



ORDER
on
AGGREGATE REVENUE REQUIREMENT
for
INDRAPRASTHA POWER GENERATION COMPANY
LIMITED
for
FY 2011-12



DELHI ELECTRICITY REGULATORY COMMISSION

AUGUST, 2011

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LIST OF ABBREVIATIONS

Abbreviation	Explanation
A&G	Administrative and General
AAD	Advance Against Depreciation
APC	Auxiliary Power Consumption
APM	Administered Price Mechanism
ARR	Aggregate Revenue Requirement
AT&C	Aggregate Technical and Commercial
ATE (Aptel)	Appellate Tribunal for Electricity
BPTAs	Bulk Power Transmission Agreement
BRPL	BSES Rajdhani Power Limited
BYPL	BSES Yamuna Power Limited
CCA	City Compensatory Allowance
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CISF	Central Industrial Security Force
DERA	Delhi Electricity Reform Act
DERC	Delhi Electricity Regulatory Commission
DISCOMs	Distribution Companies (BRPL, BYPL & NDPL)
DPCL	Delhi Power Corporation Limited
DTL	Delhi Transco Limited
DVB	Delhi Vidyut Board
EPF	Employees Contribution to Provident Fund
FPA	Fuel Price Adjustment
FRSR	Fundamental Rules / Supplementary Rules
GAIL	Gas Authority India Limited
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoNCTD	Government of National Capital Territory of Delhi
GTPS	Gas Turbine Power Station
HRA	House Rent Allowance
IPGCL	Indraprastha Power Generation Company Limited
LDO	Light Diesel Oil
LPSC	Late Payment SurCharge
LSC	Leave Salary Contribution
LSHS	Low Sulphur High Speed
LTC	Leave Travel Concession
MU	Million Units
MYT	Multi Year Tariff
NDMC	New Delhi Municipal Corporation
NDPL	North Delhi Power Limited

Abbreviation	Explanation
NTPC	National Thermal Power Corporation
O&M	Operations and Maintenance
PC	Pension Contribution
PLF	Plant Load Factor
PMT	Panna Mukta Tapti
PPCL	Pragati Power Corporation Limited
R&M	Repair and Maintenance
RLNG	Regasified liquefied Natural gas
RoCE	Return on Capital Employed
RoE	Return on Equity
RPH	Rajghat Power House
SHR	Station Heat Rate
SLDC	State Load Despatch Centre
TPA	Transport Allowance

A1: INTRODUCTION

- 1.1 This Order relates to the petition filed by Indraprastha Power Generation Company Limited (hereinafter referred to as 'IPGCL' or 'the Petitioner') for determination of generation tariff for its generating stations for the FY2011-12.
- 1.2 Before 2001, Delhi Vidyut Board (hereinafter referred to as 'DVB') was the sole entity handling all functions of generation, transmission and distribution of electricity in the National Capital Territory of Delhi. However, the Government of National Capital Territory of Delhi notified the Delhi Electricity Reform (Transfer Scheme) Rules, 2001 (hereinafter referred to as 'Transfer Scheme') on November 20, 2001 and provided for unbundling of the functions of DVB into different entities handling generation, transmission and distribution of electricity.

Indraprastha Power Generation Company Limited

- 1.3 All the assets, liabilities, rights and interest of DVB in the Indraprastha Thermal Power Station, Rajghat Power House and Indraprastha Gas Turbine Power Station were transferred to IPGCL.
- 1.4 IPGCL is wholly owned by the Government of National Capital Territory of Delhi and operates three generating stations:
- (a) Indraprastha Thermal Power Station (IP Station) having a capacity of 247.5 MW (which was decommissioned on December 31, 2009);
 - (b) Rajghat Thermal Power House (RPH) having a capacity of 135 MW; and
 - (c) Indraprastha Gas Turbine Power Station (GTPS) having a capacity of 270MW.

Delhi Electricity Regulatory Commission (DERC)

- 1.5 The Delhi Electricity Regulatory Commission (hereinafter referred to as 'DERC' or 'Commission') was constituted by the Government of National Capital Territory of Delhi on March 3, 1999 and it became operational from December 10, 1999.
- 1.6 The Commission's approach to regulation is driven by the Electricity Act 2003, the National Electricity Plan, the National Tariff Policy and the Delhi Electricity Reform Act 2000 (hereinafter referred to as 'DERA'). The Act mandates the Commission to take measures conducive to the development and management of the electricity industry in an efficient, economic and competitive manner.

Functions of the Commission

- 1.7 The Commission derives its powers from DERA as well as the Act. The major functions assigned to the Commission under the DERA are as follows:

- (a) to determine the tariff for electricity, wholesale, bulk, grid or retail and for the use of the transmission facilities;
- (b) to regulate power purchase, transmission, distribution, sale and supply;
- (c) to promote competition, efficiency and economy in the activities of the electricity industry in the National Capital Territory of Delhi;
- (d) to aid and advise the Government on power policy;
- (e) to collect and publish data and forecasts;
- (f) to regulate the assets and properties so as to safeguard the public interest;
- (g) to issue licenses for transmission, bulk supply, distribution or supply of electricity;
- (h) to regulate the working of the licensees; and
- (i) to adjudicate upon the disputes and differences between licensees.

1.8 The functions assigned to the Commission under the Act are as follows:

- (1) "Section 86. The State Commission shall discharge the following functions, namely: -
 - (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
 - (b) 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;
 - (c) facilitate intra-state transmission and wheeling of electricity;
 - (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
 - (e) promote cogeneration 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 licensee;

- (f) adjudicate upon the disputes between the licensees and generating companies and to refer any dispute for arbitration;
 - (g) levy fee for the purposes of this Act;
 - (h) specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of section 79;
 - (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
 - (j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
 - (k) discharge such other functions as may be assigned to it under this Act.
- (2) The State Commission shall advise the State Government on all or any of the following matters, namely: -
- (a) promotion of competition, efficiency and economy in activities of the electricity industry;
 - (b) promotion of investment in electricity industry;
 - (c) reorganisation and restructuring of electricity industry in the State;
 - (d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.”

- 1.9 As part of the tariff related provisions of the Act, the State Electricity Regulatory Commission (SERC) has to be guided by the National Electricity Policy, National Tariff Policy and the National Electricity Plan.

Multi Year Tariff Regulations and Extension of the Control Period

- 1.10 The Commission issued a Consultative Paper and Draft Regulations for Generation, Transmission and Distribution to all concerned stakeholders, including the Government, the Generation Companies, Transmission and Distribution Licensees, consumers, etc. These documents detailed the principles, approach and methodology to be adopted for the determination of tariff for various entities under the MYT framework and also highlighted the various issues which were to be discussed and finalized for successful implementation of the MYT principles.

- 1.11 These Draft Regulations and MYT Consultative Paper were issued on October 11, 2006 and a notice to this effect was published in leading newspapers seeking comments from public and stakeholders.
- 1.12 The Commission issued Regulations vide notification dated May 30, 2007 specifying Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Multi Year Tariff (MYT) framework for the period FY 2007-08 to FY2010-11.
- 1.13 The Commission vide its Order dated May 10, 2011 extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012 after following the due process of law.

Filing of Petition for Approval of ARR for FY 2011-12

Filing of Petition

- 1.14 IPGCL has filed a petition before the Delhi Electricity Regulatory Commission on April 15, 2011 for approval of Aggregate Revenue Requirement (ARR) and determination of Generation Tariff for its generating stations for FY 2011-12 under Section 62, 64 and 86 of the Electricity Act, 2003, read with the MYT Regulations, 2007 duly extended upto March 31, 2012.

Acceptance of Petition

- 1.15 The Commission admitted the petition for approval of ARR and determination of Generation Tariff for its generating stations for FY 2011-12 vide its Order dated May 4, 2011 subject to clarifications, if any, that would be obtained from the Petitioner from time to time. A copy of the Admission Order dated May 4, 2011 is enclosed as **Annexure I** to this Order.

Interaction with the Petitioner

- 1.16 The Order has referred at numerous places to various actions taken by the “Commission”. It may be mentioned for the sake of clarity, that the term “Commission” in most of the cases refers to the Staff of the Commission and the Consultants appointed by the Commission for carrying out the due diligence on the petitions filed by the utilities, obtaining and analysing information/clarifications received from the utilities and submitting all issues for consideration by the Commission.
- 1.17 For this purpose, the Commission Staff and Consultants held discussions with the Petitioners, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.
- 1.18 The role of the Commission has been to hold public hearings and to take the final view with respect to various issues concerning the principles and guidelines for tariff determination. The use of the term “Commission” may, therefore, be read in the

context of the above clarification. The Commission has considered due diligence conducted by the Staff of the Commission and the Consultants in arriving at its final decision.

- 1.19 The Commission interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the tariff petition. The Commission and the Petitioner also discussed key issues related to the petition, which included norms of operation of the plant, details of fuel expenses submitted to the Commission, loan details, etc.
- 1.20 The Commission conducted multiple validation sessions with the Petitioner between May 2011 and July 2011, during which the discrepancies and additional information required by the Commission were sought. The Petitioner submitted its replies to the list of queries of the Commission raised in these sessions and provided documentary evidence to substantiate its claims regarding various submissions.
- 1.21 The Petitioner submitted its replies, as shown below, in response to the queries raised by the Commission in these sessions, which have been considered during approval of the Aggregate Revenue Requirement of the Petitioner.

Table 1: List of Correspondence with IPGCL

S.No.	Date	Letter No.	Subject
1.	15.04.2011	F-30/IPGCL/CS/19	Filing of Tariff Petition for Determination of Generation Tariff for FY 2011.12.
2.	19.05.2011	IPGCL/Comml./IDRA11-12/84	Additional information reg. Determination of Generation Tariff for FY 2011-12 and Truing-up for MYT Control Period FY 2007-08 to FY 2010-11.
3.	17.06.2011	IPGCL/Comml./IDRA11-12/194	Additional information reg. Determination of Generation Tariff for FY 2011-12 and Truing-up for MYT Control Period FY 2007-08 to FY 2010-11.
4.	28.06.2011	IPGCL/Comml./IDRA11-12/254	Additional information reg. Determination of Generation Tariff for FY 2011-12 and Truing-up for MYT Control Period FY 2007-08 to FY 2010-11.
5.	08.07.2011	IPGCL/Comml./IDRA11-12/273	Additional information reg. Determination of Generation Tariff for FY 2011-12 and Truing-up for MYT Control Period FY 2007-08 to FY 2010-11.
6.	22.07.2011	IPGCL/Comml./IDRA11-12/293	Additional information reg. Determination of Generation Tariff for FY 2011-12 and Truing-up for MYT Control Period FY 2007-08 to FY 2010-11.
7.	29.07.2011	IPGCL/Comml./IDRA11-12/302	Clarification required vide e-mails dated 25.07.2011 and 28.07.2011.

Public Hearing

- 1.22 The Petitioner published a Public Notice on May 11, 2011 indicating the salient features of its petition, for inviting responses from stakeholders, in the following newspapers with their respective dates of publication:

- (a) Times of India (English)

- (b) Financial Express (English)
 - (c) Indian Express (English)
 - (d) Jansatta (Hindi)
 - (e) Daily Educator (Punjabi)
 - (f) The Daily Milap (Urdu)
- 1.23 Copies of the Public Notice in English, Hindi, Punjabi and Urdu are enclosed as **Annexure II** to this Order. A detailed copy of the petition was also made available for purchase from the head-office of the Petitioner on any working day from May 12, 2011 to May 27, 2011 between 11 A.M. and 4 P.M. on payment of Rs 100/-. A complete copy of the petition was also made available on the website of the Commission, as well as that of the Petitioner, requesting for comments of the stakeholders thereon.
- 1.24 The Commission also published a Public Notice on May 13, 2011 inviting comments from stakeholders on the petitions filed by the Licensee in the following newspapers with their respective dates of publication:
- (a) Times of India (English)
 - (b) Hindustan Times (English)
 - (c) Nav Bharat Times (Hindi)
 - (d) The Daily Milap (Urdu)
 - (e) Daily Educator (Punjabi)
- 1.25 Copies of the above Public Notice in English, Hindi, Punjabi and Urdu are attached as **Annexure III** to this Order. Interested consumers and stakeholders were requested to file their objections and suggestions on the petition by May 31, 2011.
- 1.26 The Petitioner/ Commission received comments from four stakeholders. The Petitioner responded to the comments of the stakeholders with a copy to the Commission. The Commission invited all stakeholders who have filed their objections and suggestions to attend Public Hearing. The list of stakeholders who responded to the public notice on ARR and tariff petitions and those who attended the public hearing is provided as **Annexure IV** to this Order.
- 1.27 The public hearing was held in the Commission's Court Room on July 1, 2011 at 10.30 AM to discuss the issues related to the petition filed by the Petitioner for approval of ARR and Generation Tariff for FY 2011-12.

- 1.28 The issues and concerns voiced by various stakeholders have been examined by the Commission. The major issues discussed during the public hearing, through the comments made by the stakeholders and the views of the Commission, have been summarized in Section A2.

Layout of the Order

- 1.29 This Order is organised into six Chapters:

- (a) Chapter A1 provides details of the tariff setting process and the approach of the Order;
- (b) Chapter A2 provides a detailed account of the Public Hearing process, including the comments made by various stakeholders, the Petitioner's response and views of the Commission;
- (c) Chapter A3 provides introduction to the petition filed by IPGCL for FY 2011-12;
- (d) Chapter A4 analyses the Aggregate Revenue Requirement and Generation tariff for FY 2011-12 for Rajghat Power House; and
- (e) Chapter A5 analyses the Aggregate Revenue Requirement and Generation tariff for FY 2011-12 for Gas Turbine Power Station; and
- (f) Chapter A6 details the Directives of the Commission and Summary of the Generation Tariffs for IPGCL stations.

- 1.30 The Order contains the following Annexure, which are an integral part of the Tariff Order.

- (a) Annexure I – Admission Order;
- (b) Annexure II – Copies of Public Notices published by Licensees;
- (c) Annexure III – Copies of Public Notice published by the Commission;
- (d) Annexure IV – List of Stakeholders.

A2: RESPONSES FROM STAKEHOLDERS

Introduction

- 2.1 Public hearing being a platform to understand the problems and concerns of various stakeholders, the Commission has always encouraged transparent and participative approach in the hearings, which are used to obtain necessary inputs required for tariff determination.
- 2.2 The public hearing was held in the office of the Commission on July 1, 2011, wherein stakeholders put forth their comments/suggestions before the Commission in the presence of the Petitioner.
- 2.3 The Commission has examined the issues and concerns voiced by various stakeholders in their written comments as well as in the Public hearing and also the response of the petitioner thereon. The comments/ suggestions submitted by various stakeholders in response to the ARR petition, the replies given by the Petitioner and the views of the Commission have been summarized under various sub-heads as below:

Payment to DPCL on account of prior period liability

Stakeholder's Comment

- 2.4 DPCL has claimed that a sum of Rs. 276.80 Cr which it had paid to various third parties/contractors and suppliers as per the bills and claims against erstwhile DVB are payable to it by all the successor entities. Utility wise break-up of the same is however still being worked out.

Petitioner's Submission

- 2.5 The Petitioner has submitted that *"it has not received any information about the claims/bills paid by DPCL towards works/supplies/services supplied to PPCL before the unbundling of DVB. Hence no such claim has been included in the ARR."*

Commission's View

- 2.6 During the Public hearing, DTL submitted that DPCL has not raised any demand on account of prior period liability as the detailed break-up of the claim is yet to be worked out for various utilities. The Commission is of the view that the claim of DPCL is premature and does not require consideration at this stage.

Payment to Pension Trust

Stakeholder's Comment

2.7 Stakeholders have claimed that the successor entities of the erstwhile DVB are liable to make payment to the Pension Trust on account of

- (a) Actuarial Revaluation of the Fund (total amount to be paid – Rs 1315 Cr).
- (b) Reimbursement of actual payment to the retirees by the fund on account of medical reimbursement, LTC from 2002-11 and Pension Arrears paid on account of Sixth Pay Commission recommendations. The details of which are shown in the tables below:

Table 2: Additional Contribution to the fund (Rs Cr)

Particulars	DTL	IPGCL	BRPL	BYPL	NDPL	Total
Additional Contribution to the Fund*	119.67	159.51	399.10	326.91	309.81	1315.00

Table 3: Terminal benefits as on 31.03.2011 (Rs Cr)

	DTL	IPGCL	BRPL	BYPL	NDPL	Total
Amount Claimed by Trust for FY11*	16.84	21.84	79.68	65.27	61.85	245.48
Amount Claimed by Trust for FY12*	24.28	32.35	80.95	66.31	62.84	266.73
Claimed in Petition for FY11**	26.98	32.18	0	0	0	0
Claimed in Petition for FY12**	50	32.35	0	0	0	0

*As per representation received from Pension Trust **As per petitionPetitioner's Submission

2.8 With regards to underfunding of the Pension Trust Fund, the Petitioner has submitted that it has informed the Commission about the claim in its ARR Petition for FY 2011-12. It has also submitted that the *"claim is being contested with the Trust by all successors of the erstwhile DVB. This matter is now under discussion with GNCTD and Pension Trust. IPGCL will make claim for the same in the ARR as per the final view taken by the management."*

2.9 The Petitioner has submitted that the amount claimed by the Pension Trust towards Medical reimbursement, LTC and Pension Arrears as on 31.3.2011 and a demand of Rs 32.35 Cr received for FY 2011-12 has been claimed in the ARR in the subsequent submissions to the Commission.

Commission's View

2.10 The Commission has considered the submissions made by Secretary, Pension Trust and CEO's of the DISCOMs at length. The Commission also examined the relevant provisions of the Transfer Scheme Rules, 2001, Tripartite Agreement entered amidst GoNCTD, DVB and association of Union of the officers and employees of the

erstwhile DVB, Trust Deed, Pension Trust and the record pertaining to the Civil Writ Petition (C) No 1698/2010 filed by Delhi State Electricity Workers Union before the Hon'ble High Court of Delhi.

- 2.11 The Commission noticed that shortfall of the fund in the Pension Trust is the main issue in the said Writ Petition. At the present matter is sub-judice. The Commission also observes that Pension Trust is facing acute shortage of fund and is left with the meagre fund just sufficient to meet its obligation towards the pensioners for another 5 to 6 months only.
- 2.12 In view of the above and to avoid any undue hardship to the retired employees (pensioners) of the erstwhile DVB, the Commission has considered providing a provisional lump sum amount of Rs 150 Cr in the ARR of the DTL for FY 2011-12 subject to the final outcome in the Civil Writ Petition (C) No 1698/2010.

A3: ARR PETITION FOR FY 2011-12

- 3.1 The Commission has analysed the Tariff Petition submitted by the Petitioner for approval of Aggregate Revenue Requirement and determination of Generation Tariffs for FY 2011-12.
- 3.2 The Commission held various discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all information submitted by the Petitioner as part of the tariff petitions, audited accounts for FY 2007-08 to FY 2009-10, responses to various queries raised during the discussions and also during the public hearing, for determination of tariffs.
- 3.3 IPGCL is wholly owned by the Government of National Capital Territory of Delhi and had a total generating capacity of 652.5 MW. Following the final closure of the 247.5 MW Indraprastha Thermal Power Station (IP Station) on December 31, 2009, the Petitioner currently has total generating capacity of 405 MW. It presently operates two generating stations, which are:
- (a) 135 MW Rajghat Power House (RPH); and
- (b) 270 MW¹ Indraprastha Gas Turbine Power Station (GTPS)
- 3.4 The details of each of these stations are given below:

Table 4: Indraprastha Thermal Power Station

Details	Unit 2	Unit 3	Unit 4	Unit 5
Capacity (MW)	62.5	62.5	62.5	60
Date of Commissioning	1 Jan 1968	1 Mar 1968	30 Apr 1968	1 Jan 1974
Status	Decommissioned	Decommissioned	Decommissioned	Decommissioned
Fuel	Washed Coal			
Fuel Source	NCL, Bina			

Table 5: Rajghat Power House

Details	Unit 1	Unit 2
Capacity (MW)	67.5	67.5
Date of Commissioning	May 1990	Jan 1990
Fuel	Washed Coal	
Fuel Source	NCL, Bina	

Table 6: Indraprastha Gas Turbine Power Station

Details	GT1	GT2	GT3	GT4	GT5	GT6	STG1	STG2	STG3
Capacity (MW)	30	30	30	30	30	30	30*	30*	30*
Date of	17 Jun	20 Jun	11 Aug	3 Sept	11 Nov	20 Nov	24 Apr	12 Aug	27 Dec

¹ The capacity of GTPS has been de-rated from 282 MW to 270 MW by CEA w.e.f. 16.9.2008.

Details	GT1	GT2	GT3	GT4	GT5	GT6	STG1	STG2	STG3
Commissioning	1986	1986	1986	1986	1986	1986	1996	1997	1996
Fuel	Gas	Gas	Gas	Gas	Gas	Gas	WHRU	WHRU	WHRU
Fuel Source	GAIL HBJ Pipeline								

* The capacity of each STG has been de-rated from 34 MW to 30 MW by CEA w.e.f. 16.9.2008.

3.5 In the present petition, the Petitioner has requested for true-up of FY 2007-08 to FY 2010-11 along with approval of ARR for FY 2011-12. A brief summary of the variable and fixed cost submitted by the Petitioner for its two stations for FY 2007-08 to FY 2011-12 in the Tariff Petition is shown in the table below:

Table 7: Summary of Petition for IP Station

Particulars	Units	FY 2007-08 (Actual)	FY 2008-09 (Actual)	FY 2009-10 (Actual)
Gross Generation	MU	702	667	303
Net Generation (Delhi's Share)	MU	606.29	570.92	253.97
Total Fixed Cost	Rs. Cr	64.13	75.45	55.15
Total Variable Cost	Rs. Cr	154.94	158.1	80.76
Total Cost	Rs. Cr	219.07	233.55	135.91
Fixed Cost per Unit	Rs./kWh	1.0577	1.3216	2.1715
Variable Cost per Unit	Rs./kWh	2.5555	2.7692	3.1799
Total Cost per Unit	Rs./kWh	3.6132	4.0908	5.3514

Table 8: Summary of Petition for RPH

Particulars	Units	FY 2007-08 (Actual)	FY 2008-09 (Actual)	FY 2009-10 (Actual)	FY 2010-11 (Provisional)	FY 2011-12 (Projected)
Gross Generation	MU	897.764	877.045	645.131	781.063	830.088
Net Generation	MU	780.965	756.188	552.015	689.291	730.477
Total Fixed Cost	Rs. Cr	1678.729	1633.233	1197.146	1470.354	1560.565
Total Variable Cost	Rs. Cr	157.06	171.48	150.29	168.15	202.23
Total Cost	Rs. Cr	244.19	258.61	240.39	282.41	326.72
Fixed Cost per Unit	Rs./kWh	1.1157	1.1522	1.6322	1.6576	1.7042
Variable Cost per Unit	Rs./kWh	2.0111	2.2677	2.7226	2.4395	2.7685
Total Cost per Unit	Rs./kWh	3.1268	3.4199	4.3548	4.0971	4.4727

Table 9: Summary of Petition for GTPS

Particulars	Units	FY 2007-08 (Actual)	FY 2008-09 (Actual)	FY 2009-10 (Actual)	FY 2010-11 (Provisional)	FY 2011-12 (Projected)
Gross Generation	MU	1280.36	1280.36	1497.916	1368.35	1660.18
Net Generation	MU	1241.18	1237.55	1444.76	1322.78	1604.06
Total Fixed Cost	Rs. Cr	2521.54	2517.91	2942.676	2691.13	3264.24

Particulars	Units	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Total Variable Cost	Rs. Cr	222.68	266.34	344.68	356.24	538.53
Total Cost	Rs. Cr	338.46	387.06	484.85	525.58	719.66
Fixed Cost per Unit	Rs./kWh	0.9328	0.9755	0.9702	1.2802	1.1292
Variable Cost per Unit	Rs./kWh	1.7941	2.1521	2.3856	2.6931	3.3573
Total Cost per Unit	Rs./kWh	2.7269	3.1276	3.3558	3.9733	4.4865

- 3.6 The Commission has extended the MYT Regulations and the Control Period for a period of one year up to March 31, 2012 and it shall carry out true up for each year of the Control Period only at the end of the extended Control Period. The Commission vide its Order dated May 4, 2011 has also admitted the petition for approval of ARR for FY 2011-12.
- 3.7 While the Commission shall carry out true up for all years of the extended Control Period (FY 2007-08 to FY 2011-12) at the end of the extended Control Period, it has decided to allow additional expenses/costs to the Petitioner on account of the Order of the Hon'ble Appellate Tribunal of Electricity (hereinafter referred to as "ATE") in Appeal No. 26/2008 and Order of the Commission dated December 3, 2009.
- 3.8 The following Chapters contain detailed analysis of the petition submitted by the Petitioner and the various parameters approved by the Commission for determination of Generation Tariff for RPH and GTPS for FY 2011-12. Since I.P. Power Station was decommissioned on December 31, 2009, generation tariff is not required to be determined for it. The true up for all generating stations of the Petitioner, including I.P. Station, shall be carried out at the end of the extended Control Period.

A4: PETITION FOR RAJGHAT POWER HOUSE STATION**Revision of Expenses for FY 2007-08 to FY 2010-11****Revision in Base O&M Expenses**

- 4.1 In its MYT Order the Commission had projected the total O&M Expenses (employee expenses, A&G Expenses, R&M expenses) for the Control Period by escalating the base O&M Expenses, which were calculated as the average of the approved O&M expenses in the years FY 2005-06 and FY 2006-07. This approach was at variance with the approach followed by the Commission in case of the transmission and distribution licensees wherein the Commission had projected O&M expenses for FY 2007-08 to FY 2010-11 by considering the approved expenses for FY 2006-07 as the base.
- 4.2 The Commission has already conceded in Appeal No. 26/2008 in ATE to revise the base O&M expenses for the Petitioner to correct for the anomaly in the MYT Order and apply a common approach to all Utilities. The revised base O&M expenses have been escalated by 4% p.a. for estimating the O&M expenses for each year of the Control Period. The revised approved O&M expenses for FY 2007-08 to FY 2010-11 are given in the table below:

Table 10: Impact of Revision in Base O&M Expenses (Rs. Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Escalation Factor		1.04	1.04	1.04	1.04
Base O&M Expenses Approved in the MYT Order	26.27#				
O&M Expenses allowed by the Commission in MYT Order	27.76	27.32	26.36	27.42	28.51
Actual O&M Expenses submitted by the Petitioner		42.08	43.11	48.72	72.16
Revised Base O&M Expenses Approved Now	28.74*				
Revised O&M Approved Now due to Correction of Base O&M Expenses	28.74	29.89	31.09	32.33	33.62

Base O&M expenses taken equal to average of O&M expenses of FY 2005-06 and FY 2006-07

* Base O&M expenses taken equal to approved O&M expenses for FY 2006-07 (as approved in Order dated December 3, 2009)

- 4.3 The expenses in respect of Employee Expenses, Repairs & Maintenance (R&M), and Administrative & General Expenses (A&G) as approved in the MYT Order and as approved now after correcting the anomaly are shown in the Table below:

Table 11: Revised O&M Expenses after Correction of Base expenses (Rs Cr)

	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Approved in MYT Order					
Employee Cost	12.61	12.40	12.90	13.42	13.95
A&G Expenses	4.73	2.68	2.79	2.90	3.02
R&M Expenses	10.43	10.26	10.67	11.10	11.54
O&M Expenses	27.76	27.32	26.36	27.42	28.51
Approved Now					
Employee Cost	15.06	15.66	16.29	16.94	17.62
A&G Expenses	3.25	3.38	3.52	3.66	3.80
R&M Expenses	10.43	10.85	11.28	11.73	12.20
O&M Expenses	28.74*	29.89	31.09	32.33	33.62

* As approved in Order dated December 3, 2009

Impact of 6th Pay Commission Recommendations on Employee Cost

Petitioner's Submission

- 4.4 The Petitioner has submitted that GNCTD has approved the Wage Revision Committee recommendations, based on Sixth Pay Commission in October 2009 with effect from January 1, 2006. The Petitioner has paid the interim relief w.e.f. April 1, 2008 and implemented the GNCTD Orders on Wage Revision Committee recommendations in October 2009 and paid the arrears for past period. The Petitioner has submitted that the wage revision due to 6th Pay Commission recommendations led to additional employee expenses from FY 2007-08 to FY 2010-11. It has requested for the true up of the actual employee expenses for the period FY 2007-08 to FY 2010-11, including the impact of the recommendations of the Sixth Pay Commission.
- 4.5 The Commission directed the Petitioner to submit component wise and year wise break-up of the impact of wage revision on the total employee cost. The Petitioner submitted that in the details furnished in the petition on account of impact of Sixth Pay Commission, the figures on account of Interim relief already paid, Leave Salary Contribution (LSC), Pension Contribution (PC) and EPF contribution (Employer's Contribution to Provident Fund) upto September-2009 was erroneously left out. Further, the allowances payable on implementation of Sixth Pay Commission/GNCTD Order such as Generation Linked Incentive, Education allowance, LTC leave encashment etc. are also required to be accounted in the total impact. The same were not accounted for in the earlier figures submitted in the petition. The revised impact of wage revision as submitted by the Petitioner is shown in the table below.

Table 12: Impact of 6th Pay Commission Recommendations (Rs. Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Impact due to the 6 th Pay Commission submitted in the Petition	0.82	3.25	3.22	4.02	5.04	13.95
Impact due to the 6 th Pay Commission submitted in the Additional	1.11	4.51	4.49	5.03	5.91	10.72

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Information						

Commission's Analysis

4.6 The Commission in its MYT Order had anticipated additional expenditure on account of wage revision expected due to implementation of recommendations of the 6th Pay Commission.

4.7 While approving employee cost for the Control Period, in the MYT Order, the Commission had stated:

"The Commission has recognised the uncontrollable nature of the 6th Pay Commission recommendations and has considered an increase of 10% in total Employee Expenses."

"Since the arrears on account of revision of employee costs are expected to be paid only in FY09, the Commission has considered the same in tariffs from FY09 onward. The Commission shall true-up the impact on account of 6th Pay Commission recommendations based on the actual impact of the same"

4.8 The actual impact of wage revision on employee cost of FY 2005-06 and FY 2006-07 has been submitted as Rs 1.11 Cr and Rs 4.51 Cr and thus the revised employee cost, including impact of wage revision, for FY 2005-06 and FY 2006-07 works out to be Rs 15.34 Cr and Rs 19.57 Cr respectively.

4.9 For considering the impact of wage revision on employee cost for each year from FY 2007-08 to FY 2010-11, the revised employee expenses have been escalated by the relevant escalation factor to arrive at the employee expenses for each year of the Control Period from FY 2007-08 to FY 2010-11 as would have been done at the time of deciding the MYT tariff if the revised employee expense for FY 2006-07 had been known. The revised trajectory for employee expenses for FY 2007-08 to FY 2010-11 after revision in the base expenses is shown below:

Table 13: Impact of Wage Revision on Employee Cost approved by the Commission (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Base Employee Cost for FY 2006-07	19.57				
Escalation Factor		1.04	1.04	1.04	1.04
Employee Cost (Including 6th Pay Commission impact) – Revised		20.35	21.17	22.01	22.89

4.10 Hence, the Commission has allowed additional amount for the FY 2007-08 to FY 2010-11 on account of revision of employee cost in the base year (FY 2006-07) as shown in the Table below:

Table 14: Impact of Wage Revision on Employee Cost approved by the Commission (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Revised Employee Cost (excluding 6th Pay Commission impact) - (A) (Refer Table 11)	15.66	16.29	16.94	17.62
Revised Employee Cost (Including 6th Pay Commission impact) (B) (Refer Table 13)	20.35	21.17	22.01	22.89
Additional Employee Cost Allowed due to Increase in Base Year Employee Cost due to Wage Revision (B-A)	4.69	4.88	5.07	5.28

- 4.11 Further, the Commission has also observed that while the increase in salaries due to wage revision was with retrospective effect from January 1, 2006, the implementation of wage revision recommendations also led to introduction/removal/increase of certain allowances such as HRA, TPA, CCA and Children Education Allowance (from FY 2008-09), LTC (from FY 2009-10), Special Duty Allowance and Generation Incentive (from FY 2010-11). The Commission has added the amount paid on account of these 'New Allowances' (excluding Generation Incentive) separately in the employee cost from FY 2008-09 onwards.
- 4.12 As per the Petitioner's submission, the Generation Linked Incentive scheme was framed to link the productivity with the operational targets. The factors recommended for incentives/ disincentives are Equivalent Availability Factor, Auxiliary Power Consumption, Station Heat Rate and Planned shutdown. The Commission has not allowed the additional amount on account of Generation Incentive as the Commission already provides Generation Incentive to the Petitioner for a higher PLF, which the Petitioner may utilize towards incentivizing its employees. The total amount allowed on account of these 'New Allowances' is shown below.

Table 15: Amount Paid on Account of 'New Allowances' (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Amount Paid due to New Allowances		1.03	1.82	3.20

- 4.13 The total impact of wage revision, including amount allowed on account of 'New Allowances' is shown in the table below.

Table 16: Additional Amount allowed on Wage Revision (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Additional Employee Cost Allowed due to Revision of Base Year Expenses (A) (Refer Table 14)	4.69	4.88	5.07	5.28
Amount allowed due to New Allowances (B) (Refer Table 15)		1.03	1.82	3.20
Additional Employee Cost Allowed Now on account of Wage Revision (A+B)	4.69	5.91	6.89	8.48

4.14 The Commission while approving the employee cost in the MYT Order had expected the arrears on account of revision of employee costs to be paid in FY 2008-09 and had considered the payment of arrears in the total employee cost approved for FY 2008-09. Similarly, the increase in salaries had been considered for each year, but the impact of such increase had only been taken from FY 2008-09 onwards. Regarding the actual payment of arrears for the revision in salaries from FY 2007-08 to FY 2009-10, the Petitioner has submitted that:

- (a) It started paying the interim relief to its employees w.e.f. April, 2008. The payment on account of revision in salaries due to wage revision was paid in the month of October, 2009.
- (b) The revised claim on account of revision in Leave Salary Contribution (LSC) and Pension Contribution (PC) has been provided in the Books of Account.

4.15 Accordingly, while the Commission has considered the increase in salaries for each year, the payment of arrears has been considered partially in FY 2008-09 (Rs 0.96 Cr on account of interim relief @20% of salaries) and partially in FY 2011-12 (Rs 5.70 Cr on account of revised LSC and PC payments which have been provided for in the accounts but have not yet been paid). The balance amount on account of wage revision has been considered in FY 2009-10. Further, the impact of increase in salaries has been taken from FY 2010-11 onwards.

Table 17: Approved Arrears and Increase in Employee Cost (Rs Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Extra Employee Cost Allowed due to Wage Revision	1.11	4.51					
Extra Employee Cost Allowed due to Revision of Base Year Expenses (Refer Table 16)			4.69	4.88	5.07	5.28	
Amount allowed due to New Allowances (Refer Table 16)				1.03	1.82	3.20	
Total	1.11	4.51	4.69	5.91	6.89	8.48	
Accumulated Arrears Pay Out				0.96	16.46		5.70*
Approved Increase in Salaries						8.48	

** On account of LSC and PC payments (not paid), this has been included in ARR of FY 2011-12

Table 18: Revised Employee Expenses for FY 2007-08 to FY 2010-11 (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost Allowed MYT Order (A)	12.40	17.05	14.75	15.35
Revised Employee Cost Approved Now (excluding 6th Pay Commission) (B) (Refer	15.66	16.29	16.94	17.62

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Table 11)				
Arrears		0.96	16.46	
Approved Now (C) (Refer Table 17)				
Increase in Salaries in FY 2010-11				8.48
Approved Now (D) (Refer Table 17)				
Revised Employee Cost	15.66	17.25	33.40	26.10
Approved Now (E=B+C+D)				

4.16 The total O&M expenses as approved by the Commission in the MYT Order and as approved now, in accordance with the revisions mentioned above, are shown in the table below.

Table 19: Total Revised O&M Expenses approved by the Commission (Rs Cr)

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
	Approved in MYT Order			
Employee Cost	12.40	12.90	13.42	13.95
A&G Expenses	2.68	2.79	2.90	3.02
R&M Expenses	10.26	10.67	11.10	11.54
O&M Expenses	27.32	26.36	27.42	28.51
Impact of 6 th Pay Commission	0.00	4.15	1.34	1.40
Total O&M Expenses	27.32	30.51	28.76	29.91
	Approved Now			
Employee Cost	15.66	16.29	16.94	17.62
A&G Expenses	3.38	3.52	3.66	3.80
R&M Expenses	10.85	11.28	11.73	12.20
O&M Expenses	29.89	31.09	32.33	33.62
Impact of 6 th Pay Commission	0.00	0.96	16.46	8.48
Total O&M Expenses	29.89	32.04	48.79	42.10
Difference from MYT	2.57	1.53	20.03	12.19

Impact of 6th Pay Commission Recommendations on CISF Expenses

Petitioner's Submission

4.17 The Petitioner has deployed CISF for the security of its plants. It has been submitted that their pay structure is also governed by the Central Government rules and thus the Sixth Pay Commission recommendations were also implemented in CISF. Accordingly, the expenditure on security has also increased substantially. The impact of Sixth Pay Commission on CISF manpower (for IPGCL) as submitted in the petition has been shown below.

Table 20: Impact of Sixth Pay Commission on CISF Security Expenses as submitted in the Petition (in Rs Cr)

Particulars	FY 2008-09	FY 2009-10	FY 2010-11
IP Power Station	1.39	0.47	0.52
Rajghat Power House	1.22	0.42	0.46
GTPS	1.62	0.55	0.61
IPGCL (as a whole)	4.23	1.44	1.59

- 4.18 In the additional information, the Commission directed the Petitioner to submit details regarding the impact of wage revision on CISF cost and the calculations of the same. The Petitioner submitted that the expenditure incurred on the security & fire services provided by CISF during FY 2007-08 to FY 2010-11 including revision of pay on account of sixth pay commission recommendations and service tax applicable w.e.f. April 1, 2009 was as under:

Table 21: CISF Expenses (including service tax) as Submitted by the Petitioner (Rs Cr)

Particulars (Rs. Cr)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
I.P. Power Station	2.96	3.20	3.21	2.58
Rajghat Power House	1.78	2.78	2.83	2.97
GTPS	3.39	3.78	3.97	3.58
IPGCL (as a whole)	8.13	9.76	10.01	9.13

- 4.19 It has also submitted that the GoI has imposed service tax with effect from 1st May 2006 on security agency services through Finance Act. Ministry of Home Affairs has decided to charge service tax on the services provided by CISF w.e.f April 1, 2009 and service tax for the period prior to April 1, 2009 is not payable pending decision by GoI. The company is paying service tax @ 10.3% on the services provided by CISF. The Petitioner has submitted the service tax payable on CISF cost as under:

Table 22: Expenditure incurred on Security Expenses by IPGCL (as a whole) (Rs Cr)

Year	Net Amount	Service tax	Total
FY 2007-08	8.13	-	8.13
FY 2008-09	9.76		9.76
FY 2009-10	9.15	0.86	10.01
FY 2010-11	8.28	0.85	9.13
Total	35.32	1.71	37.03

- 4.20 The revised impact on account of Sixth Pay Commission and impact on account of service tax on CISF costs has been worked out as under by the Petitioner:

Table 23: Additional CISF Expenses (Rs Cr)

Particulars	Amount
Actual Net Amount (excluding service tax) paid (Refer Table 22) (A)	35.32
Amount allowed by the Commission in FY 2006-07	4.71
Amount allowed for FY 2007-08 to FY 2010-11 (Rs. 4.71 Cr X 4) (B)	18.84
Difference on account of Sixth Pay Commission (A-B)	16.48
Impact of Service tax	1.71
Total Impact	18.19

Commission's Analysis

- 4.21 The security (CISF) expenses of the Petitioner have increased due to increase in employee cost of CISF employees on account of implementation of recommendations

of 6th Pay Commission and imposition of service tax on security expenses from 01.04.2009 onwards.

- 4.22 The exact impact on account of sixth pay commission implementation as well as service tax on the security expenses of the Petitioner is, however, unclear as according to the Petitioner, CISF has not indicated the arrears on account of wage revision separately in the bills raised by it.
- 4.23 Considering the statutory nature of the expense, the Commission has decided to provisionally allow the additional security expenses as submitted by the Petitioner. The same shall, however, be subject to true up at the end of the extended Control Period.
- 4.24 The Commission has also apportioned the total additional expenses allowed towards CISF cost to all stations – I.P. Station, RPH, GTPS – considering the share of each station in the overall expenses of IPGCL as submitted by the Petitioner in Table 21. The same is shown in the table below.

Table 24: Station-wise Additional CISF Expenses (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
I.P. Power Station	1.25	1.66	1.70	1.25	
Rajghat Power House	0.75	1.44	1.50	1.44	1.50*
GTPS	1.43	1.96	2.10	1.73	1.80*
Total Amount	3.42	5.05	5.30	4.42	3.30

**Included in ARR for FY 2011-12*

- 4.25 While the expenses apportioned to RPH and GTPS have been provisionally allowed in their respective ARRs, the expenses apportioned to I.P. Power Station shall be considered in its ARR at the time of true up for the same at the end of the extended Control Period.
- 4.26 The Commission has also escalated the expenses for RPH and GTPS for FY 2010-11 by 4% to arrive at additional CISF expenses for FY 2011-12 as shown in the table above.

Impact of transfer of Employees from I.P. Power Station

Petitioner's Submission

- 4.27 The Government of Delhi has closed down I.P. Power Station on December 31, 2009. The Commission directed the Petitioner to submit details regarding the redeployment of employees of I.P. Power Station and the financial impact of the same on PPCL, GTPS and RPH.
- 4.28 It has been submitted that out of a total of 621 employees, some of the employees had opted for SVRS in the month of November-2009. The remaining employees were transferred to various stations of IPGCL, PPCL and DTL as shown in the table below.

Table 25: Movement of I.P. Power Station Employees

Particulars	No. of Employees
SVRS	235
Retired	16
PPCL-III, Bawana Project	56
DTL	27
RPH	154
HQ	94
GTPS	4
PPCL-I	35
Total	621

4.29 The Petitioner has worked out the financial impact of movement of employees on the employee cost of GTPS, RPH and PPCL considering the following:

- The average employee cost of I.P. Power Station employees has been worked out considering the average salary of the employees of I.P. Power Station in FY 2009-10 and an escalation of 10% in the average salary of the employees per annum for FY 2010-11 and FY 2011-12.
- The average Allowances Per Employee e.g. Incentive, LTC, LTC Leave encashment for FY 2010-11 have also been included in the employee cost.
- The impact on each station – GTPS, RPH and PPCL-I – has been computed considering the number of employees transferred to the Station. The employee cost of employees transferred to Headquarters has been allocated between RPH and GTPS in the ratio 1:2.

4.30 The station wise impact of movement of I.P. Power Station employees in FY 2010-11 and FY 2011-12 as submitted by the Petitioner is shown in the table below.

Table 26: Station wise financial impact of movement of I.P. Power Station employees (Rs Cr)

Station	FY 2010-11	FY 2011-12
R.P.H.	15.80	17.38
GTPS	5.68	6.25
PPCL-I	2.98	3.28
Total	24.46	26.81

Commission's Analysis

4.31 Since the Commission has extended the MYT Regulations and the Control Period for one year upto March 31, 2012, the true up for all generating stations of the Petitioner, including I.P. Power Station, shall be carried out at the end of the extended Control Period.

- 4.32 The Commission, however, recognizes that the redeployment of employees from I.P. Power Station to RPH, GTPS and PPCL-I has caused an increase in the employee cost of these power stations that cannot be covered by the normative O&M expenses allowed to these stations. The Commission has, therefore, decided to provisionally allow additional employee cost on account of transfer of employees from I.P. Power Station, as submitted by the Petitioner (i.e. Rs 15.80 Cr for FY 2010-11 and Rs 17.38 Cr for FY 2011-12 for RPH). The same shall be subject to true up at the end of the extended Control Period, along with true up of expenses for I.P. Power Station for FY 2007-08 to FY 2009-10.

Total Cost Allowed due to Revision of various expenses for FY 2007-08 to FY 2010-11

- 4.33 The total additional cost allowed on account of revision of various expenses from FY 2007-08 to FY 2010-11, including the carrying cost, are shown in the table below. The carrying cost has been calculated from FY 2007-08 up to March 2011, considering the effective rate of interest on existing loans of the Petitioner for the respective year.

Table 27: Total Cost Allowed due to Revision of Expenses for FY 2007-08 to FY 2010-11

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Gap	0.00	3.51	7.06	30.64
Additions During the Year	3.32	2.97	21.53	29.43
<i>O&M Expenses</i>	2.57	1.53	20.03	12.19
<i>Additional CISF Expenses</i>	0.75	1.44	1.50	1.44
<i>Additional Employee Cost for I.P. Power Station Employees</i>	0.00	0.00	0.00	15.80
Rate of Interest (%)	11.50%	11.50%	11.50%	11.50%
Carrying Cost	0.19	0.58	2.05	5.22
Closing Gap	3.51	7.06	30.64	65.29

Carrying Cost Allowed on account of implementation of ATE Order in Appeal No. 81/2007

Petitioner's Submission

- 4.34 The Petitioner has submitted that it has raised revised energy bills on Delhi Transco Limited (DTL) for Rs 12.05 Cr for FY 2006-07 on October 18, 2010 in accordance with the Commission's Order for implementation of the Hon'ble ATE Order in Appeal No. 81/2007. The Petitioner has requested that carrying cost on the same be allowed to it. However, no payment has been received by it from DTL so far.

Commission's Analysis

- 4.35 The Commission had approved the ARR for the Petitioner for FY 2006-07 vide its Order dated September 22, 2006. The Petitioner filed an appeal (Appeal No. 81/2007) with the Hon'ble ATE against this Order. The Hon'ble ATE has given its judgement in this Appeal vide its Order dated January 10, 2008. In compliance with the same, the Commission vide its letter dated December 3, 2009, has allowed an amount of Rs 12.05 Cr to the Petitioner on account of –

- (a) Additional Fuel Costs approved for FY 2006-07 – Rs 0.87 Cr
- (b) Additional amount approved on account of rebate on timely payment of bills – Rs 0.39 Cr
- (c) Additional Fixed Cost allowed for FY 2005-06 and FY 2006-07 – Rs 10.79 Cr
- 4.36 Since the additional amount has already been allowed, it need not be included in the ARR of the Petitioner for FY 2011-12.
- 4.37 With regards to the carrying cost on the amount, the Petitioner has submitted that it had raised the revised bill for the FY 2006-07 on DTL in the month of January 2010 (in accordance with the Commission's Order dated December 3, 2009). Accordingly, the Petitioner is eligible for claiming carrying cost on this amount in its ARR only up to the date the Order of the Commission was given effect to, i.e. January 2010. The Petitioner may claim the surcharge/carrying cost, post January 2010 from the DTL for non payment of dues in accordance with the commercial arrangement between them.
- 4.38 In view of the above, the carrying cost on this amount has been allowed from FY 2006-07 upto January 2010 @ 11.5% p.a. i.e. the GNCTD lending rate to the Petitioner during the period.

Table 28: Carrying Cost on Additional Cost for FY 2006-07 (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Gap	0.00	12.74	14.21	15.84	-
Additions During the Year	12.05	0.00	0.00	0.00	-
Rate of Interest (%)	11.50%	11.50%	11.50%	11.50%	-
Carrying Cost	0.69	1.47	1.63	1.52	-
Closing Gap	12.74	14.21	15.84	17.36	-
Total Carrying Cost Allowed	5.31				

- 4.39 Since the carrying cost has been allowed on the amount pertaining to FY 2006-07 (i.e. to the Policy Direction Period) when the Delhi Transco Limited (DTL) was responsible for the Bulk Supply of electricity in National Capital Territory of Delhi, IPGCL shall raise the bill on account of carrying cost to DTL for recovery. The Commission has included this carrying cost in the ARR of the DTL. The additional amount, as approved above, has not been included in the fixed cost of the Petitioner (which is recoverable from distribution licensees).

Aggregate Revenue Requirement for FY 2011-12

Norms of Operation

- 4.40 The Commission has extended the MYT Regulations and the Control Period for a period of one year up to March 31, 2012. Accordingly, the operational norms given in the Regulations for previous years of the Control Period will also be applicable during FY 2011-12. The Petitioner has made submissions regarding relaxation of certain operational norms. The same have been discussed in the following sections.

Station Heat Rate**Petitioner's Submission**

- 4.41 The Petitioner has submitted that as per the instruction of the Commission, Performance Test to determine the Station Heat Rate of the Units was conducted by M/s CenPEEP, NTPC Limited. The average station heat rate was found to be 3135 kCal/kWh under test conditions. Considering the actual conditions of operation of the plant, the average operating heat rate of RPH has been estimated by the Petitioner to be around 3285 kCal/kWh (i.e. 3135+150).
- 4.42 The table below contains the SHR values achieved by the company during the Control Period FY 2007-08 to FY 2010-11 and projected SHR for FY 2011-12.

Table 29: Station Heat Rates submitted by the Petitioner for RPH (kCal/kWh)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
SHR	3227	3304	3849	3300	3285

Commission's Analysis

- 4.43 The Commission has analysed the submission made by the Petitioner. It has been observed from the report prepared by NTPC-CENPEEP that the boiler efficiency of Unit No.2 is 81.52%, which is way below the boiler design efficiency of 86.6%. Further, it has been mentioned in the said report that the boiler efficiency of Unit No.1 is 85.61%. The corresponding unit heat rate of Unit No.2 is 3220.1 kCal/kWh and Unit No.1 is and 3049.8 kCal/kWh.
- 4.44 It is also observed from the report that the boiler efficiency of Unit No.2 was low on account of high moisture in fuel and loss due to carbon mono oxide, which are temporary phenomena due to improper burning of coal. The ash content of the Unit No.2 was also high which deteriorated the boiler efficiency. Accordingly, it can be concluded that with better monitoring, operational efficiency and proper burning of fuel, the operational efficiency of Unit No.2 can be increased and brought to the same level as that of Unit No.1. Therefore, heat rate of Unit No.2 can also be taken at the same level as that of Unit No.1 i.e. 3049.8 kCal/kWh.
- 4.45 Applying the margin of 5% on site operating conditions, as recommended by CERC and CEA, the station heat rate for RPH also works out to 3202 kCal/kWh. Therefore, the Commission has restricted the SHR of the station to 3200 kCal/kWh as per the norms set in the MYT Regulations.

Table 30: Station Heat Rate approved by the Commission for RPH (kCal/ kWh)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
SHR	3200	3200	3200	3200	3200

Availability

Petitioner's Submission

- 4.46 The Availability as achieved by the Petitioner during FY 2007-08 to FY 2010-11 and proposed Availability for FY 2011-12 is shown below.

Table 31: Availability submitted by the Petitioner for RPH (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Availability	73.50%	71.89%	54.64%	75.98%	70.00%

- 4.47 The Petitioner has also requested to approve the incentive/dis-incentive for the station during the FY 2011-12 as per the CERC (Terms and Conditions of Tariff) Regulations, 2009 by way of recovery of proportionate Annual Fixed Cost based on the target availability of 70%.

Commission's Analysis

- 4.48 The Commission had considered 70% target Availability for the station in accordance with the MYT Regulations and the submission of the Petitioner.
- 4.49 Further, since the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012, the incentives/dis-incentives during the FY 2011-12 be allowed based on the existing MYT Regulations of the Commission.

Table 32: Availability approved by the Commission for RPH (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Availability	70.00%	70.00%	70.00%	70.00%	70%

Auxiliary Consumption**Petitioner's Submission**

- 4.50 The Petitioner has submitted that the CEA in its Report dated December, 2004 on 'Technical Standard on Operational Norms for Coal/Lignite fired Thermal Power Stations' had recommended APC of 12% for smaller size units with cooling tower. The RPH station having two units of 67.5 MW with cooling towers each was commissioned in the year 1989-90 and similar standards should apply to it.
- 4.51 Further the Petitioner has pointed out that the CERC in CERC (Terms and Conditions of Tariff) Regulations, 2009 has approved an auxiliary consumption of 12% for Tanda

Thermal Power Station having four units of 110 MW each. It has also claimed that the Commission too has already approved APC of 12% for FY 2006-07 for the station.

- 4.52 For FY 2011-12, the Petitioner has submitted a target auxiliary consumption lower than that achieved by it in the past (but higher than the norm set by the Commission in its MYT Regulations) as the performance of the station has improved as a result of the overhauling undertaken in FY 2009-10 and FY 2010-11. However, it has also submitted that the boiler tubes of Unit No. 1 at corners 1-4 and 2-3 are prone to frequent tube leakages and while most of these tubes were replaced during overhauling, the remaining tubes are weaker and cannot sustain the rated pressure. In Order to avoid frequent leakages and boiler shut down, pressure has been maintained at around 75% of the rated pressure. Accordingly, the load of Unit No. 1 is restricted to 60MW. The reduced load of the machine will result in increased heat rate and auxiliary power consumption. In view of the proposed closure of the station, no major repair and maintenance work including bulk replacement of boiler tubes can be carried out. The Petitioner has thus requested that the auxiliary consumption be approved at 12% for FY 2011-12.
- 4.53 The table below indicates the APC as achieved by the Petitioner during FY 2007-08 to FY 2010-11 and the proposed APC for FY 2011-12.

Table 33: Auxiliary Power Consumption (APC) submitted by the Petitioner for RPH (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
APC	13.01%	13.78%	14.43%	11.75%	12.00%

Commission's Analysis

- 4.54 The Commission has examined the submissions of the Petitioner. The Commission is of the view that the Petitioner cannot pick and chose the norms as it suits it from various Regulations. As per the CERC Regulations cited by the Petitioner itself the heat rate for Tanda Power Station is 2825 kCal/kWh and the Auxiliary Power Consumption is 12%. The Commission has already allowed higher SHR of 3200 kCal/kWh, which will more than compensate the financial loss, if any, on account of lower Auxiliary Power Consumption of 11.28%.
- 4.55 Thus, the Commission does not find any merit for relaxation of Auxiliary Power Consumption norm set in the MYT Regulations and has approved the auxiliary consumption of RPH as 11.28%

Table 34: Auxiliary power Consumption (APC) approved by the Commission for RPH (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
APC	11.28%	11.28%	11.28%	11.28%	11.28%

Gross and Net Generation

Petitioner's Submission

- 4.56 The Petitioner has projected gross generation during the year to be 830 MU at projected PLF of 70.00%. The net generation, considering the proposed auxiliary consumption of 12.00% has been proposed to be 730 MU.
- 4.57 Based on the Availability and Auxiliary Consumption, the Gross and Net Generation for the Petitioner during FY 2007-08 to FY 2010-11 and FY 2011-12 has been submitted as shown in the table below.

Table 35: Gross and Net Generation submitted by the Petitioner for RPH

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Gross Generation (MU)	898	877	645	781	830
Auxiliary Consumption	13.01%	13.78%	14.43%	11.75%	12.00%
Net Generation (MU)	781	756	552	689	730

Commission's Analysis

- 4.58 The Commission has calculated the gross and net generation for RPH considering PLF of 70.00% and auxiliary consumption of 11.28% according to the operational norms prescribed in the MYT Regulations.

Table 36: Gross and Net Generation approved by the Commission for RPH

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Gross Generation (MU)	828	828	828	828	830*
Auxiliary Consumption	11.28%	11.28%	11.28%	11.28%	11.28%
Net Generation (MU)	734	734	734	734	736

*Considering 366 days in FY 2011-12

Determination of Variable Charges

- 4.59 The energy charges (variable cost) of the plant depends upon the operational parameters such as the Station Heat Rate, Auxiliary Power Consumption, Fuel Cost and the Gross Calorific Value of fuel used. The Commission has considered all these factors to determine the variable cost of generation from Rajghat Power House.

Transit Loss**Petitioner's Submission**

- 4.60 The Petitioner has submitted that the ATE in its Order, in Appeal No. 26/2008 filed by the Petitioner against the MYT Tariff Order, has stated the following in respect of transit loss:

4.61 *“According to the Appellant, the State Commission has allowed a normative coal transit loss of 0.8% by holding that the same is nationally accepted loss level as prescribed in the Tariff Regulations of the Central Commission. It is noticed that the State Commission has rejected the claim of the Appellant merely on the ground that NTPC had not challenged the coal transit loss for the Dadri and Badarpur Stations which requires the same washing of coal. As pointed out by the Learned Counsel for the Appellant, the ground that NTPC had been allowed only 0.8% coal transit loss and the same had not been challenged by the NTPC cannot be the valid ground to deny the claim of the Appellant. The important aspect that the State Commission has failed to consider is that the transit loss cannot be the same both for unwashed and washed coal. The weight of the coal at the time of loading is significantly increased due to higher moisture content which evaporates during transit and storage. We notice that the State Commission has not given a reasoned Order regarding transit loss. Instead of examining the transit loss in case of the Appellant’s power station the State Commission has noticed that the use of washed coal is likely to improve the functioning of the plant. This matter, therefore, needs re-examination. Therefore, the State Commission is required to determine the actual coal transit loss in respect of the Appellant’s Power Station without comparing the coal transit loss with the NTPC. This point is answered accordingly”.*

- 4.62 Accordingly it has requested the Commission to true up the transit and moisture loss @ 3.8% for FY 2007-08 to FY 2010-11 and to approve the same for FY 2011-12.

Commission’s Analysis

- 4.63 The Commission in its MYT Order had considered the coal transit loss at 0.8% for the Petitioner. The Commission has taken note of the fact that CERC in its tariff regulations allows a transit loss of 0.8% for Non-Pit head stations of NTPC like NCTPS Dadri and Badarpur Thermal Power Stations. **These stations, like those of the Petitioner, are also using washed coal.**
- 4.64 Further, the Commission has observed that the Petitioner is not weighing the coal at receiving end (at the plant). It is, in fact, calculating the transit loss on a notional basis. The Petitioner is calculating the quantum of coal used by measuring the heap of coal in cubic meter. Furthermore, even the heat rate calculations submitted by the Petitioner are on estimation basis i.e. heat rate is calculated by dividing gross generation by the reduction in coal stock. This procedure is not scientific and subsumes the loss on account of theft, spillage of coal and operational inefficiency of the station.
- 4.65 Based on the above observations, the Commission has decided to retain the norm for transit loss for RPH at the level set by the Commission in its MYT Regulations i.e. at 0.8%.

Fuel Cost

Petitioner's Submission

- 4.66 The Petitioner has submitted the expenses towards annual fuel costs based on the estimated weighted average Gross Calorific Value of each fuel: Coal (3594 kCal/kg), Light Diesel Oil (LDO) (8968 kCal/l) and Low Sulphur Heavy Stock (LSHS) (10,350 kCal/kg).
- 4.67 The Petitioner has considered weighted average price of fuels e.g. coal, oil and gas prevailing during the last four months of FY 2010-11, escalated by a factor of 5% to arrive at the fuel prices for FY 2011-12.
- 4.68 The Petitioner has estimated 3.00% loss in quantity of purchased coal due to extra surface moisture present in washed coal and 0.80% loss is on account of transit loss and thus a total transit loss of 3.80%.
- 4.69 The Petitioner has proposed specific oil consumption of 1.50 ml/kWh for LDO and 3.75 g/kWh for LSHS during the year.
- 4.70 The actual fuel cost for FY 2007-08 to FY 2010-11 and projected fuel cost for FY 2011-12 as submitted by the Petitioner is shown in the table below.

Table 37: Fuel Cost submitted by the Petitioner for RPH

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Gross Generation (MU)	897.764	877.045	645.131	781.063	830.088
Net Generation (MU)	780.965	756.188	552.015	689.291	730.477
Coal Consumption(MT)	771663	793511	662605	699724	776142
Cost per Tone of Coal(Rs/MT)	1950	2079	2117	2229.3	2406
Secondary Oil Consumption-LSHS(MT)	1565.71	1470.17	2276.03	2064	3113
Price of LSHS(Rs/MT)	20379	28208	26839	31255	34222
Secondary Oil Consumption-LDO/HSD(Kl)	1142.73	722.336	1428.06	1681	1245
Price of LDO(Rs/Kl)	28688	34756	28805	33958	38770
Total Cost of Fuel(Rs Cr)	157.06	171.48	150.29	168.15	202.23
Variable Cost in Rs/kWh	2.0111	2.2677	2.7226	2.4395	2.7685

Commission's Analysis

- 4.71 The Commission directed the Petitioner to submit the actual GCV for coal and secondary oil for FY 2010-11 and has considered the same for projecting fuel consumption for FY 2011-12. The Commission has approved specific fuel oil consumption at 1.50 ml/kWh for LDO and 3.75 g/kWh for LSHS, based on the norms specified in the MYT Regulations.

- 4.72 The Commission has calculated the net coal requirement as the difference between the energy required to generate 830 MU of electricity and the energy provided by LDO and LSHS. The Commission has considered coal transit loss of 0.8% to obtain the gross coal requirement for RPH.
- 4.73 The Commission has considered weighted average price of fuels e.g. coal, oil and gas prevailing during FY 2010-11 for projection of fuel cost of the Petitioner.
- 4.74 Details of the total fuel cost approved by the Commission for FY 2011-12 are shown in the table below.

Table 38: Approved Fuel Costs for RPH for FY 2011-12

Particulars	Unit	Proposed	Approved
Primary Fuel – Coal			
GCV of Coal	kCal/kg	3,594	3,601
Coal Consumed	MT	7,46,649	7,25,613
Transit Loss	%	3.80%	0.80%
Gross Quantity of Coal Consumed	MT	7,76,142	7,31,464
Price of Coal	Rs/MT	2406.18	2261.09
Cost of Coal	Rs Cr	186.75	165.39
Secondary Fuel – LDO			
Specific Oil Consumption	ml/kWh	1.50	1.50
LDO Consumed	KL	1,245.13	1,245.13
GCV of Oil	kCal/kl	8,968	8,916
Price of LDO	Rs/KL	38769.93	32469.96
Cost of LDO	Rs Cr	4.83	4.04
Secondary Fuel – LSHS			
Specific Oil Consumption	g/kWh	3.75	3.75
LSHS Consumed	MT	3,112.83	3,112.83
GCV of Oil	kCal/kg	10,350	10,360
Price of LSHS	Rs/MT	34222.05	32469.96
Cost of LSHS	Rs Cr	10.65	10.11
Total Fuel Cost	Rs Cr	202.23	179.54

- 4.75 The fuel cost incurred by the Petitioner during the year will be adjusted using the mechanism for Fuel Price Adjustment (FPA) as specified in the MYT Regulations. The weighted average price and the weighted average GCV of fuel to be taken for FPA shall be calculated considering the actual consumption of fuel from various sources and the corresponding price and GCV.
- 4.76 The weighted average price of fuel oil (P_{os}), weighted average GCV of fuel oil (K_{os}) weighted average price of coal (P_{cs}), weighted average GCV of coal (K_{cs}) to be

considered for the purpose of Fuel Price Adjustment (FPA) during the year has been calculated based on the approved values for consumption, prices and GCV of fuels.

Table 39: Weighted Average Price and GCV of Primary Fuel

Particulars	Coal
Quantity (MT)	7,31,464
GCV (kCal/kg)	3,601
Price (Rs./Ton)	2261.09

Table 40: Weighted Average Price and GCV of Secondary Fuel

Particulars	LDO	LSHS
Quantity (KL)	1,245.13	3,112.83
GCV (kCal/KL)	8,916	10,360
Price (Rs./KL)	32469.96	32469.96
Weighted Average Price/(Rs/KL) P_{os}	32470	
Weighted Average GCV (kCal/ KL) K_{os}	9947.43	

- 4.77 The Fuel Price Adjustment would be done on a monthly basis and suitable upward and downward adjustments in variable cost would be made in the bills submitted by the Petitioner.

Variable Cost

Petitioner's Submission

- 4.78 The Petitioner submitted the projected variable cost of generation in its MYT petition, considering the projected fuel costs and the proposed net generation from the plant. The proposed variable costs are as follows:

Table 41: Submitted Variable Cost for RPH

Particulars	Unit	FY 2011-12
Gross Generation	MU	830
Auxiliary Energy Consumption	%	12.00
Net Generation	MU	730
Total Fuel Cost	Rs Cr	202.23
Variable Cost	Rs/kWh	2.7685

Commission's Analysis

- 4.79 The Commission analyzed the details of fuel supply for determination of fuel costs for the Control Period. The total fuel costs as approved by the Commission after, considering the projected fuel prices, gross calorific value and SHR of 3200 kCal/kWh (on GCV basis), is given in the table below.

Table 42: Approved Variable Cost for RPH

Particulars	Unit	FY 2011-12
Gross Generation	MU	830
Auxiliary Energy Consumption	%	11.28
Net Generation	MU	736
Total Fuel Cost	Rs Cr	179.54
Variable Cost (on Energy Sent Out Basis)*	Rs/kWh	2.4379

* Subjected to revision on account of fuel price adjustments (FPA)

Determination of Fixed Cost

4.80 The Commission analyzed all the components of fixed cost submitted by the Petitioner in detail to determine the applicable fixed cost keeping in view the principles adopted in the MYT Regulations and the MYT Order. The fixed cost include the following components according to the MYT Regulations:

- (a) Operations and Maintenance Expenses;
- (b) Depreciation;
- (c) Advance Against Depreciation;
- (d) Return on Equity
- (e) Interest Expenses; and
- (f) Interest on Working Capital

Operations and Maintenance Expenses

Employee Expenses

Petitioner's Submission

- 4.81 The Petitioner has submitted that the salaries of employees of the company are governed by FRSR structure. It is mandatory for the company to follow the salary structure as per the FRSR and it has no control over the same. Further, due to high inflation in the past, the DA has increased in the range of 4 to 9%. The average increase in salary of employees was more than 10% against the 4% hike allowed by the Commission in MYT Order for FY 2007-08 to FY 2010-11.
- 4.82 The salary and allowances for the FY 2010-11 have been escalated by 10% annually for estimating the employee expenses for FY 2011-12. This 10% increase in salaries & allowances is mainly due to annual increments, DA etc.

Table 43: Employee Expenses submitted by the Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Employee Cost	19.85	23.10	25.42	49.50*	54.45*

*includes employee cost for employees of I.P. Station

Commission's Analysis

- 4.83 The Commission has escalated the approved employee expenses for FY 2010-11 as shown in
- 4.84 Table 18 by 4% p.a. to arrive at the employee expenses for FY 2011-12, in line with the approach followed by it in the MYT Order.
- 4.85 The balance arrears to be paid on account of impact of 6th Pay Commission Recommendations, as shown in Table 17, have also been included in the employee cost for the year.
- 4.86 The approved employee expense for FY 2011-12 is shown in the table below.

Table 44: Employee Expenses approved by the Commission for RPH (Rs Cr)

Particulars	FY 2010-11	FY 2011-12
Employee Cost	26.10	27.14
Unpaid arrears on account of 6 th Pay Commission (Refer Table 17)		5.70
Total Employee Cost including arrears	26.10	32.84

Repair and Maintenance Expenses

Petitioner's Submission

- 4.87 The R&M expenses for FY 2011-12 have been projected by applying 5.72% annual increase, as stipulated in CERC (Terms and Conditions of Tariff) Regulations, 2009 on the estimated costs for FY 2010-11.

Table 45: R&M Expenses submitted by the Petitioner for RPH (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
R&M Expenses	16.68	13.57	17.58	16.75	17.71

Commission's Analysis

- 4.88 The Commission has approved the O&M Expenses for FY 2010-11 in respect of Employee Expenses, R&M and A&G Expenses as explained in paragraph 4.3. The approved R&M expenses for FY 2010-11 have been escalated @ 4% p.a. to arrive at the R&M expenses for FY 2011-12, in line with the approach followed in the MYT Order.

4.89 The approved R&M expenses for the Control Period are shown in the table below.

Table 46: R&M Expenses approved by the Commission for RPH (Rs Cr)

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
R&M Expenses	10.85	11.28	11.73	12.20	12.69

Administrative and General Expenses

Petitioner's Submission

4.90 The Petitioner has projected A&G expenses for FY 2011-12 by applying 5.72% annual increase as stipulated in CERC (Terms and Conditions of Tariff) Regulations, 2009, on the provisional costs for FY 2010-11.

4.91 It has also requested the Commission to allow expense on account of property tax and water-cess paid to Delhi Jal Board as a pass-through on actual basis besides the other O&M expenses.

Table 47: A&G Expenses submitted by the Petitioner for RPH (Rs Cr)

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
A&G Expenses	5.55	6.44	5.72	5.91	6.25

Commission's Analysis

4.92 The Commission has approved the O&M Expenses for FY 2010-11 in respect of Employee Expenses, R&M and A&G Expenses as explained in paragraph 4.3. The approved A&G expenses for FY 2010-11 have been, then, escalated by 4% p.a. to arrive at the A&G expenses for FY 2011-12, in line with the approach followed in the MYT Order.

4.93 Inderprastha Power Corporation Limited (IPGCL) has also requested for additional expenditure to be allowed on account of ERP licenses. The scheme for installation of ERP was approved by the Board of Directors of IPGCL and PPCL on December 19, 2008 and work was awarded to M/s NICS. The Commission also gave, in principle, approval for implementation of the ERP project vide its letter dated October 15, 2009.

4.94 PPCL/IPGCL were directed to submit the details regarding the expenditure on ERP licenses projected by it during FY 2011-12, including Contract Documents of Annual Maintenance Contracts, SAP licenses etc. PPCL has provided documentary proof relating to Rs 7.17 Cr of expenditure on ERP licenses/IT support as shown in the table below.

Table 48: Expenditure on ERP licenses and IT Support

Category	Description of item	Amount (Rs)
1	Annual Maintenance Contracts	4,14,12,730
2	Other Costs	

Category	Description of item	Amount (Rs)
	<i>Internet Leased Line</i>	
	<i>MTNL</i>	5,07,380
	<i>ERNET</i>	2,75,750
	<i>Radio Connectivity Link ERNET</i>	1,54,420
	<i>Website Hosting</i>	1,45,000
	<i>Email Hosting</i>	54,000
	<i>SAP Licenses ATS Support @22%</i>	
	2010-11	1,14,65,685
	2011-12	1,14,65,685
	Sub Total	2,40,67,920
3	Hiring of Experts	15,45,848
4	IT Specialized Training	46,89,050
	Total	7,17,15,548

- 4.95 On scrutiny of the information provided by PPCL, it was observed that out of the total expenditure submitted by PPCL, Rs 0.20 Cr was on account of non ERP related expenditure which is already covered under the normative expenditure allowed by the Commission.
- 4.96 The ERP related expenditure includes SAP License @ 22% (i.e. 1.15 Cr) for FY 2010-11 and an expenditure of Rs 5.82 Cr for FY 2011-12, including SAP License @ 22% (i.e. 1.15 Cr). This expenditure is not covered under the normative O&M expenses for FY 2011-12. The Commission has, therefore, decided to allow this additional expenditure for FY 2011-12. The expenditure on SAP license in FY 2010-11 shall be considered at the time of true up for the year.
- 4.97 However, while the entire cost of the ERP project has been shown in the ARR of PPCL, the ERP is being utilised by both IPGCL and PPCL. The allowed ERP expenditure for FY 2011-12 (i.e. Rs 5.82 Cr) has therefore been apportioned between IPGCL and PPCL in the ratio 19.23%: 80.77%. (i.e. Rs 1.12 Cr for IPGCL and Rs 4.70 Cr for PPCL).
- 4.98 Further, the ERP expenditure apportioned to IPGCL has been allocated to RPH and GTPS in the ratio of the installed capacity. Accordingly, the Commission has approved ERP expenditure of Rs 0.37 Cr for RPH and Rs 0.75 Cr for GTPS for FY 2011-12.

Table 49: A&G Expenses approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Normative A&G Expenses	3.38	3.52	3.66	3.80	3.95
Additional Amount for ERP	-	-	-	-	0.37
Total A&G Expenses	3.38	3.52	3.66	3.80	4.33

- 4.99 O&M Expenses approved by the Commission for RPH for FY 2011-12 is shown below:

Table 50: O&M Expenses approved by the Commission for RPH for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
Employee Expenses	32.84
R&M Expenses	12.69
A&G Expenses	4.33
O&M Expenses	49.86

Payment to Pension Trust

Petitioner's Submission

- 4.100 The Petitioner has submitted that the pension and other terminal benefits of the employees transferred from erstwhile Delhi Vidyut Board is being dealt by DVB Employees Terminal Benefits Fund, 2002 and an amount of Rs 159.51 Cr has been demanded from IPGCL on account of shortfall in funds as per the actuarial valuation done by the trust. However, since this amount is being contested with the trust, the Petitioner has not included this amount in the current tariff petition, and has submitted that any payment on this account should be allowed by the Commission as and when made.
- 4.101 In its subsequent submissions to the Commission, the Petitioner submitted additional expenses on account of payment to the Pension Trust for re-imbursement of actual payment to the retirees by the fund on account of medical reimbursement, LTC from 2002-11 and Pension Arrears paid on account of Sixth Pay Commission recommendations. The total amount on this account has been submitted as Rs. 21.85 Cr for FY 2010-11 and Rs 32.35 Cr for FY 2011-12.

Commission's Analysis

- 4.102 The Commission has considered the submissions made by Secretary, Pension Trust and CEO's of the DISCOMs at length. The Commission also examined the relevant provisions of the Transfer Scheme Rules, 2001, Tripartite Agreement entered amidst GoNCTD, DVB and association of Union of the officers and employees of the erstwhile DVB, Trust Deed, Pension Trust and the record pertaining to the Civil Writ Petition (C) No 1698/2010 filed by Delhi State Electricity Workers Union before the Hon'ble High Court of Delhi.
- 4.103 The Commission noticed that shortfall of the fund in the Pension Trust is the main issue in the said Writ Petition. At the present matter is sub-judice. The Commission also observes that Pension Trust is facing acute shortage of fund and is left with the meagre fund just sufficient to meet its obligation towards the pensioners for another 5 to 6 months only.
- 4.104 In view of the above and to avoid any undue hardship to the retired employees (pensioners) of the erstwhile DVB, the Commission has considered providing a provisional lump sum amount of Rs 150 Cr in the ARR of the DTL for FY 2011-12 subject to the final outcome in the Civil Writ Petition (C) No 1698/2010.

Capital Expenditure

Petitioner's Submission

- 4.105 The Petitioner has submitted that it carried out capital expenditure during each year of the Control Period. The same has been segregated into the debt and equity on the basis of 70:30 ratio while calculating the fixed cost.
- 4.106 The Petitioner has not proposed any capital expenditure and capitalization for FY 2011-12.

Table 51: Proposed Capital Expenditure submitted by the Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Capital Expenditure	1.43	0	0.19	0	0

Commission's Analysis

- 4.107 The Petitioner has requested the Commission to true up the actual capital expenditure and capitalisation incurred by it during the MYT period. With regards to this, the Commission notes that Clause 5.6 of the MYT Regulations states that:

"...The Commission shall review the actual capital investment at the end of each year of the Control Period. Adjustment for the actual capital investment vis-à-vis approved capital investment shall be done at the end of Control Period."

Since the Commission has extended the Control Period for one more year, up till 31st March 2012, it has not considered any adjustment in capital expenditure and GFA for the years FY 2007-08 to FY 2010-11 as per the submission of the Petitioner. The adjustment in ARR for the capital expenditure and capitalization actually done by the Petitioner shall be conducted only at the end of the extended Control Period.

- 4.108 Accordingly, the Commission has considered the closing balance of GFA for FY 2010-11 as approved by it in the MYT Order as the opening balance of GFA for the year. It has also not considered any capital expenditure for the year as per the submission of the Petitioner.

Table 52: Capital Expenditure approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Capital Expenditure	5.56	15.93	11.25	0.04	0

Depreciation**Petitioner's Submission**

- 4.109 The Petitioner has charged depreciation on the basis of straight-line method, on the fixed assets in use at the beginning of the year. The depreciation is based on the original cost, estimated life and residual life. It has been submitted that depreciation

amount during the Control Period from FY 2007-08 to FY 2011-12 has been calculated as per the depreciation rates specified under MYT Regulations.

Table 53: Depreciation submitted by Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Opening GFA	233.5	235.01	235.14	236.09	236.09
Net Additions to GFA	1.51	0.13	0.95	0	0
Closing GFA	235.01	235.14	236.09	236.09	236.09
Depreciation	8.79	8.83	8.86	8.88	8.88

Commission's Analysis

- 4.110 The Commission has not considered any adjustment in GFA and accordingly, depreciation, for the years FY 2007-08 to FY 2010-11 will be carried out at the time of true up of the capital expenditure actually done by the Petitioner, at the end of the extended Control Period.
- 4.111 For FY 2011-12, the Commission has calculated the depreciation according to the methodology and depreciation rates notified in the MYT Regulations. It has considered the closing balance of GFA for FY 2010-11, as approved in the MYT Order, as the opening balance of GFA for FY 2011-12.
- 4.112 The depreciation amount as estimated by the Petitioner and as approved by the Commission are as follows:

Table 54: Depreciation approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Opening GFA	223.11	228.67	244.6	255.86	255.90
Net Additions to GFA	5.56	15.93	11.25	0.04	0
Closing GFA	228.67	244.6	255.86	255.9	255.90
Depreciation	8.12	8.51	9	9.2	9.20

Advance Against Depreciation

- 4.113 The Petitioner has not submitted any requirement for advance against depreciation (AAD) during the FY 2007-08 to FY 2010-11 for the RPH. It has however projected AAD for FY 2011-12 at Rs 3.33 Cr.

Table 55: Advance Against Depreciation submitted by the Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1/10th of the Loan(s)	12.34	12.22	12.28	12.21	12.21
Repayment of the Loan(s) as considered for working out Interest on Loan	10.49	12.53	22.46	12.57	12.53

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Minimum of the Above	10.49	12.22	12.28	12.21	12.21
Less: Depreciation during the year	8.79	8.83	8.86	8.88	8.88
A	1.70	3.39	3.42	3.33	3.33
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	10.97	23.50	45.96	58.53	71.06
Less: Cumulative Depreciation	106.66	115.49	124.35	133.23	142.11
B	0.00	0.00	0.00	0.00	71.06
Advance Against Depreciation	0.00	0.00	0.00	0.00	3.33

Commission's Analysis

- 4.114 The Commission has not considered any adjustment in Advance Against Depreciation for the years FY 2007-08 to FY 2010-11, based on the submission of the Petitioner. The same will be carried out at the time of adjustment of the capital expenditure and capitalization done by the Petitioner, at the end of the extended Control Period.
- 4.115 For FY 2011-12, the Commission has calculated the advance against depreciation using the principles specified in the MYT Regulations and considering the details of cumulative debt repayment and accumulated depreciation till FY 2010-11 as approved in the MYT Order.
- 4.116 As per the MYT Regulations a Generation Company is allowed AAD if the Cumulative Repayment of Loan is greater than the Cumulative Depreciation. The Petitioner has erroneously calculated the Cumulative Repayment minus Cumulative Depreciation (Rs 71.06 Cr - Rs 142.11 Cr) as Rs 71.06 Cr, which would actually be a negative Rs 71.06 Cr and hence would be treated as zero.
- 4.117 As per the calculations of the Commission, there is no requirement of AAD for RPH during the entire Control Period including FY 2011-12.

Table 56: Advance Against Depreciation approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
1/10th of the Loan(s)	12.24	12.63	13.74	13.74	13.74
Repayment of the Loan(s) as considered for working out Interest on Loan	12.48	12.7	13.39	13.82	13.7
Minimum of the Above	12.24	12.63	13.39	13.74	13.7
Less: Depreciation during the year	8.12	8.51	9	9.2	9.2
A	4.12	4.12	4.4	4.54	4.5

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	12.05	14.82	18.29	22.18	25.95
Less: Cumulative Depreciation	106.56	114.69	123.19	132.19	141.39
B	0	0	0	0	0
Advance Against Depreciation	0	0	0	0	0

Return on Equity

Petitioner's Submission

- 4.118 The Petitioner has computed return on equity on approved opening equity and the 30% amount of the capital additions made during FY 2007-08 to FY 2010-11.
- 4.119 Return on Equity has been taken at 14% in line with the MYT Regulations during FY 2007-08 & FY 2008-09. For FY 2009-10 to FY 2011-12 RoE has been computed @15.5%, as per the rate specified in CERC (Terms and Conditions of Tariff) Regulations, 2009.

Table 57: Return on Equity submitted by the Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Equity (Opening Balance)	59.56	60.01	60.05	60.34	60.34
Net additions during the year	0.45	0.04	0.29	0.00	0.00
Equity (Closing Balance)	60.01	60.05	60.34	60.34	60.34
Average Equity	59.79	60.03	60.19	60.34	60.34
Rate of Return on Equity	14%	14%	15.50%	15.50%	15.50%
Return on Equity	8.37	8.40	9.33	9.35	9.35

Commission's Analysis

- 4.120 The Commission has not considered any revision in equity for the years FY 2007-08 to FY 2010-11 as proposed by the Petitioner. The same shall be carried out at the time of adjustment of the capital expenditure and capitalization done by the Petitioner, at the end of the extended Control Period.
- 4.121 The Commission has considered the closing equity approved for FY 2010-11 in the MYT Order as opening equity of FY 2011-12 for calculation of RoE for the year.
- 4.122 Further, the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012. Therefore, the return on equity allowable under the current MYT Regulations of the Commission and not CERC (Terms and Conditions of Tariff) Regulations, 2009 shall be allowed to the Petitioner. The return on equity is thus retained at 14%.

4.123 The return on equity approved by the Commission in the MYT Order and submitted by the Petitioner for the Control Period is given in Table 58 below.

Table 58: Return on Equity approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Equity (Opening Balance)	59.56	61.23	66.01	69.38	69.40
Net additions during the year	1.67	4.78	3.38	0.01	0
Equity (Closing Balance)	61.23	66.01	69.38	69.40	69.40
Average Equity	60.39	63.62	67.70	69.39	69.40
Rate of Return on Equity	14%	14%	14%	14%	14%
Return on Equity	8.46	8.91	9.48	9.71	9.72

Interest Expenses

Petitioner's Submission

4.124 The Petitioner has submitted that as per the Delhi Electricity Reforms (Transfer Scheme) Rules 2001, Rs. 210 Cr of unsecured loan has been transferred to the Petitioner as on July 1, 2002 which is repayable to the holding company. Further, the Plan Funds Loan from Delhi Government were taken at 13% p.a. interest during FY 2002-03 and from FY 2003-04 and thereafter @ 11.50% p.a. It has also been submitted that a penal charge on late payment of interest @ 2.75% p.a. has been accounted for in the ARR.

4.125 The Petitioner has made certain capital additions during the MYT Control Period. The same have been funded through Reserve and surplus. As per the MYT Regulations, 70% of the capital additions have been considered to be funded through Loans. Accordingly, interest on this loan has been taken @ 11.50% p.a. i.e. GNCTD lending rate during the period.

Table 59: Proposed Interest Expenses submitted by the Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Interest on Loan	19.04	17.22	13.95	13.08	10.19

Commission's Analysis

4.126 In its MYT Order, the Commission had determined the interest costs for each year of the Control Period by considering the opening balance of loans, the repayment schedule and by applying the actual rate of interest applicable to various components of the loan.

- 4.127 The Commission has not considered any revision in the loan, and interest on it, for the years FY 2007-08 to FY 2010-11. The same shall be carried out at the time of adjustment of the capital expenditure and capitalization done by the Petitioner, at the end of the extended Control Period.
- 4.128 For calculating the interest and finance charges for FY 2011-12, the Commission has calculated the interest on secured and unsecured loan as per loan schedule as considered during the MYT Order. Considering the opening balance of loans, the repayment schedule and by applying the actual rate of interest applicable to various components of the loan, the interest and finance charges for the year have been calculated as Rs 10.01 Cr.

Table 60: Interest Expenses approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Interest on Loan	14.15	13.93	13.26	11.65	10.01

Interest on Working Capital

Petitioner's Submission

- 4.129 The Petitioner has calculated the Interest on Working Capital as per the following norms:
- Cost of coal & secondary oil for 2 months
 - O&M expenses for 1 month
 - Receivables equivalent to 2 months average billing
 - Maintenance Spares for FY 2007-08 to FY 2008-09 : @1% of project cost plus escalation; for FY 2009-10 onwards : @ 20% of the O&M expenses
- 4.130 The Petitioner has submitted that the fuel cost has increased steeply in FY 2010-11; this increase in prices of fuel had substantial impact on certain components considered in the computation of working capital and resultantly the interest on working capital has increased considerably in comparison to the interest allowed by the Commission.
- 4.131 The rate of interest on working capital has been assumed @ 12.75% p.a. which was the SBI PLR (as on 1.04. 2007) for calculating interest on working capital till FY 2010-11. Since the SBI PLR has increased to 13% p.a. w.e.f 12.2.2011, the increased rate has been considered for FY 2011-12.
- 4.132 The following table details the interest on working capital, as submitted by the Petitioner and as approved by the Commission for FY 2007-08 to FY 2010-11 and the projected interest on working capital for FY 2011-12.

Table 61: Interest on Working Capital submitted by the Petitioner for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Interest on Working Capital	8.85	9.57	9.24	10.84	14.33

Commission's Analysis

- 4.133 Regarding the true up of working capital requirement, the Commission had stated in its MYT Order for the Petitioner that:

“The Commission has not considered any escalation in fuel costs in its calculation for working capital requirements for the Control Period. Though the variation in fuel costs would be adjusted automatically through the FPA mechanism, the Commission shall not true-up the working capital requirements due to the same. Hence, the Commission has escalated the working capital requirement for FY09, FY10 and FY11 at an annual rate of 4% to consider for the escalation in fuel costs.”

- 4.134 The Commission had therefore already accounted for increase in the working capital requirements of the Petitioner due to increase in fuel costs while approving the working capital requirement for each year in the MYT Order. Therefore, the Commission does not feel that there is any need for true up the interest on working capital.

Table 62: Interest on Working Capital approved by the Commission for RPH (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
	Approved in MYT Order			
Interest on Working Capital	8.00	8.47	8.81	9.23

- 4.135 Further, the Commission has extended the MYT Regulations and the Control Period for a period of one year up to March 31, 2012. Therefore, the formula for calculation of working capital requirement allowable under the current MYT Regulations of the Commission and not CERC (Terms and Conditions of Tariff) Regulations, 2009 shall be applicable for calculating the working capital requirement for FY 2011-12.

- 4.136 The Commission has estimated the working capital requirement of the Petitioner for FY 2011-12 based on the following norms:

- Cost of Coal for 1.5 months for pithead stations and for 2 months in non-pithead stations corresponding to the Target Availability;
- Cost of Secondary Fuel Oil for 2 months corresponding to the Target Availability;
- O&M Expenses for 1 month;
- Receivables equivalent to 2 months of fixed and variable costs for sale of electricity calculated on the Target Availability;

- (e) Maintenance spares: 1% of the actual capital cost escalated @ 6% per annum from the date of commercial operation.

4.137 For calculation of working capital, the receivables considered in (d) are equal to the total variable and fixed cost projected for the year (divided by six).

4.138 The Commission has calculated the interest on working capital for the year, considering an interest rate of 13% based on the SBI Prime Lending Rate effective on April 1, 2011.

Table 63: Interest on Working Capital approved by the Commission for RPH for FY 2011-12 (Rs Cr)

Particulars	Proposed	Approved*
Cost of Coal	31.13	27.57
Cost of Secondary Oil	2.58	2.36
O & M expenses	6.53	4.15
Maintenance Spares	15.68	3.46
Receivables	54.28	59.18
Total Working Capital	110.20	96.71
Rate of Interest	13.00%	13.00%
Interest on Working Capital	14.33	12.57

*As per formula used in the MYT Order

Fixed Cost

4.139 The Fixed Cost for the Petitioner for the Control Period, based on the analysis of various components by the Commission, as detailed above, is shown on the following page.

Table 64: Fixed Costs approved by the Commission for RPH (Rs Cr)

	FY 2007-08			FY 2008-09			FY 2009-10			FY 2010-11			FY 2011-12
	Approved in MYT Order	Approved Now	Differe nce	Approved in MYT Order	Approved Now	Differe nce	Approved in MYT Order	Approved Now	Differe nce	Approved in MYT Order	Approved Now	Differe nce	Approved Now
O&M Expenses	27.32	29.89	2.57	30.51	32.04	1.53	28.76	48.79	20.03	29.91	42.10	12.19	49.86
Additional CISF Expenses	0.00	0.75	0.75	0.00	1.44	1.44	0.00	1.50	1.50	0.00	1.44	1.44	1.50
Additional Employee Cost for I.P. Power Station Employees	0.00		0.00	0.00		0.00	0.00		0.00	0.00	15.80	15.80	17.38
Depreciation	8.12	8.12	0.00	8.51	8.51	0.00	9.00	9.00	0.00	9.20	9.20	0.00	9.20
AAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Charges	14.15	14.15	0.00	13.93	13.93	0.00	13.26	13.26	0.00	11.65	11.65	0.00	10.01
Return on Equity	8.46	8.46	0.00	8.91	8.91	0.00	9.48	9.48	0.00	9.71	9.71	0.00	9.72
Interest on Working Capital	8.00	8.00	0.00	8.47	8.47	0.00	8.81	8.81	0.00	9.23	9.23	0.00	12.57
Income Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Fixed Cost	66.04	69.36	3.32	70.33	73.30	2.97	69.30	90.83	21.53	69.70	99.13	29.43	110.23
Additional Amount Allowed account of Revision in ARR from FY2007-08 to FY2010-11 including carrying cost (Refer Table 28)													65.29
Total Amount Recoverable from Fixed Cost													175.52

A5: PETITION FOR GAS TURBINE POWER STATION (GTPS)**Revision of Expenses for FY 2007-08 to FY 2010-11****Revision in Base O&M Expenses**

- 5.1 In its MYT Order the Commission had projected the total O&M Expenses (employee expenses, A&G Expenses, R&M expenses) for the Control Period by escalating the base O&M Expenses, which were calculated as the average of the approved O&M expenses in the years FY 2005-06 and FY 2006-07. This approach was at variance with the approach followed by the Commission in case of the transmission and distribution licensees wherein the Commission had projected O&M expenses for FY 2007-08 to FY 2010-11 by considering the approved expenses for FY 2006-07 as the base.
- 5.2 The Commission has now decided to revise the base O&M expenses for the Petitioner to correct for the anomaly in the MYT Order and apply a common approach to all the Utilities. The revised base O&M expenses have been escalated @ 4% p.a. for estimating the O&M expenses for each year of the Control Period. The revised approved O&M expenses for FY 2007-08 to FY 2010-11 are given in the table below.

Table 65: Impact of Revision in Base O&M Expenses (Rs. Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Escalation Factor		1.04	1.04	1.04	1.04
Base O&M Expenses Approved in the MYT Order	33.30#				
Base O&M Expenses allowed by the Commission in MYT Order	34.37	34.63	35.13	36.53	37.99
Actual O&M submitted by the Petitioner					
Revised Base O&M Expenses Approved Now	35.34*				
Revised O&M Approved Now due to Correction of Base O&M Expenses	35.34	36.75	38.22	39.75	41.34

Base O&M expenses taken equal to average of O&M expenses of FY 2005-06 and FY 2006-07

* Base O&M expenses taken equal to approved O&M expenses for FY 2006-07 (as approved in Order dated December 3, 2009)

- 5.3 The expenses in respect of Employee Expenses, Repairs & Maintenance (R&M), and Administrative & General Expenses (A&G) as approved in the MYT Order and as approved now after correcting the anomaly are shown in the Table below:

Table 66: Revised Base O&M Expenses after Correction of Base (Rs Cr) for GTPS

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Approved in MYT Order					
Employee Cost	10.86	10.95	11.38	11.84	12.31
A&G Expenses	8.12	7.33	7.62	7.92	8.24
R&M Expenses	15.39	15.50	16.12	16.77	17.44
O&M Expenses	34.37	34.63	35.13	36.53	37.99
Approved Now					
Employee Cost	12.30	12.79	13.30	13.84	14.39
A&G Expenses	7.65	7.96	8.27	8.61	8.95
R&M Expenses	15.39	16.00	16.64	17.31	18.00
O&M Expenses	35.34*	36.75	38.22	39.75	41.34

* As approved in Order dated December 3, 2009

Impact of 6th Pay Commission Recommendations on Employee Cost

Petitioner's Submission

- 5.4 The Petitioner has submitted that GNCTD has approved the Wage Revision Committee recommendations, based on Sixth Pay Commission in the month of October-2009 with effect from January 1, 2006. The Petitioner has paid the interim relief w.e.f. April, 2008 and implemented the GNCTD Orders on Wage Revision Committee recommendations in the month of October-2009 and paid the arrears for past period. The Petitioner has submitted that the wage revision due to 6th Pay Commission recommendations led to additional employee expenses from FY 2007-08 to FY 2010-11. It has requested for the true up of the actual employee expenses for the period FY 2007-08 to FY 2010-11, including the impact of the recommendations of the Sixth Pay Commission.
- 5.5 The Commission directed the Petitioner to submit component wise and year wise break-up of the impact of wage revision on the total employee cost. The Petitioner submitted that in the details furnished in the petition on account of impact of Sixth Pay Commission, the figures on account of Interim relief already paid, Leave Salary Contribution (LSC), Pension Contribution (PC) and EPF contribution (Employer's Contribution to Provident Fund) upto September-2009 was erroneously left out. Further, the allowances payable on implementation of Sixth Pay Commission/GNCTD Order such as Generation Linked Incentive, Education allowance, LTC leave encashment etc. are also required to be accounted in the total impact. The same were not accounted in the earlier figures submitted in the petition. The revised impact of wage revision as submitted by the Petitioner is shown in the table below.

Table 67: Impact of 6th Pay Commission Recommendations (Rs. Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Impact due to the 6 th Pay Commission submitted in the Petition	0.57	2.27	2.25	2.81	4.32	5.96

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Impact due to the 6 th Pay Commission submitted in the Additional Information	0.80	3.20	3.15	3.64	4.32	7.46

Commission's Analysis

5.6 The Commission in its MYT Order had anticipated additional expenditure on account of wage revision expected due to implementation of recommendations of the 6th Pay Commission.

5.7 While approving employee cost for the Control Period it had stated:

"The Commission has recognised the uncontrollable nature of the 6th Pay Commission recommendations and has considered an increase of 10% in total Employee Expenses

Since the arrears on account of revision of employee costs are expected to be paid only in FY09, the Commission has considered the same in tariffs from FY09 onward. The Commission shall true-up the impact on account of 6th Pay Commission recommendations based on the actual impact of the same"

5.8 The actual impact of wage revision on employee cost of FY 2005-06 and FY 2006-07 has been submitted as Rs 0.80 Cr and Rs 3.20 Cr and thus the revised employee cost, including impact of wage revision, for FY 2005-06 and FY 2006-07 works out to be Rs 13.11 Cr and Rs 15.50 Cr respectively.

5.9 For considering the impact of wage revision on employee cost for each year from FY 2007-08 to FY 2010-11, the revised employee expenses have been escalated by the relevant escalation factor to arrive at the employee expenses for each year from FY 2007-08 to FY 2010-11 as would have been done at the time of deciding the MYT tariff if the revised employee expense for FY 2006-07 had been known. The revised trajectory for employee expenses for FY 2007-08 to FY 2010-11 after revision in the base is shown below.

Table 68: Impact of Wage Revision on Employee Cost approved by the Commission (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Base Employee Cost for FY 2006-07	15.50				
Escalation Factor		1.04	1.04	1.04	1.04
Employee Cost (Including 6th Pay Commission impact) – Revised		16.12	16.76	17.43	18.13

5.10 Hence, the Commission has allowed additional amount for the FY 2007-08 to FY 2010-11 on account of revision of employee cost in the base year (FY 2006-07) as shown in the Table below:

Table 69: Additional Amount approved on account of revision of Base Employee Cost (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Revised Employee Cost (excluding 6th Pay Commission impact) - (A) (Refer Table 66)	12.79	13.30	13.84	14.39
Revised Employee Cost (Including 6th Pay Commission impact) (B) (Refer Table 68)	16.12	16.76	17.43	18.13
Additional Employee Cost Allowed due to Increase in Base Year Employee Cost due to Wage Revision (B-A)	3.32	3.46	3.59	3.74

5.11 Further, the Commission has also observed that while the increase in salaries due to wage revision was with retrospective effect from January 1, 2006, the implementation of wage revision recommendations also led to introduction/removal/increase of certain allowances such as HRA, TPA, CCA and Children Education Allowance (from FY 2008-09), LTC (from FY 2009-10), Special Duty Allowance and Generation Incentive (from FY 2010-11). The Commission has added the amount paid on account of these 'New Allowances' (excluding Generation Incentive) separately in the employee cost from FY 2008-09 onwards.

5.12 As per the Petitioner's submission, the Generation Linked Incentive scheme was framed to link the productivity with the operational targets. The factors recommended for incentives/ disincentives are Equivalent Availability Factor, Auxiliary Power Consumption, Station Heat Rate and Planned shutdown. The Commission has not allowed the additional amount on account of Generation Incentive as the Commission already provides Generation Incentive to the Petitioner for a higher PLF, which the Petitioner may utilize towards incentivizing its employees. The total amount allowed on account of these 'New Allowances' is shown below.

Table 70: Amount Paid on Account of 'New Allowances' (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Amount Paid due to New Allowances		0.71	1.29	2.21

5.13 The total impact of wage revision, including amount allowed on account of 'New Allowances' is shown in the table below.

Table 71: Additional Amount allowed on Wage Revision (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Additional Employee Cost Allowed due to Revision of Base Year Expenses (A) (Refer Table 69)	3.32	3.46	3.59	3.74
Amount allowed due to New Allowances (B) (Refer Table 70)		0.71	1.29	2.21
Additional Employee Cost Allowed Now on account of Wage Revision (A+B)	3.32	4.17	4.88	5.95

5.14 The Commission while approving the employee cost in the MYT Order had expected the arrears on account of revision of employee costs to be paid in FY 2008-09 and had considered the payment of arrears in the total employee cost approved for FY 2008-09. Similarly, the increase in salaries had been considered for each year, but the impact of such increase had only been taken from FY 2008-09 onwards. Regarding the actual payment of arrears for the revision in salaries from FY 2007-08 to FY 2009-10, the Petitioner has submitted that:

- (a) It started paying the interim relief to its employees w.e.f. April, 2008. The payment on account of revision in salaries due to wage revision was paid in the month of October, 2009.
- (b) The revised claim on account of revision in Leave Salary Contribution (LSC) and Pension Contribution (PC) has been provided in the Books of Account.

5.15 Accordingly, while the Commission has considered the increase in salaries for each year, the payment of arrears has been considered partially in FY 2008-09 (Rs 0.66 Cr on account of interim relief @20% of salaries) and partially in FY 2011-12 (Rs 3.47 Cr on account of revised LSC and PC payments which have been provided for in the accounts but have not yet been paid). The balance amount on account of wage revision has been considered in FY 2009-10. Further, the impact of increase in salaries has been taken from FY 2010-11 onwards.

Table 72: Approved Arrears and Increase in Employee Cost (Rs Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Extra Employee Cost Allowed due to Wage Revision	0.80	3.20					
Extra Employee Cost Allowed due to Revision of Base Year Expenses (Refer Table 71)			3.32	3.46	3.59	3.74	
Amount allowed due to New Allowances (Refer Table 71)				0.71	1.29	2.21	
Total	0.80	3.20	3.32	4.17	4.88	5.95	
Accumulated Arrears Pay Out				0.66	12.23		3.47*
Approved Increase in Salaries						5.95	

**On account of LSC and PC payments (not paid), this has been included in ARR of FY 2011-12

Table 73: Revised Employee Expenses for FY 2007-08 to FY 2010-11 (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost Allowed - MYT Order (A)	10.95	15.01	13.02	13.54
Revised Employee Cost Approved Now (excluding 6th Pay Commission) (B) (Refer	12.79	13.30	13.84	14.39

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Table 66)				
Arrears (till FY 2009-10) Approved Now (C) (Refer Table 72)		0.66	12.23	
Increase in Salaries in FY 2010-11 Approved Now (D) (Refer Table 72)				5.95
Revised Employee Cost Approved Now (E=B+C+D)	12.79	13.97	26.07	20.34

5.16 The total O&M expenses as approved by the Commission in the MYT Order and as approved now based on the discussion in the sections above are shown in the table below.

Table 74: Total Revised O&M Expenses (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
	Approved in MYT Order			
Employee Cost	10.95	11.38	11.84	12.31
A&G Expenses	7.33	7.62	7.92	8.24
R&M Expenses	15.50	16.12	16.77	17.44
O&M Expenses	34.63	35.13	36.53	37.99
Impact of 6 th Pay Commission	0.00	3.63	1.18	1.23
Total O&M Expenses	34.63	38.75	37.72	39.22
	Approved Now			
Employee Cost	12.79	13.30	13.84	14.39
A&G Expenses	7.96	8.27	8.61	8.95
R&M Expenses	16.00	16.64	17.31	18.00
O&M Expenses	36.75	38.22	39.75	41.34
Impact of 6 th Pay Commission	0.00	0.66	12.23	5.95
Total O&M Expenses	36.75	38.88	51.98	47.29
Difference from MYT	2.12	0.13	14.26	8.06

Impact of 6th Pay Commission Recommendations on CISF Expenses

Petitioner's Submission

5.17 The Petitioner has deployed CISF for the security of its plants. It has been submitted that their pay structure is also governed by the Central Government rules and thus the Sixth Pay Commission recommendations were also implemented in CISF. Accordingly, the expenditure on security has also increased substantially. The impact of Sixth Pay Commission on CISF manpower (for IPGCL) as submitted in the petition has been shown below.

Table 75: Impact of Sixth Pay Commission on CISF Security Expenses as submitted in the Petition (in Rs Cr)

Particulars	FY 2008-09	FY 2009-10	FY 2010-11
IP Power Station	1.39	0.47	0.52
Rajghat Power House	1.22	0.42	0.46
GTPS	1.62	0.55	0.61
IPGCL (as a whole)	4.23	1.44	1.59

- 5.18 In the additional information, the Commission directed the Petitioner to submit details regarding the impact of wage revision on CISF cost and the calculations of the same. The Petitioner submitted that the expenditure incurred on the security & fire services provided by CISF during FY 2007-08 to FY 2010-11 including revision of pay on account of sixth pay commission recommendations and service tax applicable w.e.f. April 1, 2009 was as under:

Table 76: CISF Expenses (including service tax) as Submitted by the Petitioner (Rs Cr)

Particulars (Rs. Cr)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
I.P. Power Station	2.96	3.20	3.21	2.58
Rajghat Power House	1.78	2.78	2.83	2.97
GTPS	3.39	3.78	3.97	3.58
IPGCL (as a whole)	8.13	9.76	10.01	9.13

- 5.19 It has also submitted that the GoI has imposed service tax with effect from 1st May 2006 on security agency services through Finance Act. Ministry of Home Affairs has decided to charge service tax on the services provided by CISF w.e.f April 1, 2009 and service tax for the period prior to April 1, 2009 is not payable pending decision by GoI. The company is paying service tax @ 10.3% on the services provided by CISF. The Petitioner has submitted the service tax payable on CISF cost as under:

Table 77: Expenditure incurred on Security Expenses by IPGCL (as a whole) (Rs Cr)

Year	Net Amount	Service tax	Total
FY 2007-08	8.13	-	8.13
FY 2008-09	9.76		9.76
FY 2009-10	9.15	0.86	10.01
FY 2010-11	8.28	0.85	9.13
Total	35.32	1.71	37.03

- 5.20 The revised impact on account of Sixth Pay Commission and impact on account of service tax on CISF costs has been worked out as under by the Petitioner:

Table 78: Additional CISF Expenses (Rs Cr)

Particulars	Amount
Actual Net Amount (excluding service tax) paid (Refer Table 22) (A)	35.32
Amount allowed by the Commission in FY 2006-07	4.71
Amount allowed for FY 2007-08 to FY 2010-11 (Rs. 4.71 Cr X 4) (B)	18.84
Difference on account of Sixth Pay Commission (A-B)	16.48
Impact of Service tax	1.71
Total Impact	18.19

Commission's Analysis

- 5.21 The security (CISF) expenses of the Petitioner have increased due to increase in employee cost of CISF employees on account of implementation of recommendations of 6th Pay Commission and imposition of service tax on security expenses from April 1, 2009 onwards.
- 5.22 The exact impact on account of sixth pay commission implementation as well as service tax on the security expenses of the Petitioner is, however, unclear as according to the Petitioner, CISF has not indicated the arrears on account of wage revision separately in the bills raised by it.
- 5.23 Considering the statutory nature of the expense, the Commission has decided to provisionally allow the additional security expenses as submitted by the Petitioner. The same shall, however, be subject to true up at the end of the extended Control Period.
- 5.24 The Commission has also apportioned the total additional expenses allowed towards CISF cost to all stations – I.P. Station, RPH, GTPS – considering the share of each station in the overall expenses of IPGCL as submitted by the Petitioner in Table 76. The same is shown in the table below.

Table 79: Station-wise Additional CISF Expenses (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
I.P. Power Station	1.25	1.66	1.70	1.25	
Rajghat Power House	0.75	1.44	1.50	1.44	1.50*
GTPS	1.43	1.96	2.10	1.73	1.80*
Total Amount	3.42	5.05	5.30	4.42	3.30

**Included in ARR for FY 2011-12*

- 5.25 While the expenses apportioned to RPH and GTPS have been provisionally allowed in their respective ARRs, the expenses apportioned to I.P. Power Station shall be considered in its ARR at the time of true up for the same at the end of the extended Control Period.
- 5.26 The Commission has also escalated the expenses for RPH and GTPS for FY 2010-11 by 4% to arrive at additional CISF expenses for FY 2011-12 as shown in the table above.

Impact of transfer of Employees from I.P. Power Station**Petitioner's Submission**

- 5.27 The Government of Delhi has closed down I.P. Power Station on December 31, 2009. The Commission directed the Petitioner to submit details regarding the redeployment of employees of I.P. Power Station and the financial impact of the same on PPCL, GTPS and RPH.

- 5.28 It has been submitted that out of a total of 621 employees, some of the employees had opted for SVRS in the month of November-2009. The remaining employees were transferred to various stations of IPGCL, PPCL and DTL as shown in the table below.

Table 80: Movement of I.P. Power Station Employees

Particulars	No. of Employees
SVRS	235
Retired	16
PPCL-III, Bawana Project	56
DTL	27
RPH	154
HQ	94
GTPS	4
PPCL-I	35
Total	621

- 5.29 The Petitioner has worked out the financial impact of movement of employees on the employee cost of GTPS, RPH and PPCL considering the following:
- The average employee cost of I.P. Power Station employees has been worked out considering the average salary of the employees of I.P. Power Station in FY 2009-10 and an escalation of 10% in the average salary of the employees per annum for FY 2010-11 and FY 2011-12.
 - The average Allowances Per Employee e.g. Incentive, LTC, LTC Leave encashment for FY 2010-11 have also been included in the employee cost.
 - The impact on each station – GTPS, RPH and PPCL-I – has been computed considering the number of employees transferred to the Station. The employee cost of employees transferred to Headquarters has been allocated between RPH and GTPS in the ratio 1:2.
- 5.30 The station wise impact of movement of I.P. Power Station employees in FY 2010-11 and FY 2011-12 as submitted by the Petitioner is shown in the table below.

Table 81: Station wise financial impact of movement of I.P. Power Station employees (Rs Cr)

Station	FY 2010-11	FY 2011-12
R.P.H.	15.8	17.38
GTPS	5.68	6.25
PPCL-I	2.98	3.28
Total	24.46	26.81

Commission's Analysis

- 5.31 Since the Commission has extended the MYT Regulations and the Control Period for one year upto March 31, 2012, the true up for all generating stations of the Petitioner, including I.P. Station, shall be carried out at the end of the extended Control Period.

- 5.32 However, the Commission recognizes that the redeployment of employees from I.P. Power Station to RPH, GTPS and PPCL-I has caused an increase in the employee cost of these stations that cannot be covered by the normative O&M expenses allowed to these stations. The Commission has, therefore, decided to provisionally allow additional employee cost on account of transfer of employees from I.P. Station, as submitted by the Petitioner (i.e. Rs 5.68 Cr for FY 2010-11 and Rs 6.25 Cr for FY 2011-12 for GTPS). The same shall be subject to true up at the end of the extended Control Period, along with true up of expenses for I.P. Power Station for FY 2007-08 to FY 2009-10.

Total Cost Allowed due to Revision of various expenses for FY 2007-08 to FY 2010-11

- 5.33 The total additional cost allowed on account of revision of various expenses from FY 2007-08 to FY 2010-11, including the carrying cost, are shown in the table below. The carrying cost has been calculated from FY 2007-08 up to March 2011, considering the effective rate of interest on existing loans of the Petitioner for the respective year.

Table 82: Total Cost Allowed due to Revision of Expenses for FY 2007-08 to FY 2010-11

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Gap	0.00	3.75	6.39	24.43
Additions During the Year	3.54	2.09	16.37	15.48
<i>O&M Expenses</i>	<i>2.12</i>	<i>0.13</i>	<i>14.26</i>	<i>8.06</i>
<i>Additional CISF Expenses</i>	<i>1.43</i>	<i>1.96</i>	<i>2.10</i>	<i>1.73</i>
<i>Additional Employee Cost for I.P. Power Station Employees</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>5.68</i>
Rate of Interest (%)	11.50%	11.50%	11.50%	11.50%
Carrying Cost	0.20	0.55	1.68	3.70
Closing Gap	3.75	6.39	24.43	43.61

Carrying Cost Allowed on account of implementation of ATE Order in Appeal No. 81/2007

Petitioner's Submission

- 5.34 The Petitioner has submitted that it has raised revised energy bills on Delhi Transco Limited (DTL) for Rs 8.74 Cr for FY 2006-07 on 18.10.2010 in accordance with the Commission's Order for implementation of ATE Order in Appeal No. 81/2007. The Petitioner has requested that carrying cost on the same be allowed to it. However, no payment has been received by it from DTL so far.

Commission's Analysis

- 5.35 The Commission had approved the ARR for the Petitioner for FY 2006-07 vide its Order dated September 22, 2006. The Petitioner filed an appeal (Appeal No. 81/2007) with the 'ATE' against this Order. The ATE has given its judgement in this Appeal vide its Order dated January 10, 2008. In compliance with the same, the Commission

vide its letter dated December 3, 2009, has allowed an amount of Rs 8.74 Cr to the Petitioner on account of –

- (a) Additional Fixed Cost approved for FY 2006-07 – Rs 3.93 Cr
- (b) Additional Fuel Costs approved for FY 2006-07 – Rs 4.54 Cr
- (c) Additional amount approved on account of rebate on timely payment of bills – Rs 0.27 Cr

5.36 Since the additional amount has already been allowed, it need not be included in the ARR of the Petitioner for FY 2011-12.

5.37 With regards to the carrying cost on the amount, the Petitioner has submitted that it had raised the revised bill for the FY 2006-07 on DTL in the month of January 2010 (in accordance with the Commission's Order dated December 3, 2009). Accordingly, the Petitioner is eligible for claiming carrying cost on this amount in its ARR only up to the date the Order of the Commission was given effect to, i.e. January 2010. The Petitioner may claim the surcharge/carrying cost, post January 2010 from the DTL for non payment of dues in accordance with the commercial arrangement between them.

5.38 In view of the above, the carrying cost on this amount has been allowed from FY 2006-07 up to January 2010. The carrying cost has been calculated from FY 2006-07 up till January 2010 @ 11.5% p.a. i.e. the GNCTD lending rate to the Petitioner during the period.

Table 83: Carrying Cost on Additional Cost for FY 2006-07 (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Gap	0.00	9.24	10.31	11.49	
Additions During the Year	8.74	0.00	0.00	0.00	
Rate of Interest (%)	11.50%	11.50%	11.50%	11.50%	
Carrying Cost	0.50	1.06	1.19	1.10	
Closing Gap	9.24	10.31	11.49	12.59	
Total Carrying Cost Allowed	3.85				

5.39 Since the carrying cost has been allowed on the amount pertaining to FY 2006-07 (i.e. to the Policy Direction Period) when the Delhi Transco Limited (DTL) was responsible for the Bulk Supply of electricity in National Capital Territory of Delhi, PPCL shall raise the bill on account of carrying cost to DTL for recovery. The Commission has included this carrying cost in the ARR of the DTL. The additional amount, as approved above, has not been included in the fixed cost of the Petitioner (which is recoverable from distribution licensees).

Aggregate Revenue Requirement for FY 2011-12

Norms of Operation

- 5.40 The Commission has extended the MYT Regulations and the Control Period for a period of one year upto March 31, 2012. Accordingly, the operational norms given in the Regulations for previous years of the Control Period will also be applicable during FY 2011-12. The Petitioner has made submissions regarding relaxation of certain operational norms. The same have been discussed in the following sections.

Station Heat Rate

Petitioner's Submission

- 5.41 The Petitioner has claimed that the Commission has approved the station heat rate for the GTPS at the levels which are quite below the actual level achieved by the station.
- 5.42 It has further been submitted that the turbines of the station are of 30 MW size and more than 23 years old. The combined cycle of the Station was started after retrofitting of waste Heat Recovery modules by M/s BHEL, after operation of GTs in open cycle mode for around 10 years. Retrofitting of the machines by any supplier other than by the OEM of GTs has inherent problems.
- 5.43 The Petitioner has submitted that the guaranteed heat rate in simple cycle mode is 11688 kJ/kWh on NCV at compressor inlet temperature of 15°C and atmospheric pressure of 1.019 BAR. The guaranteed heat rate at site conditions of 31.5°C is approximately 3188 kCal/kWh. Further, taking into account the correction factor of 5.70% on the guaranteed heat rate, as recommended by the CEA, the corrected heat rate for simple cycle mode works out to 3370 kCal/kWh.
- 5.44 Further, the Petitioner has stated that CERC in its latest tariff regulation for FY 2009-14 has fixed a heat rate of 3440 kCal/kWh in simple cycle mode for the similar Assam gas station of NEEPCO having capacity of 291 MW (6 Gas Turbines of 33.5 MW and 3 STG of 30 MW), even though the station was commissioned in 1995-98. It has argued that even under the CERC Tariff Regulations, 2004, the heat rate allowed for this station was at a higher level than that allowed by the Commission.
- 5.45 It has further been submitted that two of Gas Turbines at the Station were converted on liquid fuel. Since the CERC has allowed 2% excess heat rate over the allowed operative heat rate for gas turbines operating on liquid fuel, the Petitioner has requested the Commission to consider and allow 2% excess heat rate over the allowed heat rate for operation of machines on liquid fuel.
- 5.46 In addition to the above, the Petitioner has submitted that the SHR of IPGCL stations has been high due to considerable high number of trippings in the grid of Delhi as compared to the national grid. Since heat input is same for de-rated capacity of STGs, the combined cycle heat rate will be impacted and need to be revised accordingly.
- 5.47 It has also been argued that in the past due to evacuation constraints (insufficient capacity for evacuation during off peak hours) the gas turbines had to be backed down by 10% for 10hrs daily, which resulted in further 1% loss in performance. There has

been substantial gap between Availability and PLF of the station and the lower PLF has adversely affected the heat rate of the station.

- 5.48 Citing the above reasons, the Petitioner has requested to relax the heat rate allowed to it. It has proposed SHR of 3440kCal/kWh in open cycle mode and 2550kCal/kWh in combined cycle mode for FY 2011-12.

Table 84: Station Heat Rates submitted by the Petitioner (kCal/kWh)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
GT Power Station (Combined Cycle)	2554	2553	2557	2504	2550
GT Power Station (Open Cycle)	3416	3397	3390	3394	3440

Commission's Analysis

- 5.49 The Commission has directed the Petitioner several times in the past to get a performance guarantee test conducted in open cycle and combined cycle mode on its machines so that the Commission may have a scientific basis for relaxation of the heat rate allowed to the Petitioner. However, the Petitioner has not complied with the directive of the Commission till date. In absence of the same, the Commission is unable to relax the SHR which has been allowed to the Petitioner in the MYT Regulations.
- 5.50 Further, the Commission has observed that CERC in CERC (Terms and Conditions of Tariff) Regulations, 2009 has set the combined cycle SHR of Assam Kathal Guri gas turbine at 2400 kCal/kWh and open cycle SHR at 3440 kCal/kWh. The Commission has already approved the SHR in combined cycle as 2450 kCal/kWh for the Petitioner in the MYT Regulations. Moreover, the contention of the Petitioner is unacceptable as plant is expected to run in combined cycle mode most of the time and open cycle operation is rare. The Commission has thus decided to retain the SHR for FY 2011-12 as per the norm set in the MYT Regulations, till IPGCL gets a performance guarantee test conducted.

Table 85: Station Heat Rate approved by the Commission (kCal/ kWh)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
GT Power Station (Combined Cycle)	2450	2450	2450	2450	2450
GT Power Station (Open Cycle)	3125	3125	3125	3125	3125

Availability**Petitioner's Submission**

- 5.51 It has been submitted that the Station was able to achieve availability of 60.98% in FY 2007-08 and 70% thereafter and has proposed target Availability at 70% for FY2011-12.
- 5.52 The Petitioner has also requested to approve the incentives/dis-incentives for the station during the FY 2011-12 as per the CERC (Terms and Conditions of Tariff) Regulations, 2009 by way of recovery of proportionate Annual Fixed Cost based on the target availability of 70%.
- 5.53 The table below indicates the Availability as approved by the Commission and achieved by the Petitioner during FY 2007-08 to FY 2010-11 and proposed Availability for FY 2011-12.

Table 86: Availability submitted by the Petitioner (%)

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Availability	60.98%	70.14%	73.28%	81.91%	70.00%

Commission's Analysis

- 5.54 The Commission has extended the MYT Regulations and the Control Period for a further period of one year. The Commission thus approves target Availability of 70% for FY 2011-12 as per the norms prescribed in the MYT Regulations.
- 5.55 Further, since the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012, the incentive/dis-incentive during the FY 2011-12 be allowed based on the existing MYT Regulations of the Commission.

Table 87: Availability approved by the Commission (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Availability	70.00%	70.00%	70.00%	70.00%	70.00%

Auxiliary Consumption**Petitioner's Submission**

- 5.56 The Petitioner has submitted that the STGs of the station are not able to produce the rated output and hence the auxiliary power consumption (APC) of the station calculated in terms of percentage over the gross generation of the station increases.

- 5.57 Further, due to less system demand, the generation of the station was backed down, resulting in partial operation of the units in the past. The lower PLF resulted in higher APC. It has further been submitted that APC in combined cycle mode is around 3.5%, whereas in open cycle mode it is around 1.5%. Therefore, the Petitioner has requested that APC of 3.5% in Combined Cycle Mode and 1.5% in Open Cycle Mode be allowed for FY 2011-12.
- 5.58 The table below indicates the target APC as approved by the Commission in the MYT Order and as achieved by the Petitioner during FY 2007-08 to FY 2010-11 and the proposed APC for FY 2011-12.

Table 88: Auxiliary Power Consumption (APC) submitted by the Petitioner (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
APC	3.06%	3.34%	3.55%	3.33%	3.38%

Commission's Analysis

- 5.59 The Commission observes that CERC has also allowed 3% APC in combined cycle mode and 1% in open cycle mode. The claim of the Petitioner is thus devoid of any merit and the Commission retains the norm of 3% auxiliary power consumption in combined cycle mode and 1% in open cycle mode during FY 2011-12.

Table 89: Auxiliary Power Consumption (APC) approved by the Commission (%)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
APC	3.00%	3.00%	3.00%	3.00%	3.00%

Gross and Net Generation**Petitioner's Submission**

- 5.60 Based on the Availability and Auxiliary Power Consumption, the Gross and Net Generation during FY 2007-08 to FY 2010-11 and FY 2011-12 has been submitted as shown in the table below. The table also contains the approved Net and Gross Generation for FY 2007-08 to FY 2010-11.

Table 90: Gross and Net Generation submitted by the Petitioner

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Gross Generation (MU)	1280	1,280	1,497	1,368	1660
Auxiliary Consumption	3.06%	3.34%	3.55%	3.33%	3.38%
Net Generation (MU)	1241	1237	1445	1323	1604

Commission's Analysis

- 5.61 The Commission has considered the gross and net generation for GTPS considering the values of 70% PLF and auxiliary power consumption of 3% in combined cycle. The Commission has not considered generation in open cycle mode of operation. The approved gross and net generation calculated by the Commission are given below.

Table 91: Gross and Net Generation (MU) approved by the Commission

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Gross Generation (MU)	1729	1729	1729	1729	1660*
Auxiliary Consumption	3%	3%	3%	3%	3.00%
Net Generation (MU)	1677	1677	1677	1677	1610

*Considering 366 days in FY 2011-12 and de-rated capacity of 270 MW

Determination of Energy Charges

- 5.62 The energy charges (variable cost) of the plant depends on the operational and fuel parameters such as the Station Heat Rate, Auxiliary Power Consumption, Fuel Cost and the Gross Calorific Value of fuel used. The Commission has considered all these factors to determine the variable cost of generation from Gas Turbine Power Station.

Fuel Cost

Petitioner's Submission

- 5.63 The Petitioner submitted that it has a long-term agreement with Gas Authority of India Limited (GAIL) for supply of gas. Initially, GTPS had a daily allocation of 1.44 MMSCMD of gas (APM+PMT+R-LNG), which was sufficient to run six gas turbines at their base load. Subsequently the daily gas allocation to GTPS was reduced to 1.32 MMSCMD (the contracted quantity of R-LNG is 0.6 MMSCMD and balance 0.72 MMSCMD is from APM and PMT). The Petitioner further submitted that due to depleting gas reserves, GAIL imposed cuts on its supply on day-to-day basis to the extent of 15%. In view of non availability of sufficient gas, the Commission has also approved the conversion of two Gas Turbines on dual fuel system in FY 2008-09, vide Order dated February 21, 2008.
- 5.64 For projection of gas consumption in FY 2011-12, the Petitioner has considered that it will first off take the LNG with cuts, if any, and rest will be drawn from APM/PMT. The Petitioner has also projected consumption from Spot RLNG in FY 2011-12. However, no consumption of liquid fuel has been projected.
- 5.65 It has also been submitted that during the FY 2007-08 to FY 2010-11, the station has also run in open cycle mode with the average open cycle generation being around 15% of the total generation of the station.

- 5.66 The fuel requirement for FY 2011-12 has been computed based upon the type of fuel and also on the mode of operation in combined cycle mode (85%) and open cycle (15%) mode. This fuel consumption has been computed on the heat rate of 2550kCal/kWh in combined cycle mode and 3440kCal/kWh in open cycle mode at the gross calorific value of 9250kCal/SCM.
- 5.67 The Petitioner has considered weighted average price of gas prevailing during the last four months of FY 2010-11, escalated by a factor of 5% to arrive at the fuel prices for FY 2011-12.
- 5.68 The table below indicates the fuel cost as incurred by the Petitioner during FY 2007-08 to FY 2010-11 and the proposed fuel cost for FY 2011-12.

Table 92: Fuel Cost submitted by the Petitioner

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual	Provisional	Projection		
APM (MMSCM)	181.73	178.05	197.91	198.87	229.19
PMT(MMSCM)	52.88	47.12	40.94	30.19	43.14
R-LNG (MMSCM)	153.95	135.77	164.71	139.65	207.14
Spot R-LNG (MMSCM)	0.76	0.15	4.15	3.63	2.14
Total Gas Consumption	389.32	361.09	407.71	374.10	481.63
HSD Consumption (kL)	11.6	6517.58	14231.95	19.1	-
Total Fuel Cost (Rs. Cr)	222.68	266.34	344.68	356.24	538.53

Commission's Analysis

- 5.69 The Commission has projected the total gas consumption for the year by considering the heat rate of 2450 kCal/kWh in combined cycle mode and 3125 kCal/kWh in open cycle mode, at the gross calorific value of 9250kCal/SCM. Since the Petitioner is expected to usually operate in combined cycle mode, the Commission has not considered any generation in open cycle mode for projection of fuel consumption for FY 2011-12.
- 5.70 The Commission has considered consumption of various gases – APM, PMT and RLNG for FY 2011-12. The Commission has considered the consumption of various gases considering the average daily allocation of each gas (after cuts imposed by GAIL) and assuming that the cheapest gas will be consumed first. The Commission has not considered any purchase of R-LNG from the spot market or any consumption of liquid fuel for the projection of fuel cost for the year.
- 5.71 The Commission has considered the average price of last three months of FY 2010-11 for projection of gas prices. Also, since the Commission allows an FPA charge to account for variation in cost of fuel, it has not considered any escalation in the same.
- 5.72 The fuel cost for FY 2011-12 as proposed by the Petitioner and as approved by the Commission is shown below.

Table 93: Fuel Costs for FY 2011-12

Particulars	Unit	Proposed	Approved
APM Gas			
APM Gas	MMSCM	229.198	194.47
Gas Price	Rs/1000 SCM	8279.77	7899.04
APM Gas Cost	Rs Cr	189.77	153.61
PMT Gas			
PMT Gas	MMSCM	43.14	29.52
Gas Price	Rs/1000SCM	8278.90	7897.48
PMT Gas Cost	Rs Cr	35.72	23.32
R-LNG			
R-LNG Consumed	MMSCM	207.14	215.73
R-LNG Price	Rs/1000SCM	14897.43	14434.17
R-LNG Cost	Rs Cr	308.59	311.39
Spot R-LNG			
Spot R-LNG	MMSCM	2.14	-
Spot R-LNG Price	Rs/1000SCM	20876.30	-
Spot R-LNG Cost	Rs Cr	4.47	-
Total Gas	MMSCM	481.63	439.72
Total Gas Cost	Rs Cr	538.55	488.32
Total Variable	Rs/kWh	3.3574	3.0323

5.73 The fuel cost incurred by the Petitioner during the Control Period will be adjusted using the mechanism for Fuel Price Adjustment (FPA) as specified in the MYT Regulations. The weighted average price and the weighted average GCV of fuel to be taken for FPA shall be calculated considering the actual consumption of fuel from various sources and the corresponding price and GCV.

5.74 The weighted average price (P_s) and GCV of fuel (K_s) to be considered for the purpose of Fuel Price Adjustment (FPA) during the first year of the Control Period (FY08) has been calculated based on the approved values for consumption, prices and GCV of fuels from various sources.

Table 94: Weighted Average Price and GCV of Fuel

Particulars	APM Gas	PMT Gas	Fall-back R-LNG	Spot R-LNG
Quantity (MMSCM)	194.47	29.52	215.73	0.00
GCV (kCal/SCM)	9250.00	9250.00	9250.00	0.00
Price (Rs./ 1000 SCM)	7899.04	7897.48	14434.17	0.00
Weighted Average Price/(Rs/ 1000 SCM)	11105.11			

Particulars	APM Gas	PMT Gas	Fall-back R-LNG	Spot R-LNG
Weighted Average GCV (kCal/kWh)		9250.00		

- 5.75 The Fuel Price Adjustment (FPA) would be automatically done on a monthly basis, as per the FPA formula given below and suitable upward and downward adjustments in variable cost would be made in the bills generated by the Petitioner.

Variable Cost

Petitioner's Submission

- 5.76 The Petitioner submitted the projected variable cost of generation in its ARR petition by considering the projected fuel costs and the net generation from the plant. The proposed variable costs submitted are as follows:

Table 95: Proposed Variable Cost for GTPS

Particulars	Unit	FY 2011-12
Gross Generation	MU	1660
Auxiliary Energy Consumption	%	3.38%
Net Generation	MU	1604
Total Fuel Cost	Rs Cr	538.53
Variable Cost	Rs/kWh	3.3573

Commission's Analysis

- 5.77 The Commission analyzed the details of fuel supply for determination of fuel costs for the Control Period. The total fuel costs as approved by the Commission after, considering the projected fuel prices, gross calorific value and SHR of 2450 kCal/kWh (close cycle) and 3125 kCal/kWh (open cycle), is given in table below.

Table 96: Approved Variable Cost for GTPS

Particulars	Unit	FY 2011-12
Gross Generation	MU	1660
Auxiliary Energy Consumption	%	3.00%
Net Generation	MU	1610
Total Fuel Cost	Rs Cr	488.32
Variable Cost*	Rs/kWh	3.0323

* Subjected to revision on account of fuel price adjustments (FPA)

Determination of Fixed Cost

5.78 The Commission analyzed all the components of fixed cost submitted by the Petitioner in detail to determine the applicable fixed cost for the year. The Fixed Cost includes the following components:

- (a) Operations and Maintenance Expenses;
- (b) Depreciation;
- (c) Advance Against Depreciation;
- (d) Return on Equity
- (e) Interest Expenses; and
- (f) Interest on Working Capital;

Operations and Maintenance Expenses

Employee Expenses

Petitioner's Submission

- 5.79 The Petitioner has submitted that the salaries of employees of the company are governed by FRSR structure. It is mandatory for the company to follow the salary structure as per the FRSR and it has no control over the same. Further, due to high inflation in the past, the DA has increased in the range of 4 to 9%. The average increase in salary of employees was more than 10% against the 4% hike allowed by the Commission in MYT Order for FY 2007-08 to FY 2010-11.
- 5.80 The Petitioner has requested that salaries/employee cost increase should be considered as uncontrollable factor as it is not in a position to not allow these increases as any deviation will be against law/policy and should be trued up as per actuals.
- 5.81 The salary and allowances for the FY 2010-11 have been escalated by 10% annually for estimating the employee expenses for FY 2011-12. This 10% increase in salaries & allowances is mainly due to annual increments, DA etc.

Table 97: Employee Expenses submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Employee Cost	15.71	19.71	18.58	26.24	28.86

Commission's Analysis

- 5.82 The Commission has escalated the approved employee expenses for FY 2010-11 as shown in Table 73 by 4% p.a. to arrive at the employee expenses for FY 2011-12, in line with the approach followed by it in the MYT Order.
- 5.83 The balance arrears to be paid on account of impact of 6th Pay Commission Recommendations, as shown in Table 72, have also been included in the employee cost for the year.
- 5.84 The approved employee expenses for the Control Period are shown in the table below.

Table 98: Employee Expenses approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2010-11	FY 2011-12
Employee Cost	20.34	21.15
Unpaid arrears on account of 6 th Pay Commission (Refer Table 72)		3.47
Total Employee Cost	20.34	24.62

Repair and Maintenance Expenses**Petitioner's Submission**

- 5.85 The R&M expenses for FY 2011-12 have been projected by applying 5.72% annual increase (as stipulated in CERC Tariff Regulation for FY 2009-14) on the estimated costs for FY 2010-11.

Table 99: R&M Expenses submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
R&M Expenses	29.36	20.27	33.07	45.29	47.88

Commission's Analysis

- 5.86 The Commission has approved O&M Expenses for FY 2010-11 in respect of Employee Expenses, R&M and A&G Expenses and has escalated the approved R&M expenses for FY 2010-11 as shown in
- 5.87
- 5.88 Table 66 by 4% p.a. to arrive at the R&M expenses for FY 2011-12 in line with the approach followed by it in the MYT Order.
- 5.89 The approved R&M expenses for the Control Period are shown in the table below.

Table 100: R&M Expenses approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
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R&M Expenses	16.00	16.64	17.31	18.00	18.72
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Administrative and General Expenses

Petitioner's Submission

- 5.90 The Petitioner has projected A&G expenses for FY 2011-12 by applying 5.72% annual increase as stipulated in CERC (Terms and Conditions of Tariff) Regulations, 2009, on the provisional costs for FY 2010-11.
- 5.91 It has also requested the Commission to allow expense on account of property tax and water-cess paid to Delhi Jal Board as a pass-through on actual basis besides the other O&M expenses.

Table 101: A&G Expenses submitted by the petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
A&G Expenses	6.79	8.57	8.90	10.94	11.57

Commission's Analysis

- 5.92 The Commission has approved O&M Expenses for FY 2010-11 in respect of Employee Expenses, R&M and A&G Expenses and has then escalated the approved A&G expenses for FY 2010-11 as shown in
- 5.93
- 5.94 Table 66 by 4% p.a. to arrive at the A&G expenses for FY 2011-12 in line with the approach followed by it in the MYT Order.
- 5.95 Pragati Power Corporation Limited (PPCL) has also requested for additional expenditure to be allowed on account of ERP licenses. The scheme for installation of ERP was approved by the Board of Directors of IPGCL and PPCL on December 19, 2008 and work was awarded to M/s NICS. The Commission also gave, in principle, approval for implementation of the ERP project vide its letter dated October 15, 2009.
- 5.96 PPCL was directed to submit the details regarding the expenditure on ERP licenses projected by it during FY 2011-12, including Contract Documents of Annual Maintenance Contracts, SAP licenses etc. PPCL has provided documentary proof relating to Rs 7.17 Cr of expenditure on ERP licenses/IT support as shown in the table below.

Table 102: Expenditure on ERP licenses and IT Support

Category	Description of item	Amount (Rs)
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	Category	Description of item	Amount (Rs)
1	Annual Maintenance Contracts		4,14,12,730
2	Other Costs		
	<i>Internet Leased Line</i>		
		<i>MTNL</i>	5,07,380
		<i>ERNET</i>	2,75,750
		<i>Radio Connectivity Link ERNET</i>	1,54,420
	<i>Website Hosting</i>		1,45,000
	<i>Email Hosting</i>		54,000
	<i>SAP Licenses ATS Support @22%</i>	2010-11	1,14,65,685
		2011-12	1,14,65,685
	Sub Total		2,40,67,920
3	Hiring of Experts		15,45,848
4	IT Specialized Training		46,89,050
	Total		7,17,15,548

- 5.97 On scrutiny of the information provided by PPCL, it was observed that out of the total expenditure submitted by PPCL, Rs 0.20 Cr was on account of non ERP related expenditure which is already covered under the normative expenditure allowed by the Commission.
- 5.98 The ERP related expenditure includes SAP License @ 22% (i.e. 1.15 Cr) for FY 2010-11 and an expenditure of Rs 5.82 Cr for FY 2011-12, including SAP License @ 22% (i.e. 1.15 Cr). This expenditure is not covered under the normative O&M expenses for FY 2011-12. The Commission has, therefore, decided to allow this additional expenditure for FY 2011-12. The expenditure on SAP license in FY 2010-11 shall be considered at the time of true up for the year.
- 5.99 However, while the entire cost of the ERP project has been shown in the ARR of PPCL, the ERP is being utilised by both IPGCL and PPCL. The allowed ERP expenditure for FY 2011-12 (i.e. Rs 5.82 Cr) has therefore been apportioned between IPGCL and PPCL in the ratio 19.23%: 80.77%. (i.e. Rs 1.12 Cr for IPGCL and Rs 4.70 Cr for PPCL).
- 5.100 Further, the ERP expenditure apportioned to IPGCL has been allocated to RPH and GTPS in the ratio of the installed capacity. Accordingly, the Commission has approved ERP expenditure of Rs 0.37 Cr for RPH and Rs 0.75 Cr for GTPS for FY 2011-12.

Table 103: A&G Expenses approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Normative A&G Expenses	7.96	8.27	8.61	8.95	9.31
Additional Amount for ERP	-	-	-	-	0.75
Total A&G Expenses	7.96	8.27	8.61	8.95	10.05

5.101 O&M Expenses approved by the Commission for GTPS for FY 2011-12 is shown below:

Table 104: O&M Expenses approved by the Commission for GTPS for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
Employee Expenses	24.62
R&M Expenses	18.72
A&G Expenses	10.05
O&M Expenses	53.40

Payment to Pension Trust

Petitioner's Submission

- 5.102 The Commission has considered the issues related to Pension Trust and the view of all the stake holders. Pension Trust was created under the provision of Transfer Scheme Rules, 2001 at the time of unbundling of erstwhile DVB, duly notified by Govt. of NCT of Delhi and the obligations arising therefrom are binding on all the successor entities. As informed by the Pension Trust, in response to ARR of various Distribution Licensees, the funds available with Pension Trust are sufficient to make the payment on account of Pension, Terminal benefits etc. for the next 5-6 months only.
- 5.103 The Commission has noted that the matter is sub-judice before the Hon'ble High Court of Delhi in Civil Writ petition no. 1698/2010 filed by Delhi State Electricity Workers Union vs. GoNCTD and others. The Commission has also noted that the present amount available in the corpus of the Pension Trust shall be sufficient for disbursement of Pension, Terminal Benefits etc. for the next 5 to 6 months. Therefore, the Commission has decided to provide a provisional lump sum amount of Rs. 150 Crore in the ARR of DTL for FY 2011-12 so that there is no hardship caused to the retired employees of erstwhile DVB.
- 5.104 DTL is directed to transfer this amount to the Pension Trust and shall keep separate record of payment made to Pension Trust.

Commission's Analysis

- 5.105 The Commission has considered the submissions made by Secretary, Pension Trust and CEO's of the DISCOMs at length. The Commission also examined the relevant provisions of the Transfer Scheme Rules, 2001, Tripartite Agreement entered amidst GoNCTD, DVB and association of Union of the officers and employees of the erstwhile DVB, Trust Deed, Pension Trust and the record pertaining to the Civil Writ Petition (C) No 1698/2010 filed by Delhi State Electricity Workers Union before the Hon'ble High Court of Delhi.
- 5.106 The Commission noticed that shortfall of the fund in the Pension Trust is the main issue in the said Writ Petition. At the present matter is sub-judice. The Commission

also observes that Pension Trust is facing acute shortage of fund and is left with the meagre fund just sufficient to meet its obligation towards the pensioners for another 5 to 6 months only.

- 5.107 In view of the above and to avoid any undue hardship to the retired employees (pensioners) of the erstwhile DVB, the Commission has considered providing a provisional lump sum amount of Rs 150 Cr in the ARR of the DTL for FY 2011-12 subject to the final outcome in the Civil Writ Petition (C) No 1698/2010.

Capital Expenditure

Petitioner's Submission

- 5.108 The Petitioner has submitted that it carried out capital expenditure during each year from FY 2007-08 to FY 2010-11. The Petitioner has submitted that the same has been segregated into the debt and equity on the basis of 70:30 ratio while calculating the fixed cost.

Table 105: Capital expenditure and capitalisation submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Capital Expenditure	13.39	23.15	22.74	46.54	15.20

- 5.109 For FY 2011-12 the Petitioner proposed capital expenditure and capitalization of Rs 15.20 Cr in its petition. In subsequent submissions to the Commission, the Petitioner revised its projections for capital expenditure and capitalization during FY 2011-12 to Rs 13.45 Cr as shown in the table below.

Table 106: Capital Expenditure and Capitalization for FY 2011-12 (Rs Cr)

S.No.	Scheme	Amount
1.	Electronic Governor	1.50
2.	Renovation of Turbine Monitoring System in STG of one module	0.25
3.	Replacement of Steam Ejectors with Vacuum Pumps in One STG	0.80
4.	Refurbishment of GT Compressor Rotor	6.50
5.	AVR/Excitation System of STG	0.30
6.	Side Steam filtration of CW System	1.00
7.	Renovation of DAS of WHRU	1.00
8.	Renovation of SWAS	0.50
9.	Civil Works-Shed	0.30
10.	Renovation of Fire fighting System	0.50
11.	On-line Gas Metering at GTPS	0.80
	Total	13.45

Commission's Analysis

- 5.110 The Petitioner has requested the Commission to true up the actual capital expenditure and capitalisation incurred by it during the MYT period. With regards to this, the Commission notes that Clause 5.6 of the MYT Regulations states that:

“...The Commission shall review the actual capital investment at the end of each year of the Control Period. Adjustment for the actual capital investment vis-à-vis approved capital investment shall be done at the end of Control Period.”

Since the Commission has extended the Control Period for one more year, up till 31st March 2012, it has not considered any adjustment in capital expenditure and GFA for the years FY 2007-08 to FY 2010-11 as per the submission of the Petitioner. The adjustment in ARR for the capital expenditure and capitalization actually done by the Petitioner shall be conducted only at the end of the extended Control Period. Accordingly, the Commission has considered the closing balance of GFA for FY 2010-11 as approved by it in the MYT Order as the opening balance of GFA for the year.

- 5.111 With regards to the capital expenditure for FY 2011-12, the Commission observes that out of the total expenditure of Rs.122.72 Cr approved for GTPS during FY 2007-08 to FY 2010-11, the actual expenditure was only Rs.105.81 Cr. As per the Petitioner's submission the anticipated expenditure on account of spill-over will be Rs 30.10 Cr. Thus, as per the Petitioner, total expenditure is expected to be Rs.135.91 Cr, against the approved capital expenditure of Rs.122.72 Cr.
- 5.112 Further, the Commission is of the opinion that scheme nos. 3, 8, 9 & 11 i.e viz Replacement of Steam Ejectors with Vacuum Pumps in One STG, Renovation of SWAS, Civil Works-Shed, On-line Gas Metering at GTPS should be covered under O&M expenses already allowed to the Petitioner. Therefore, the balance proposed capital expenditure of Rs.11.05 Cr has been approved for FY 2011-12.

Table 107: Capital Expenditure approved by the Commission for GTPS (Rs Cr)

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Capital Expenditure	40.00	38.53	27.73	16.46	11.05

Depreciation

Petitioner's Submission

- 5.113 The Petitioner has charged depreciation on the basis of straight-line method, on the fixed assets in use at the beginning of the year. The depreciation is based on the original cost, estimated life and residual life. It has been submitted that depreciation amount during the Control Period from FY 2007-08 to FY 2011-12 has been calculated as per the depreciation rates specified under MYT Regulations.

Table 108: Depreciation submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Opening GFA	310.18	340.61	364.33	388.59	435.14
Net Additions to GFA	30.43	23.72	24.26	46.55	15.2
Closing GFA	340.61	364.33	388.59	435.14	450.34
Depreciation	18.43	20.06	21.50	23.62	25.47

Commission's Analysis

5.114 The Commission has not considered any adjustment in GFA and accordingly, depreciation, for the years FY 2007-08 to FY 2010-11 will be carried out at the time of true up of the capital expenditure actually done by the Petitioner, at the end of the extended Control Period.

5.115 For FY 2011-12, the Commission has calculated the depreciation according to the methodology and depreciation rates notified in the MYT Regulations. It has considered the closing balance of GFA for FY 2010-11 as approved in the MYT Order as the opening balance of GFA for FY 2011-12. It has also considered the approved capital additions during the year for calculation of depreciation.

5.116 The depreciation amount as approved by the Commission are as follows:

Table 109: Depreciation approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Opening GFA	296.52	336.51	375.04	402.77	419.23
Net Additions to GFA	40	38.53	27.73	16.46	11.05
Closing GFA	336.51	375.04	402.77	419.23	430.29
Depreciation	18.97	21.33	23.32	24.64	25.47

Advance Against Depreciation

5.117 The Petitioner has not submitted any requirement for advance against depreciation (AAD) during the FY 2007-08 to FY 2011-12.

Table 110: Advance Against Depreciation submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1/10th of the Loan(s)	20.30	19.91	19.94	21.24	19.42
Repayment of the Loan(s) as considered for working out Interest on Loan	6.61	21.29	34.57	21.36	21.36
Minimum of the Above	6.61	19.91	19.94	21.24	19.42
Less: Depreciation during the year	18.43	20.06	21.50	25.47	25.47

A	18.43	20.06	21.50	25.47	
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	18.13	39.42	73.99	95.35	116.71
Less: Cumulative Depreciation	156.88	176.94	198.44	222.06	247.53
B	0.00	0.00	0.00	0.00	0.00
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00

Commission's Analysis

5.118 The Commission has not considered any adjustment in Advance Against Depreciation for the years FY 2007-08 to FY 2010-11, based on the submission of the Petitioner. The same will be carried out at the time of adjustment of the capital expenditure and capitalization done by the Petitioner, at the end of the extended Control Period.

5.119 For FY 2011-12, the Commission has calculated the advance against depreciation using the principles specified in the MYT Regulations and considering the details of cumulative debt repayment and accumulated depreciation till FY 2010-11 as approved in the MYT Order.

5.120 As per the calculations of the Commission, there is no requirement of AAD for GTPS during the entire Control Period including FY 2011-12.

Table 111: Advance Against Depreciation approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
1/10th of the Loan(s)	20.33	23.13	25.82	27.77	28.54
Repayment of the Loan(s) as considered for working out Interest on Loan	18.83	20.70	22.50	23.79	24.56
Minimum of the Above	18.83	20.70	22.50	23.79	24.56
Less: Depreciation during the year					25.47
A	18.83	20.70	22.50	23.79	0.00
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	44.54	52.03	61.32	65.31	76.66
Less: Cumulative Depreciation	153.23	172.20	193.53	216.84	241.48
B	0.00	0.00	0.00	0.00	0.00
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00

Return on Equity

Petitioner's Submission

- 5.121 The Petitioner has computed return on equity on approved opening equity and the 30% amount of the capital additions made during FY 2007-08 to FY 2010-11.
- 5.122 Return on Equity has been taken @ 14% in line with the MYT Regulations during FY 2007-08 & FY 2008-09. For FY 2009-10 to FY 2011-12 RoE has been computed at 15.5%, as per the rate specified in CERC (Terms and Conditions of Tariff) Regulations, 2009.

Table 112: Return on equity submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Equity (Opening Balance)	79.24	88.37	95.49	102.76	116.73
Net additions during the year	9.13	7.12	7.28	13.97	4.56
Equity (Closing Balance)	88.37	95.49	102.76	116.73	121.29
Average Equity	83.80	91.93	99.12	109.75	119.01
Rate of Return on Equity	14.0%	14.0%	15.50%	15.50%	15.50%
Return on Equity	11.73	12.87	15.36	17.01	18.45

Commission's Analysis

- 5.123 The Commission has not considered any revision in equity for the years FY 2007-08 to FY 2010-11 as proposed by the Petitioner. The same will be carried out at the time of adjustment of the capital expenditure and capitalization done by the Petitioner, at the end of the extended Control Period.
- 5.124 The Commission has considered the closing equity approved for FY 2010-11 in the MYT Order as opening equity of FY 2011-12 for calculation of RoE. The additions to equity have been considered at 30% of the approved capitalization for the year.
- 5.125 Further, the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012. Therefore, the rate of return on equity allowable under the MYT Regulations of the Commission and not CERC (Terms and Conditions of Tariff) Regulations, 2009 shall be allowed to the Petitioner. The rate of return on equity is thus retained at 14%.

Table 113: Return on Equity approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Equity (Opening Balance)	79.24	91.24	102.80	111.12	116.06
Net additions during the year	12.00	11.56	8.32	4.94	3.32
Equity (Closing Balance)	91.24	102.80	111.12	116.06	119.37
Average Equity	85.24	97.02	106.96	113.59	117.71

Rate of Return on Equity	14%	14%	14%	14%	14%
Return on Equity	11.93	13.58	14.97	15.90	16.48

Interest Expenses

Petitioner's Submission

- 5.126 The Petitioner has submitted that as per the Delhi Electricity Reforms (Transfer Scheme) Rules 2001, Rs. 210 Cr of unsecured loan has been transferred to the Petitioner as on July 1, 2002 which is repayable to the holding company. Further, the Plan Funds Loan from Delhi Government were taken at 13% p.a. interest during FY 2002-03 and FY 2003-04 and thereafter @ 11.50% p.a. Also, it has been submitted that a penal charge on late payment of interest @ 2.75% p.a. has been accounted for in the ARR.
- 5.127 The Petitioner has made certain capital additions during the MYT Control Period. The same have been funded through Reserve and surplus. As per the MYT Regulations, 70% of the capital additions have been considered to be funded through Loans. Accordingly, interest on this loan has been taken @ 11.50% p.a. i.e. GNCTD lending rate during the period.

Table 114: Interest expenses submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
		Actual		Provisional	Projection
Interest Expenses	23.28	24.07	23.31	24.09	21.70

Commission's Analysis

- 5.128 In its MYT Order, the Commission had determined the interest costs for each year of the Control Period by considering the opening balance of loans, the repayment schedule and by applying the actual rate of interest applicable to various components of the loan.
- 5.129 The Commission has not considered any revision in the loan, and interest on it, for the years FY 2007-08 to FY 2010-11. The same will be carried out at the time of adjustment of the capital expenditure and capitalization done by the Petitioner, at the end of the extended Control Period.
- 5.130 For calculating the interest and finance charges for FY 2011-12, the Commission has calculated the interest on secured and unsecured loan as per the loan schedule as considered during the MYT Order. The interest and finance charges for the year have been calculated considering the opening balance of loans, the repayment schedule and by applying the actual rate of interest applicable to various components of the loan.
- 5.131 Further, 70% of the capitalization for the year has been considered to be funded through debt. The interest on this debt has been taken @ 11.50% p.a. i.e. GNCTD lending rate to the Petitioner.

5.132 The approved interest expenses for the Control Period are shown in the table below.

Table 115: Interest Expenses approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order				Approved Now
Interest Expenses	24.70	25.43	25.05	23.65	21.66

Interest on Working Capital

Petitioner's Submission

5.133 Petitioner has calculated the Interest on Working Capital as per the following norms:

- Cost of Gas for 1 month;
- Cost of liquid fuel for 15 days;
- O&M expenses for 1 month;
- Receivables equivalent to 2 months average billing;
- Maintenance Spares for FY 2007-08 to FY 2008-09 : @1% of project cost plus escalation @6%; FY 2009-10 onwards : @ 30% of the O&M expenses for gas based plants;

5.134 The Petitioner has submitted that the fuel cost has increased steeply in FY 2010-11; this increase in prices of fuel had substantial impact on certain components considered in the computation of working capital and thus the interest on working capital has increased considerably in comparison to the interest allowed by the Commission.

5.135 For calculation of working capital, the Petitioner has considered the generation of two Gas Turbines on liquid fuel and other four gas turbines on gas. Accordingly, the requirement of 15 days liquid fuel as per the Regulations has been considered for requirement of working capital for FY 2008-09 onwards.

5.136 The rate of interest on working capital has been assumed @ 12.75% p.a. which is the SBI PLR (as on 1.04. 2007) for calculating interest on working Capital till FY 2010-11. Since the SBI PLR has increased to 13% p.a. w.e.f 12.2.2011, the increased rate has been considered for FY2011-12.

Table 116: Interest on Working Capital submitted by the Petitioner for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual			Provisional	Projection
Total Working Capital	82.16	119.01	152.53	173.75	209.20

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Rate of Interest (%)	12.75	12.75	12.75	12.75	13
Interest on Working capital	10.48	15.17	19.45	22.15	27.20

Commission's Analysis

5.137 Regarding the true up of working capital requirement, the Commission had stated in MYT Order for the Petitioner that:

“The Commission has not considered any escalation in fuel costs in its calculation for working capital requirements for the Control Period. Though the variation in fuel costs would be adjusted automatically through the FPA mechanism, the Commission shall not true-up the working capital requirements due to the same. Hence, the Commission has escalated the working capital requirement for FY09, FY10 and FY11 at an annual rate of 4% to consider for the escalation in fuel costs.”

5.138 The Commission had therefore already accounted for increase in the working capital requirements of the Petitioner due to increase in fuel costs while approving the working capital requirement for each year in the MYT Order. Therefore, there is no requirement for true up the interest on working capital.

Table 117: Interest on Working Capital approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
	Approved in MYT Order			
Total Working Capital	93.11	102.65	107.87	113.58
Rate of Interest (%)	12.75	12.75	12.75	12.75
Interest on Working capital	11.87	13.09	13.75	14.48

5.139 Further, the Commission has extended the MYT Regulations and the Control Period for a period of one year up to March 31, 2012. Therefore, the formula for calculation of working capital requirement allowable under the MYT Regulations of the Commission and not CERC (Terms and Conditions of Tariff) Regulations, 2009 shall be applicable for calculating the working capital requirement for FY 2011-12.

5.140 The Commission has estimated the working capital requirement of the Petitioner for FY 2011-12 based on the following norms:

- Fuel expenses for 1 month corresponding to the Target Availability duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;
- Liquid fuel stock for 15 days;
- O&M Expenses for 1 month;

- (d) Receivables equivalent to 2 months of fixed and variable cost for sale of electricity calculated on the Target Availability;
- (e) Maintenance spares: 1% of the actual capital cost escalated @ 6% per annum from the date of commercial operation;

5.141 For calculation of working capital for the year, the Commission has considered the generation of two Gas Turbines on liquid fuel and other four gas turbines on gas as per the submission of the Petitioner. The Commission has, however, not considered any generation in open cycle mode as has been done by the Petitioner.

5.142 For calculation of working capital, the receivables considered in (d) is equal to the total variable and fixed cost projected for the year (divided by six).

5.143 The Commission has calculated the interest on working capital for the year, considering an interest rate of 13% based on the SBI PLR effective on April 1, 2011.

Table 118: Interest on Working Capital approved by the Commission for GTPS for FY 2011-12 (Rs Cr)

Particulars	Submitted	Approved*
Cost of Fuel	29.92	27.13
Cost of Secondary Fuel	25.48	24.48
O & M expenses	7.36	4.45
Maintenance Spares	26.49	6.34
Receivables	119.95	113.30
Total Working Capital	209.20	175.71
Rate of Interest	13.00%	13.00%
Interest on Working Capital	27.20	22.84

*As per formula used in the MYT Order

Fixed Cost

5.144 The Fixed Cost for the Petitioner for the Control Period, based on the analysis of various components by the Commission, as detailed above, is shown on the following page.

Table 119: Fixed Cost approved by the Commission for GTPS (Rs Cr)

Particulars	FY 2007-08			FY 2008-09			FY 2009-10			FY 2010-11			FY 2011-12
	Approved in MYT Order	Approved Now	Difference	Approved in MYT Order	Approved Now	Difference	Approved in MYT Order	Approved Now	Difference	Approved in MYT Order	Approved Now	Difference	Approved Now
O&M Expenses	34.63	36.75	2.12	38.75	38.88	0.13	37.72	51.98	14.26	39.22	47.29	8.06	53.40
Additional CISF Expenses	0.00	1.43	1.43	0.00	1.96	1.96	0.00	2.10	2.10	0.00	1.73	1.73	1.80
Additional Employee Cost for I.P. Power Station Employees	0.00		0.00	0.00		0.00	0.00		0.00	0.00	5.68	5.68	6.25
Depreciation	18.97	18.97	0.00	21.33	21.33	0.00	23.32	23.32	0.00	24.64	24.64	0.00	25.47
AAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Charges	24.70	24.70	0.00	25.43	25.43	0.00	25.05	25.05	0.00	23.65	23.65	0.00	21.66
Return on Equity	11.93	11.93	0.00	13.58	13.58	0.00	14.97	14.97	0.00	15.90	15.90	0.00	16.48
Interest on Working Capital	11.87	11.87	0.00	13.09	13.09	0.00	13.75	13.75	0.00	14.48	14.48	0.00	22.84
Income Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Fixed Cost	102.10	105.65	3.54	112.18	114.27	2.09	114.81	131.17	16.37	117.89	133.37	15.48	147.90
Additional Amount Allowed account of Revision in ARR from FY2007-08 to FY2010-11 including carrying cost (Refer Table 82)													43.61
Total Amount Recoverable from Fixed Cost													191.51

A6: SUMMARY**Directives issued by the Commission**

- 6.1 The Commission directs PPCL to inform the SLDC when the plant is operated on Spot R-LNG, since the variable cost is expected to be significantly higher and the SLDC can consider the same during merit Order dispatch.
- 6.2 The SLDC may test the declared capacity of the PPCL-I at random and in the event of the power station failing to demonstrate the declared capability, the SLDC shall report the matter to the Commission, which would then determine the penalty, if any, to be levied for false declaration.
- 6.3 The Commission also directs the Petitioner to consider any source of cheaper fuel available in the future, and accordingly restructure the order of scheduling of fuel to ensure that the cheapest available fuel is utilised first.
- 6.4 PPCL/IPGCL shall furnish details of the employees transferred from I.P. Power Station to other stations of IPGCL and PPCL. The exact number of employees transferred, and the actual year-wise financial impact thereof shall be submitted to the Commission with the filing of the next tariff petition. The impact allowed in this tariff order is provisional and subject to true up at the end of the extended MYT Control Period.

Summary of Generation Tariffs

- 6.5 The generation tariffs for IPGCL Stations as determined by the Commission for the year FY 2011-12 are summarized below:

Table 120: Generation Tariff for RPH

Particulars	FY 2011-12
Net Generation (MU)	736
Net Fixed Costs (Rs. Cr)*	110.23
Past Arrears (Rs Cr)	65.29
Total Amount Recoverable from Fixed Cost (Rs Cr)	175.52
Total Amount Recoverable from Fixed Cost (Rs/kWh)	2.3833
Total Variable Cost (Rs Cr)	179.54
Variable Cost per Unit (Rs/kWh)	2.4379
Total Cost per Unit (Rs/kWh)	4.8212

*excluding past arrears

Table 121: Generation Tariff for GTPS

Particulars	FY 2011-12
Net Generation (MU)	1610
Net Fixed Costs (Rs. Cr)*	147.90
Past Arrears (Rs Cr)	43.61
Total Amount Recoverable from Fixed Cost (Rs Cr)	191.51
Total Amount Recoverable from Fixed Cost (Rs/kWh)	1.1892

Particulars	FY 2011-12
Total Variable Cost (Rs Cr)	488.32
Variable Cost per Unit (Rs/kWh)	3.0323
Total Cost per Unit (Rs/kWh)	4.2215

*excluding past arrears

- 6.6 The net fixed costs (as specified in the table above) shall be recovered by the Petitioner at target availability specified by the Commission. The recovery of net fixed cost below the level of target availability shall be on pro rata basis with no net fixed cost payable at zero availability. For this purpose, the availability of the power station shall be certified by the SLDC. Any adjustment of recovery of net fixed costs shall be based on the cumulative availability as certified by the SLDC at the end of the year. The net fixed cost shall be recovered in proportion to allocated/contracted capacity.
- 6.7 The Past Arrears shall be recovered in proportion to allocated/contracted capacity.
- 6.8 Intra-state ABT (Availability Based Tariff) is in operation in Delhi since April 1, 2007. Consequent to this, the Variable Cost shall be billed by the Petitioner to the beneficiaries based on the scheduled generation during the month from the station as per the rates approved by the Commission.
- 6.9 Incentive shall be payable at a flat rate of 25 paise/kWh for the scheduled generation achieved beyond the level corresponding to target PLF. However, the generating station shall comply with the SLDC instructions with respect to the backing down of the generation and such backing down shall not qualify for calculation of PLF for Incentive. Further, in case of non-compliance by generating stations to backing down instructions given by SLDC, generation during backing down period as instructed by SLDC shall not be considered for Incentive purpose. The SLDC shall at the end of the year, certify the generation level of generating stations which qualifies for Incentive purpose as per the above guidelines.
- 6.10 Deviations from the schedule are to be accounted for in accordance with the principals laid down in the order of the Commission regarding Intra-state ABT.