rihand II		413		64		1.55
Auriya	483	472	88	89	1.83	1.88
Dadri Gas	614	567	130	124	2.12	2.19
Unchahar-1	186	172	33	29	1.77	1.69
Unchahar-2	378	348	69	60	1.83	1.74
Dadri Thermal	4303	4771	1010	1051	2.35	2.20
sub-total	8207	8934	1619	1697	1.97	1.90
NHPC						
Bairasul	76	80	9	6.3	1.21	0.79
Salal	377	356	46	20.7	1.21	0.58
Tanakpur	52	58	10	7.4	1.84	1.28
Chamera I	143	131	27	19.0	1.88	1.46
Chamera II	239	222	55	50.1	2.28	2.26
Uri	271	284	76	64.4	2.82	2.27
sub-total	1160	1131	223	168	1.92	1.49
NPC						
NAPP	276	277	64	60.6	2.33	2.18
RAPP 3	12	20	3	5.7	2.77	2.82
RAPP 4	216	20	60	5.7	2.78	2.83
sub-total	504	318	128	72	2.53	2.27
NJPC	772	1323	181	299	2.35	2.26
Total	10643	11706	2150	2236	2.02	1.91

Other Costs of CGS – Income Tax and Incentives

Petitioner's Submission

The Petitioner submitted that the income tax for Central Generating Stations for FY 2005-06 has been estimated based on per unit tax paid in the previous years. The tax payable to PGCIL is based on the weighted average share of TRANSCO in PGCIL's transmission capacity and the total tax claimed by PGCIL for the first three-quarters of FY 2004-05. The Petitioner for FY 2005-06 has estimated the total tax at Rs 37 Crore.

The Petitioner has submitted that for NTPC stations, incentive has been calculated at the rate of 25 paise per unit produced at a PLF greater than 80% as per the CERC norms. The PLF for each plant has been assumed as approved in the Tariff Order for FY 2004-05. For NHPC plants, the incentive has been calculated based on capacity index formula in accordance with CERC norms. The achieved capacity index for FY 2005-06 has been taken to be same as actual Capacity Index achieved by the plants during April to October 2004

Commission's Analysis

The Commission has examined the approach adopted by the Petitioner for estimating the Income Tax for FY 2005-06 and has found the same reasonable. The Commission for FY 2005-06 has considered the income tax of Rs 37 Crore as estimated by the Petitioner.

The Commission has estimated the incentives for NTPC stations based on the revised norms of performance as per the CERC regulations dated March 26, 2004. As per the revised performance norms the incentive for NTPC stations is admissible @25 paise/unit for scheduled energy (ex-bus) corresponding to scheduled generation in excess of ex-bus energy corresponding to target PLF.

Considering the generation levels of NTPC stations as discussed in above sections and by applying the incentive rate as per the CERC regulation, the total incentive for NTPC stations for FY 2005-06 is estimated at Rs. 12.03 Crore. For NHPC stations, the Commission has considered the total incentive of Rs 7 Crore based on actual incentive for FY 2004-05.

3.2.6 Power Purchase from Other Sources

3.2.6.1 Power Purchase from Other Sources for FY 2004-05

Petitioner's Submission

In its Petition, the TRANSCO for the year 2004-05 has projected a power purchase of 1713 MUs from other sources such as HPSEB, Tata Power, Power Trading Corporation, Adani Exports etc.

Commission's Analysis

During the technical validation sessions, the Commission directed TRANSCO to submit the details of actual power purchased and power purchase cost from all the sources for FY 2004-05. Subsequently, TRANSCO submitted these details to the Commission. The Commission has considered actual energy purchased and the actual costs have been considered for the purpose of estimating the energy purchases from other sources during FY 2004-05. The energy purchases from the Other Sources and the power purchase cost as approved by the Commission based on actual for FY 2004-05 is provided in Table 3.13 given below:

Table:3.13 Power Purchase from other sources during FY 2004-05

	Power Pur (MU)	Total Cost (Rs. Crore)	Rate (Rs/kwh)
HPSEB	1071	297	2.77
Trading Companies	63	18	2.82
sub-total	1133	315	2.78

3.2.6.2 Power Purchase from other sources during FY 2005-06

In its Petition, TRANSCO has submitted that to meet the peak deficit, it is proposed to purchase power from other sources. The TRANSCO has also submitted the details with respect to the extent of peak deficit, the additional energy requirement and the time during which the power is required to be purchased from other sources.

Commission's Analysis

During the technical validation session, the Petitioner has submitted that TRANSCO has made arrangements for purchase of power during FY 2005-06 from HPSEB and further, short term arrangement has been made for purchase of 100 MW power during peak period of 7 hours from GRIDCO, Orissa for the period April to June 2005.

Based on the above submission of the Petitioner, the Commission has considered the power purchase only from HPSEB and GRIDCO as purchase from other sources.

Himachal Pradesh State Electricity Board

The actual power purchased by TRANSCO from HPSEB during FY 2004-05 is 1071 MU and for FY 2005-06 the TRANSCO has estimated power purchase of 1383 MU from HPSEB in accordance with the agreement with TRANSCO. The Commission notes that with the availability of energy from its own resources, CGS and bilateral tie ups with HPSEB, TRANSCO shall be surplus during offpeak hours. For FY 2005-06, the Commission has considered power purchase of 1383 MU from HPSEB as considered by the Petitioner. Further, the Commission has also considered the purchase of 64 MU from GRIDCO, Orissa in accordance with the short term arrangement made by TRANSCO.

The summary of power purchase and costs from other sources for FY 2005-06 as estimated in the Petition and as considered by the Commission is given in Table 3.14 below:

Table:3.14 Power Purchase from Other Sources for FY 2005-06

S.No.	Source	Units Purchased (MU)		Total Cost (Rs. Cr)		Rate (Rs/kwh)	
		Petition	Commission's Approval	Petition	Commission's Approval	Petition	Commission's Approval
1	HPSEB	1383	1383	404	404	2.92	2.92
2	Trading Companies	646	64	180	23	2.79	3.61
	Total	2029	1447	584	427	2.88	2.95

3.2.7 Transmission Charges and other Wheeling Charges

3.2.8 Petitioner's Submission

In its Petition, TRANSCO has submitted that the transmission wheeling charges payable to the Power Grid for the transmission of power from CGS are estimated based on the weighted average capacity allocation from the central stations to the TRANSCO. The calculation is based on both allocated and unallocated power from the sources.

The Petitioner has estimated the transmission wheeling charges payable to the Power Grid for the transmission of power from CGS based on actual transmission charges paid to PGCIL from April 2004 to September 2004. The total transmission charges as estimated by the Petitioner for FY 2004-05 and FY 2005-06 are Rs 159.23 Crore and Rs 147.69 Crore, respectively.

Commission's Analysis

Based on actual details submitted by the Petitioner, the transmission charges for FY 2004-05 are Rs. 155 Crore and the Commission has considered the same for FY 2004-05. For the year 2005-06 the Commission has considered the transmission wheeling charges at the same level of actual transmission charges during FY 2004-05. The total transmission charges for FY 2004-05 and FY 2005-06 as considered by the Commission are Rs 155 for each of the years.

3.2.8.1 Other Wheeling Charges

In its Petition, TRANSCO submitted that the TRANSCO has to pay other agencies also apart from PGCIL towards wheeling of power as the power flows through their system.

For FY 2005-06, the Petitioner has considered the following other wheeling charges :

- Rental for Rohtak road sub-station of BBMB @ Rs. 8.1 lakh/month
- Pooled losses for Rohtak sub-station @ 10 lakh units per month for 12 months @ BTPS rate of 247 Ps/kWh.

- Wheeling charges for Salal Power at 2.4 Ps./kWh for 377 MU payable to BBMB
- Salal losses paid to BBMB @ 4% at Salal power rate
- Wheeling charges to PGCIL for reimbursement to BBMB for Bairasuil Power

The Petitioner submitted that the other wheeling charges amounts to Rs 5.79 Crore for FY 2004-05 and Rs 5.93 Crore for FY 2005-06. For FY 2004-05, the Commission has considered the other wheeling charges at Rs 5.79 Crore as submitted by the Petitioner. For FY 2005-06, the Commission has estimated the other wheeling charges by applying the revised BTPS rate towards pooled losses for Rohtak sub-station @ 10 lakh units per month for 12 months. The other wheeling charges for FY 2005-06 as estimated by the Commission works out to Rs 5.69 Crore.

3.2.8.2 RLDC and ULDC Charges

In its Petition, TRANSCO submitted that it has to pay O&M Charges to Regional Load Despatch Centre and Unified Load Despatch Centre (ULDC) and communication charges to PGCIL as per the rates approved by the Central Electricity Regulatory Commission (CERC). The total RLDC and ULDC charges as estimated by the Petitioner for FY 2004-05 are Rs. 17 Crore

For FY 2004-05, the Commission has obtained the actual details of RLDC and ULDC charges from the Petitioner. The actual RLDC and ULDC charges for FY 2004-05 is Rs. 12.47 Crore and the same has been considered by the Commission. For FY 2005-06, the Commission has considered these charges as Rs 12.47 Crore at the same level of RLDC and ULDC actual charges for FY 2004-05.

3.2.9 Transmission Losses

Petitioner's Submission

The TRANSCO in the Petition has submitted that the monthwise transmission losses in the PGCIL's network (for CGS stations) have been assumed to be the same as the average transmission losses in PGCIL's network during the corresponding month in the last year based on data available at Northern Regional Load Dispatch Centre website. The Petitioner further submitted that for other sources, the transmission loss has been assumed to be 15% for power received from Southern region-Western-region-Northern region link and 20.5% for power received from Eastern region.

For external transmission network losses, the TRANSCO has submitted a figure of 4.32 % and 3.76% for FY 2004-05 and FY 2005-06, respectively.

Commission's Analysis

During the technical validation session the Commission has directed TRANSCO to submit the details of actual transmission losses for FY 04-05. Subsequently, TRANSCO has submitted the total energy purchased during the year, energy sold during the year and the transmission losses in TRANSCO system. As regard to external losses, the Commission has taken the details of actual transmission losses for FY 2004-05 from the website of Northern Regional Load Despatch Centre (NRLDC). The

actual external transmission losses for FY 2004-05 are 3.6%. Accordingly, the Commission for FY 2004-05 and FY 2005-06 has considered the external transmission losses as 3.6%.

The actual transmission losses in TRANSCO system for FY 2004-05 as per the details provided by TRANSCO works out to be 1.78%. For FY 2004-05, the Commission has considered the transmission losses of 1.78% in TRANSCO system based on actual losses for FY 2004-05. For FY 2005-06, considering the extent of capital expenditure approved by the Commission, the Commission has considered the transmission losses of 1.70% in TRANSCO system.

3.2.10 Energy Requirement

Petitioners Submission

The TRANSCO in its Petition has submitted that the energy requirement for 6 months of FY 2004-05 and 12 months of FY 2005-06 has been estimated based on the monthly demand as projected by the Licensees. Based on this methodology, the TRANSCO has estimated the total energy requirement of 21365 MU during FY 2004-05 and 22251 MU during FY 2005-06 at TRANSCO periphery. This estimated energy requirement also includes a transmission loss of 2% in the TRANSCO system. The Petitioner has submitted the details of monthwise energy requirement. The Petitioner further submitted that on the basis of demand schedules as provided by various licensees, the annual growth rate of energy requirement in FY 2005-06 would be 4.15% over the previous year's demand.

The Petitioner further submitted that as the energy consumption pattern is not expected to remain uniform throughout the day, the Petitioner proposes to sell the surplus power during night hours to neighbouring States or through Unscheduled Interchange (UI)

Commission's Analysis

The Commission has examined the total energy requirement for FY 2004-05 as estimated by TRANSCO and actual energy supplied during the year. The Commission has observed that against the energy requirement of 21365 MU for FY 2004-05 as estimated by TRANSCO, the actual energy supplied to DISCOMs, NDMC and MES is 20470 MU and considering the TRANSCO losses, the actual energy requirement works out to 20840 MU.

For FY 2005-06, the Commission has also observed the total energy requirement as projected by DISCOMs in their ARR Petitions is substantially lower than the energy requirement as estimated by TRANSCO. This is due to the reason that DISCOMs will be able to meet growth in energy requirement from the reduction in losses during FY 2005-06.

The total energy requirement of DISCOMs, NDMC and MES for FY 2005-06 as estimated by the Commission works out to 20709 MU. Considering the external transmission losses and TRANSCO

system losses, the total energy requirement for the Delhi power system as estimated by the commission works out to 21316 MU as against 21952 MU as estimated by TRANSCO.

Based on detailed analysis for energy availability as discussed in earlier sections, the total energy available from all the sources for FY 2005-06 as estimated by the Commission works out to 23232 MU and considering the estimated requirement, the surplus energy available is 1784 MU.

The Commission has not reduced the power purchase to the extent of surplus power and has considered the sale of entire surplus energy.

3.2.11 Sale to Other States and Underdrawals

3.2.11.1 Petitioner's Submission

For FY 2004-05, TRANSCO has proposed to sell the surplus off-peak power to the extent of 1434 MU to other neighbouring states either through the bilateral arrangements or through UI at an average rate of Rs. 3.29/kWh. The TRANSCO in its Petition has submitted that the UI rate has been higher in the first six months of FY 2004-05 due to delayed monsoon and increase in agricultural demand from Punjab, Haryana and UP. Hence, FY 2004-05 was an exceptional year in terms of higher revenue accruals on account of UI. However, the same may not be a benchmark for future years and hence the unit sale price on account of UI has been taken on a lower side for the projection period.

For FY 2005-06, TRANSCO has proposed to sell the surplus off-peak power to the extent of 292 MU to other neighbouring states and as UI at an average rate of Rs. 2.10 /kWh.

3.2.11.2 Commission's Analysis

During the technical validation sessions, the Commission directed the TRANSCO to submit the details of actual energy sold along with revenue and details of UI Charges for FY 2004-05. Subsequently, TRANSCO provided the details of actual energy sold to other States, Revenue from sale of power to Other States and UI Charges. The actual energy sold by TRANSCO including UI during FY 2004-05 is 1983 MU and the revenue earned by TRANSCO from this sale is Rs. 628 Crore. Thus, the average rate for sale of energy to other States works out to Rs. 3.17/kWh. The Commission has considered the actual revenue of Rs 628 Crore from sale to other States while estimating the Power Purchase Cost of FY 2004-05

For FY 2005-06, the Commission has considered the entire surplus energy available as difference between the energy available and estimated energy sales to Licensees in Delhi as a sale of power to other States. The Commission hopes that the TRANSCO will be able to sell the entire surplus energy available during off peak hours to other States. **The Commission directs the TRANSCO to optimise its energy balance and try to sell the entire surplus energy available during off peak hours. In case, TRANSCO is unable to sell the surplus energy, TRANSCO should back down the generating**

stations of Delhi including Badarpur, PPCL and GENCO duly taking into account the merit order based on the variable cost of various sources of power purchase, operating conditions etc.. TRANSCO is further directed not to surrender the cheaper power available from CGS except in case of unavoidable circumstances.

For projecting the revenue from sale to other States, the Commission has considered the average rate of Rs. 3.17/kWh based on the average actual rate for FY 2004-05. The Commission is of the opinion that TRANSCO should not incur losses on sale of energy to other States and due to underdraws from the regional grid because of the variation in the load.

3.2.12 Energy Balancing

Based on the net energy purchased from each source, transmission losses, sale to other States and Underdrawals, the Energy Balance for FY 2004-05 and FY 2005-06 as estimated in the Petition and as considered by the Commission is provided in Table 3.15 below:

Table 3.15 Energy Balance (MU)

Particulars	FY 2004-05		FY 2005-06	
	Rev. Est. (petition)	Commission's Approval (Based on actual details)	Petition	Commission's Approval
Purchase from CGS and other States	13590	13187	12672	13152
Losses in PGCIL network	(587)	(475)	(477)	(473)
Balance	13003	12712	12195	12679
Purchase from Genco, PPCL, BTPS, etc	9726	10112	10347	10062
Energy Available at periphery	22729	22824	22542	22740
TRANSCO losses	(295)	(370)	(295)	(373)
Sale to Other States	1252	1983	441	1784
Energy for Sale in Delhi	21182	20470	21806	20583

3.2.13 Summary of Power Purchase and Power Purchase Costs

The total power purchase from various sources and power purchase cost as estimated in the Petition and as considered by the Commission for the period for FY 2004-05 and FY 2005-06 is summarised in the Table 3.16 and Table 3.17 respectively, as under:

Table:3.16 Summary of Power Purchase and Power Purchase Cost for FY 2004-05

Source	Units Purchased (MU)		Total Price (Rs. Cr)		Price/unit (Rs./kWh)	
	Petition	Commission's Approval	Petition	Commission's Approval	Petition	Commission's Approval
CGS	10572	10779	2008	2025	1.90	1.88
NJPC	1275	1274	293	293	2.30	2.30
PTC and Other States	1713	1134	493	315	2.88	2.78
BTPS	4851	4969	1139	1162	2.35	2.34
Genco	2645	2693	569	569	2.15	2.11

PPCL	2230	2450	477	482	2.14	1.97
Sub-total	23286	23298	4979	4846	2.14	2.08
Sale to other States	-1252	-1983	-426	-628	3.40	2.70
Underdrawls (Actual)	-182		-46		2.53	
Total Power Purchase	21852	21315	4507	4216	2.06	1.98
Other Costs						
Transmission Charges			159	155		
RLDC and ULDC Charges			17.00	12.47		
Other Wheeling Charges			7.00	5.79		
Incentive and Income Tax			90.0	92		
sub-total			273	265		
Total Power Purchase Cost			4780	4482	2.18	2.10

Table 3.17 Summary of Power Purchase and Power Purchase Cost for FY 2005-06

Source	Units Purchased (MU)		Total Price (Rs. Cr)		Price/unit (Rs./kWh)	
	Petition	Commission's Approval	Petition	Commission's Approval	Petition	Commission's Approval
CGS	9871	10383	1969	1937	1.99	1.87
NJPC	772	1323	181	299	2.35	2.26
PTC and Other States	646	64	180	23	2.79	3.61
HPSEB	1383	1383	404	404	2.92	2.92
BTPS	4972	4740	1227	1077	2.47	2.27
Genco	3130	2993	842	664	2.69	2.22
PPCL	2245	2328	570	483	2.54	2.06
Sub-total	23019	23214	5373	4886	2.33	2.10
Underdrawls	-292	-1784	-61	566	2.10	3.17
Total Power Purchase	22727	21430	5312	4320	2.34	2.07
Other Costs						
Transmission Charges			148	155		
RLDC and ULDC Charges			17.00	12.47		
Other Wheeling Charges			7.00	5.69		
Incentive and Income Tax			27.0	22.0		
Income Tax			37.0	37.0		
Open Access Charges			21.00	7.7		
Sub-total			257	240		
Total Power Purchase Cost			5569	4560	2.45	2.13

3.3 Employee Expenses

3.3.1 Petitioner's Submission

The TRANSCO, in its ARR and Tariff Petition for FY 2005-06, provided the revised estimates for FY 2004-05. The TRANSCO has estimated gross employee expense of Rs. 48.3 Crore for FY 2004-05, as compared with the Commission's approval of Rs. 50.20 Crore. The TRANSCO has submitted that the revised estimates are based on actuals for the first six months and as estimated for the balance six months. The TRANSCO has estimated a capitalisation of 15% of employee expenses for FY 2004-05.

For FY 2005-06, the TRANSCO has projected gross employee expenses at Rs. 53.30 Crore. The TRANSCO has submitted that the employee expenses for FY 2005-06 are projected by applying a 10% growth to the estimated employee costs of FY 2004-05. The TRANSCO has also submitted that this increase is projected to meet the normal annual increments, increase in salary due to promotions and sanction of additional dearness allowance every year.

The TRANSCO has also proposed capitalisation @ 15% of the gross employee cost, thereby resulting in a net employee cost of Rs. 43.81 Crore for FY 2005-06.

3.3.2 Commission's Analysis

The Commission has analysed the employee expenses proposed by the TRANSCO along with the methodology adopted for estimation of the employee expenses. During the technical sessions, the Commission directed the TRANSCO to submit the actual employee expenditure incurred during FY 2004-05.

Accordingly, the TRANSCO submitted the details of actual employee expenses for FY 2004-05. The total actual employee expenses for FY 2004-05 as submitted by the TRANSCO are Rs. 45.40 Crore.

The actual employee expenses of the TRANSCO during the FY 2004-05 are lower than the employee costs approved by the Commission in its Order on ARR for FY 2004-05. Therefore the Commission has considered the actual employee expenses for FY 2004-05. The employee expenses capitalised during the year are projected at Rs. 6.81Crore, and the Commission has considered the same while approving the net employee expenses for FY 2004-05.

For estimating the employee expenses for FY 2005-06, the Commission has projected each component of the employee expenses rather than applying a growth rate on the overall employee expenses of FY 2004-05. The critical assumptions made by the Commission with regard to the projections for FY 2005-06 are stated below:

- Basic Salary: Growth of 3% on Basic Salary.
- Dearness Allowance: Increase in DA by 6%
- Terminal Benefits - 26% of the Basic + DA.
- Other Allowances: Considered as proportion to the Basic, as these components are linked to the Basic Salary.
- Other components: Other heads such as staff welfare, other allowances, medical reimbursements, and bonus/ex-gratia, considered on proportionate basis based on the actual expenses during FY 2004-05.

Based on the above assumptions, the employee expenses for FY 2005-06 has been approved at Rs. 46.85 Crore as against Rs. 53.13 Crore as proposed by the TRANSCO for FY 2005-06. The Commission has considered capitalisation of 15% of gross employee costs as proposed by the Petitioner.

The Table 3.18 provides a snapshot view of the employee expenses as proposed by TRANSCO in the Petition and as approved by the Commission.

Table:3.18 Employee Expenses (Rs. Crore)

Particulars	FY 2004-05				FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Actual	Commission's Approval	Petition	Commission's Approval
Salaries	27.44	26.38	22.77	22.77	29.02	23.45
Dearness Allowance	3.02	3.03	3.11	3.11	3.34	3.30
Terminal Benefits	1.89	2.75	4.92	4.92	3.02	5.07
Other Costs	17.85	16.13	14.60	14.60	17.75	15.04
Total	50.20	48.29	45.40	45.40	53.13	46.85
less expenses capitalised	7.53	7.24	6.81	6.81	7.97	7.03
Total	42.67	41.05	38.59	38.59	45.16	39.82

3.4 Administrative and General Expense (A&G)

3.4.1 Petitioner's Submission

In its Petition for FY 2005-06, the TRANSCO has estimated gross A&G expenses for FY 2004-05 as Rs. 14.65 Crore. The TRANSCO has estimated expenses for FY 2004-05 by considering the actuals for first six months and as estimated for the balance six months. The TRANSCO has also considered a capitalisation of 15% of A&G expenses for FY 2004-05.

For FY 2005-06, the TRANSCO has projected a gross A&G expenses at Rs. 16.11 Crore, assuming a growth of 10% over the estimated A&G expenses for FY 2004-05. The TRANSCO has also considered a capitalisation of 15% of A&G expenses for FY 2005-06.

3.4.2 Commission's Analysis

During the technical sessions, the Commission directed the TRANSCO to submit the actual A&G expenditure incurred during FY 2004-05. The TRANSCO submitted the actual A&G expenses incurred during FY 2004-05 at Rs. 25.73 Crore. This actual expenditure comprises of Rs. 9.68 Crore under the regular heads of A&G expense, and Rs. 16.05 Crore on account of the rebate to DISCOMs. The actual rebate of Rs 16.05 Crore to DISCOMs as submitted by TRANSCO includes the estimation of Rebate for the month of March 2004.

The rebate extended to DISCOMs on the sale of power is accounted for by the DISCOMs in their Non-Tariff Income. The Commission is of the opinion that the expense on this head is not an expenditure as far as the sector as a whole is concerned.

The Commission has observed the total actual rebate on bulk supply of power as submitted by DISCOMs based on the provisional audited accounts works out to Rs 12.37 Crore. As the actual details provided by DISCOMs are based on provisional audited accounts, the Commission has considered the same as expense of TRANSCO for FY 2004-05.

For the other components of A&G expenses, the Commission accepts the actuals as provided by the TRANSCO. The Commission has thus approved a gross A&G expense of Rs. 22.65 Crore for FY 2004-05. The Commission has considered the capitalisation as Rs. 1.49 Crore for FY 2004-05.

For FY 2005-06, the Commission has separately projected individual components of A&G expenses, considering a growth rate of 4%, over the actual expenses incurred in FY 2004-05. Further, the component of rebate on sale of energy has been considered as A&G expense for TRANSCO and Non-Tariff Income for DISCOMs. The total A&G expenses for FY 2004-05 estimated by the Commission works out to Rs. 23.13 Crore. The Commission has considered a capitalisation of 15% of A&G expenses for FY 2005-06 as proposed by TRANSCO.

Table 3.19 provides a summary of A&G expenses as proposed by the TRANSCO and as approved by the Commission.

Table:3.19 Administrative and General Expenses (Rs. Crore)

Particulars	FY 2004-05				FY 2005-06	
	Approved	Petition	Actual	Commission's Approval	Petition	Commission's Approval
Expenses excluding Rebate	12.11	12.12	9.68	9.68	13.34	10.06
Less capitalised	2.56	2.20		1.45	2.42	1.52
Net Expenses excluding Rebate	9.55	9.92	9.68	8.22	10.92	8.55
Rebate	4.94	2.52	16.05	12.37	2.77	12.37
Expenses considering rebate	14.49	12.44	25.73	21.19	13.69	21.62

The Commission directs the Petitioner to take prior approval for any increase in A&G expenses excluding rebate during the FY 2005-06 beyond A&G expenses excluding rebate approved before committing/incurred such additional A&G expenses.

3.5 Repairs and Maintenance (R&M)

3.5.1 Petitioner's Submission

The TRANSCO, in its ARR and Tariff Petition for FY 2005-06, submitted that against an approved R&M expense of Rs. 16.82 Crore for FY 2004-05, the revised estimates for FY 2004-05 are Rs. 13.41 Crore. The TRANSCO has estimated expenses for FY 2004-05 by considering the actuals for first six months

and as estimated for the balance six months. The TRANSCO has projected R&M expense of Rs. 19.76 Crore for FY 2005-06.

3.5.2 Commission's Analysis

During the technical validation sessions, the Commission had asked the TRANSCO to submit the actual R&M expenses for FY 2004-05. The TRANSCO submitted that the actual R&M for FY 2004-05 are Rs. 13.62 Crore.

The actual R&M expenses of TRANSCO for FY 2004-05 are much lower than the R&M expense approved in the Order for FY 2004-05. Therefore, the Commission now approves R&M expenses for FY 2004-05 at Rs. 13.62 Crore.

For FY 2005-06, the Commission has estimated the R&M expenses at Rs. 14.17 Crore, by considering a growth rate of 4% over the approved expenses for FY 2004-05.

The Commission, in its previous Order on ARR for FY 2004-05 dated June 9, 2004, had directed the TRANSCO to provide quarter wise details of the R&M activities as under:

"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 the actual R&M works carried out at the end of each quarter.

The Petitioner has submitted the quarterly reports on R&M expenditure and material drawn from the stores for R&M works on a regular basis to the Commission. **The Commission reiterates its direction to 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 Commission also directs the Petitioner to take prior approval for any increase in R&M expense during FY 2005-06 beyond the approved R&M expense before committing/incurred an expense.

Table 3.20 provides a summary of R&M expenses as proposed by the TRANSCO and as approved by the Commission.

Table:3.20 Repairs and Maintenance Expenses (Rs. Crore)

Particulars	FY 2004-05				FY 2005-06	
	Approved*	Petition	Actual	Commission's Approval	Petition	Commission's Approval
Total	16.82	13.41	13.62	13.62	19.76	14.17

* - as per Commission Order dated June 26, 2003.

3.6 Investments

3.6.1 Petitioner's submission

In its Petition, TRANSCO has estimated an investment of Rs. 109.55 Crore for FY 2004-05 excluding capitalisation of establishment and interest expenses against that of Rs. 135 Crore considered by the Commission in the ARR and Tariff Order dated June 9, 2004. For FY 2005-06, the Petitioner has proposed an investment of Rs. 232.78 Crore excluding capitalisation of establishment and interest expenses. The Petitioner has submitted the scheme-wise details of the proposed investments.

During the Technical Sessions, the Commission directed the Petitioner to submit the status of actual capital expenditure incurred during FY 2004-05 and the cost benefit analysis and preparedness for execution of the investment proposed in FY 2005-06.

In the subsequent submissions, TRANSCO has furnished the scheme-wise physical and financial progress report along with a revised estimate of investments undertaken during FY 2004-05. The Petitioner has submitted that it has incurred capital expenditure of Rs. 108.05 Crore as against the investment of Rs. 135 Crore considered by the Commission in the Tariff Order dated June 9, 2004. The Petitioner has indicated that it has funded the investments through the Plan Assistance from the GNCTD in FY 2004-05.

As regards the cost benefit analysis of the investment proposed in FY 2005-06, TRANSCO has submitted that the plan schemes are for system improvement/augmentation, primarily meant for improving reliability of supply and meeting the load requirements of the DISCOMs. The Petitioner has further submitted that the Schemes for establishment of substations including installation of additional transformers have been prepared in accordance with System Planning Studies issued by CEA based on (n-1) criteria. The Petitioner has also submitted that the proposed Schemes would be funded through Plan Fund Assistance from the GNCTD. In the subsequent submissions, TRANSCO has submitted that the GNCTD has sanctioned a Plan Assistance of Rs. 250 Crore for FY 2005-06 for funding the proposed capital works schemes. However, the Petitioner has not provided copies of Sanction Letter from GNCTD as evidence for scheme-wise approvals.

The investments proposed by the Petitioner for FY 2004-05 and FY 2005-06 in the Petition, actual investment carried out by the Petitioner during FY 2004-05, and the investments approved by the GNCTD under the Plan Assistance have been summarised in the Table 3.21.

Table:3.21 Investment (Rs. Crore)

Description	FY 2004-05		FY 2005-06	
	Rev. Est. (Petition)	Actual	Petition	Approved by GNCTD
400 kV works	52.30	44.46	34.50	
220/66-33 kV works	68.70	49.98	197.00	
SCADA	13.00	13.58	13.00	

Computerisation of operation and establishment of works station	1.00	0.03	1.00	
Total	135.00	108.05	250.00	250.00

3.6.2 Commission's Analysis

In the Tariff Order dated June 9, 2004, the Commission has observed the following:

"During discussions, the Petitioner submitted that the investment plan has been revised based on the sanctioned Plan Assistance from Government for FY 2004-05. This gives the impression that due care has not been taken while preparing the capital investment plan and planning the transmission system requirements. At the same time it is not clear that whether the capital investment plans are prepared on need basis or resource availability basis.

At this junction, in the absence of the necessary details, the Commission is left with the option of approving the capital investment for FY 2004-05 at Rs 135 Crore. However, the Commission is of the opinion that there should not be any gaps in the transmission system, which may throttle the supply to DISCOMs. In case, the additional investments are required for strengthening and improving the transmission system to ensure reliable power supply to DISCOMs, the TRANSCO shall soon prepare the plans for these works and submit it to the Commission. Further, TRANSCO shall expeditiously take up these works and arrange the additional funds for these works through commercial borrowings. The Commission will consider the cost of these borrowings during the truing up."

However, the TRANSCO did not submit the Plan for additional investments for strengthening and improving the transmission system during FY 2004-05. During FY 2004-05, TRANSCO has submitted several scheme reports for the Commission's approval without justification based on load flow studies. In line with the direction given in the earlier Tariff Order, the Commission directed the Petitioner vide letter dated February 25, 2005 to submit a consolidated Project Report covering all works proposed to be undertaken during FY 2005-06 and FY 2006-07 along with the following details:

- Scope of Work
- Single line diagram of substation works
- Full justification along with peak load incident on the substation during last three years and report of load flow studies corresponding to FY 2006-07 or FY 2011-12 conditions
- Commissioning schedule of the Scheme
- Pattern of financing
- Detailed cost estimates for electrical and civil works

- Power Map of Delhi System showing existing, approved and proposed system in different colours.

In line with the Commission's direction, TRANSCO has submitted the consolidated Project Report for the works proposed in FY 2005-06 and FY 2006-07 vide letter dated April 20, 2005. The Commission is processing the application for approval of investment.

Considering that the Schemes are based on the recommendations of CEA and the Petitioner has obtained sanction of Rs. 250 Crore under the Plan Fund Assistance, the Commission has considered an investment of Rs. 250 Crore for the purpose of determination of ARR and Tariff. However, this does not amount to approval of Schemes and the proposed Schemes shall be separately processed.

The summary of the investments as proposed in the Petition and as considered by the Commission for FY 2004-05 and FY 2005-06 is provided in the Table 3.22.

Table:3.22 Capital Investment (Rs. Crore)

Description	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Total Investments	135.00	109.55	108.05	250.00	250.00

3.6.3 Asset Capitalisation

3.6.3.1 Petitioner's Submission

In its Petition, the TRANSCO has proposed to capitalise Rs. 151.49 Crore and Rs. 97.46 Crore of investment during FY 2004-05 and FY 2005-06, respectively.

In the subsequent submissions made by the Petitioner, the revised estimate of asset capitalisation has been submitted as Rs. 19.76 Crore for FY 2004-05. During the Technical Sessions, the Commission directed TRANSCO to submit the Provisional Accounts for FY 2004-05 alongwith actual addition to assets as per the Provisional Accounts of FY 2004-05. TRANSCO has submitted that the Provisional Accounts are yet to be finalised and hence details of actual addition to assets is not available for FY 2004-05.

The Petitioner has submitted that the assets having original cost of Rs. 3.11 Crore is planned to be retired during FY 2004-05. The Petitioner has not proposed any retirement of assets during FY 2005-06. During the Technical Sessions, the Commission directed TRANSCO to submit the details of those assets which are not being utilised for meeting Network Requirement. The Petitioner has submitted that the replacement of major assets would be undertaken as per the directions of the Commission and the cost of retired assets as a result of replacement would be deleted from the gross block of fixed assets.

3.6.3.2 Commission Analysis

The Commission has analysed the asset capitalisation proposed by the Petitioner for FY 2004-05 and FY 2005-06. For FY 2004-05, the Commission has considered capitalisation of asset as per information submitted by the Petitioner. The Commission notes that the proposed capitalisation is substantially lower than that considered for FY 2004-05 at Rs. 77.45 Crore in the Tariff Order for FY 2004-05. Considering the opening Capital Works in Progress (CWIP) at Rs. 53.45 Crore and estimate of investment during FY 2004-05 at Rs. 108.05 Crore, the Petitioner has been able to capitalise only 11% of investment under progress during the year. It is relevant to note that the delay in completion of schemes deny benefit of new capital assets to the users and consumers. **The Commission hereby directs TRANSCO to complete these Schemes on an expeditious basis.**

The Petitioner has not demonstrated consistent performance in completion of the Schemes over the past three years. Considering that the transmission projects are long gestation projects and taking into account the actual capitalisation during the past three years, the Commission has considered capitalisation for FY 2005-06 equivalent to 20% of the fresh investments and capital work in progress. Accordingly, the Commission has considered asset capitalisation of Rs. 19.76 Crore and Rs. 82.09 Crore in FY 2004-05 and FY 2005-06, respectively.

The Commission has considered Opening Block of Fixed Assets for FY 2004-05 based on the Provisional Accounts submitted by TRANSCO for FY 2003-04.

The Commission has considered the retirement of fixed assets for FY 2004-05 as submitted in the Petition. Upon identification of the retired assets by the Petitioner, the same shall be considered based on actual information submitted by the Petitioner during truing of expenses and revenues for FY 2005-06.

The summary of opening balance of fixed assets, asset capitalisation during the year and the closing balance of fixed assets at the end of the Financial Year as proposed in the Petition and as considered by the Commission is summarised in the Table 3.23 given below:

Table: 3.23 Asset Capitalisation (Rs. Crore)

Description	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Opening balance of fixed assets	713.14	739.50	739.50	888.24	759.26
Addition during the year	77.45	151.84	19.76	97.46	82.09
Retirement during	0.00	3.11	0.00	0.00	0.00

the year					
Closing balance of fixed assets	791.34	888.24	759.26	985.70	841.35

3.6.4 Depreciation

3.6.4.1 Petitioner's Submission

The TRANSCO has proposed depreciation charges based on the weighted average depreciation rate of 3.75%, approved by the Commission in the Tariff Order for FY 2004-05. In line with the Commission's philosophy in the Tariff Order for FY 2004-05, the Petitioner has calculated depreciation charges based on the Opening Block of Gross Fixed Assets. The Petitioner has estimated the depreciation charge at Rs. 27.73 Crore and Rs. 33.31 Crore for FY 2004-05 and FY 2005-06, respectively. The Petitioner has not submitted details of proposed utilisation of depreciation for FY 2004-05 and FY 2005-06.

3.6.4.2 Commission's Analysis

The Commission has adequately discussed the issue of depreciation in its Tariff Order dated June 26, 2003 and the Order on the Review Petition filed by the TRANSCO on the ARR Petition dated November 25, 2003 (Review Petition Order). The Commission's view on the concept of depreciation both from an accounting perspective and from a regulatory perspective from its Review Order dated November 25, 2003 has been reproduced below for reference.

"From an accounting perspective, Depreciation is a charge to the Profit and Loss account and represents a measure of the wearing out, consumption or other loss in value of an asset arising from use, efflux of time or obsolescence through technology and market changes. From a regulatory perspective, depreciation is a small amount of the original cost of the capital assets, built into the tariff computation every year with a view to providing the utility a source of funding to repay instalments of debt capital. As the asset is used over its operational life, Depreciation is proportionately charged over the useful life of the asset."

Asset Block on which depreciation is applicable

In the BST Order of February 22, 2002, the Commission had directed the TRANSCO and DISCOMs to submit the details of the GFA and CWIP in the opening balance sheet of TRANSCO within one month of the issue of the Order. Accordingly, the Petitioner has submitted the Fixed Assets Register (FAR). The FAR submitted by the Petitioner is on the basis of the business valuation and FAR does not provide the historical cost for various categories of assets. In the absence of availability of historical cost for various categories of Assets, the Commission has continued to provide the depreciation considering the valuation of assets based on the Transfer Scheme for the assets transferred on July 1, 2002.

As set out in the Tariff Orders dated June 26, 2003 and June 9, 2004, the Commission had allowed the depreciation expenditure for the purpose of ARR and tariff determination only on the Gross Fixed Assets at the beginning of the year, in line with the applicable Schedule VI of the Electricity (Supply) Act. However, with the repeal of the Electricity (Supply) Act on promulgation of the Electricity Act, 2003, the Commission has decided to revise the methodology of calculation of depreciation. The Commission has decided to admit depreciation based on the usage of the asset in a particular year from FY 2005-06 onwards. Depreciation shall be chargeable from the first year of operation. For the purpose of estimating depreciation for FY 2005-06, the Commission has considered capitalisation of assets on an average basis in the middle of the year. **However, the Commission directs the Petitioner to provide pro-rata depreciation considering actual usage/operation (in number of days) of asset during the Financial Year.** Any difference between depreciation estimated on an average basis and the depreciation determined based on actual usage of days during the Financial Year shall be trued up at the time of tariff determination for the next Financial Year.

For removal of any doubt, it is being clarified that while truing up expenses for FY 2004-05, the Commission has considered the same methodology of determining depreciation expense as was specified under the Tariff Order for FY 2004-05.

Accordingly, the Commission has computed the depreciation expense for FY 2004-05 based on the GFA arrived at by considering the GFA as on March 31, 2004 as per the Provisional Accounts. For FY 2005-06, the Commission has computed depreciation on the average of the opening GFA as on April 1, 2005 and estimated closing GFA as on March 31, 2006, by adding the assets estimated to be capitalised during FY 2005-06.

Depreciation Rate

The Commission has summarised its methodology of depreciating the assets in its Review Order dated November 25, 2003, which has been reproduced below for reference.

"In its Order of June 26, 2003, the Commission adopted the methodology of depreciating the asset upto a cumulative 90% uniformly over the entire useful life of the asset. This will avoid front loading of tariffs while at the same time ensuring necessary cash flow to the licensees over a long period of time."

The Commission had mentioned in its Tariff Order dated June 26, 2003 that *"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 had mentioned in its Tariff Order dated June 9, 2004 that *"In the absence of details of CWIP and the historical value of various categories of the assets, the Commission has continued to use the depreciation rate at 3.75% for the purposes of the ARR considering the average fair life of the lines and cables network at distribution voltages as 25 years.*

The Commission is of the view that as depreciation is a non-cash expenditure and scheduled loan repayment is lower than the depreciation charge, 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. Accordingly, the Commission has continued to use the depreciation rate of 3.75% for the purposes of the ARR."

The Commission has again considered the rates of depreciation for the purpose of determination of ARR and has decided to consider depreciation based on straight line method over the useful life of the asset and at the rates prescribed in the Appendix II to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 for various asset classes from FY 2005-06 onwards. The residual life of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the cost of the asset.

For determining the weighted average depreciation rate, addition to asset needs to be estimated for each asset class. As the Petitioner has not submitted the Provisional Accounts for FY 2004-05 and the asset category-wise break-up of proposed capitalisation during FY 2005-06, the Commission is not in a position to estimate addition to class-wise assets. In such a situation, the Commission has considered the following asset break-up as available from the Provisional Accounts for FY 2003-04 for estimating weighted average depreciation rate for estimation of depreciation expense for FY 2005-06. The depreciation rates considered by the Commission are given in Table 3.24

Table:3.24 Depreciation Rates

Sr. No.	Description of Assets	Asset Gross Block as at March 31, 2004 (Rs Lakh)	Rate (%)
1.0	Land and land rights	46.50	0.00%
2.0	Buildings (sub-station)	1114.82	3.60%
3.0	Buildings (office and residential colonies)	1320.53	1.80%
4.0	Bays of 400 kV	1163.00	3.60%
5.0	Other civil works	4696.75	1.80%
6.0	Plant & Machinery	40545.70	3.60%
7.0	SCADA and PLCC	5095.00	3.60%
8.0	Lines, cables, network, etc	19239.35	3.60%
9.0	Furniture and fixtures	219.27	6.00%
10.0	Vehicles	318.48	18.00%
11.0	Office equipment	190.70	6.00%
	Total	73950.10	3.53%

The Petitioner is hereby directed to submit the break-up of opening block of Assets and assets capitalised during the year as per the classification specified in the said Appendix II while submitting the Petition for FY 2006-07. Any difference in depreciation arising out of calculation of depreciation as per above classification and rates and actual classification of assets as per the said Appendix II and corresponding rates shall be trued up at the time of tariff determination for the next Financial Year.

For removal of any doubt, it is being clarified that while truing up expenses for FY 2004-05, the Commission has considered the rate of depreciation as 3.75% as specified under the Tariff Order for FY 2004-05.

The Table 3.25 provides a summary of the Depreciation as proposed by the Petitioner and as approved by the Commission for FY 2004-05 and FY 2005-06.

Table:3.25 Depreciation (Rs. Crore)

Description	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Opening Balance of fixed assets	713.91	739.50	739.50	888.24	759.26
Addition during the year	77.51	151.84	19.76	97.46	82.09
Retirement during the year	0.00	3.11	0	0.00	0.00
Closing Balance of Fixed Assets	791.42	888.24	759.26	985.70	841.35
Depreciation	26.77	27.73	27.73	33.31	28.22

3.6.4.3 Depreciation Utilisation

The Commission has considered utilisation of depreciation for meeting the loan repayment requirement, working capital requirement and funding capital investments in line with the priority of utilisation mentioned in the Table 3.46 in its ARR and Tariff Order dated June 26, 2003. The priority order of utilisation of depreciation has been summarised below:

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

The Commission has considered actual repayment for FY 2004-05 based on the submission of the Petitioner. For FY 2005-06, the Commission has considered loan repayment liability based on the revised submissions by the Petitioner.

For FY 2004-05, the Commission has considered the funding of working capital requirement through depreciation in line with the philosophy adopted in the Tariff Order for FY 2004-05. The Working Capital requirement has been estimated by considering two months Stores (R&M expenses) and one month cash expenses i.e. salary, A&G and R&M expenses. While providing for funds for working capital, funds provided towards working capital for the period from FY 2002-03 to FY 2004-05 are also considered as available to meet working capital requirement of FY 2005-06. The Commission has provided funding of 27.23 Crore towards working capital requirement by allowing to utilise depreciation of Rs. 9.05 Crore in FY 2002-03, Rs. 9.11 Crore in FY 2003-04 and Rs. 9.07 Crore in FY 2004-05 towards Working Capital requirement. Since net requirement of working capital for FY 2004-05 is lower than cumulative funding provided, the funding for working capital is capped at Rs. 9.07 Crore as was provided under the Tariff Order for FY 2004-05. No additional funding has been considered towards working capital requirement for FY 2005-06 considering the availability of such funds.

Since the loan repayment liability of Rs. 9.11 Crore and Rs. 15.98 Crore during FY 2004-05 and FY 2005-06, respectively, is lower than the depreciation in each year, the Commission is of the opinion that utilising the depreciation to fund the capital investment is appropriate, and has hence considered the unutilised depreciation as a means of finance for capital investment.

The utilisation of depreciation as considered by the Commission is summarised in the Table 3.26.

Table:3.26 Utilisation of Depreciation (Rs. Crore)

Description	FY 2004-05		FY 2005-06
	Order for FY 2004-05	Commission's Approval	Commission's Approval
For debt repayment	9.11	9.11	15.98
For working capital requirement	9.07	9.07	0.00

Description	FY 2004-05		FY 2005-06
	Order for FY 2004-05	Commission's Approval	Commission's Approval
For capital investment	8.59	9.55	12.24
Total depreciation	26.77	27.73	28.22

3.6.5 Means of Finance

3.6.5.1 Petitioner's Submission

In its Petition, the Petitioner has proposed funding of the investments through the Plan Assistance provided by the GNCTD in FY 2004-05 and FY 2005-06. Under the Plan Assistance, the Petitioner has estimated funding of Rs 135 Crore during FY 2004-05 and proposed funding of Rs. 250 Crore during FY 2005-06.

During the Technical Sessions, the Commission directed the Petitioner to submit the details of actual means of finance availed during FY 2004-05 and the sanction from GNCTD for proposed means of finance for investments in FY 2005-06. During the subsequent submissions, the Petitioner submitted that the GNCTD allocated Plan funds to the extent of Rs. 114.66 Crore towards the investments proposed by TRANSCO for FY 2004-05. For FY 2005-06, the Petitioner has submitted that it has obtained sanction from the GNCTD under the Plan Assistance for funding of Rs. 250 Crore for meeting capital expenditure.

The Petitioner has further submitted that the TRANSCO has outstanding loans to the account of Holding Company as apportioned under the Transfer Scheme at Rs 270 Crore. Further, the Petitioner has availed loan of Rs. 180 Crore from the Holding Company in FY 2005-06. The Petitioner envisaged repayment of Rs. 130 Crore during FY 2004-05. In the subsequent submission, the Petitioner has submitted that it has repaid entire loan of Rs. 180 Crore during FY 2004-05.

The Petitioner has further submitted that an amount of Rs. 3452 Crore has been allotted to TRANSCO as loan from GNCTD for the purpose of meeting revenue gap as per the Policy Directions issued by GNCTD. Out of this amount, TRANSCO has claimed Rs. 3314 Crore by FY 2004-05 and has further plan to draw down Rs. 138 Crore in FY 2005-06.

3.6.5.2 Commission Analysis

As elaborated in earlier section, the Commission has considered the unutilised depreciation as a source of funding for the capital investments. The Commission has thus considered the means of finance to be a mix of unutilised depreciation and State Government support for funding the investments. For meeting the requirement of additional funds to support capitalisation of salary and interest expense in FY 2004-05, the Commission has considered the utilisation of unutilised portion of loan drawn from the GNCTD for FY 2003-04. The means of finance considered by the Commission for funding capital works is summarised in the Table 3.27 below:

Table: 3.27 Means of Finance (Rs. Crore)

Description	FY 2004-05		FY 2005-06
	Order for FY 2004-05	Commission's Approval	Commission's Approval
Unutilised depreciation	8.48	9.55	12.13
Loan from GNCTD for Plan Assistance	142.81*	117.26**	237.87
Internal Accruals	2.00	0.00	
Commercial Debt	4.66	0.00	
Total	157.94	126.76	250.00

* Loan sanctioned by the GNCTD under Plan Assistance is Rs. 135 Crore. Unutilised loan of Rs. 7.81 Crore in FY 2003-04 was considered for funding investment during FY 2004-05.

** Loan sanctioned by the GNCTD under Plan Assistance is Rs. 114.66 Crore. Unutilised loan of Rs. 2.55 Crore in FY 2003-04 has been considered for funding investment during FY 2004-05.

The Commission is aware about the allocated loan of Rs. 270 Crore from the Holding Company and the loan of Rs. 3450 Crore provided by GNCTD to bridge the gap between the revenue requirement of TRANSCO and bulk supply price received/to be received from DISCOMs. In respect of the repayment of loan of Rs 3452 provided by GNCTD for meeting revenue gap, the Policy Direction stipulates that this loan is to be repaid by the TRANSCO to GNCTD in the manner agreed to between Transmission Company and the GNCTD. The TRANSCO has submitted that it has not considered any interest charge on the loans availed from GNCTD for meeting the revenue gap as per the Policy Directions issued by GNCTD as the detailed terms and conditions of this loan including the rate of interest are not finalised. The Commission is of the opinion that if at any point of time, the servicing of this loan is to be considered as pass through in the ARR of the TRANSCO, the revenue gap of TRANSCO will increase substantially, which in turn will result in tariff shock to the consumers. Thus, it will be difficult at any stage to service this loan of Rs 3450 Crore through the ARR of the Transmission Company. Therefore, the TRANSCO shall take up this matter of servicing (principal repayments and interest payments) of loan of Rs 3450 with the Appropriate Authority and make arrangements for servicing this loan without affecting the ARR of TRANSCO in the future years.

3.7 Interest Expenditure

3.7.1 Petitioner's Submission

In its Petition, TRANSCO has projected an interest on the loans from GNCTD under Plan Assistance at Rs. 14.60 Crore in FY 2004-05 and Rs. 29.43 Crore in FY 2005-06. During the Technical Sessions, the Commission directed TRANSCO to submit the details of the Plan Fund received from the GNCTD and its repayment schedule and actual interest rate. Accordingly, TRANSCO has submitted that Rs. 33.13 Crore of loan is at the interest rate of 13% and balance loan is at the interest rate of 11.5%. In the subsequent submissions, TRANSCO has submitted that it has paid an interest of Rs. 14.76 Crore and repaid loan the extent of Rs. 9.11 Crore in FY 2004-05. Further, TRANSCO has submitted revised

projection of interest of Rs. 26.79 Crore and principal repayment of Rs. 15.98 Crore during FY 2005-06.

The Petitioner has projected an interest of Rs. 7.38 Crore for FY 2004-05 and Rs. 5.50 Crore for FY 2005-06 on the loans of Rs. 270 Crore allocated under the Transfer Scheme and Rs. 180 Crore availed in FY 2004-05 from Holding Company. The TRANSCO has submitted that the loan of Rs. 270 Crore from the Holding Company is payable within a period of 13 years with 12% interest per annum. However, a moratorium period of four years for the payment of interest and principal repayment is applicable. In the subsequent submissions, the Petitioner has clarified that interest on loan of Rs. 270 Crore has been included on accrual basis and no interest payment has been released during FY 2004-05.

Further, the Petitioner has submitted that it has not considered any interest charge on the loans availed from GNCTD for meeting the revenue gap as per the Policy Directions issued by GNCTD as the detailed terms and conditions of this loan including the rate of interest are not finalised. TRANSCO has highlighted that the interest liability may arise in future as and when the GNCTD finalises the terms and conditions for the Government Assistance.

TRANSCO has estimated capitalisation of interest expense of Rs. 16.01 Crore for FY 2004-05 and Rs. 6.83 Crore for FY 2005-06. Thus TRANSCO has estimated net interest after capitalisation at Rs. 5.97 Crore for FY 2004-05 and Rs. 27.80 Crore for FY 2005-06. During the Technical Session, the Commission directed TRANSCO to submit actual capitalisation of interest expense. However, TRANSCO has not submitted details of actual capitalisation as the Accounts have not been finalised.

3.7.2 Commission's Analysis

The Commission has analysed the interest expenses proposed by TRANSCO for both FY 2004-05 and FY 2005-06. For the purpose of determination of ARR, the Commission has admitted the interest on loans availed under the Plan Fund Assistance as these loans have been specifically utilised for funding capital expenditure.

As regards to the outstanding loan of Rs 270 Crore to the Holding Company in the books of TRANSCO in accordance with the provisions of Transfer Scheme, the Policy Direction stipulates as follows:

"The successor companies viz. GENCO, TRANSCO and the three Distribution Companies shall undertake to repay the loan payable to Holding Company mentioned in the relevant schedules of the Transfer Scheme, within thirteen years from the date of transfer with a waiver of interest and moratorium on principal repayment for the first four years. Thereafter the loan would carry an interest at the rate of 12% per annum and would be repaid in eighteen equal half yearly instalments"

The Commission is of the view that there is waiver on interest for the first four years from the date of transfer and hence no interest is payable by TRANSCO to Holding Company till July 2006. Therefore, the Commission has not considered any interest liability on this account while determining the interest expenses for FY 2005-06. Further, the Commission has examined that the total outstanding loan in the books of all the successor entities i.e. GENCO, TRANSCO and three DISCOMs is of the order of around Rs 1900 Crore. The Commission is of the opinion that in case while determining the ARR and sector revenue gap for FY 2006-07, the repayment and interest on this loan is to be considered as pass through in the ARR of the Utilities, the overall sector revenue gap will increase substantially, which in turn will result in tariff shock to the consumers. Thus, it will be difficult at any stage to service this outstanding loan in the books of all the successor companies of erstwhile DVB through the ARR. Therefore, the TRANSCO shall take up this matter of servicing of outstanding loan of Rs 270 Crore with the appropriate authority and make arrangements for servicing this loan without affecting the ARR of TRANSCO for the future years.

As regard to the loan of Rs 180 Crore availed from the Holding Company, the Commission, the Commission has not considered any interest expense on this loan as this loan has been taken by TRANSCO primarily for meeting the shortfall in revenue requirement. The Commission has considered the carrying cost on Regulatory Asset i.e. shortfall in meeting revenue requirement as approved by the Commission. The principles of carrying cost on Regulatory Asset has been elaborated in Section 4 of the Order..

For the purpose of determination of ARR, the Commission has considered actual interest expense of Rs. 14.76 Crore for FY 2004-05 for loans availed under Plan Fund Assistance. The Commission has considered interest expenses for FY 2005-06 based on the revised submission at the interest rate submitted by the Petitioner for the Plan Fund Assistance. The Commission has also assumed the drawal of fresh loans in the middle of the year for the purpose of projecting the interest liability of the Petitioner. The Commission has considered capitalisation of interest for FY 2004-05 at the capitalisation ratio proposed by TRANSCO. For FY 2005-06, the Commission has estimated capitalisation of interest considering the asset capitalisation over the period from FY 2002-03 to FY 2004-05.

The summary of the interest charges as proposed by the Petitioner and as approved by the Commission is provided in the Table 3.28 given below:

Table:3.28 Interest Expenditure (Rs. Crore)

Description	FY 2004-05		FY 2005-06	
	Petition	Commission's Approval	Petition	Commission's Approval
Transfer Scheme loan from GNCTD	-	-	-	-
Loan under Plan Fund Assistance from GNCTD	14.60	14.76	29.13	26.79
Loan from Holding Company	7.38	0.00	5.50	0.00
Interest Expenditure	21.98	14.76	34.63	26.79
Interest capitalised	16.01	9.49	6.83	9.70
Interest charged to revenue	5.97	5.27	27.80	17.09

3.8 Contingency Reserves

3.8.1 Petitioner's Submission

The Petitioner has proposed to contribute 0.25% of the opening balance of original cost of fixed assets as contingency reserves for FY 2004-05 and FY 2005-06 each.

3.8.2 Commission's Analysis

The Commission would like to bring to the notice of the Petitioner that the creation of contingency reserve was mandated in the Sixth Schedule to the Electricity (Supply) Act, 1948 as was in force before the repeal of the said Act by the EA 2003. The EA 2003, however, does not provide for the creation of contingency reserve. Therefore, in accordance with the EA 2003, the Commission does not feel the necessity to provide for this reserve. The Commission is not approving any expenses with respect to contingency reserve for FY 2005-06.

The Commission will deal with the treatment of contingency reserve created during the past after the issue of this Order and communicate its decision to the Petitioner.

The following Table 3.29 summarises the Contribution to Contingency Reserves as proposed by the Petitioner and as considered by the Commission for FY 2004-05 and FY 2005-06:

Table: 3.29 Contingency Reserves (Rs. Crore)

Component	FY 2004-05			FY 2005-06	
	Order for FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Contribution to Contingency Reserves	2	1.85	1.85	2.22	0.00

3.9 Taxes on Income

3.9.1 Petitioner's Submission

In the Petition, the Petitioner has not estimated any taxes on income and profit for FY 2004-05 and FY 2005-06. In the subsequent submissions, the Petitioner has submitted that the estimate of fringe benefit tax for FY 2005-06 is not available as the implication of the same are not clear.

3.9.2 Commission's Analysis

In line with the Petitioner's submission, the Commission has not considered taxes on income for FY 2004-05 and FY 2005-06. The Commission has not provided for Fringe Benefit Tax as the Commission is not in a position to assess the impact of Fringe Benefit Tax on the Petitioner. The same shall be considered at actuals on submission of documentary evidence at the time of truing up for FY 2005-06.

3.10 Return

3.10.1 Petitioner's Submission

The Petitioner has estimated the return based on the methodology adopted by the Commission in the ARR and Tariff Order for FY 2002-03 and FY 2003-04, and FY 2004-05 for TRANSCO dated June 26, 2003 and June 9, 2004, respectively. The returns has been estimated based on return on Capital Base in accordance with the Sixth Schedule of erstwhile Electricity Supply Act, 1948 @ 16% p.a. Based on this, the Petitioner has estimated return of Rs. 48.79 Crore and Rs. 46.49 Crore on a Capital Base of Rs. 290.55 Crore for FY 2004-05 and FY 2005-06, respectively.

3.10.2 Commission's Analysis

The Capital Base and Reasonable Return are estimated based on the revised Guidelines for Revenue & Tariff Filing (Guidelines) issued by the Commission on August 23, 2002 to accommodate the Policy Direction framework envisaged by the Government. The revised guidelines recognised the then applicable Sixth Schedule of the erstwhile 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). With the repeal of the Electricity Supply Act on promulgation of Electricity Act, 2003, the Sixth Schedule is no longer applicable. However, to ensure the consistency in approach for determination of ARR during the Reforms period, the Commission has decided to continue with the same methodology for estimating the Capital Base and Reasonable Return during balance of the Reforms Period as has been adopted for the period from FY 2002-03 to FY 2004-05.

The Commission has not considered the loan provided by the GNCTD for supporting the revenue gap as part of the Capital Base. The summary of Capital Base and Reasonable Return as estimated by the Petitioner and as estimated by the Commission is provided in Table 3.30 given below:

Table:3.30 Capital Base and Reasonable Return (Rs. Crore)

	FY 2004-05			FY 2005-06	
	Order	Petition	Commission's Approval	Petition	Commission's Approval
Original cost of fixed assets (excl consumer contribution)	791	888	756	986	842
Cost of intangible assets	0	0	0	0	0
Original cost of WIP	77	216	160	369	328
Compulsory investments	0	0	0	0	0
Amount of working capital as sum of:					
Average cost of stores	7	7	7	8	8
Average cash & bank balance	9	9	9	10	10
Sub- total	885	1120	933	1372	1187
Amount written off or set aside on account of depreciation of fixed / intangible assets	263	246	246	279	273
Amount of loan from State Govt	249	250	228	482	462
Loan from Holding Company	270	320	270	320	270
Debenture issues/commercial loan	5	0	0	0	0
Amounts deposited in cash with licensee by consumer by way of security	0	0	0	0	0
Sub-total	786	815	744	1081	1005
Net Capital Base	99	305	188	291	177
16% return on capital base	16	48.79	30.13	46.49	28.44
Return on borrowed funds	3		2.49		3.67
Total Reasonable Return	18	48.79	32.62	46.49	32.59

3.11 Total Expenditure

The Table 3.31 given below provides a summary view of the various expenses as proposed by the Petitioner and as approved by the Commission for FY 2004-05 and FY 2005-06. Detailed analysis of each expense head has already been provided in the above sections.

Table 3.31 Total Expenditure (Rs. Crore)

Description	FY 2004-05			FY 2005-06	
	Order FY 2004-05	Rev. Est. (Petition)	Commission's Approval	Petition	Commission's Approval
Power Purchase Expenses	4887	4,778	4482	5,569	4560
Employee expenses	43.10	39.82	38.59	43.81	39.82
A&G expenses	14.49	12.45	21.19	13.7	21.62
R&M expenses	16.82	13.41	13.62	19.75	14.17
Depreciation	26.67	27.73	27.73	33.31	28.22
Interest Expense	9.05	5.97	5.27	27.8	14.74
Carrying cost on trueing up		11	6.30	0	
Other Admissible expenses	7.55	18.43		23.41	
Total Expenditure	5005	4907	4593	5731	4679

Contribution to contingency reserves	2	1.85	1.85	2.22	0
Income Tax					
Net expenditure including special appropriations	5007	4909	4595	5733	4679

3.12 Non Tariff Income (NTI)

3.12.1 Petitioner's Submission

The TRANSCO, in its ARR and Tariff Petition for FY 2005-06, submitted that against an approved Non Tariff Income of Rs. 79.02 Crore for FY 2004-05, the revised estimates for FY 2004-05 is Rs. 86.05 Crore. The TRANSCO has estimated non tariff income for FY 2004-05 based on actuals for the first six months and projections for the balance six months. The Non Tariff Income comprises of the following heads:

- Interest on FDs, etc.
- Rental on Meters and other apparatus hired to consumers.
- Rebate from early payment of power purchase bills under one time settlement scheme.
- Reactive drawal by DISCOMs.

For FY 2005-06, the TRANSCO has projected a Non Tariff Income of Rs. 86.45 Crore.

3.12.2 Commission's Analysis

During the technical sessions, the Commission had directed the TRANSCO to submit the details of the actual Non Tariff Income for FY 2004-05. However, the TRANSCO has not provided the details of the Non Tariff income and has submitted that the actual details of Non Tariff income can be provided after finalisation of the accounts.

- For the purpose of approving the Non Tariff Income for FY 2004-05 and FY 2005-06, the Commission has considered the Non-Tariff Income as estimated by the Petitioner.

The Table 3.32 provides a summary of the Non-tariff Income, as proposed by the TRANSCO and as approved by the Commission.

Table:3.32 Non Tariff Income (Rs. Crore)

Particulars	FY 2004-05			FY 2005-06	
	Order	Petition	Commission's Approval	Petition	Commission's Approval
Total Non Tariff Income	79.02	86.05	86.05	86.45	86.45

3.13 Revenue Requirement

Based on the expenses, return and non-tariff income estimated in above sections, the total Revenue Requirement as given in the Petition and as estimated by the Commission is summarised in Table 3.33 given below:

Table : 3.33 Total Revenue Requirement (in Rs. Crore)

Description	FY 2004-05		FY 2005-06	
	Petition	Commission's Approval	Petition	Commission's Approval
Expenses	4909	4595	5733	4679
Return	49	32.62	48	32.59
Truing up for previous year	55	55		
Past DVB Arrears	210			
Amortisation of Regulatory Asset			100	
Less Non-Tariff Income	86	86	87	87
Revenue Requirement (A+B-C)	5137	4597	5794	4625

4. Tariff Philosophy

4.1 Background

The first Tariff Order issued by the Commission for the erstwhile DVB in 2001 was largely in line with the approach mentioned in the Concept Paper issued by the Commission in September 2000, which followed the provisions of the Electricity (Supply) Act, 1948. Subsequently, the DVB was restructured and unbundled into one Generation Company (GENCO), one Transmission Company (TRANSCO) and three Distribution Companies (DISCOMs). The GNCTD issued Policy Directions on November 22, 2001 in exercise of the powers conferred under Section 12 and other relevant Sections of the Delhi Electricity Reform Act, 2000 (DERA), to facilitate the process of privatisation of the unbundled distribution entities of DVB. The Policy Directions specified that the Distribution Licensees would earn a return of at least 16% on their paid up equity capital and free reserves, based on predetermined efficiency parameters for the five-year period from FY 2002-03 to FY 2006-07. Through the Policy Directions, the Commission was mandated to issue the Order on opening level of AT&C losses and the Bulk Supply Tariff payable by DISCOMs to TRANSCO before bidding for privatisation of distribution business.

The Commission issued the Order on Bulk Supply Tariff and the Opening Level of AT&C losses, on February 22, 2002. The GNCTD, issued another set of Policy Directions on May 31, 2002 in amendment to the Policy Directions issued on November 22, 2001, specifying (i) the trajectory of AT&C losses to be achieved by the DISCOMs as agreed during the bidding process towards privatisation of DISCOMs (Accepted Bid AT&C loss reduction target) over the five year Policy period, (ii) the loss reduction target specified by GNCTD for bidding process (minimum loss reduction target) and (iii) the treatment in tariff in case of underachievement or overachievement in actual AT&C losses with respect to Accepted Bid AT&C loss reduction target.

Subsequently, the Commission issued the revised "Guidelines for Revenue & Tariff Filing" (Guidelines) on August 23, 2002 to accommodate the framework established by the Policy Directions. The DISCOMs and the TRANSCO filed their ARR Petitions for FY 2002-03 (9 months) and FY 2003-04 during November and December 2002 in accordance with the revised Guidelines. The Commission after a detailed analysis of the Petitions and following due public process issued its Order on these Petitions, on June 26, 2003, considering the provisions of the Policy Directions and the tariff philosophy adopted by the Commission.

The DISCOMs, TRANSCO, GENCO and PPCL filed their ARR Petitions for FY 2004-05 during December 2003. The Commission after a detailed analysis of the Petitions and following due public process issued its Order on these Petitions, on June 9, 2004, considering the provisions of the Policy Directions and the tariff philosophy adopted by the Commission.

4.1.1 Elements of Policy Directions

There are four important elements in the Policy Directions issued by the GNCTD, which are relevant from the point of view of tariff philosophy. First, the retail tariffs across the three DISCOMs have to be uniform over the tenure of Policy Directions i.e. upto FY 2006-07. Second is the determination of a Differential BST payable to TRANSCO for power purchase by each DISCOM based on the paying capacity of the respective DISCOMs. Third is the aspect of Government Support for bridging gap of TRANSCO and lastly, the concept of AT&C loss and the treatment of over/under achievement in AT&C losses by the DISCOMs. All these aspects of Policy Directions have been explained in detail in the Commission's Orders dated June 26, 2003 and June 9, 2004.

The requirement of uniform retail tariff across the three DISCOMs in Delhi implies that the tariff for a particular category of consumer shall be uniform till the end of FY 2006-07, irrespective of geographical location of the consumer. This requires that the uniform retail tariff for all the DISCOMs have to be determined by considering the ARR of TRANSCO and all DISCOMs simultaneously, after providing a minimum of 16% return for each DISCOM. The determination of Bulk Supply Tariff has to be inter-linked with revenues through the retail tariff and individual parameters including AT&C losses of DISCOMs. Further, the other important aspect of Policy Directions is the support envisaged to be provided by GNCTD to TRANSCO to bridge the revenue gap of the TRANSCO and the Bulk Supply Tariff it receives from the DISCOMs. The provisions of the Policy Directions in this regard are as follows:

"The Government will make available to Transmission Company an amount of upto, approximately, Rs. 3450 Crore 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 Policy Directions laid down performance targets/efficiency level to be achieved by the Distribution Companies measured in terms of AT&C loss. Following the principles specified in the Policy Directions, the determination of AT&C loss involves estimation of three parameters, i.e., T&D loss, collection efficiency, and units realised. T&D loss is the difference between the units input to the DISCOM and units billed by the DISCOM, expressed in terms of ratio of energy input to the DISCOM. Collection efficiency is the ratio of the amount collected to the amount billed and units realised is the product of units billed and collection efficiency. AT&C loss is the difference between units input and units realised, expressed as a percentage of units input. In the Commission's Order issued on June 26, 2003, the Commission has explained in detail, the method of determination of AT&C losses. The Commission also discussed in detail, the impact of lag in the collection and billing and the results of the analysis showed that, although the AT&C loss for a particular month might be very high or low, the overall AT&C loss for the year follows a definite trend and has minimal variation. Hence, the Commission concluded that the impact of time lag is minimal and that it may

not be necessary to differentiate between the collection efficiency with time lag and without time lag.

4.1.2 Treatment of Over Achievement and Under Achievement of Efficiency Targets

The amendment to the Policy Directions issued by the Government on May 31, 2002, further elaborates the method of treatment of overachievement and underachievement over the period FY 2002-03 to FY 2006-07. The relevant provisions have been reproduced below:

"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 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 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/underachievement and appropriate adjustments shall be made for the net effect."

The Commission has already elaborated upon the treatment of over/under achievement as per the provision of Policy Directions in its Orders on ARR Petitions of DISCOMs for FY 2002-03 and FY 2003-04 issued on June 26 2003 and its Orders on ARR Petitions of DISCOMs for FY 2004-05 issued on June 9, 2004.

4.2 Treatment of Over/Under Achievement in AT&C Losses

The Commission while determining the ARR of DISCOMs for FY 2002-03 had considered the actual AT&C losses and AT&C loss reduction trajectory in Policy Direction framework. During FY 2002-03, two of the DISCOMs (NDPL and BYPL) under-achieved the AT&C loss reduction vis-à-vis their corresponding bid level targets. For these two DISCOMs, the Commission for computing the ARR for FY 2002-03 had considered the AT&C loss considering the bid level AT&C loss reduction target as per the provisions of Policy Directions. The third DISCOM (BRPL) over-achieved the AT&C loss reduction vis-à-vis its bid level target and hence the Commission had considered the actual AT&C loss while computing the ARR as per the provisions of Policy Directions in case of over-achievement in AT&C loss reduction as compared to bid level target.

For FY 2003-04, the Commission, had considered the closing AT&C loss level of FY 2002-03 based on the bid targets as the opening level for FY 2003-04 for two DISCOMs (NDPL and BYPL), due to under-achievement of AT&C loss reduction vis-à-vis the bid level target. For BRPL, the Commission had considered the opening level of AT&C loss for FY 2003-04 as the actual loss level at the end of FY 2002-03 due to company's over-achievement of AT&C loss reduction vis-à-vis the bid level target. This effectively implies that the over achievement in AT&C loss during one particular year had been considered for succeeding years.

Subsequent to the Commission's Order dated June 26, 2003, BRPL filed a Review Petition on the Order on ARR for FY 2002-03 and FY 2003-04 issued by the Commission, in which BRPL in addition to other issues had also raised an issue that as per the Policy Directions, the over achievement in AT&C loss reduction during one particular year cannot be considered for determining ARR and Tariffs for succeeding years.

As this was a matter of interpretation of Policy Directions and considering that this issue has substantial impact on the future ARR and Tariff Determination process, the Commission felt it appropriate to seek clarifications from GNCTD on the methodology to be followed for treatment of over-achievement in AT&C losses in any particular year for the future.

The Commission requested the GNCTD to provide clarification on the issue of treatment of under/over achievement vis-à-vis AT&C loss targets in the context of the interpretation of Para 2 of the Policy Directions notified on May 31, 2002, vide letter No. F.11 (42)/DERC/2003-04/3719 dated November 5, 2003. In response, the GNCTD, in its letter No. F11 (118)/2001-Power/Partfile/2336 dated December 26, 2003, had given its clarifications on the points raised by the Commission. In addition to explaining the treatment of under/over achievement of AT&C losses, the GNCTD had explained the proviso to Para 2 of the Policy Directions issued on May 31, 2002, on the question of cumulative effect of the AT&C loss achieved by the DISCOMs. The GNCTD in its letter stated that

"The proviso again has no effect on the annual AT & C loss reduction targets, but only related to the determination of additional revenue or shortfall in revenue on account of over-achievement or under-achievement of the loss reduction targets..... The intention of proviso was only to give the DISCOMs the benefit of certain financial adjustments in respect of financial consequences of underachievement or over achievement and has no effect on the AT & C loss reduction targets themselves. Indeed the idea of shifting the targets themselves would be contrary to the whole scheme of policy directives. Again, if the targets themselves were likely to shift upwards on over-achievement, it would not only imply serious disincentive for loss reduction, but might equally have led to demands for a corresponding revision in case of underachievement. It would not, therefore be consistent with the Policy Directions to shift the targets. "

The Government along with the letter providing clarification on this issue also attached the illustrative examples (hypothetical situations) of underachievement and overachievement in different years and how the cumulative net effect ought to be taken into account.

The Commission while estimating the ARR for FY 2004-05 duly considered the clarification on this issue of treatment of overachievement in a particular year.

In FY 2004-05 also, all the three DISCOMs overachieved vis-à-vis their cumulative AT&C loss reduction targets. In fact, NDPL has achieved AT&C loss level lower than the Minimum Bid level specified by the GNCTD. Accordingly, the provisions of the Policy Directions and the GNCTD's clarification have been applied to determine the extent of additional revenue to be retained by the DISCOM and that to be passed on to the consumers while determining the Annual Revenue Requirement of the Utilities. In case of BRPL and BYPL, as the over-achievement in AT&C loss reduction is less than the minimum level target, the entire additional revenue due to over-achievement has been considered as additional revenue for the purpose of ARR determination. In case of NDPL, as the over-achievement in AT&C loss reduction is more than the minimum level target the entire additional revenue as a result of AT&C loss reduction upto minimum level with respect to bid level and 50% of the additional revenue beyond minimum level has been considered as additional revenue for the purpose of ARR determination and balance 50% of the savings beyond minimum level has been approved to be retained by NDPL.

The extent of over-achievement achieved by DISCOMs during FY 2004-05 vis-à-vis AT&C loss reduction targets and the quantum of savings due to over-achievement of AT&C loss is given in Tables 4.1 to 4.3 below:

Table 4.1 : Over achievement by NDPL in AT&C Loss Reduction and quantum of savings (Rs Crore)

	Bid Level	Min Level	Actual
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A. AT&C Loss (%)	40.85%	37.10%	33.79%
B. Over/Under Achievement	7.06%	3.31%	
C. Energy Input (MU)	5549	5549	5549
D. Units Realised (MU)	3283	3491	3674
E. Average Rate (Rs.)	4.06	4.06	4.06
F. Amount Realised (Rs Cr)	1333.3 (X)	1417.8 (Y)	1492.3 (Z)
G. Total benefit on account of over achievement (Rs Cr) [Z-X]	159.1		
H. Benefit on account of overachievement beyond the minimum AT&C loss reduction level (Rs Cr) [Z-Y]	74.5		
I. Benefit on account of over achievement from minimum AT&C loss reduction level and bid level (Rs. Cr.) [G-H]	84.6		
J. Benefits to be shared with consumers (Rs Cr.) [H x 0.5 + I]	121.8		
K. Benefits to be retained by the DISCOM (Rs Cr) [H x 0.5]	37.25		

Table 4.2 : Over achievement by BRPL in AT&C Loss Reduction and quantum of savings (Rs Crore)

	Bid Level	Actual
A. AT&C Loss (%)	42.70%	40.64%
B. Over/Under Achievement	2.06%	
C. Energy Input (MU)	8405	8405
D. Units Realised (MU)	4816	4989
E. Average Rate (Rs.)	4.05	4.05
F. Amount Realised (Rs Cr)	1949.3 (X)	2020.3 (Y)
G. Total benefit on account of over achievement beyond the bid level (Rs Cr) [Y-X]	71	
H. Benefits to be shared with consumers	71	

Table 4.3 :Over achievement by BYPL in AT&C Loss Reduction and quantum of savings (Rs Crore)

	Bid Level	Actual
A. AT&C Loss (%)	50.70%	50.12%
B. Over/Under Achievement	0.59%	
C. Energy Input (MU)	5337.50	5337.50
D. Units Realised (MU)	2631	2662
E. Average Rate (Rs.)	3.91	3.91
F. Amount Realised (Rs Cr)	1029.7 (X)	1042 (Y)
G. Total benefit on account of over achievement beyond the bid level (Rs Cr) [Y-X]	12.3	
H. Benefits to be shared with consumers	12.3	

The total additional revenue of all three DISCOMs to be considered for the purpose of ARR determination works out to Rs 205 Crore. The treatment of additional revenue due to over-achievement of AT&C losses to be considered for the purpose of ARR determination has been discussed in Section **Error! Reference source not found.** i.e Efficiency Gains in FY 2004-05. Further, in line with the clarifications obtained from GNCTD, the Commission has also not considered overachievement in a particular year for determining the opening level of AT&C loss for the next year. For FY 2005-06, the Commission has considered the AT&C losses of each DISCOM based on the cumulative Bid Level AT&C loss reduction as specified in the Policy Direction till FY 2005-06.

4.3 'Truing up' Mechanism

While analysing the ARR Petitions filed by TRANSCO, DISCOMs and GENCO, the Commission has to rely on the information available at that point of time and also project the sales, expenses and revenues while determining the Annual Revenue Requirement. The Commission recognised the fact that at the end of the year, the actual sales, expenses and revenues can be different vis-à-vis the projections made by the Commission in its Order. The Commission has detailed its view in its earlier Orders that the licensees have to be compensated to the extent of variations, which are beyond their control, subject to prudence of the expenses, to ensure their financial viability. The Commission instituted a process of 'Truing up' at the end of the year, based on the actual expenses/revenues, considering the prudence of such variations over the approved levels. Further, the Commission clarified that while approving such expenses/revenues to be recovered in the future years, the holding costs of the same would also be allowed. The Commission in its Order dated June 9, 2004 on ARR and Tariff Petitions for FY 2004-05 have considered the carrying cost for truing up of expenses and revenue at a weighted average cost of funds considering debt: equity ratio of 70:30. The Commission has continued with the same principle and has allowed the carrying cost for truing up of expenses at a weighted average cost of funds considering debt:equity ratio of 70:30

The DISCOMs and TRANSCO in the ARR and Tariff Petition for FY 2005-06 have requested for truing up for FY 2004-05 based on the revised estimates and for FY 2003-04 and FY 2002-03 based on audited accounts.

The Commission would like to clarify that the truing up for any year will be taken up during the ARR and Tariff determination process of the ensuing year based on revised estimates or provisional accounts which will take into account the impact of major variations in each component of expenses and revenues. Further, to account for small variations arising out of difference in audited accounts with revised estimates or provisional accounts, the truing up will be taken in the year after

ensuing year. In no circumstances, the truing up for any year will be considered after two years i.e. the year after the ensuing year. This principle has been elaborated with example as follows:

The first truing up of expenses and revenue for FY 2004-05 based on revised estimates or provisional accounts has been taken up during the ARR and Tariff determination process of FY 2005-06 and the second truing up of expenses and revenue for FY 2004-05 based on audited accounts will be taken up during the ARR and Tariff determination process of FY 2006-07.

In line with the principles mentioned above, the Commission while determining the ARR for FY 2005-06 has considered the truing up of expenses and revenue for FY 2003-04 based on audited accounts and the truing up of expenses and revenue for FY 2004-05 based on the provisional accounts. The Commission has not considered for truing up of expenses and revenue for FY 2002-03 at this stage, as this has already been carried out in the Order for FY 2004-05.

The Commission has also considered the carrying cost on truing up amount considering a normative debt:equity ratio of 70:30. For the amount allowed as a truing up for FY 2003-04, the Commission has considered the carrying cost for two years and for the amount allowed as a truing up for FY 2004-05, the Commission has considered the carrying cost for one year.

4.4 Treatment of DVB Arrears

According to the provisions of the Transfer Scheme, the amount of DVB arrears realised by the DISCOM shall be shared between the Holding Company and DISCOM in the ratio of 80:20. The Commission in its previous Tariff Order dated June 26, 2003 has deliberated on this issue and the Commission's views on this issue as mentioned in Tariff Order dated June 26, 2003 are as follows:

"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 authorised to realise the receivables of the Holding Company in their respective area of supply. Upon realisation 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 realised against current billing and amounts realised 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 privatisation period. **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."**

The GNCTD reviewed the matter and issued a clarification through letter No.F.11(99)/2001-Power/531 dated March 31, 2004 that the original Transfer Scheme would remain as it is and the receivables against DVB arrears would be shared between the Holding Company and the DISCOMs in the ratio of 80:20 respectively.

The Commission felt that it would be equitable and fair if the revenue realised on account of recovery of arrears remain in the sector and as recommended in the Tariff Order dated June 26, 2003, are passed on to the Delhi Transco Limited, instead of the Holding Company. Accordingly, the Commission vide its letter dated April 25, 2004 again requested the Government to reconsider the matter in the interest of consumers of Delhi.

The GNCTD further replied on June 4, 2004 mentioning that the Government has reviewed the matter and the original Transfer Scheme would remain as it is and the receivables against DVB arrears would be shared between the Holding Company and the DISCOMs in the ratio of 80:20 respectively.

The Commission in its Order dated June 9, 2004 has opined as follows:

"The Commission is of the opinion that it will not be fair at all to pass on the burden of past receivables of the sector to consumers of Delhi as also this will warrant huge tariff shock to

consumers. The 80% of total receivables for three years i.e. FY 2002-03, FY 2003-04 and FY 2004-05 works out to around Rs. 300 Crore. In case these receivables are to be passed on to Holding Company instead of TRANSCO as envisaged in Commission's Order dated June 26, 2003, these receivables along with carrying cost on arrears of FY 2002-03 and FY 2003-04 has to be considered as expense in ARR, which will increase the Revenue Gap by around Rs. 330 Crore. To bridge this additional sector revenue gap of Rs. 330 Crore, the tariff increase required will be around 9%. It is not ending here and infact more and more past arrears will be collected by DISCOMs in future years and if these arrears will go out of the sector, this will lead to increase in tariffs in future. Considering these aspects, the Commission vide its letter dated June 7, 2004 again approached the Government so as to protect the consumers of Delhi from unwarranted tariff hike. Accordingly, the Commission while estimating the ARR and Revenue Gap for FY 2004-05 considered 80% of the collected arrears remaining within the sector as revenue to TRANSCO".

TRANSCO filed the Review Petition for review of the Order of the Commission dated June 9, 2004 (Order) passed on the Petitioner's Petition no. 1/2004 in respect of its Annual Revenue Requirement (ARR) and determination of Bulk Supply Tariff (BST) for the Financial Year 2004-05. The TRANSCO raised the issue of DVB arrears in the Review Petition filed on July 22, 2004.

Subsequently, the GNCTD further replied on August 12, 2004 mentioning that the Government has reviewed the matter and the original Transfer Scheme would remain as it is and the receivables against DVB arrears would be shared between the Holding Company and the DISCOMs in the ratio of 80:20 respectively.

The Commission on October 29, 2004 issued the Order on Review Petition filed by TRANSCO and the Commission in its Order on Review Petition had not admitted the issue of remittance of DVB Arrears to Holding Company instead of remittance to TRANSCO for review.

In the above backdrop, this issue has been further examined by the Commission in light of Policy Directions regarding treatment of efficiency gains with respect to over achievement and under achievement of AT&C loss reduction during the period FY 2002-03 to FY 2006-07. According to the arrangement as stipulated in the Policy Directions, the benefits of over-achievement by the DISCOMs in AT&C losses which is calculated by taking into account the past DVB arrears has to be passed on to consumers fully if the AT&C loss reduction is upto minimum level and if the AT&C loss level reduction is beyond the minimum level, revenue realised on account of AT&C loss reduction between the Minimum level and actual level has to be equally shared between the consumers and the Licensees. The additional revenue to be passed on to consumers due to over-achievement has to be taken into account for the purpose of determination of ARR for next year. In case, the DVB arrears are passed on to the Holding Company, the arrangement proposed for treatment of over achievement of efficiency targets in the Policy Direction is not implementable. Therefore, the Commission while estimating the ARR and Revenue Gap for FY 2005-06 has

considered 80% of the collected DVB arrears remaining within the sector as revenue to TRANSCO, in line with the practice followed in previous years

4.5 Regulatory Asset created in FY 04-05 Orders

The Commission in its Orders on ARR and Tariff Petitions for FY 2004-05 after deliberating all the options of bridging the revenue gap has created Regulatory Asset of Rs 696 Crore to bridge the entire revenue gap of Rs 696 Crore.

The Commission's philosophy on the creation of Regulatory Asset, the quantum of Regulatory Asset apportioned to TRANSCO and DISCOMs and its amortization have been elaborated in the Tariff Order for FY 2004-05 as under:

"Need for Regulatory Asset

The total consolidated revenue gap of all the utilities (TRANSCO and DISCOMs) during FY 2004-05 as estimated by the Commission works out to Rs. 1762 Crore which is 48% of revenue at existing tariffs. The committed support from the GNCTD for FY 2004-05 is Rs. 690 Crore. After considering this Government support, the net revenue gap of the utilities works out to Rs. 1072 Crore. As mentioned earlier, if the entire net revenue gap is to be bridged by increase in tariffs, the average tariff increase required would be to the extent of 30%.

Concept of Regulatory Asset:

Creation of a Regulatory Asset is a mechanism to carry forward a portion of the revenue requirement for a particular year that has not been included while designing the tariffs for that year. The amount equivalent to the Regulatory Assets is thus effectively removed from the revenue requirement for the year in question. Such a situation generally arises when the projected revenues are significantly lower than the revenue requirement and it is not feasible to recover the entire amount either through increase in tariffs or through other means such as Government subsidy during that year. In such situations, the Regulator may choose to create a Regulatory Asset equivalent to the uncovered expenses and allow the licensee to amortise the same over a period of time. The Regulatory Asset mechanism is resorted to mainly to avoid tariff shocks to the consumers in a given year, while at the same time allowing the utility to recover the costs in a reasonable manner so as to protect its interests as well as those of the consumers.

Generally, Regulatory Assets are amortised over a reasonably long period of time, say 3-7 years, so as to even out the sudden increase in tariff. It is also common that over the period of amortisation, financing cost of the outstanding Regulatory Asset and the funds required to retire the Regulatory Asset through amortisation is allowed by the Regulators. In such cases, the Revenue Requirement for the future years would include the amount towards amortisation of the Regulatory Assets as well

as the carrying cost of the Regulatory Assets. This allows spreading the impact of tariff increases over a period of time and thereby mitigates the possibility of a rapid and upward pressure on tariffs.

In view of the circumstances in the Delhi Power sector as explained in the above Sections, the Commission feels it is imperative to resort to the mechanism of Regulatory Assets in the interest of viability of the sector and also to ensure that the consumers are not subjected to an unusually high tariff increase after the last tariff increase effected in July 2003.

4.5.1.1 Estimated Regulatory Assets

Out of the total revenue gap, the revenue gap to be bridged from the increase in tariff as approved by the Commission works out to Rs. 376 Crore. The balance revenue gap of Rs. 696 Crore is proposed to be treated as a Regulatory Asset to be amortised in future years through various measures.

The Commission would like to highlight the fact that the total revenue gap estimated for FY 2004-05 is based on information submitted by the Petitioners and certain assumptions based on past trends. However, the actual revenue gap for the year might vary based on the actual performance during the year. Hence, the quantum of uncovered/excess Revenue Gap that will be permitted under truing up mechanism after prudence check, and the Regulatory Assets will also undergo a change after the truing up process for FY 2004-05.

4.5.1.2 Proposed Amortisation Mechanism for the Regulatory Asset

The Commission proposes to amortise the Regulatory Asset through a combination of several measures such as through the efficiency gains i.e. over-achievement in AT&C losses, and inclusion of certain component of Regulatory Asset in future years' ARR, (when the revenue gap for that particular year is not substantial) and any other appropriate measure..

The Commission while amortising the Regulatory Asset will also consider the carrying cost of the Regulatory Asset. The period of amortisation of the Regulatory Asset and the amount to be amortised each year is contingent upon several factors such as Revenue Gap approved by the Commission for the particular year including the ensuing year, actual AT&C loss reduction during the year, etc. The Commission is of the opinion that it would be ideal to amortise this Regulatory Asset fully within the Policy Direction Period i.e. by FY 2006-07. At this stage, it is difficult to define the quantum of amortisation in future years. However, in principle, while deciding the quantum of Regulatory Asset to be amortised, the Commission will consider the following:

- Actual AT&C loss reduction achieved by the DISCOMs
- AT&C loss reduction proposed by the DISCOMs.
- Actual Revenue Gap/Surplus for the previous year, if any, after Truing up

- Estimate of Revenue Gap for the sector during the ensuing year"

1.1.1.1 Apportionment of Regulatory Asset between the Utilities

The Commission apportioned Rs. 100 crore of the gap as a Regulatory Asset to the TRANSCO, considering the potential and scope for efficiency improvement in terms of efficient operation under the ABT regime and tariff increase in future years for TRANSCO. The Commission evaluated various parameters for the apportionment of the balance gap of Rs. 596 crore between the DISCOMs, viz. revenue of each DISCOM, energy purchase by the DISCOM, power purchase cost of the DISCOM, and revenue gap of the DISCOM. The Commission also studied the proportion of apportionment of the Regulatory asset to the various DISCOMs for each of the parameters as the basis of apportionment. Based on the analysis, the Commission apportioned the balance gap of Rs. 596 Crore as Regulatory Asset in proportion to Revenue of each of the DISCOM, as given in the Table below: The following Table 4.4 details the apportionment of the Regulatory Asset and the quantum of Regulatory apportioned to TRANSCO and DISCOMs.

Table 4.4: Apportionment of the Regulatory Asset in FY 2004-05 Order :

Sr. No.	Company	Regulatory Asset Apportionment Ratio amongst DISCOM (%)	Regulatory Asset Apportionment Ratio amongst all players (%)	Regulatory Asset (Rs. Crore)
1	BRPL	44.7%	38.3%	267
2	BYPL	23.1%	19.8%	138
3	NDPL	32.2%	27.6%	192
4	Subtotal DISCOMs	100%	85.6%	596
5	TRANSCO		14.4%	100
6	Total		100%	696

4.6 Impact of Truing up for FY 2004-05

While determining the quantum of Regulatory Asset for FY 2004-05, the Commission had specified that the actual revenue gap for the year might vary based on the actual performance during the year and hence, the Regulatory Asset would also undergo change after the truing up process for FY 2004-05.

The truing up for FY 2004-05 based on the actual expenditure and after prudence check by the Commission has revealed that the actual gap between revenue and revenue requirement is lesser than that estimated by the Commission at the time of the Tariff Order for FY 2004-05. The revised revenue gap for FY 2004-05 as estimated by the Petitioner and as approved by the Commission in this Order is given in Table 4.5 below:

Table 4.5 : Revised Revenue Gap for FY 2004-05 based on truing up

	2004-05	
	Petition	Commission
NDPL	309	207
BRPL	325	221
BYPL	139	120
DTL	141	0
Total	914	548

As the total sector revenue gap for FY 2004-05 based on truing up of expenses and revenue of Utilities has reduced as compared to the quantum of Regulatory Asset created for FY 2004-05, the quantum of Regulatory Asset required to be created for FY 2004-05 has also reduced from Rs. 696 crore to Rs. 548 Crore.

The Commission has consequently restated the quantum of Regulatory Asset for FY 2004-05 in accordance with the philosophy stated in the Tariff Order for FY 2004-05, as Rs. 548 Crore based on the actual revenue gap of the Utilities. The quantum of Regulatory Asset created in the Orders dated June 9, 2004 on ARR and Tariff Petitions for FY 2004-05 and revised Regulatory Asset for FY 2004-05 based on truing up has been shown in the Table 4.6 below:

Table 4.6 : Quantum of Revised Regulatory Asset (Rs Crore):

	Regulatory Asset Created in FY 04-05 Order (Rs Crore)	Revised Regulatory Asset (Rs Crore)
DTL	100	0
NDPL	192	207
BRPL	266	221
BYPL	138	120
	696	548

4.7 Sector Revenue Gap for FY 2005-06

The total sector revenue gap estimated by the Commission for FY 2005-06 is Rs. 458 Crore excluding the Government Support. The details of the revenue gap as estimated by the Petitioners for FY 2005-06 and the revenue gap as approved by the Commission is provided in Table 4.7 below:

Table 4.7: Proposed and Approved Revenue Gap for FY 2004-05 and FY 2005-06 (Rs Crore)

	2005-06	
	Petition	Commission
NDPL	244	101
BRPL	260	31
BYPL	129	-30
DTL	1442	356
Total	2075	458
Govt Support*	138	138
Transco Rev Gap after Support	1304	218
Net Revenue Gap	1937	320

As already discussed earlier, while issuing the Policy Directions, the GNCTD has committed to provide Rs. 3450 Crore during the period FY 2002-03 to FY 2006-07 as a loan to TRANSCO, which is to be used to bridge the gap between its revenue requirement and the bulk supply price that it receives from the Distribution Licensees. The Table 4.8 below shows the committed level of Government support for the period FY 2002-03 to FY 2006-07, as given in the Financial Restructuring Plan approved by the GNCTD.

Table 4.8: Committed GNCTD Support

(Rs. Crore)

Year	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	Total
GNCTD Support	1364	1260	690	138	0	3452 (say 3450)

The Commission in its Order on ARR for FY 2002-03, FY 2003-04 and FY 2004-05 has taken into consideration the Government Support available to TRANSCO for respective years while estimating the sector revenue gap and for setting the tariffs for FY 2004-05. For FY 2005-06 the extent of Government support available to TRANSCO to bridge the revenue gap is Rs. 138 Crore. Considering this, the net revenue gap for FY 2005-06 works out to Rs. 320 Crore.

4.8 Consolidated Sector Revenue Gap for FY 2004-05 and FY 2005-06

The total consolidated sector revenue gap for FY 2004-05 based on truing up and FY 2005-06 as approved by the Commission works out to **Rs 1006 Crore** including the Revised Regulatory Asset of Rs 548 Crore and excluding the Govt. support of Rs. 138 Crore. .

4.9 Efficiency Gains in FY 2004-05 and its treatment

As anticipated and assumed by the Commission in its Order dated June 9, 2004, the DISCOMs have made significant efficiency improvement in FY 2004-05, with the most notable achievement being made by NDPL which has exceeded the AT&C loss targets specified in the Minimum Bid

criteria by the GNCTD. The over-achievement in AT&C loss reduction achieved by each DISCOM and the extent of additional revenue to be considered while ARR determination has been discussed in Section 4.1.2.

As discussed in Section 4.5.1.2, the Commission in its Order dated June 9, 2004 on ARR and Tariff Petitions of FY 2004-05 has opined that the Commission will utilise the efficiency gains for amortising the Regulatory Asset. The Commission has considered the benefits of the efficiency gains to be passed on to consumers for amortising the Regulatory Asset of the respective DISCOM in view of the fact that no transition support by way of Government Loan is available to TRANSCO in FY 2006-07 from the total support of Rs 3450 Crore during the Policy Direction Period. If the efficiency gains achieved during FY 2004-05 are not utilised for amortising the Regulatory Asset while determining the ARR and Revenue Gap for FY 2005-06, the revenue gap during FY 2006-07 including the amortisation of entire Regulatory Asset may increase to unmanageable proportions. Further, the issue of creation of Regulatory Asset is sub-judice in Hon'ble Delhi High Court, where the Commission has taken a stand that it is preferable to amortise the Regulatory Asset created during FY 2004-05 during the tenure of Policy Direction Period i.e. FY 2006-07.

Considering the above aspects, the Commission adjusted the efficiency gains achieved by each DISCOM against the revenue requirement of each DISCOM, by amortizing the Regulatory Asset of each DISCOM to the extent of additional revenue as a result of over-achievement to be considered for ARR determination purpose.

The Regulatory Assets amortized against efficiency gains for each DISCOM and TRANSCO, and the balance Regulatory Asset to be amortized in future years is given in the Table 4.9:

Table 4.9 : Amortisation of Regulatory Asset and Balance Regulatory Asset (Rs Crore)

	DTL	NDPL	BRPL	BYPL	Total
Revised Reg. Asset	0	207	221	120	548
Amortisation of Reg. Asset	0	122	71	12.2	205
Balance Regulatory Asset	0	85	150	108	343

The balance Regulatory Asset after amortising the Regulatory Asset of Rs 205 Crore through the efficiency gains works out to Rs 343 Crore. Amortization of balance regulatory asset of Rs. 343 Crore will be considered in the following years.

As regards to the carrying cost on Regulatory Asset, the Commission is of the opinion that the savings from efficiency gains have been made by the Utilities during the course of the entire year i.e. FY 2004-05 which have been considered for amortising the Regulatory Asset. Therefore, the Commission has allowed the carrying cost for FY 2004-05 on the balance unamortised Regulatory Asset considering the normative debt:equity ratio of 70:30.

Further, the Commission has also considered the carrying cost on balance Regulatory Asset for FY 2005-06 considering the normative debt:equity ratio. The carrying cost on balance Regulatory Asset for FY 2005-06 shall be trued up at the end of the year after taking into account the amortisation of Regulatory Asset during FY 2005-06.

4.10 Measures to Bridge the Revenue Gap

While issuing the Tariff Order for FY 2004-05, considering the quantum of revenue gap the Commission had explored various options to bridge the revenue gap and the options examined by the Commission were:

Option I: Increase in Retail Supply Tariffs:

The increase in the revenue requirement determined after prudent regulatory process has to be met through increase in tariffs, as the user charges need to reflect the cost of operations. However, considering the quantum of revenue gap, substantial increase in tariff in the range of around 30% would have been necessary during FY 2004-05 if the entire revenue gap was to be met through revision in tariffs. This would have resulted in a severe tariff shock to consumers.

Option II: Efficiency Improvements

The other option was to assess the expected efficiency improvements and its financial benefits to bridge the revenue gap to certain extent.

Option III : Creation of Regulatory Asset:

This involved deferring the recovery of the revenue gap and staggering it over a longer period, through creation of a Regulatory Asset, to avoid tariff shock to the consumers in the current year.

The details of the above Options and the Commission's approach in FY 2004-05 are detailed in the Commission's Orders dated June 9, 2004.

The Commission has considered these three options as well as other options for bridging the total consolidated revenue gap of Rs 663 Crore FY 2004-05 and FY 2005-06 as approved by the Commission for FY 2005-06 including unmet gap i.e balance regulatory asset of FY 2004-05.

4.10.1 Option I: Increase in Retail Tariff

The Commission is of the opinion that the burden on the consumers should be minimised to the extent possible and licensees should operate at efficient levels to bridge the revenue gap. As discussed earlier, the total sectoral revenue gap including unmet revenue gap FY 2004-05 (i.e. balance Regulatory Asset) works out to Rs 663 Crore.

At the time of restructuring and privatisation, the GNCTD had initially committed a support of Rs. 2600 Crore for the period of five years FY 2002-03 to FY 2006-07. Accordingly, while issuing the Bulk Supply Tariff Order in February 2002, the Commission considered the Government support to the extent of Rs. 2600 Crore. The Commission in its BST Order with regard to quantum of Government Support to bridge the revenue gap had mentioned as follows:

"The Commission has taken note of the position of the Govt. of NCT of Delhi regarding the issue envisaging turnaround of the Distribution Companies and the viability of the Transmission Company well within five years, enabling TRANSCO to meet the loan liability and at the same time resulting no tariff shocks to the consumers. The Commission is not aware of the assumptions made by the Government to arrive at Rs. 2600 Crore in terms of loss reduction trajectory envisaged and the level of tariff increases. However, the accumulated revenue gap for TRANSCO could be higher or lower than the amount estimated by the Government depending upon the level and structure of future retail tariffs and the committed loss reductions. At this point, the Commission opines that any shortfall in the revenue gap, if any, of TRANSCO during the term of five years over and above Rs. 2600 Crore would have to be bridged in the form of Government support, sector efficiency improvements, any other suitable mechanism or a combination of all of the above, to be decided by the Commission at the appropriate stage."

Subsequently, the Government enhanced the support during the five year period from Rs. 2600 Crore to Rs. 3450 Crore based on assumptions about key parameters which were not provided to the Commission at the time of issuance of amendment to the Policy Directions.

Subsequently, the GNCTD provided the copy of Financial Restructuring Plan prepared at the time of privatisation upon a specific request from the Commission during the processing of the ARR and Tariff Petitions for FY 2002-03 and FY 2003-04.

It may be noted that the Financial Restructuring Plan prepared by GNCTD at the time of privatisation, has assumed an average tariff increases for the period FY 2002-03 to FY 2006-07 as given in the Table 4.10 below:

Table 4.10: Tariff Increases Projected in the Financial Restructuring Plan
(%)

Year	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Projected Tariff Increase	10%	10%	10%	5%	3%

The Commission would like to highlight that the tariff increase projected in the Financial Restructuring Plan and the estimated Government Support were based on broad assumptions for the period FY 2002-03 to FY 2006-07 with respect to increase in sales, consumption mix, loss reduction trajectory, capital investment programme, operational expenses, etc.

The Commission while determining the ARR on year-to-year basis has to consider the actual revenue and expenses, operational parameters and loss reduction of the previous and current year and estimate of the ARR parameters based on the recent trends for the ensuing year. The extent of tariff increase approved by the Commission in its previous Orders after the restructuring of erstwhile DVB and privatisation of DISCOMs is discussed in following sections.

4.10.1.1 Tariff Increase during FY 2002-03 and FY 2003-04

Based on the estimation of ARR for the Transmission Company and Distribution Companies for FY 2002-03 and FY 2003-04, the Commission estimated the Sector Revenue Gap of Rs. 87 Crore for the two years after considering the Government Support of Rs. 1364 Crore and Rs. 1260 Crore for FY 2002-03 and FY 2003-04, respectively. To bridge this estimated revenue gap of Rs. 87 Crore and to compensate for the loss in revenue due to the rationalisation measures undertaken, the Commission increased the tariff by 5.01% for FY 2003-04. Thus, against the cumulative 21% average tariff increase assumed in the Financial Restructuring Plan for FY 2002-03 and FY 2003-04, the increase in tariffs required to bridge the revenue gap based on actual assessment for FY 2002-03 and estimations for FY 2003-04 was only about 5%.

4.10.1.2 Tariff Increase during FY 2004-05

As discussed in the previous Order, the Government Support during FY 2004-05 reduced to Rs. 690 Crore as compared to the amount of Rs. 1260 Crore during FY 2003-04. The reduction in Government Support during FY 2004-05 coupled with other factors resulted in substantial revenue gap at the existing bulk and retail supply tariffs during FY 2004-05, estimated at Rs. 1072 Crore. The tariff increase required to meet the entire estimated gap in FY 2004-05 was around 30%, which was very high and would have resulted in a severe tariff shock to the consumers. Considering all the aspects, the Commission decided to peg the average tariff increase for FY 2004-05 at 10%. The estimated increase in revenue on account of the tariff revision approved by the Commission was Rs. 376 Crore out of the total unbridged revenue gap of Rs. 1072 Crore. For bridging the balance revenue gap of Rs. 696 Crore, the Commission after exploring other options such as efficiency improvements and creation of Regulatory Asset, created Regulatory Asset of Rs 696 Crore which has already been discussed in Section 4.5.1.1 above.

Thus, the cumulative tariff increase from FY 2002-03 to FY 2004-05 has been only 15.55% as against 33% envisaged in the Financial Restructuring Plan.

As discussed earlier, the Government Support during FY 2005-06 is Rs 138 Crore as compared to the amount of Rs. 690 Crore, Rs. 1260 Crore and Rs 1364 during FY 2004-05, FY 2003-04 and FY 2002-3, respectively. The reduction in Government Support during FY 2005-06 coupled with other factors has resulted in substantial revenue gap at the existing bulk and retail supply tariffs during FY 2005-06, estimated at Rs. 663 Crore (including balance regulatory asset) even though the performance

of the DISCOMs have improved as compared the previous years. The average tariff increase required to meet the entire estimated gap works out to around 13.60%, which appears to be on higher side and would result in a severe tariff shock to the consumers.

The Commission after exploring the other options of bridging the revenue gap as discussed in subsequent sections has deliberated on the tariff increase approved for FY 2005-06.

4.10.2 Option II: Efficiency Improvements and Regulatory Asset

In this regard, the Commission in its Tariff Order for FY 2004-05 has opined as follows:

"The Commission has also explored the option of bridging the revenue gap through efficiency improvements. The Commission strongly feels that during the ensuing year FY 2004-05, there is a good chance for substantial overachievement in reducing AT&C losses and the improvement in efficiencies in terms of over achievement in AT&C loss reduction can bridge the estimated revenue gap to some extent. However, as elaborated in earlier Sections, in accordance with the Policy Directions, the Commission is bound to consider Accepted Bid Level AT&C loss reduction target while determining the ARR and setting the tariffs for the ensuing year 2004-05. Therefore, for the said purposes, it is not appropriate to consider efficiency improvements during the ensuing year in terms of over achievement in AT&C loss reduction for bridging the revenue gap.

4.10.2.1 Importance of over achievement of Efficiency Gains

The Commission wishes to highlight the importance of efficiency gains in achieving the goals set out in the reform process. This requires improvements in the functioning of the licensee to over - achieve the performance targets set out in the Policy Directions. The investments made towards system improvement as a part of APDRP including the metering programme and improvements in billing and collection have resulted in some improvement. The significant investments planned under the APDRP scheme, along with other capital and R&M investments approved for FY 2003-04 and FY 2004-05, were not envisaged at the time of bidding. These include 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, and part outsourcing of metering and billing proposed during the two years. The Commission, therefore, expects that the higher investments during the initial years should lead to a far more aggressive AT&C loss reduction trajectory as compared to the committed loss reduction trajectory.

Based on the submissions by the DISCOMs, the actual AT&C losses reduction achieved by all three DISCOMs in FY 2003-04 was higher than the bid levels for FY 2003-04. Thus the trend of over achievement in AT&C loss reduction target has commenced from FY 2003-04, even when the investments made by two DISCOMs were substantially lower than the investment plan approved by the Commission in its Order of June 26, 2003. While appreciating the efforts put in by the licensees, the Commission expects that this tempo will be continued with added vigour in the

coming years and the licensees will strive to surpass the efficiency targets set out in the GNCTD's Policy Directions. The extent of investments proposed by DISCOMs has been discussed in earlier Section. Considering the achievement made in FY 2003-04 and the proposed investment programme, the Commission is optimistic in this regard, and is of the opinion that there will be substantial over achievement in reduction in AT&C loss levels over the bid and minimum levels. A one-percentage point reduction in AT&C losses in the Delhi power sector is expected to result in additional surplus of Rs. 90 Crore in the system at the current level of sales and tariffs. The AT&C loss reduction targets as per the Accepted Bids and Minimum Bid levels stipulated in GNCTD's Policy Directions for FY 2004-05 is about 4% and 4.5 % respectively for the sector.

As per the Policy Directions, the revenues on account of over achievement and under achievement has to be shared between consumers in the form of tariff reduction and DISCOMs based on cumulative underachievement and overachievement in lines with the principles of Policy Directions. Considering the cumulative AT&C loss reduction target for two years FY 2002-03 and FY 2003-04, two DISCOMs i.e. NDPL and BRPL have already over-achieved the AT&C loss reduction and hence the benefit of overachievement in future years will be available in the form of lower ARR from FY 2004-05 onwards. However, in case of BYPL, over achievement in FY 2003-04 does not completely compensate BYPL for under achievement of FY 2002-03. Hence, the over achievement in AT&C loss reduction in future years in BYPL has to first set off against the cumulative under achievement till the end of FY 2003-04. Once the revenue from over achievement is set off against the cumulative underachievement till FY 2003-04, the benefits of over achievement in BYPL will also start flowing in the ARR. By following the mechanism of treatment of overachievement of AT&C loss targets as per the Policy Directions, over achievement of 0.5% in FY 2004-05 will lead to a reduction of around Rs. 30 Crore of revenue requirement of the Sector, as this portion is completely passed on to the consumers. In case the overachievement is higher than 0.5%, the incentive will be shared between the consumers and the licensees, which will again effectively lead to a reduction in ARR of the licensees. However, in the case of years 2005-06 and 2006-07, as the bid level loss reduction targets are higher than the minimum loss reduction target, the entire benefit of over achievement will be shared between the consumers and the licensees. For example 1% improvement in the loss levels over the bid level, will generate additional revenue of Rs. 90 Crore per annum, estimated at current level of tariff and sales. This additional revenue will be shared equally between the consumers and licensee (i.e. Rs. 45 Crore each). This feature highly incentivises the licensees to over achieve and exceed the loss reduction targets.

The Commission further opines that for the success of reform and restructuring and to achieve the viability of the Sector by FY 2006-07, it is essential to exceed the AT&C loss reduction targets as compared to minimum AT&C loss reduction targets stipulated in the Policy Directions."

Considering the extent of planned investments and over-achievement in AT&C loss reduction achieved by three DISCOMs during FY 2004-05, the Commission is of the opinion that there is an

ample potential for over-achievement in substantial AT&C loss reduction during the next two financial years i.e. FY 2005-06 and FY 2006-07. Hence, the balance Regulatory Asset of Rs 343 Crore can be amortised through efficiency gains and other measures during FY 2005-06 and FY 2006-07. Therefore, the Commission has retained the balance regulatory asset as determined in Section 4.9 to be amortised in future years.

The Commission reiterates that the balance Regulatory Asset of Rs 343 Crore is to be amortised in future years through a combination of several measures such as through the efficiency gains i.e. over-achievement in AT&C losses, and inclusion of certain component of Regulatory Asset in future years' ARR, (when the revenue gap for that particular year is not substantial). The Commission further opines that as the determination of tariffs till FY 2006-07 is bound by the Policy Directions issued by GNCTD and hence the matters such as Regulatory Asset, created in order to avoid a severe tariff shock to the consumers during the Policy Direction period, would have to be amortised during the tenure of the Policy Directions i.e. by 2006-07.

4.11 Balance revenue gap to be met through tariff increase

The balance revenue gap for each DISCOM and TRANSCO after adjusting for the trued up Regulatory Asset and amortizing of partial Regulatory Asset through efficiency gains, has to be met through increase in tariffs. This effectively means that the Revenue Gap for FY 2004-05 based on truing up has been dealt with the mechanism of Regulatory Asset and Efficiency gains as discussed in above sections and the revenue gap of Rs 320 Crore for FY 2005-06 is to be met through increase in tariffs. The average tariff increase required to meet the uncovered revenue gap of Rs 320 Crore works out to around 6.6%. Further, in line with the principle of reduction in cross subsidy as per EA, 2003 the tariffs of all the categories cannot be increased by an average tariff increase of 6.6 % required to bridge the revenue gap. Thus the tariffs for subsidised category are to be increased in higher proportion and for subsidising categories the tariff increase needs to be limited to account for increase in average power purchase cost and escalation. By applying these principles, if the tariff increase for subsidising categories i.e. Non-Domestic and Industrial is limited to around 4-5%, the average tariff increase required for Domestic Category to meet the entire revenue gap works out to around 10% which appears to be reasonable considering the current level of cross subsidy and the ratio of average realisation to average cost of supply.

The Commission had approached the GNCTD to ascertain whether the GNCTD intends to provide any subsidy under section 65 of the Electricity Act, 2003 to specific consumer categories to minimise the tariff impact for those categories. The Commission in its letter asked GNCTD to provide information to the Commission, whether the GNCTD is considering grant of any subsidy to any consumers or class of consumers in the tariff to be determined by the Commission for FY 2005-06 and if so, specify the quantum of subsidy.

With reference to Commission's letter, the GNCTD vide its letter dated July 6, 2005 has communicated as follows:

"It has been decided that Government shall not be extending any subsidy under Section 65 of the Electricity Act, 2003 at present".

Considering the above aspects, the Commission has increased the retail supply tariffs to meet the uncovered revenue gap of Rs 320 Crore which results in an average tariff increase of around 6.6%.

4.12 Revenue Gap at Existing Tariffs

For FY 2004-05, the Commission has considered the actual revenue of TRANSCO. For FY 2005-06, the Commission has estimated the total revenue of TRANSCO based on the existing bulk supply tariff for Sale to DISCOMs and existing tariff applicable to NDMC and MES. Further as discussed in earlier section, the Commission has also considered the 80% of the DVB arrears as revenue to TRANSCO. Considering the total estimated revenue requirement, revenue at existing tariffs, Government Support available and 80% of the DVB arrears as revenue to TRANSCO, the estimated Revenue Gap for FY 2005-06 is given in Table 4.11

Table : 4.11 Revenue Gap of TRANSCO at existing Tariffs (in Rs. Crore)

Description	FY 2004-05		FY 2005-06	
	Petition	Commission's Approval	Petition	Commission's Approval
Net Revenue Requirement (A)	5137	4597	5794	4625
Revenue at Existing Tariffs (B)	4003	3907	4352	4150
Assistance from Government (C)	690	690	138	138
DVB Arrears C(D)	0	0	0	119
Regulatory Asset (E)	100	0	0	0
Revenue Gap				
Revenue Gap (A-B-C-D-E)	344	0	1304	218

4.13 Bulk Supply Tariff Determination for FY 2005-06

4.13.1 Bulk Supply Tariff Determination

The paying capacity of each DISCOM in FY 06 (amount available for power purchase) has been estimated based on the projected Revenue Realisation at the approved tariffs for the FY 2005-06 and the Revenue Requirement excluding power purchase cost. The Bulk Supply Tariff for each DISCOM has been computed based on the total amount available for power purchase and the total units input to the respective DISCOM.

Based on the revenues projected at approved tariff, apportioned regulatory asset, estimated total revenue requirement of each DISCOM excluding power purchase cost and the estimated total units input to each DISCOM, the Bulk Supply Tariff for each DISCOM has been computed and is shown in Table 4.12 below:

Table 4.12 Bulk Supply Tariff for FY 2005-06

Particular	NDPL	BRPL	BYPL
ARR of DISCOMs– Excluding Power Purchase Cost (Rs Crore)	415	468	308
Revenues at Proposed Tariff (Rs Crore)	1677	2469	1263
Electricity Duty (Rs Crore)	69	98	51
Net Revenue Available (Rs Crore)	1609	2371	1212
Amount Available for Power Purchase (Rs Crore)	1194	1903	904
Unit Inputs to DISCOMs(MU)	5655	8609	5106
Bulk Supply Tariff (Paise/kWh)	211.21	221.01	177.04

4.13.2 NDMC and MES Tariff

The existing BST of Rs. 2.57 per kVAh for NDMC and MES is based on the Order issued by the Commission on May 31, 2002. The Commission had asked the erstwhile DVB to identify the 33 kV feeders supplying power to NDMC and MES and submit the details to the Commission, through its letter dated November 11, 2001 to Govt. of NCT of Delhi. This would have enabled the Commission to assess the losses and the wheeling charges applicable for the NDMC and MES. Requisite details are not available with the Commission. Further, NDMC have not even responded to the various Petitions filed with the Commission for FY 2005-06. NDMC has submitted the ARR and Tariff Petition for FY 2005-06 and the Commission is separately processing the same. The Commission is of the opinion that in such a situation, it would not be proper to either increase or decrease the tariffs applicable for NDMC and MES, and has hence retained the existing tariffs for NDMC and MES at Rs. 2.57 per kVAh in this Order.

4.13.3 Revenue Requirement and Revenue

The TRANSCO's revenue requirement and revenue for FY 2005-06 as determined by the Commission is summarised in Table 4.13.

Table 4.13 Revenue Requirement and Revenue of TRANSCO for FY 2005-06 (Rs Crore)

Particular	FY 2005-06
Net Revenue Requirement	4625
Revenues	
Govt Support	138
DVB Arrears (for FY 2004-05 and FY 2005-06)	119
NDPL	1194
BRPL	1903
BYPL	904
NDMC and MES	367
Total	4625

5. Directives

5.1 Introduction

In the Orders on the ARR and Tariff Petition for FY 2004-05 dated June 9, 2004, the Commission had issued a number of directives to the Utilities in Delhi with the objective of attaining operational efficiency and streamlining the flow of information, which would be beneficial for the Sector both in short and long term. These directives aimed at creating an enabling environment for the Utilities to provide good quality of electricity supply and service to the consumers of Delhi at optimum costs. The Commission derives powers to issue such directives under the Delhi Electricity Reform Act 2000 (DERA), which mandates the Commission to promote competition, efficiency and economy in the activities of the electricity industry. DERA also 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. In the issuance of directives, the Commission is also guided by Section 61 of EA 2003 which mentions that the Commission shall be guided by the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments in specifying the terms and conditions of determination of tariff.

This section discusses the compliance status of all directions given by the Commission to the Petitioner in the Order on ARR and Tariff Petition for FY 2004-05 dated June 9, 2004.

5.2 Investments and Monitoring of investments

The Commission had directed the Petitioner to submit the complete DPR along with cost-benefit analysis for schemes more than Rs. 5 Crore for obtaining the scheme-wise investment approval from the Commission as per the terms and conditions of the License for Transmission and Bulk Supply of Electricity within a month from the date of the issue of this Order. The Commission had also directed the Petitioner to submit a separate Petition for approval of schemes for FY 2005-06, by September 2004.

The Petitioner has submitted that it is complying with the Commission's directives.

The Commission observes that the Petitioner had submitted the scheme wise proposed outlay under Annual Plan for 2005-06 for the appraisal of the Commission on October 21, 2004 vide letter No. GM (Comml)/203/F-1/257. In this submission, the Petitioner had also submitted the scheme wise revised outlay for Annual Plan 2004-05. Further, the Petitioner had highlighted the revised physical targets for Annual Plan 2004-05.

The Petitioner, during the months December 2004 to February 2005, submitted few schemes to the Commission for approval. The Commission observed certain discrepancies and vide its letter dated

February 25, 2005 returned all the schemes with a direction to submit consolidated Project Report of the Schemes. The Petitioner vide its letter dated April 20, 2005 have submitted the DPR of the schemes and the same are being analysed in the Commission.

The Commission directs the Petitioner to submit the complete DPR along with cost-benefit analysis for all the schemes more than Rs. 2 Crore on which the capital expenditure has been incurred during FY 2004-05 which were not approved by the Commission earlier and the schemes proposed during FY 2005-06 for obtaining the scheme-wise investment approval from the Commission within a month from the date of the issue of this Order. The Petitioner should also obtain the approval from the Commission for individual schemes less than Rs. 2 Crore but consolidating to Rs. 20 Crore. The Commission further directs that the Petitioner should submit the complete details of the investments proposed during FY 2006-07 for approval of schemes, by September 2005, after which the Commission will not entertain any request for approval of capital expenditure for any new scheme not covered by the schemes submitted upto September 2005, except in emergency cases which shall be decided by the Commission on the basis of merits of each case.

The Commission had also directed the Petitioner to form a Steering Committee, with one member as Commission's Representative, within 7 days of the date of issue of this Order. The Commission had specified that the Steering Committee would be responsible for developing an integrated and consolidated implementation plan and monitoring thereof. The Commission had also directed the Petitioner to submit the consolidated plan within 15 days of the date of issue of the Order dated June 9, 2004 and submit quarterly monitoring reports thereafter. Further, the Commission had directed the Petitioner to submit the quarterly progress report of investments.

The Petitioner, in its Petition, has submitted that it has complied with the Commission's directive.

In compliance to the directive of the Commission, a Steering Committee was formed under the chairmanship of General Manager (Planning), TRANSCO and with one member representing the Commission in the Committee. The first meeting of the Committee was held on June 22, 2004 and TRANSCO was asked to submit the integrated and consolidated plan in respect of works to be carried out in FY 04-05 and the same was submitted by TRANSCO on August 13, 2004. The Steering Commission meets on regular basis and till date around 10 meetings have taken place. The Commission has been monitoring these works during the subsequent meetings.

The Commission notes that the Petitioner has submitted the quarterly progress reports of capital investment schemes on a regular basis to the Commission. **The Commission further directs the Petitioner to submit the quarterly progress reports for the schemes implemented during FY 2005-06 within 15 days of the end of each quarter.**

5.3 R&M Works

The Commission had directed 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 Commission had also directed the Petitioner to take a prior approval for any increase in R&M expense during FY 2004-05 beyond the approved R&M expense before committing/incurred an expense.

The Petitioner has submitted that it has been submitting the quarterly reports on R&M expenditure to the Commission.

The Commission notes that the Petitioner has submitted the quarterly reports on R&M expenditure, material drawn from the Stores for R&M works and transformer failure on a regular basis to the Commission. The actual R&M expenditure incurred by the Petitioner is lower than that approved by the Commission in the Order dated June 9, 2004. Therefore, the need to take prior approval for increase in R&M expenses during FY 2004-05 did not arise.

The Commission reiterates its direction to 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.**

The Commission also directs the Petitioner to take prior approval for any increase in R&M expense during FY 2005-06 beyond the approved R&M expense before committing/incurred such additional R&M expenses.

5.4 Consumption by employees of erstwhile DVB

The Commission had directed the Petitioner to submit the mechanism for payments and accounting within 1 month of the date of issue of the Order dated June 9, 2004.

The Petitioner has submitted that this issue needs to be sorted out between the DISCOMs, DPCL and the Pension Trust. The Petitioner has highlighted that all information pertaining to the employees of the Petitioner has been submitted to the Commission.

5.5 Sale of surplus energy

The Commission directed the Petitioner to improve their load management systems in order to avoid the instances of underdrawals and submit the report to the Commission on the initiatives taken to avoid unscheduled interchanges within 3 months from the date of issue of the Order

dated June 9, 2004. The Commission also directed the Petitioner to optimise its energy balance and try to sell the entire surplus energy available during off peak hours. The Commission had specified that in case the Petitioner is unable to sell the surplus energy, the Petitioner should back down the generating stations of Delhi including Badarpur, PPCL and GENCO. The Commission had further directed the Petitioner not to surrender the cheaper power available from CGS except in case on unavoidable circumstances.

The Petitioner has submitted that it has recently got its share in the NCTPP reallocated to other States of the region. The Petitioner has added that it has entered into bilateral agreements for sale of off peak power to Rajasthan and HVPN to minimize underdrawal. The Petitioner has submitted that copies of all agreements have been submitted to the Commission.

5.6 Reactive energy

The Commission had directed the Petitioner to submit the detailed implementation plan of EMS system and suggest the target date from which the peak reactive drawl data of each DISCOM can be provided, within 1 month of the issue of the Order dated June 9, 2004.

The Petitioner has submitted that it is complying with the Commission's directive.

The Petitioner has submitted the DISCOM wise reactive energy details for the period April - October 2004 in the Petition for approval of ARR for FY 2005-06.

5.7 Scheme for adherence to ABT

The Commission had directed the Petitioner to expedite the finalisation of scheme for adhere to ABT clearly defining the responsibilities of the DISCOMs, NDMC and MES, and bring to the notice of the Commission any difficulty faced by it in finalisation of the same.

The Petitioner, in its Petition, has submitted that it has submitted the said scheme in consultation with the DISCOMs to the Commission for the Commission's approval on June 13, 2005.

The Commission is examining the details of the Intra State ABT mechanism and the matter is being dealt separately by the Commission.

5.8 A&G Expenses

The Commission had directed the Petitioner to take prior approval for any increase in A&G expenses during the FY 2004-05 beyond A&G expenses approved before committing/incurred an expense.

The Petitioner, in its Petition had submitted that it would obtain prior approval of the Commission if the need arises.

However, the actual A&G expenditure incurred by the Petitioner is lower than that approved by the Commission in the Order dated June 9, 2004. Therefore, the need to take prior approval for increase in A&G expenses during FY 2004-05 did not arise.

The Commission directs the Petitioner to take prior approval for any increase in A&G expenses excluding rebate during the FY 2005-06 beyond A&G expenses excluding rebate approved before committing/incurred such additional A&G expenses.

5.9 List of new directives

The Commission has discussed the compliance by the Petitioner with the directives issued in the Order dated June 9, 2004. The Commission has also issued additional directives in respect of some of the directives issued in the Order dated June 9, 2004. Further, the Commission has also issued certain new directives, which have been detailed in the respective sections, and have been listed below for easy reference:

5.9.1 Optimisation of energy balance

(Ref. Section 3.2.11.2) The Commission directs the TRANSCO to optimise its energy balance and try to sell the entire surplus energy available during off peak hours. In case, TRANSCO is unable to sell the surplus energy, TRANSCO should back down the generating stations of Delhi including Badarpur, PPCL and GENCO duly taking into account the merit order based on the variable cost of various sources of power purchase, operating conditions etc.. TRANSCO is further directed not to surrender the cheaper power available from CGS except in case of unavoidable circumstances.

5.9.2 Depreciation

(Ref. Section 3.6.4.2) The Commission directs the Petitioner to provide pro-rata depreciation considering actual usage/operation (in number of days) of asset during the Financial Year.

5.9.3 Cost Audit

The Govt. of India has prescribed Cost Accounting Record Rules for electricity industry under which electricity utilities are required to maintain records to show their costs and other details. The Commission, therefore, directs that this Rule be complied with by the Licensee and separate accounts be maintained and submitted to the Commission since the introduction of these Rules.