

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
- 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

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

1.1.2.1 Concept Paper on Tariff

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

1.1.2.2 Guidelines for Revenue and Tariff Filing

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

1.1.3 Regulations and Orders issued by the Commission

In its journey from inception till date, the Commission has issued seven Tariff Orders and notified nine Regulations as given in Tables 1.1 and 1.2 respectively. The Orders were issued after following the due process and all stakeholders were given an opportunity to present their viewpoints. (Draft Regulations under EA 2003)

Table 1.1: Orders issued by the Commission

Sr. No.	Name of the Order	Date of issue
1.	Order on Rationalization of Tariff for Delhi Vidyut Board (DVB)	16.1.2001
2.	Order on ARR for 2001-02 and Tariff Determination Principles for 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 BSES – New 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

Table 1.2 : Regulations notified by the Commission

Sr. No.	Title of Regulations	Date of Notification
1.	Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001	9-3-2001
2.	Delhi Electricity Regulatory Commission (Management and Development of Human Resources) Regulations, 2001	16-4-2001
3.	Delhi Electricity Regulatory Commission (Appointment of Consultants) Regulations, 2001	6-8-2001
4.	Delhi Electricity Regulatory Commission (Delegation of Financial Powers) Regulations, 2001	6-8-2001
5.	Delhi Electricity Regulatory Commission (Grant of Consent for Captive Power Plants) Regulations, 2002	21-4-2002
6.	Delhi Electricity Regulatory Commission (Performance Standards – Metering & Billing) Regulations, 2002	19-8-2002
7.	Delhi Electricity Regulatory Commission (Medical Attendance) Regulations, 2003	12-3-2003
8.	Delhi Electricity Regulatory Commission (Redressal of Consumers' Grievances) Regulations, 2003	10-6-2003
9.	Delhi Electricity Regulatory Commission (Guidelines for establishment of Forum for redressal of grievances of the consumer and Ombudsman) Regulations, 2003	11-3-2004

1.1.4 Constitution of Commission Advisory Committee

The Commission has constituted the Commission Advisory Committee, vide notification dated March 27, 2003, to advise the Commission on major questions of policy related to electricity industry in the State and on matters such as quality of supply, continuity and extent of service provided by licensees and compliance by licensees with the conditions and requirements of their licences.

1.2 Background

1.2.1 Transfer Scheme

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

1.2.2 Pragati Power Corporation Limited (PPCL)

The Pragati Power Corporation Limited (PPCL) is a combined cycle station of 330 MW capacity consisting of two gas turbines and one steam turbine. The first gas turbine unit was commissioned in the month of May 2002, the second gas turbine unit was commissioned in November 2002 and the combined cycle plant was commissioned in March 2003.

1.2.3 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 TRANSCO petition also contained the details about the generation companies, PPCL and IPGCL as no separate ARR filing was envisaged for generation companies under DERA. 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. The DISCOMs filed the Consolidated Petitions based on the Commission's direction, during the first week of March 2003. The Commission admitted the petition of TRANSCO and the Petitions of DISCOMs for further processing on March 6, 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.

1.2.4 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. Further Section 86 (1) (a) of the EA 2003 vests the responsibility of determination of tariff with the Commission – the relevant portion of this Section is as follows;

“ The State Commission shall discharge the following function namely –

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, whole sale, bulk or retail, as the case may be within the state: ...”.

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 or 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.”

1.3 Procedural History

1.3.1 ARR & Tariff filing by the Companies for FY 2004-05

1.3.1.1 Filing of petitions

The Commission would like to highlight that the Petitioner submitted the statements of Annual Revenue Requirement for determination of generation tariff for FY 2004-05 on November 28, 2003, which was not filed on an affidavit in accordance with the Commission's Regulations.

Subsequently, the Commission sent the deficiency note to the Petitioner in which the Commission mentioned that the Petitioner has submitted the figures/details in the statements and has not submitted any write-up including the basis, assumptions, explanatory notes for the figures submitted in the Statements and has not filed the Petition on an affidavit in accordance with the Commission's Regulations. The Commission directed the Petitioner to file the Petition on an affidavit in line with the Commission's Regulations and provide detailed basis notes and assumptions in the Petition for estimating the various figures indicated in the Statements.

Based on the above instructions, Pragati Power Corporation Limited (PPCL) filed their formal Petitions for approval of ARR and determination of Tariffs for FY 2004-05, on December 3, 2003. The Delhi Transco Ltd. (TRANSCO) and Indraprastha Power Generation Company Limited (IPGCL) also filed their ARR Petitions for determination of Tariffs for FY 2004-05. The cost of generation and the net generation by the generating units are inputs to the TRANSCO ARR and determination of tariff.

Further 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 for TRANSCO and further, one would have to take cognisance of the ARRs of the DISCOMs for further processing.

The Commission, therefore, directed the DISCOMs to file their respective ARR & Tariff Petitions for FY 2004-05. Thereafter, North Delhi Power Limited (NDPL) filed its petition for ARR approval and determination of Retail Supply Tariff (RST) for FY 2004-05 on December 17, 2003. The other two DISCOMS, i.e., BSES Yamuna Power Limited (BYPL) and BSES Rajdhani Power Limited (BRPL) filed their ARR and Tariff Petition for determination of Retail Supply Tariff for FY 2004-05 on December 26, 2003.

The Petitioner, in its Petition, has projected a net generation of 1938 MU with a total fixed cost of Rs. 263 Crore and total variable cost of Rs. 221 Crore @ Rs. 1.14/kWh for FY 2004-05

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 17, 2004.

1.3.2 Public Notice and response from stakeholders

1.3.2.1 Publicity given to the Proposal

The Commission brought out a Public Notice on January 17, 2004 indicating the salient features of the Petitions for FY 2004-05, and to invite 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, The Times of India, and The Economic Times in English;
- Punjab Kesri, Navbharat Times, in Hindi; and
- Daily Milap in Urdu.

A copy of the Public Notice in English, Hindi and Urdu is attached as Annexure 1a-1, 1a-2 and 1a-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 January 19, 2004 onwards, between 11 a.m. to 4 p.m. on payment of Rs. 100/-. The Notice specified the deadline of February 17, 2004 for the receipt of responses/objections from the stakeholders. 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 78 objections in all. Some objections were received after the deadline for submission of the responses. The Commission forwarded the objections to the Petitioner for submission of comments to the Commission with a copy to the respondent. A detailed list of the respondents is attached with this Order as Annexure 2a.

The Petitioner filed its responses to the comments/objections of the stakeholders by March 22, 2004. The Commission conducted the Public Hearings on the April 7, 8 and 10, 2004. 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 2b. The entire proceeding was split across five different sessions catering to distinct groups of stakeholders as given in Table 1.3.

Table 1.3: Dates of Public Hearing

Date	Category
April 7, 2004 (Two Sessions)	Industrial Consumers and Associations
April 8, 2004 (Two Sessions)	Domestic, Co-operative Societies, NGO's and Commercial
April 10, 2004	Government Departments and Utilities

1.3.4 Post admission interactions

1.3.4.1 Discussions during technical sessions

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. The Commission sent the issues raised by the public for Petitioner's response.

1.3.4.2 Petitioner's responses to queries raised by the Commission

The Petitioner submitted various details including the copy of the Gas Supply Agreement entered into with GAIL, Loan Agreement, etc. to the Commission on January 17, 2004. On March 12, 2004, the Petitioner submitted responses to the various queries raised during the public hearing.

An Activity Chart giving the details of various activities undertaken during the proceedings is attached as Annexure 3.

1.4 Summary of the petition

The Petitioner has estimated the Annual Revenue Requirement (ARR) for FY 2004-05 at Rs. 485 Crore. A snapshot of the ARR and revenue gap at existing tariffs is provided in the Table 1.4.

Table 1.4 Summary of ARR of the Petitioner

Rs. Crore

Particulars	Units	FY 2004-05
Gross Generation	MU	1998
Net Generation	MU	1938
Total Fixed Cost	Rs. Crore	263.14
Total Variable Cost	Rs. Crore	221.35
Total Cost	Rs. Crore	484.49
Variable Cost per Unit	Rs/kWh	1.14
Total Cost per Unit	Rs/kWh	2.50

1.5 Layout of this Order

This Order is organised into 4 Chapters. While the current Chapter gives the information about the Commission, the historical background and summary of the Petition, the second Chapter gives a detailed account of responses from stakeholders, Petitioner's comments and Commission's views on the responses. Chapter 3 discusses the Annual Revenue Requirement while Chapter 4 focuses on the Tariff Philosophy and approved tariff for FY 2004-05.

2. Response from Stakeholders

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

These objections/responses mainly relate to Procedural Issues, Quality of Filing, Privatisation Policy and Reform Process, Policy Directions issued by the Government of NCT of Delhi, ARR, etc. The scope of this Order is limited to covering the issues directly connected with or incidental to the Annual Revenue Requirement of the Licensees and the Tariffs.

2.1 Quality of Filing and Additional Information

2.1.1 Objections

Shri Rajan Gupta has submitted that the Petitioner has filed incomplete, non-transparent and non-reliable estimates in the Petition. It has requested the Commission to obtain additional data from the Petitioner. The additional data asked for further scrutiny is as follows:

- Copy of Minutes of Meeting and Resolutions of the Board of Directors approving the Annual Revenue Requirements of the Petitioner for FY 2004-05
- Copy of the report of the Commission with regard to actual verification of the details and data of all the Petitioner and the methodology followed by the Commission towards actual verification of the data
- Copy of the Commission's approval for implementing VRS

Shri Rajan Gupta has also asked for additional time to submit responses based on compliance by the Petitioners to the above issues.

India Defence Foundation have stated that the information and data provided by the Generation, Transmission and Distribution Licensees is not adequate to evaluate whether these Licensees are properly discharging their public duties and are alive to their responsibilities. The objector has requested the Commission to consider involving C&AG for the test audit to determine causes and responsibilities for any lapses in the systems of these Licensees. The objector has further requested that the state of affairs during erstwhile DVB days and status of improvement achieved after the privatisation should be shared with the public. It has further suggested that the Commission, before entertaining any claim for increase in Tariff or any projection of loss in revenue, or excessive expenditure, may compare the Business Plan of the Licensees with the projections made in the Business Plan at the time of privatisation.

India Defence Foundation have suggested that the following comparative data should be obtained to evaluate the performance of the Licensees:

- Break up of expenditure per consumer

- Labour and management share of the output of the Utility
- Ratio and magnitude of direct labour to management staff including indirect labour, ratio of labour cost to management cost including advertisements and publicity
- Capital to Output ratio, Output to Investment ratio, Labour to Output ratio, Labour to Capital ratio
- Ratio of expenditure incurred in Indian Rupees to that incurred in foreign currency

Joint Committee of Residents Welfare Associations of Pitampura opined that there is lack of transparency in the accounts. The opinion stemmed out from reasons given by the Petitioners inability to provide data on meter rentals and penal charges, late payment charges, etc.

2.1.2 Response of the Petitioner

The Petitioner has stated that it has submitted the copies of the relevant Minutes of Meeting and Board Resolutions approving the Annual Revenue Requirements of the Petitioner for FY 2004-05.

2.2 Privatisation Policy and Reform Process

2.2.1 Objections

India Defence Foundation expressed its displeasure with the state of affairs post privatisation and stated that the Licensees have not been ensuring any quality of service or guaranteeing efficient usage of resources or undertaking any cost cutting, except in reduction of manpower engaged in operation and maintenance. It has further stated that the Licensees have been supplying interrupted power supply repeatedly and have not yet succeeded in developing properly functioning complaint handling systems and have been imposing heavy financial burdens on the consumer, who have no means of getting any corrective action or relief. In the rejoinder submitted before the Commission, the Foundation highlighted the issue of lack of coordination between DISCOMs and TRANSCO and mentioned that inspite of power availability, less power is being drawn from the grid thus resulting in power cuts. Mr. Arun Kumar Dutta stated that a PIL has been filed on restructuring and privatisation of Power Distribution Function in Delhi and the matter is subjudice with the Hon'ble High Court and hence the ARR Petitions should not be processed till the Hon'ble Court disposes off the matter.

2.2.2 Response of the Petitioner

No specific response has been received from the Petitioner.

2.3 ARR

2.3.1 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.

'Energywatch' argued that the Commission should not accept the expenses as mentioned in the audited accounts of the Petitioner, but should determine the ARR and Tariffs on the basis of "properly incurred expenditure", and should be guided by Section 28 of Delhi Electricity Reforms Act, 2000 and Section 29 of ERC Act, 1998, in this regard. Energywatch quoted from the Supreme Court judgement in this regard (SLP Nos. CC 6293/02 & CC 6307/02).

PHD Chamber of Commerce and Industry, Mr. Vijay K. Gupta have requested the Commission to conduct due diligence of the costs claimed by the Petitioners to ensure strict compliance with the Commission's previous Orders and rework the revenue gap before considering any increase in either BST or RST for FY 2004-05.

2.3.2 Response of the Petitioner

No specific response has been received from the Petitioner.

2.4 Generation Expenses

2.4.1 Objections

PHD Chamber of Commerce and Industry has requested the Commission to look into the details of the proposed R&M program and get the same duly vetted by the CEA, if considered appropriate, before according approval. Mr. V. K. Gupta, Municipal Counsellor, MCD, has indicated that the Fixed Cost of the Generating Companies is very high and the Commission needs to critically examine each head of expense, before according approval.

2.4.2 Response of the Petitioner

The Petitioner has replied that it has projected generation for FY 2004-05 at a PLF of 69% as approved by the Commission in its Order for FY 2004-05. The Petitioner has also stated that it has proposed two part Tariff (fixed and variable component) along with draft Power Purchase Agreement (PPA) to the Commission for its approval.

2.5 Depreciation charges

2.5.1 Objections

Mr. Vijay K. Gupta, in his objections submitted to the Commission and also during the public hearing process has suggested that depreciation should be excluded from expenditure for the purpose of ARR. He also suggested that depreciation approved in the past Tariff Orders should be disallowed. Alternatively, he suggested that the effect of any change in valuation of the assets after revaluation should be charged at the end of the Reform Period i.e. FY 2006-07 either to the tariff or to the account of the Holding Company.

Mr. S. K. Aggarwal and PHD Chamber of Commerce and Industry have requested the Commission to retain the depreciation rate as approved in its Order for FY 2003-04 for the purpose of approval

of depreciation expense for FY 2003-04 and FY 2004-05 as against higher rates of depreciation adopted by the Petitioner on the basis of the Ministry of Power notification of March 1994.

PHD Chamber of Commerce and Industry has requested the Commission to adopt the depreciation rate indicated by the CERC in its Draft Regulations on Terms & Conditions for Tariff Fixation for the purposes of assessing depreciation expense to maintain uniformity in approach.

2.5.2 Response of the Petitioner

The Petitioner has replied that depreciation is a cost and is treated accordingly while estimating the ARR. The Petitioner has requested the Commission to allow depreciation as per the repealed Electricity (Supply) Act, 1948 till the time the new rates are notified by the Government under the Electricity Act, 2003.

2.6 Employee Expenses

2.6.1 Objections

The Senior Citizens Forum has requested the Commission to critically examine whether the claimed revenue expenditure is necessary and to ensure that the Petitioner has undertaken adequate measures to reduce wasteful expenditure, improves productivity of labour and staff. While the objector has recognized that the Petitioner has inherited an inefficient and oversized organization from erstwhile DVB, it has requested the Commission to ensure that the consumers are not made to pay for the failure of the Petitioner to improve productivity and efficiency.

2.6.2 Response of the Petitioner

The Petitioner has stated that entire staff is on deputation from IPGCL and IPGCL is taking care of all liabilities on account of VRS.

2.7 R&M Expenses

2.7.1 Objections

PHD Chamber of Commerce and Industry has requested the Commission to look into the details of O&M expenses and has expressed its opinion that the O&M expenses should be permitted within the normative levels of 3.5% of capital costs.

2.7.2 Response of the Petitioner

No specific response has been received from the Petitioner.

2.8 Return on Equity

2.8.1 Objections

Energywatch has argued that the 16% returns is not sacrosanct and has requested the Commission to also consider other factors like, interest of consumers, efficiency, economic use of resources and

good performance, which are mentioned in Section 29 of ERC Act, 1998 and Section 28 of Delhi Reforms Act, 2000.

Mayurdhwaj Residents Welfare Association has requested the Commission to reduce the ROE to 10% and abolish all other subsidies and grants.

Northern Railways have suggested that the Commission may review the rate of 16% return on equity in view of the general inflation rates of consumable commodities.

2.8.2 Response of the Petitioner

No specific response has been received from the Petitioner.

2.9 Commission's Views

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

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 made a beginning in addressing the challenges brought in by the modifications in the regulatory framework due to Policy Directions through its BST Order dated February 22, 2002. The lack of institutional and policy precedents existing in the country to provide the required guidance and support to effectively tackle the issues at the implementation level in the privatised and multi-year framework was an immediate challenge. At the same time, being the ERC at the National Capital heightened the challenge and demand as the Commission is being looked upon as a model for privatised distribution entities subsequent to restructuring and privatisation for other States to emulate. For setting high standard for others, it was quintessential to target high by considering global standards. The Commission, therefore, signed a MoU with the Public Services Commission of Maryland, USA on February 3, 2002 to tap international expertise available in the sector regulation, and had been interacting with them on various issues.

Further, the Commission also realised that the foundation stone of any meaningful regulation of the utilities is to have an effective platform for exchange of operational and performance related information with the utilities throughout the year, rather than the interactions being limited to year-end submission of filings. Accordingly, the Commission required the utilities to spell out detailed information/reasons for their state of affairs as well as the steps they proposed to undertake for improving the situation over an extended period. The Commission undertook visits for actual verification of the information submitted 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). A Consultant for developing the RIMS is being finalised. 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.

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

2.9.1 Quality of Filing and Additional Information

2.9.1.1 Adequacy of information

As regards the adequacy of information, the Commission would like to bring to the notice of the stakeholders that substantial data/information has been submitted by the companies during the process in order to fill the data gaps in the respective ARR Petitions, even after the admission of the Petitions. The Commission has also asked for the actual cost, revenue and investment related data for FY 2003-04 from the Petitioners.

The Commission is of the opinion that considering the substantial volume of data/information obtained from the Petitioners by the Commission during the processing of the Petitions; it is not feasible to provide a copy of the entire data/information to the Public along with the ARR Petition. Moreover, as specified in the Regulations of the Commission, any stakeholder can see the data by visiting the Commission's office and following due procedure for access to such data.

As regards the suggestion of providing copy of the Report of the Commission on the methodology followed by the Commission towards actual verification of the data, to the objector, the methodology followed by the Commission for scrutinising each and every element of the ARR has been deliberated in detail in Chapter 3 of the Order.

2.9.1.2 Time provided to stakeholders for response

The Commission is of the opinion that the time provided to the stakeholders for responding to the Petitions was reasonable, considering that the Public Notice in the newspapers was brought out by the Commission on January 17, 2004 and the last date of submission of objections/comments was further extended from February 17, 2004 to February 27, 2004.

2.9.2 Policy Directions 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.

As regards improvement in the service quality, post restructuring and privatisation, the Commission would like to clarify that it monitors the performance of the Licensees on a regular basis with the objective of improving the quality of service and the Commission has issued several regulations namely Performance Standards (Metering and Billing) Regulations, Complaint Handling Procedure, Schedule of Miscellaneous charges, to provide the consumers with an opportunity to register their views in the matter. It may not be out of place to mention that the Commission has established Grievances Redressal Mechanism on June 10, 2003 to handle the complaints received from the consumers. The Commission has designated three Grievance Redressal Officers (GROs), one for each DISCOM for handling the billing complaints. Till date, the Commission have received 600 complaints from various consumers and most of these complaints have been resolved with the help of GROs.

Further, In accordance with the provisions of Section 42 (5) of the Electricity Act 2003, a Forum is being established soon to address the grievances of the consumers and the consumers should come forward with the metering and billing related issues for redressal of grievances.

Further the Commission will also appoint an Ombudsman to settle the grievances of any consumer who is aggrieved by non-redressal of his grievances by the Forum. The Commission will detail out the time frame and the manner in which these grievances will be addressed.

2.9.3 ARR

2.9.3.1 Scrutiny of expenditure and revenue components

The Commission would like to clarify that it has critically examined all the elements of expenditure and revenue, and has not merely gone by the actual expenses as provided by the Petitioner. The Commission considered the prudence of expenditure projected by the utilities while determining the revenue requirement. Detailed analysis of all the expenditure and the revenue components for their prudence, and the methodology of projection adopted by the Commission, has been provided in the relevant sections of Chapter 3 .

2.9.4 Generation Expenses

The Commission has examined all the operational parameters such as Gross Generation, Auxiliary consumption, Heat Rate etc in detail in Chapter 3. Further, the Commission has gone into the details of every component of the fixed and variable cost before finalising the costs to be allowed, as discussed in Chapter 3.

2.9.5 Depreciation charges

The Commission has deliberated on this issue in detail in its Orders on ARR and Tariff Determination for FY 2002-03 and FY 2003-04 for TRANSCO. The Commission has adopted a rational approach in this regard and has allowed depreciation on the basis of the straight-line method of depreciation

linked to useful life of the assets, instead of accelerated depreciation rates proposed by the Petitioner. Further, the Commission in its previous Orders has deliberated on the utilisation of amount available through depreciation for meeting the working capital requirement and capital investments in the absence of loan repayments. The extent of depreciation allowed by the Commission has been discussed in detail in Chapter 3 of the Order.

2.9.6 Employee Expenses

The Commission has examined the employee expenses projected by the Petitioner while estimating the employee expenses for FY 2004-05.

2.9.7 R&M Expenses

The Commission has examined all the components of other expenses projected by the Petitioner while approving the same. The details of other expenses have been deliberated in Chapter 3 of the Order.

2.9.8 Return on Equity

The Petitioner has estimated ROE based on the GOI norms for the generation plants and the same has been considered by the Commission, while approving the ARR. However, the Commission will examine this issue in detail while approving the Power Purchase Agreement.

3. Analysis of ARR

3.1 Introduction

TRANSCO, vide a separate Petition has submitted the Power Purchase Agreement (PPA) entered into with Pragati Power Corporation Limited (PPCL) for the approval of the Commission. The Commission is dealing with the matter of approval of PPA separately.

In this Order, the Commission has analysed the ARR Petition filed by PPCL for FY 2004-05 and has approved the ARR and Tariff for FY 2003-04 and FY 2004-05. While analysing the Petition, the Commission, based on the submission made by the Petitioner asked for further details and supporting documents, which was submitted by the Petitioner. Based on these submissions, the Commission has finalised the ARR and Tariff for FY 2003-04 and FY 2004-05.

3.2 Generation

3.2.1 Petitioner's Submission

The Petitioner has submitted that the capacity of the Station is 330 MW with two gas turbine units of 104MW each and a steam generator of 122 MW. The two gas turbines have commenced Commercial Operation in July 2002 and December 2002 and the stations were operating in open cycle and the Station commenced the Combined Cycle operations from May 15, 2003. The Petitioner has estimated the generation during FY 2003-04 by considering the actual generation for the period April to September 2003. The Petitioner has submitted that the plant has generated 1208 MU during FY 2003-04 till October and is expected to generate 1998 MU by the end of the year with a PLF of 69.10%. For the FY 2004-05 the Petitioner has considered the PLF to be maintained at the same level i.e. 69.10% based on the PLF approved by the Commission for the plant in the previous Tariff Order of TRANSCO.

3.2.2 Commission's Analysis

The Commission directed the Petitioner to submit the actual generation for FY 2003-04 and the same has not yet been submitted by the Petitioner. The Commission also obtained the details of actual power purchase from TRANSCO for FY 2003-04 and the TRANSCO has provided the details of actual power purchase from all the stations including PPCL. In the details provided by TRANSCO they indicated that they have purchased 2194 MU from PPCL during the year. As the PPCL sells power only to TRANSCO, the Commission has estimated the actual generation of PPCL during FY 2003-04 based on sales to TRANSCO and by applying auxiliary consumption. With this assumption, the actual gross generation for FY 2003-04 works out to 2262 MU. Therefore the Commission has considered the actual generation for FY 2003-04 at 2262 MU at a PLF of around 78%.

For FY 2004-05, the Commission has considered the gross generation as per the generation target of 2200 MU as prescribed by Central Electricity Authority (CEA). The generation details submitted by the Petitioner and that allowed by the Commission are given in Table 3.1 below.

Table:3.1 Generation

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Availability (MW)	330	330	330	330	330
PLF	69.10%	69.10%	78.4%	69.10%	76.10%
Gross Generation (MU)	1998	1998	2262	1998	2200

3.2.3 Auxiliary Consumption**3.2.3.1 Petitioner's Submission**

The Petitioner has estimated the actual Auxiliary Consumption for FY 2003-04 till October at 3% and has considered the same for FY 2003-04 and FY 2004-05.

3.1.1.1 Commission's Analysis

The Auxiliary Consumption proposed by the Petitioner is in line with the Draft PPA between the Petitioner and TRANSCO. This is also in line with the norms proposed by CERC in its latest Tariff Order for Central Sector Stations and the same has been accepted by the Commission. The Auxiliary Consumption details submitted by the Petitioner and that allowed by the Commission are given in Table 3.2 below.

Table:3.2 Auxiliary Consumption

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Auxiliary Consumption	3%	3%	3%	3%	3%

3.2.4 Net Generation

The Commission has worked out the net generation based on the above gross generation and the Auxiliary Consumption allowed as discussed in the sections above. For FY 2003-04 the net generation allowed by the Commission is at the same level as estimated by the Petitioner. However in case of FY 2004-05 the Commission has arrived at a higher net generation of 2134 MU vis. a vis. the Petitioner's submission of 1938 MU for FY 2004-05 based on the CEA target. The details of net generation submitted by the Petitioner and that allowed by the Commission is given in Table 3.3 below.

Table:3.3 Net Generation

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Gross Generation (MU)	1998	1998	2262	1998	2200
Auxiliary Consumption	3%	3%	3%	3%	3%
Net Generation (MU)	1938	1938	2194	1938	2134

3.3 Fixed Costs

The Commission has examined in detail all the components of the Fixed Cost of PPCL. The fixed cost of PPCL includes the following elements:

- O&M Charges
- Depreciation
- Interest Charges
- Return on Equity
- Interest on Working Capital
- Fixed Fuel Costs

3.3.1 O&M Charges

3.3.1.1 Petitioner's Submission

The Petitioner has estimated base O&M cost @ 2.50% of the Capital Cost of the plant at Rs. 26.90 Crore and escalated it @ 10% p.a. for arriving at the O&M cost for FY 2003-04 and FY 2004-05. In addition to these O&M expenses, the Petitioner has added as additional expenses of Rs. 2.16 Crore and Rs. 2.38 Crore towards water charges for FY 2003-04 and FY 2004-05 respectively. As the Petitioner is treating the sewage water to meet its water requirements of the plant, it has prayed for the allowances of this water charges over and above the O&M charges.

3.1.1.2 Commission's Analysis

As per the GoI norms the O&M cost for first year of operation is allowed at 2.50% of the capital cost for the combined cycle plant operating with natural gas as fuel. The Commission in its previous Order on TRANSCO ARR has allowed O&M expenses for FY 2003-04 based on this principle as the combined cycle plant was commissioned in May 2003 and hence FY 2003-04 will be the first year of operation. The Commission is of the opinion that the Petitioner will be able to meet its O&M expenses including the water expenses within the GoI specified limits. Thus the Commission allows O&M expenses for the Base year, i.e. FY 2003-04 @ 2.50% of the Capital Cost of the plant which works out to Rs 26.93 Crore. Further, the Commission allows an increase of 7% p.a. in O&M expenses for FY 2004-05. The O&M expenses estimated by the Commission for FY 2004-05 works out to Rs. 28.82 Crore Thus the summary of O&M charges approved by Commission for FY 2003-04 and FY 2004-05 is as given in Table 3.4 below:

Table:3.4 O&M Charges

Description	Rs. Crore				
	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
O&M Charges	26.93	29.09	26.93	32.00	28.82

3.3.2 Depreciation**3.3.2.1 Petitioner's Submission**

The Petitioner has considered depreciation @ 8.24% as per the Draft PPA terms on straight-line method. The Petitioner has argued that the Commission in the BST order for FY 2001-02 had approved a weighted average depreciation rate of 8.24% and the same has been considered for the present filing. The Petitioner further stated that though the Commissioner had allowed a depreciation only @ 5% for FY 2003-04 while approving the tariff of PPCL station in the Order on TRANSCO's ARR for FY 2002-03 and FY 2003-04. The Petitioner further submitted that as per the provisions of the Electricity Act 2003 the power sector utilities may be required to follow Companies Act 1956 in the matter of depreciation. They further state that the draft tariff policy of Ministry of Power mentions that the depreciation rate applicable for tariff determination shall be as per Schedule XIV of Companies Act 1956 and considering the power plants as 'continuous process plants' the rate applicable could be 5.28%. In view of the pending notification of Tariff Policy by Government of India under the Electricity Act 2003, the Petitioner has requested the Commission to allow depreciation @ 8.24%.

3.1.1.3 Commission's Analysis

The Commission would like to highlight that the Petitioner submitted the statements of Annual Revenue Requirement for determination of generation tariff for FY 2004-05 on November 28, 2003, which was not filed on an affidavit in accordance with the Commission's Regulations. The depreciation rate considered by the Petitioner in the statements of ARR was 5% per annum in line with the Commission's Order for FY 2003-04.

The Commission sent the deficiency note to the Petitioner in which the Commission mentioned that the Petitioner has submitted the figures/details in the statements and has not submitted any write-up including the basis, assumptions, explanatory notes for the figures and has not filed the Petition on an affidavit in accordance with the Commission's Regulations. The Commission directed the Petitioner to file the Petition on an affidavit in line with the Commission's Regulations and provide detailed basis notes and assumptions in the Petition for estimating the various figures indicated in the Statements.

Subsequently, the Petitioner has filed the Petition on affidavit in accordance with the Commission's Regulations. The Petitioner in the format Petition has changed the depreciation rate to 8.24% as

against the depreciation rate of 5% as considered while submitting the ARR statements on November 28, 2003.

The Commission has adequately discussed the issue of depreciation in its Tariff Order dated June 26, on TRANSCO's ARR Petition for FY 2002-03 and FY 2003-04 2003 and the Order on Review Petition filed by the TRANSCO. 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."

The Commission in its Order of June 26, 2003 has considered and applied the principle of depreciating the asset over its fair life such that 90% of the asset value is depreciated over the fair life of the asset. The average fair life of the gas turbines and steam turbine including other equipments has been considered as 15 years and 25 years respectively for the purpose of estimating the depreciation. In this method, the average depreciation will be in the range of 5%. The Commission based on these principles had approved a depreciation of Rs. 53.87 Crore @ 5% of the project cost for FY 2003-04. Incidentally, the Petitioner in the original submission made on November 28,2003 has also considered the depreciation @5%. Thus the depreciation approved by Commission for FY 2003-04 and FY 2004-05 is Rs. 53.9 Crore and Rs. 53.9crores respectively. The depreciation estimated by the Petitioner and as approved by the Commission for FY 2003-04 and FY 2004-05 is given in Table3.5.

Table:3.5 Depreciation

Description	Rs. Crore				
	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Depreciation	53.9	85.1	53.9	88.7	53.9

3.3.3 Interest Charges

3.3.3.1 Petitioner's Submission

The petitioner has submitted that the Project Cost is financed as per the Debt:Equity Ratio of 70:30. The Term Loans of Rs. 754 Crore i.e. Rs. 700 Crore and Rs. 54 Crore had been arranged from PFC and Govt. of Delhi respectively. The PFC loan was sanctioned against the State Government Loan with interest rate varying from 14% to 11.5%, however an average interest rate of 11.5% has been considered with the assumption that the Petitioner will be able to get reimbursement of subsidy on

interest. This loan shall be repayable in 40 quarterly equal instalments starting from January 2004. The interest rate applicable to Govt. of Delhi loan is 6.75% p.a. The Petitioner has estimated interest based on the above assumptions at Rs. 83.65 Crore and Rs. 79.19 Crore for FY 2003-04 and FY 2004-05 respectively.

3.1.1.4 Commission's Analysis

The Commission has examined the means of finance and the interest charges estimated by the Petitioner. The means of finance for the Project is as per the industry norms for generation projects and hence the Commission has considered the means of finance proposed by the Petitioner. Based on the terms of sanctioned loans, the Commission has estimated the interest expenses as Rs 83.14 Crore and Rs 78.11 Crore for FY 2003-04 and FY 2004-05 respectively. The interest charges as estimated by the Petitioner and as approved by the Commission are given in Table 3.6 below.

Table:3.6 Interest Charges

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Interest	90.49	83.65	83.14	79.19	78.11

Rs. Crore

3.3.4 Return on Equity

3.3.4.1 Petitioner's Submission

The Petitioner has estimated Return on Equity (ROE) @ 16% on Rs. 323 Crore equity of the company.

3.1.1.5 Commission's Analysis

The Commission allows ROE @ 16% on 30% (equity component) of the Project Cost of Rs. 1077.30 Crore which works to Rs. 51.71 Crore as per the applicable Gol norms. The Return on Equity as estimated by the Petitioner and as approved by the Commission is given in Table:3.7 below.

Table: 3.7 Return on Equity

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Return on Equity	51.7	51.7	51.7	51.7	51.7

Rs. Crore

3.3.5 Interest on Working Capital

3.3.5.1 Petitioner's Submission

The petitioner's submission on interest on working capital assumes the following working capital norms

- Fuel expenses for 30 days of operation at the projected PLF
- O&M expenses for one month
- Receivables for 2 months based on the projected sales.

The interest rate for working capital has been considered as @ 12.50% p.a. as allowed by DERC in its Tariff Order dated 26th June 2003.

3.1.1.6 Commission's Analysis

The Commission has examined the Draft PPA between TRANSCO and PPCL. In the Draft PPA the assumptions for estimating working capital are as follows:

- Fuel expenses for 30 days of operation at the projected PLF
- O&M expenses for one month
- Receivables for 1 month based on the projected sales.

As these assumptions are within the approved Gol norms, the Commission has estimated the working capital requirement based on the above assumptions. The working capital interest rate considered by Petitioner @ 12.50% seems to be reasonable considering the prevailing interest rate for short term loans and the Commission has considered the same. The interest on working capital allowed by the Commission viz. a viz. the Petition is as given in Table 3.8 below;

Table:3.8 Interest on Working Capital

Description	Rs. Crore				
	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Interest on Work. Cap.	7.81	11.42	7.6	11.56	7.7

3.3.6 Fixed Fuel Cost

3.3.6.1 Petitioner's Submission

As per the Fuel Supply Agreement entered into between the Petitioner and GAIL, Petitioner is required to pay monthly transmission /service charges of Rs. 15,54,682.00 for base year FY 2002-03 and shall be increased @3% p.a. Based on the above rates the Petitioner has estimated a fixed cost towards fuel supply at Rs. 1.93 Crore for FY 2003-04 and Rs. 1.99 Crore for FY 2004-05. However the Petitioner had included it as a part of variable cost in its ARR filing.

3.1.1.7 Commission's Analysis

As these charges are an integral part of the gas pricing and has to be paid irrespective of the quantum of gas bought from the Petitioner the same has been considered as the fixed cost instead of variable cost for the purposes of ARR calculations. The detailed of the fixed fuel cost is given in Table 3.9 below

Table: 3.9 Fixed Fuel Cost

Rs. Crore

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Fixed Fuel Cost	1.93	1.93	1.93	1.99	1.99

3.3.7 Total Fixed Cost

The total fixed cost estimates as per the Petitioner's submission and as allowed by Commission is summarised in the Table 3.10 below.

Table:3.10 Total Fixed Cost

Rs. Crore

	FY 2003-04		FY 2004-05	
	Petition	Commission	Petition	Commission
O&M Charges	29.1	26.9	32.00	28.8
Depreciation	85.1	53.9	88.7	53.9
Interest	83.7	83.1	79.29	78.1
Return on Equity	51.7	51.7	51.7	51.7
Interest on WC	11.4	7.6	11.6	7.7
Fixed Fuel Cost	1.9	1.9	2.0	2.0
Total Fixed Cost	262.9	225.1	265.2	222.1
Total Energy Supply (MU)	1938	1938	193	2140
Fixed cost/Unit (Rs/kWh)	1.36	1.04	1.37	1.05

3.4 Other Expenses

The Petitioner in its ARR submission has also mentioned about some additional expenses like Repairs & Maintenance and expenses towards Voluntary Retirement Scheme, which are discussed below;

3.4.1 Repairs & Maintenance**3.4.1.1 Petitioner's Submission**

The Petitioner has submitted that it has used the technology of DLN Burners for the first time in India for reducing pollution level in Delhi. These burners are very costly and required to be replaced after every 8000 hours and subject to damages these burners have a maximum life of 24,000 hours. The Petitioner further states that it has to incur a substantial amount from time to time in respect of this technology of DLN Burners.

3.4.1.2 Commission's Analysis

The Petitioner has not submitted any specific costs towards these expenses. Further, the O&M expenses are allowed based on the tariff norms set by CERC for combined cycle plants which is applicable for combined cycle stations irrespective of the type of the burner used. Therefore no separate allowance has been considered towards this expense.

3.4.2 Voluntary Retirement Scheme (VRS)

3.4.2.1 Petitioner's Submission

The Petitioner has submitted that, the company has introduced the VRS scheme for its employees in Category B,C & D. The Petitioner is most likely to offer to its employees in Category 'A' a voluntary retirement scheme before close of FY 2003-04. The Petitioner further states that similar VRS scheme is envisaged in near future in phased manner to the employees and requested Commission to keep in view the liability arising on account of VRS schemes already introduced or to be introduced by the Company, at the time of fixing the tariff.

3.4.2.2 Commission's Analysis

The Petitioner has not given the details of the VRS including the cost of these schemes.

3.2 Fuel Cost

The variable cost of the plant depends upon the operational and fuel parameters such as Heat Rate, Auxiliary Consumption, Fuel Cost and Fuel Calorific value. The Petitioner has submitted the operating parameters of the plant as a part of ARR. The Petitioner has also submitted additional submission as required by the Commission. The Analysis of the Commission is as follows;

3.4.3 Station Heat Rate

3.4.3.1 Petitioner's Submission

The Station Heat Rate as per the submission of the Petitioner for the combined cycle plant operation is 2000 kCal/kWh for both the years under consideration.

3.2.1.1 Commission's Analysis

The Station Heat Rate as per the Draft PPA between the TRANSCO and the Petitioner for combined cycle operation is 2000 kCals/kWh. As per the latest CERC Tariff Order for Central Sector Stations, the Heat Rate for combined cycle plants using natural gas as fuel is 2030 kCal/kWh. As the Heat Rate of 2000 kCals/kWh proposed by the Petitioner is as per the PPA and better than the guidelines of CERC Tariff Order, the same has been accepted by the Commission for both the tariff periods. The details of the Station Heat Rate is as given in the Table 3.11 below:

Table: 3.11 Station Heat Rate

kCal/kWh

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Station Heat Rate	2000	2000	2000	2000	2000

3.4.4 Total Cost of Gas**3.4.4.1 Petitioner's Submission**

The Petitioner has submitted that the fuel price for FY 2003-04 has been considered based on the Gas price notified by Gol. For FY 2004-05, 5% increase on the fuel price over the FY 2003-04 price has been considered by the Petitioner. The Petitioner has considered the calorific value of gas based on actual Calorific Value of the fuel at 8250 kCals/SCM. The total gas requirement is calculated based on the PLF projected considering the Station Heat rate. Based on these assumptions the price of gas works out to be Rs. 4.31/SCM and Rs. 4.53/SCM for FY 2003-04 and FY 2004-05 respectively.

3.2.1.2 Commission's Analysis

The Commission in its earlier Order based on TRANSCO had given an approval based on a fuel price of Rs. 4.04/SCM. However the Petitioner has revised the same to Rs. 4.31/SCM based on the actual expenses incurred in FY 2003-04 and the same has been approved by the Commission. For FY 2004-05, the Commission has considered an escalation of 5% on the actual gas price for FY 2003-04. The variable cost and total fuel cost as estimated by the Petitioner for FY 2003-04 and FY 2004-05 is given in Table 3.12 below:

Table:3.12 Fuel Cost

Description	FY 2003-04			FY 2004-05	
	TRANSCO Order	Petition	Commission	Petition	Commission
Calorific Value of Gas (kCal/SCM)	8251	8250	8250	8250	8250
Price of Gas (Rs./SCM)	4.04	4.31	4.31	4.53	4.53
Gross Generation (MU)	1998	1998	2262	1998	2200
Total Gas Quantity mill SCM	484	484	484	484	533
Cost of Gas (Rs. Crore)	196	209	237	219	242
Variable cost at bus bar (Rs./kWh)	1.01	1.08	1.08	1.13	1.13

The variable cost of power supply from the plant as estimated by the Commission works out to be Rs. 1.08/kWh and Rs. 1.13/kWh for FY 2003-04 and for FY 2004-05 respectively.

3.5 Summary of Fixed and Variable Costs

The summary of the ARR for FY 2004-05 estimated by the Petitioner and that approved by the Commission is as given in Table 3.13 below:

Table:3.13 Summary of Fixed and Variable Costs as approved by the Commission

	FY 2003-04		FY 2004-05	
	Petition	Commission	Petition	Commission
Net Generation (MU)	1938	2194	1938	2134
Fixed Cost (Rs. Crore)	263	225	265	222
Variable Cost per unit	1.08	1.08	1.13	1.13
Variable Cost (Rs. Crore)	209	237	219	242
Total Cost	472	462	485	464

4. Tariff Philosophy

4.1 Tariff Philosophy

Both PPCL and TRANSCO have submitted the draft PPAs for the Commission's approval and the same is being examined by the Commission for approval. In the absence of an approved PPA, the Commission would like to spell out its tariff philosophy for generating companies.

4.2 Two Part Tariff

Currently the tariff for the generation companies are fixed based on the 'Two Part Tariff Principles' announced by Gol, with modification from time to time. Under this principle the tariff is divided into two components (i) fixed component (ii) variable component.

4.2.1 Fixed Component of Tariff

The fixed component consists of all the costs incurred by the generating company irrespective of the generation (PLF) of the plant. This component typically includes;

- O&M cost
- interest payment
- depreciation
- interest on working capital
- tax payments
- return on equity

This could also include any fixed payment to be made by the generating company towards the purchase and transportation of fuel. As the capacity of the plant is dedicated to a utility, any fixed cost arising out of some contractual obligation of the generation company e.g. minimum fuel off-take guarantee, has to be paid by the power off taker.

The fixed costs are generally fixed based on pre-determined parameters. The generating company stands to gain if its performance parameters are better than the normative parameters agreed to between the generator and power off taker and loose if the operations are not up to the normative level. Generally the fixed costs are payable by the off taker at a particular contracted PLF level. The power off taker has to make the payment irrespective of despatch of power as long as the plant is available for generation at this agreed PLF. In some cases an incentive structure could also be worked out where the generating company shall be paid an incentive for deemed/actual generation over and above the contracted PLF. The total fixed cost shall be paid by the off-taker of the power on a monthly basis where each month payment shall be 1/12th of the total fixed cost.

4.3 Variable Component

Fuel cost is the variable component of the tariff, which, as the name suggests varies, based on the actual operation of the plant. Typically this includes primary fuel cost and secondary fuel cost.

The variable cost shall be paid by the off-taker based on the actual operation of the plant on a monthly basis. The variable cost shall be determined based on the pre-set operating parameters like Heat Rate of the plant and the Auxiliary Consumption norms. Under this principle the generator stands to gain if the performance is better than the pre-decided norms and stands to lose if the actual performance is below the norms. Generally the PPAs entered into between the generating company and the off takers of power specify the type of fuel used and the consumption norms. Generally it is the responsibility of the generating company to contract the necessary fuel for operating the plant.

4.4 Fuel Price Adjustment Formula

Apart from the approval of the ARR for FY 2004-05 the Petitioner has also requested for a Fuel Cost Adjustment Formula as discussed below.

4.4.1 Petitioner's Submission

The Petitioner has requested for an approval of appropriate Fuel Price Adjustment formula to compensate the variation of fuel cost as the fuel price is subject to price variations.

4.4.2 Commission's Response

The Petitioner has entered into a Fuel Supply Agreement with GAIL and as per the Agreement the fuel price is fixed as per the Ministry of Petroleum and Natural Gas, GOI notification on natural gas prices. As per this notification, the price would be determined and notified by GAIL with the approval of the Ministry for every quarter depending upon the average price of the basket of Fuel Oils based on the figures obtained from Platt's Oilgram for the previous quarter. As per the current notification the general price would vary between the floor price of Rs. 2150/MCM and ceiling price of Rs. 2850/MCM.

It can be seen from above paragraph, though the gas price is linked to the movement in prices of Fuel Oils, a cap has been prescribed beyond which the gas price will not increase irrespective of the increase on Fuel Oil prices. Further, the Commission has also considered an escalation factor of 5% on actual fuel price for FY 2003-04. Considering this the Commission feels that there is no need for a Fuel Price Adjustment Formula at this stage. However any variation in the fuel price beyond 5% increase during the year shall be considered during true up at the end of the year.

4.5 Open Cycle Tariff

The Petitioner has requested the Commission to fix tariff for Open Cycle operation of the plant.

4.5.1 Commissioner's Response

The Commission is of the opinion that the plant should be always operated in the combined cycle mode, as the open cycle operations are very inefficient. However under unforeseen circumstances, which are beyond the control of the Petitioner, the plant may be forced to operate in Open Cycle mode. The Commission will approve the operational parameters for open cycle and the conditions for open cycle operation while approving the Power Purchase Agreement between TRANSCO and PPCL.

4.6 Approved Tariff for FY 2004-05

Based on the Two Part Tariff principles as discussed in the above sections, the Commission approves the tariff for PPCL for FY 2003-04 and FY 2004-05 as given in Table 4.1 below:

Table: 4.1 Summary of the tariff approved by the Commission for FY 2003-04 and FY 2004-05

Description	FY 2003-04	FY 2004-05
Fixed Cost p.a. (Rs. Crore)	225	222
Variable Cost per unit (Rs./kWh)	1.08	1.13

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