



**ASSAM ELECTRICITY REGULATORY COMMISSION
(AERC)**

**TARIFF ORDER
FY 2013-14 to FY 2015-16**

**Assam Power Distribution Company Limited
(APDCL)**

Petition No. 5/2013

ASSAM ELECTRICITY REGULATORY COMMISSION

A.S.E.B. Campus, Dwarandhar,

G. S. Road, Sixth Mile, Guwahati - 781 022

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Abbreviations

A&G	Administration and General
ABITA	Assam Branch of Indian Tea Association
ADB	Asian Development Bank
AEGCL	Assam Electricity Grid Corporation Limited
AERC	Assam Electricity Regulatory Commission
APDCL	Assam Power Distribution Company Limited
APGCL	Assam Power Generation Corporation Limited
APTEL	Appellate Tribunal For Electricity
ARR	Annual Revenue Requirement
ASEB	Assam State Electricity Board
AT&C	Aggregate Technical & Commercial
BPL	Below Poverty Line
BTPS	Bongaingon Thermal Power Station
CAG	Comptroller and Auditor General
CAGR	Compounded Annual Growth Rate
CERC	Central Electricity Regulatory Commission
CSGS	Central Sector Generating Stations
CTU	Central Transmission Utility
CVO	Central Vigilance Office
CWIP	Capital Work-In-Progress
DPR	Detailed Project Report
DSM	Demand Side Management
EPFI	Employees' Pension Fund Investment
ERC	Electricity Regulatory Commission
ERP	Enterprise Resource Planning
FAR	Fixed Asset Register
FCC	Financial Completion Certificate
FINER	Federation of Industry & Commerce of North Eastern Region
FPA	Fuel Price Adjustment
FPPPA	Fuel & Power Purchase Price Adjustment
GFA	Gross Fixed Assets
GoA	Government of Assam
GOI	Government of India
HVCMS	High Value Consumer Management System

IPS	Indian Police Services
JNNSM	Jawaharlal Nehru National Solar Mission
KMSS	Krishak Mukti Sangram Samiti
kW	Kilo Watt
kWh	Kilo Watt Hour
MOD	Merit Order Dispatch
MRI	Meter Reading Instrument
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NCE	Non-Conventional Energy
NEIPP	North East Industrial and Investment Promotion Policy
NEP	National Electricity Policy
NESSIA	North Eastern Small Scale Industries Association
NVVNL	NTPC Vidyut Vyapar Nigam Ltd
O&M	Operation and Maintenance
PAC	Public Accounts Committee
PGCIL	Power Grid Corporation Limited
PPA	Power Purchase Agreement
R&M	Repairs and Maintenance
R-APDRP	Restructured Accelerated Power Development Reforms Programme
RE	Renewable Energy
REC	Rural Electrification Corporation
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
SAC	State Advisory Committee
SLDC	State Load Despatch Centre
STU	State Transmission Utility
T&D	Transmission & Distribution
TOD	Time of Day

ASSAM ELECTRICITY REGULATORY COMMISSION

Guwahati

Present

Shri Naba Kumar Das, Chairperson

Dr. Rajani Kanta Gogoi, Member

Shri Tapan Chatterjee, Member

Petition No. 5 of 2013

Assam Power Distribution Company Limited (APDCL) — **Petitioner**

ORDER

(Passed on 21.11. 2013)

- (1) The Assam Power Distribution Company Limited (APDCL) filed the Petition for approval of Annual Revenue Requirement (hereafter called as ARR) for the period from FY 2013-14 to FY 2015-16 and approval to the proposal for revision of the retail supply tariff, on 31 January, 2013 under Section 62 of the Electricity Act, 2003.
- (2) The Commission on preliminary scrutiny found that the above Petition filed by APDCL was incomplete in some material particulars. Therefore, additional data and clarifications on the Petition were sought for from APDCL from time to time and replies received. Although, additional information and clarifications continued to be submitted, the Commission in the larger interest of the consumers as well as the licensee and abiding by the statutory obligation of tariff determination, admitted the Petition on April 4, 2013.
- (3) The Commission while examining the MYT Petition had observed that true up for FY 2011-12 and Annual Performance Review for FY 2012-13 has not been sought by APDCL explicitly. Accordingly, the Commission, vide its letter dated 14 March, 2013 directed APDCL to file the Petition for True up of FY 2011-12 (along with the Audited Annual Statement of Accounts for FY 2011-12 and justification for variation in actual expenses vis-à-vis expenses approved in the Order), and Annual Performance Review of FY 2012-13 on or before March 21, 2013.
- (4) However, as APDCL had not submitted the Petition for true-up of FY 2011-12, therefore, the Commission sent reminder letter on 26 March, 2013. APDCL filed the

Petition for true up for FY 2011-12, however, the same was not supported with the Audited Annual Statement of Accounts for FY 2011-12. APDCL vide its letter dated 1 June, 2013 submitted the Annual Statement of Accounts for FY 2011-12 along with CAG Audit Report. Due to delay in filing of the Petition along with the Audited Annual Statement of Accounts during the regulatory process, the True up Petition was not published for objections/suggestions from the public and hence, the Commission has not undertaken true up for FY 2011-12 and Annual Performance Review for FY 2012-13 for APDCL in this Order.

- (5) Although, the Petition from APDCL was admitted on April 4, 2013, the Commission continued to receive additional data and clarifications from APDCL on various aspects as late as June 17, 2013.
- (6) After the Petition was admitted, in accordance with Section 64 of the Electricity Act 2003, the Commission directed APDCL to publish a summary of the ARR and Tariff filings in local dailies to ensure due public participation. A copy of the Petition and other relevant documents were also made available to consumers and other interested parties at the office of the Managing Director of APDCL and offices of the Deputy General Manager of each circle of APDCL. A copy of the Petition was also made available on the website of the Commission and APDCL.
- (7) Accordingly, a Public Notice was issued by APDCL inviting objections/suggestions from stakeholders to be submitted on or before April 30, 2013. The notice was published in 11 (Eleven) leading newspapers of the State on April 9, 2013. Meanwhile, the Commission received requests for extending the time limit for filing objections/suggestions from some consumers/ consumer organizations. With a view to allow some more time for obtaining views of stakeholders, the Commission positively considered the request and extended the time limit for filing objections/suggestions upto May 13, 2013. APDCL was asked to issue a public notice to this effect, which was published in 11 (Eleven) newspapers on May 4, 2013, as aforesaid.
- (8) The Commission received 43 (Forty three) objections on the Petition filed by APDCL and sent communication to the objectors and served personally/by Registered Post informing the date and time of Hearing to take part in the Hearing to be held at the Circuit House, Jorhat on May 17, 2013 and at the Assam Administrative Staff College, Guwahati on May 18, 2013. Also, a comprehensive Notice was published in the seven newspapers on May 12, 2013 in Assamese and English language. The Hearing was held at the Circuit House, Jorhat on May 17, 2013 as scheduled. The Commission commenced the Hearing at the Assam Administrative Staff College, Guwahati on May 18, 2013, however, few objectors/respondents who were present in the Hearing submitted that the Utilities have either not satisfactorily responded or not at all responded in certain cases and appealed to the Commission to adjourn the

Hearing. APDCL responded that they have replied to objections submitted till last date of submission and they have not submitted the replies to recently received objections. During the deliberations, the Commission also clarified the mandate under the Act, and also referred to the recent Judgment of Hon'ble Appellate Tribunal for Electricity. However, based on persistent requests from few objectors/respondents who were present, the Commission directed APDCL to submit replies to all such objections on or before May 24, 2013, and adjourned the hearing to a later date to be notified in due course.

- (9) The Commission rescheduled the adjourned Hearing on July 2, 2013 and July 3, 2013. In this context Notices were served on the objectors personally/by Registered Post informing the date and time of Hearing. Also, a comprehensive Notice was published in the seven newspapers on June 26, 2013.
- (10) The Commission held Hearing at Circuit House, Guwahati, on July 2, 2013 and July 3, 2013, respectively, as notified, so that the objectors may make their oral submissions. However, a section of the objectors/respondents insisted upon that the Hearing be held in open space on both the days so that all people who desire to take part may participate and also that the media including live coverage on Television be allowed to cover the proceedings and disrupted the proceeding. The Commission stated that all the proceedings of the Commission are deemed to be judicial proceedings in terms of Section 95 of the Electricity Act, 2003 and therefore, allowing media inside the Hearing premises would not be appropriate. The Commission further clarified that the Hearing is being held only on the response petitions filed under affidavit by individuals/organizations. The Commission appealed to objectors/respondents to maintain faith in the Commission and allow the Commission to complete the proceedings with objective participation. Even after several requests from the Commission some of the objectors/respondents refused to co-operate and created pandemonium inside the Hearing premises.
- (11) The Commission rescheduled the Hearing on September 27, 2013 and September 28, 2013, respectively. In this context, Notices were served on the objectors personally/by Registered Post informing the date and time of Hearing. Also, a comprehensive Notice was published in the seven leading newspapers in the State on September 19, 2013.
- (12) The Commission held Hearing at Karmabir Nabin Chandra Bordoloi Indoor Stadium, Sarusajai, Guwahati, on September 27, 2013 and September 28, 2013, respectively, as notified.
- (13) The details are discussed in the relevant section of this Tariff Order. Besides, all stakeholders who participated in the Hearing were afforded the opportunity to express their views on the Petition. The MYT Petition was also discussed in the meeting of the State Advisory Committee (constituted under Section 87 of the

Electricity Act, 2003) convened on May 9, 2013 held at the Assam Administrative Staff College, Guwahati.

- (14) The Commission, now in exercise of the power vested under Section 61 and 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf and taking into consideration and submissions made by the petitioners, objections and suggestions received from stakeholders and all other relevant materials on record, has determined the ARR for APDCL for the period from FY 2013-14 to FY 2015-16 and the retail tariff for FY 2013-14 and issued the Order accordingly, making the new tariff effective from December 1, 2013.
- (15) The Commission further directs APDCL to publish a Public Notice 7 days before the implementation of the Order.
- (16) Before parting, it would be worth mentioning that while passing the Tariff Order some delay could not be avoided and the factors attributed for the same have been stated herein before.

Sd/-
(T. Chatterjee)
Member, AERC

Sd/-
(Dr. R.K. Gogoi)
Member, AERC

Sd/-
(N. K. Das)
Chairperson, AERC

1. Introduction

1.1 CONSTITUTION OF THE COMMISSION

1.1.1 The Assam Electricity Regulatory Commission (hereinafter referred to as the AERC or the Commission) was established under the Electricity Regulatory Commissions Act, 1998 (14 of 1998) on February 28, 2001. The first proviso of Section 82(1) of the Electricity Act, 2003 has ensured continuity of the Assam Electricity Regulatory Commission under the Electricity Act, 2003.

1.1.2 The AERC came into existence in August 2001 as a one-man Commission. Considering the multidisciplinary requirements of the Commission, it was made a Multi-Member Commission consisting of three Members (including Chairperson) from January 27, 2006. The Commission has started functioning as Multi Member Commission on joining of two Members from February 1, 2006.

1.1.3 The Commission is mandated to exercise the powers and functions conferred under Section 181 of the Electricity Act 2003 (36 of 2003) (hereinafter referred to as the Act) and to exercise the functions conferred to it under Section 86 of the Act from 10 June, 2003.

1.2 TARIFF RELATED FUNCTIONS OF THE COMMISSION

1.2.1 Under Section 86 of the Act, the Commission has the following tariff related functions:

- (a) To determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be;
- (b) To regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
- (c) To promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.

1.2.2 Under Section 61 of the Act in the determination of tariffs, the Commission is to be guided by the following:

- (a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- (b) That the electricity generation, transmission, distribution and supply are conducted on commercial principles;
- (c) The factors which would encourage efficiency, economical use of the resources, good performance, optimum investments, and other matters which the State Commission considers appropriate for the purpose of this Act,
- (d) The interests of the consumers are safeguarded and at the same time, the consumers pay for the use of electricity in a reasonable manner,
- (e) That the tariff progressively reflects the cost of supply of electricity at an adequate and improving level of efficiency and also gradually reduces cross subsidies,
- (f) The National Power Plans formulated by the Central Government including the National Electricity Policy and Tariff Policy.

1.2.3 In accordance with the Act, the Commission shall not show undue preference to any consumer of electricity in determining the tariff, but may differentiate according to the consumers load factor, power factor, voltage, total consumption of energy during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required (Section 62 of the Act).

1.2.4 If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the Commission, the State Government shall pay the amount to compensate the person affected by the grant of subsidy in the manner the Commission may direct as a condition for the license or any other person concerned to implement the subsidy provided for by the State Government (Section 65 of the Act).

1.3 BACKGROUND

1.3.1 The Government of Assam notified Vide Memo No. PEL151/2003/Pt./165 dated December 10, 2004, the restructuring of the erstwhile Assam State Electricity Board (ASEB) into five entities namely:

- (i) Assam Electricity Grid Corporation Limited (AEGCL) to carry out function as State Transmission Utility (STU).

- (ii) Assam Power Generation Corporation Limited (APGCL) to carry out function of generation of electricity in the State of Assam.
 - (iii) Three Electricity Distribution Companies, namely Lower, Central and Upper Assam Electricity Distribution Company Limited to carry out functions of distribution and retail sale of electricity In the districts covered under each company area.
- 1.3.2 All Companies are duly incorporated with the Registrar of Companies as per the Companies Act.
- 1.3.3 Further, in exercise of power under Section 172 of the Electricity Act 2003, the State Government authorized ASEB to continue its trading functions by periodic notification till September 2009.
- 1.3.4 In May 2009, as per GOA notification No PEL.41/2006/199 dated May 13, 2009, in accordance with the Assam State Reform (Transfer and merger of Distribution Functions and undertakings) scheme, 2009, CAEDCL and UAEDCL distribution companies merged with the LAEDCL, thereby forming one distribution Company for the State.
- 1.3.5 The name of the Company was changed from LAEDCL to Assam Power Distribution Company Limited (APDCL) vide Certificate of Incorporation dated October 23, 2009.
- 1.3.6 The Government of Assam vide Notification dated March 12, 2013 dissolved ASEB under Section 131 of the Act with effect from March 31, 2013 and transferred ASEB's current functions and reassigned its personnel to its successor entities namely APDCL, AEGCL and APGCL in accordance with the Scheme of Reorganization.
- 1.3.7 The Commission notified the AERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 (hereafter referred to as AERC Tariff Regulations) vide Notification No. AERC.2005/19 dated April 28, 2006, which was published in the Assam Gazette on May 24, 2006.
- 1.3.8 In accordance with Regulation 5.3 of the AERC Tariff Regulations, the tariff will be determined on the basis of the principles enunciated under the Multi Year Tariff principle for a period of three years commencing from April 1, 2006.

APDCL had filed the MYT Petition for the Control Period of three years beginning from FY 2010-11 to FY 2012-13 on 15 February 2010. The Commission, after following the due procedure issued the Tariff Order on 16 May, 2011.

The Commission vide Order dated February 28, 2013 carried out True up for FY 2009-10 and suo-motu proceedings for True up of FY 2010-11, Performance Review for FY 2011-12 and determination of ARR and Tariff of APDCL for FY 2012-13.

1.4 PROCEDURAL HISTORY

- 1.4.1 As per the AERC Tariff Regulations, 2006, APDCL is required to file the Petition for determination of ARR and tariff latest by 1st December before the Commission. The APDCL has filed the Petition for the approval of ARR and Tariff for the Control Period from FY 2013-14 to FY 2015-16 on January 31, 2013.

1.5 ADMISSION OF THE PETITION AND PUBLIC PROCESS

- 1.5.1 The Commission conducted preliminary analysis of the information submitted by APDCL on January 31, 2013 and found that the Petition was incomplete in material particulars. Although, Volume I and II of the Petition were submitted, the Petition was not accompanied by Volume III, which was submitted vide letter dated February 14, 2013. Accordingly, required additional information along with para-wise clarifications on the MYT Petition was sought from APDCL vide letter dated March 15, 2013. APDCL submitted its reply vide letter dated April 2, 2013. APDCL, vide its letter dated April 5, 2013, submitted the revised Schedule of Tariff and ARR as part of the MYT Petition for the period from FY 2013-14 to FY 2015-16 after modification of some of elements in ARR and tariff vide Interlocutory Petition. The Commission admitted the Interlocutory Petition (Petition No. 7/2013) on April 6, 2013. The Petition was also uploaded on website for receiving comments/responses. While examining the revised submission, the Commission observed additional data requirements vis-à-vis replies to original data requirement as well as in the Interlocutory Petition, which were sought from APDCL vide letter dated April 23, 2013. Technical Validation Session with APDCL to discuss and sort out data gaps and shortcomings was conducted in the office of the Commission on April 26, 2013. APDCL, vide letter dated May 3, 2013 submitted its reply. The Commission vide letter dated May 13, 2013 communicated the status of data submitted and directed APDCL to submit the pending information. APDCL, vide its letter dated May 21, 2013 (received on May 23,

2013) submitted its reply. The Commission vide letter dated May 28, 2013 again directed APDCL to submit the pending information. APDCL, vide its letter dated May 31, 2013 submitted its reply. APDCL, vide its letter dated June 1, 2013 submitted the Annual Statement of Accounts for FY 2011-12 along with CAG Audit Report. Further, the Commission vide its letter dated June 4, 2013 also sent the format for submitting capital expenditure related details for earliest compliance and clarified that APDCL had forwarded details in such format in its earlier MYT filing. APDCL, vide its letter dated June 15, 2013 submitted the capex related data in the formats provided by the Commission. APDCL vide its letter dated June 17, 2013 submitted the status of compliance with the Commission's directives.

1.5.2 In accordance with Section 64 of the Act, the Commission directed APDCL to publish the information in the abridged form and manner to ensure due public participation.

1.5.3 The copies of the Petition and other relevant documents were made available to consumers and other interested parties at the office of the Deputy General Manager of each Distribution Circle of APDCL and office of the Chief General Manager (Commercial), APDCL. APDCL was also directed to make the copy of the Petition on APDCL's website. A copy of the Petition was made available on the website of the website of APDCL (www.laedcl.gov.in) and also on the website of the Commission (www.aerc.nic.in) in downloadable format. A Public Notice was issued by APDCL inviting objections/suggestions from stakeholders on or before April 30, 2013, which was published in the following newspapers on April 9, 2013.

Date	Name of newspapers	Language
09.04.2013	The Assam Tribune	English
	The Sentinel	English
	The Telgraph	English
	The Pratidin	Assamese
	The Amar Asom	Assamese
	Janasandharan	Assamese
	Dainik Janambhumi	Assamese
	Jugashankha	Bengali
	Sakalbela	Bengali
	Pratakhbar	Hindi
	Purbnchal Prahari	Hindi

1.5.4 The time limit for submitting objections/suggestions was stipulated in accordance with the AERC (Conduct of Business) Regulations, 2006. Moreover, the same were also in line with the time limit given by most of State Electricity Regulatory Commission in India, and the time allowed by the Commission in earlier tariff proceedings. Meanwhile, the Commission received requests for extending the time limit for filing objections/suggestions from some consumers/consumers organizations. The Commission positively considered the requests from different stakeholders, and extended the time limit for filing objections/suggestions upto May 13, 2013.

1.5.5 The Commission considered the objections received and sent communication to the objectors to take part in the hearing process for presenting their views in person before the Commission. Accordingly, the Commission scheduled a Hearing in the matter on May 17, 2013 at Jorhat and on May 18, 2013 at Guwahati. In this context, Notices were dispatched to the objectors personally/by Registered Post stating the date and time of hearing. Also, a comprehensive Notice was published in the following seven newspapers on May 12, 2013 in Assamese and English language. The Hearing was held at the Circuit House, Jorhat on May 17, 2013 as scheduled. All objectors/respondents who participated in the Hearing were given opportunity to express their views on the Petition.

Date	Name of Newspaper	Language
12.05.2013	The Sentinel	English
	The Assam Tribune	English
	Amar Asom	Assamese
	Pratidin	Assamese
	Dainik Janambhoomi	Assamese
	Dainik Jugashankha	Bengali
	Purbachal Prahari	Hindi

1.5.6 The Commission commenced the Hearing at the Assam Administrative Staff College, Guwahati on May 18, 2013, however, few objectors/respondents who participated in the Hearing submitted that the Utilities have either not satisfactorily responded or not at all responded in certain cases and requested the Commission to adjourn the hearing. ADPCL responded that they have replied to objections submitted till last

date of submission, and they have not submitted the replies to recently received objections. During the hearing, the Commission also clarified the mandate under the Act, and also referred to the recent Judgment of Hon'ble Appellate Tribunal of Electricity. However, based on persistent requests from few objectors/respondents who participated in the hearing, the Commission directed APDCL to submit replies to all such objections on or before May 24, 2013.

1.5.7 The Commission rescheduled the adjourned hearing on July 2, 2013 and July 3, 2013. In this context, Notices were dispatched to the objectors personally/by Registered Post stating the date and time of hearing. Also, a comprehensive Notice was published in the aforementioned seven newspapers on June 26, 2013.

1.5.8 The Commission held a hearing at Circuit House, Guwahati, on July 2, 2013 and July 3, 2013 so that the objectors may make their oral submissions. However, a section of the objectors/respondents insisted that the hearing be held in open space on both days so that all people who desire to take part may participate and also that the media, including live coverage on Television, be allowed to cover the proceedings, and did not allow the hearing to proceed. The Commission stated that all the proceedings of the Commission are deemed to be judicial proceedings in terms of Section 95 of the Act and therefore, allowing media inside the hearing premises would not be appropriate. The Commission further clarified that the hearing is being held only on the response petitions filed under affidavit by individual/organizations. The Commission appealed to objectors/respondents to maintain faith in the Commission and allow the Commission to complete the proceedings with objective participation. Even after several requests from the Commission some of the objectors/respondents refused to co-operate and created pandemonium inside the premises.

1.5.9 The Commission scheduled the hearing on September 27, 2013 and September 28, 2013. In this context, Notices were dispatched to the objectors personally/by Registered Post stating the date and time of hearing. Also, a comprehensive Notice was published in the abovementioned same following seven newspapers on September 19, 2013.

1.5.10 The Commission held hearing at Karmabir Nabin Chandra Bordoloi Indoor Stadium Sarusajai, Guwahati, on September 27, 2013 and September 28, 2013.

1.5.11 All objectors/respondents who participated in the Hearing were given the opportunity to express their views on the Petition. All the written representations submitted to the Commission and oral submissions made before the Commission in the hearing and the responses of APDCL have been carefully considered while issuing this Tariff Order. The major issues raised by different consumers and consumer groups along with the response of the Petitioner, APDCL and views of the Commission are elaborated in Chapter 3 of this Order.

1.6 Approach of this Order

1.6.1 The Commission, while examining the MYT Petition had observed that truing up for FY 2011-12 and Annual Performance Review for FY 2012-13 has not been sought explicitly. Accordingly, the Commission, vide its letter dated March 14, 2013 directed APDCL to file the Petition for

- (i) True up of FY 2011-12 (along with the Audited Annual Statement of Accounts for FY 2011-12)
- (ii) Annual Performance Review of FY 2012-13 (along with the Audited/provisional Annual Statement of Accounts for FY 2012-13) on or before 21 March, 2013.

1.6.2 However, as APDCL had not submitted the Petition for true-up of FY 2011-12, the Commission sent reminder letter on March 26, 2013. APDCL filed the Petition for truing up for FY 2011-12, however, the same was not supported with the Audited Annual Statement of Accounts for FY 2011-12. APDCL, vide its letter dated June 1, 2013 submitted the Annual Statement of Accounts for FY 2011-12 along with CAG Audit Report. Due to delay in filing of the Petition along with the Audited Annual Statement of Accounts during the regulatory process, the True up Petition was not published for objections/suggestions from the public and hence, the Commission has not undertaken true up for FY 2011-12 and Annual Performance Review for FY 2012-13 for APDCL in this Order. However, for the purpose of determination of ARR for the period from FY 2013-14 to FY 2015-16, the ARR for FY 2011-12 and FY 2012-13 have been considered based on latest available figures furnished by the Utility, since they are the base values for the MYT period from FY 2013-14 to FY 2015-16.

1.7 State Advisory Committee Meeting

A meeting of the State Advisory Committee (constituted under section 87 of the Electricity Act, 2003) was convened on May 9, 2013 and members were briefed on the MYT Petition of APDCL. The minutes of the meeting are appended to this Order as **Annexure 1**.

2. Summary of ARR and Tariff Petition

2.1 ANNUAL REVENUE REQUIREMENT FOR THE PERIOD FROM FY 2013-14 TO FY 2015-16

The Assam Power Distribution Company Ltd. (APDCL) submitted the Petition on 31 January, 2013 seeking approval of Annual Revenue Requirement (ARR) and approval to the proposal for revision of the retail supply tariff. APDCL has projected Annual Revenue Requirement of Rs. 3726.60 Crore for FY 2013-14, Rs. 4179.50 Crore for FY 2014-15, and Rs. 4677.13 Crore for FY 2015-16.

2.2 SUMMARY OF THE PETITION

Summary of the Petition filed by APDCL for the period from FY 2013-14 to FY 2015-16 is shown in the Table below:

Table 2.1: ARR and Revenue Gap for FY 2013-14 to FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Cost of power purchase	2720.26	3024.74	3328.77
2	Operation & Maintenance Expenses	715.47	835.77	1000.4
2.1	<i>Employee Cost</i>	634.77	741.50	887.53
2.2	<i>Repair & Maintenance</i>	48.61	56.78	67.97
2.3	<i>Administrative & General Expenses</i>	32.09	37.49	44.87
3	Depreciation	63.61	68.70	72.14
4	Interest and Finance Charge	96.94	106.64	117.3
5	Interest on Working Capital	68.61	77.84	88.33
6	Provision for Bad Debts	26.9	30.7	35.11
7	Return on Equity	35.11	35.11	35.11
8	Net Prior Period charges/ (credit)			
9	Total ARR	3726.6	4179.5	4677.13
10	Revenue at existing Tariff	2713.18	3049.04	3460.03
11	Other Income	203.5	227.92	255.27
12	Revenue Subsidies/ Grants			
13	Total Earning	2916.68	3276.97	3715.30
15	(Gap)/ Surplus	(809.92)	(902.53)	(961.83)

APDCL has thus estimated the total revenue gap for the period from FY 2013-14 to FY 2015-16 as Rs.809.92 Core, Rs.902.53 Crore, and Rs.961.83 Crore. To meet this gap, APDCL has submitted a Tariff Proposal for the Commission's approval, wherein APDCL has proposed average tariff increase of around 37% (i.e., increase in Average Cost of Supply from Rs. 5.72 per kWh to Rs. 7.87 per kWh).

APDCL added that it would adjust the Fuel and Power Purchase cost if it varies during the course of the MYT period as per the provision of the AERC (FPPPA) Regulations, 2010, (1st Amendment, 2012) notified by the Commission.

While projecting its ARR, APDCL has proposed norm based O&M expenses to address the growing demand of O&M requirements due to increased assets after implementation of large number of capital expenditure schemes.

APDCL has proposed to recover the power purchase related cost through Energy Charges, and the remaining retail supply cost on the basis of the number of consumers. Considering this, APDCL proposed to rename the fixed charges as 'Capacity Charges' for the specific categories of HT consumers (HT IV/V(A)/V(B)/V(C)/VI/VII), which are proposed to be recovered on the basis of Connected load/Contracted Demand as the case may be, and 'Customer Charge', which shall be recovered on the basis of number of consumers in the two broad groups of LT and HT consumers.

2.3 PRAYERS OF APDCL

APDCL, in its Petition, has prayed as under:

“

1. *To admit this Petition and determination of ARR/Tariff for FY 2013-14 to FY 2015-16.*
2. *To approve revised Annual Revenue Requirement of FY 2009-10, FY 2010-11 and FY 2011-12 based on results of Truing up and other under pending before the Commission and to allow its recovery through a suitable mechanism.*
3. *To allow recovery of Revenue Gap for FY 2013-14 to FY 2015-16 as given in the Petition, in addition to past period dues.*
4. *To approve the capital expenditure for FY 2013-14 to FY 2015-16.*

5. *To consider approved parameters/ARR of APGCL, AEGCL and SLDC while finalizing tariff of APDCL.*
6. *To grant any other relief as the Commission may consider appropriate.*
7. *Pass any Order as the Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.”*

3. Brief Summary of Objections raised, Responses of APDCL and Commission's comments

The Commission has received 43 (Forty three) no. of objections/suggestions on the Petition filed by APDCL from the following stakeholders:

Sr. No.	Name of the Objector
1	Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati
2	Assam Branch, Indian Tea Association (ABITA), Guwahati
3	Krishak Mukti Sangram Samiti (KMSS), Assam
4	Shri. Jayanta Deka, Advocate and Others, Darrang
5	Assam Jyeshtha Nagarik Sanmilan, Jorhat
6	All Assam Students' Union, Guwahati
7	The All India Manufacturers' Organization, Tinsukia
8	North Eastern Small Scale Industries Association (NESSIA), Guwahati
9	Grahak Suraksha Sanstha, Guwahati
10	Assam Sahitya Sabha
11	M/s. Frontier Publications Pvt. Ltd, Guwahati
12	Shri. D. D. Baruah, Jorhat
13	Assam Tea Planters Association, Jorhat
14	Chief Editor, Asom Sahitya Sabha
15	Shri Sarbeswar Das, Nalbari
16	Grahak Surakhsha Santha, Nalbari
17	Shri Deven Dutta, Public Activist
18	Bharatiya Cha Parishad, Dibrugarh
19	Brihattar Guwahati Maati Pattan Daabi Samittee, Guwahati
20	Indian Association of Lawyers (Assam Branch), Guwahati
21	All India Trade Union Congress, Guwahati

Sr. No.	Name of the Objector
22	Asom Mahila Sangha, Guwahati
23	Shri. J. N. Khataniar, Guwahati
24	Assam Chamber of Commerce, Guwahati
25	All Assam Student Union, Guwahati
26	Aam Aadmi Party, Assam State Preparatory Committee, Guwahati
27	Shri Dibakar Baruah, Guwahati
28	All India Students Federation, Guwahati
29	Abasarprapta Jestha Nagarik Santha, Guwahati
30	Assam Tea Planters Association, Jorhat
31	Retired Employees' Forum, Jagiroad, Morigaon
32	North Eastern Tea Association, Golaghat
33	Dibrugarh Nagarik Sangha, Dibrugarh
34	Tezpur Nagarik Sabha, Tezpur
35	Mahanagar Unnayan Samittee, Guwahati
36	All Assam SSI Association, Bamunimaidam
37	Federation of Industry & Commerce of North Eastern Region (FINER), Guwahati
38	Shri Robindra Nath Barthakur, Guwahati
39	Ahom Royal Council Assam, Rangpur, Sivasagar
40	Assam Jatiyatabadi Yuva Chatra Parishad, Jorhat
41	Bharatiya Janata Party, Guwahati City Committee
42	Dr. Durlav Kumar Baruah, Jorhat
43	Centre of Indian Trade Unions, Kamrup (M) District Committee, Guwahati

APDCL has submitted its responses to the objections/suggestions from various stakeholders.

The Commission considered the objections/suggestions received and sent communication to the objectors/respondents to take part in hearing process by presenting their views in person before the Commission, if they so desired.

The Commission held hearing at the Circuit House, Jorhat on May 17, 2013 and at the Administrative Staff College, Guwahati on 18 May, 2013. The Commission held a further hearing on July 2, 2013 and July 3, 2013 at Circuit House Guwahati. The Commission also held hearing at Karmabir Nabin Chandra Bordoloi Indoor Stadium, Sarusajai, Guwahati, on September 27, 2013 and September 28, 2013.

The objectors/respondents attended the hearings and submitted their views/suggestions. All the written representations submitted to the Commission and oral submissions made before the Commission in the hearing and the responses of APDCL have been carefully considered while issuing this Tariff Order.

As a part of the tariff exercise, a meeting of the State Advisory Committee (SAC) was convened on May 9, 2013 at Assam Administrative Staff College, Guwahati to obtain views of SAC members on the ARR and Tariff proposals of APDCL. The suggestions made by the members of SAC were duly taken into consideration by the Commission while finalizing the Tariff Order.

The objections/suggestions made by the stakeholders and responses of the Petitioner are briefly dealt with in this Chapter. The major issues raised by different consumers and consumer groups are discussed below along with the response of the Petitioner, APDCL and views of the Commission.

It is observed that the objections/suggestions filed are by and large repetitive in nature. Some of the objections/suggestions are general in nature and some are specific to the proposal submitted by APDCL for approval of ARR and Tariff revision. While all the objections/suggestions have been given due consideration by the Commission, only major responses/objections received related to ARR and Tariff Petition and also those raised during the course of Hearings have been grouped and addressed issue-wise rather than objector-wise, in order to avoid repetition.

Issue No. 1: Publication of Public Notice, Time limit for submission of Objections

Objections:

Shri. Jayanta Deka and others, All Assam Students' Union and others have submitted that publication of Public Notice in English language had deprived the

common consumers of the opportunity to file objections, and the Public Notice should have been published in all vernacular languages of the State to enable the common consumers to express their grievances.

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, and Abasarprapta Jestha Nagrik Santha submitted that by publishing the Public Notice in certain newspapers, giving one-month time limit for submission of observations/suggestions, uploading document on website in zip format, and requiring submission of representations through affidavit, APDCL intends to restrict representation by a large section of consumers.

M/s Frontier Publications Pvt. Ltd submitted that the time allowed for submitting objections is evidently inadequate and at least 45 days ought to have been allowed for submission of objections in order to bring such exercise within the purview of the phrase 'effective opportunity of hearing'.

Response of APDCL:

APDCL has submitted that it has complied with the directives issued by the Commission in this regard.

Comments of the Commission:

As outlined under the Introduction Chapter of this Order, a Public Notice was published in eleven newspapers, in English and Assamese languages. The time limit for submitting objections/suggestions was set as per Regulation 16 of the AERC (Conduct of Business) Regulations, 2004, and as per past practice. Moreover, the same were also in line with the time limit given by most State Electricity Regulatory Commissions in India. Moreover, the Commission considered the requests received from different stakeholders, and extended the time limit for filing objections/suggestions up to May 13, 2013.

Issue No. 2: Truing up for FY 2011-12

Objections:

Assam Branch of Indian Tea Association (ABITA) submitted its observations on the various parameters of the ARR and requested the Commission to devise a profit/loss sharing mechanism due to controllable and uncontrollable factors so as to ensure

progressive reduction in tariff for end-use consumers, while at the same time incentivizing the Utilities to perform efficiently. ABITA requested the Commission to apply proper judgement while approving the variations in the true-up on account of controllable and uncontrollable parameters and allowing the same in the tariff for consumers. ABITA also submitted that some of the variations have occurred due to errors in projecting the parameters and submitted that consumers should get relief on account of lower than approved expenditure on such parameters.

The Assam Tea Planters Association and North Eastern Tea Association submitted that the proposed ARR is not supported by the Statutory Audit or CAG Audit and it lacks authenticity and reliability and submitted that unless the Audited Statement of Accounts is made available, the Petition must not be accepted and considered.

Response of APDCL:

It is obligatory for APDCL to submit the True-up Petition along with the MYT Petition. The true up Petition for FY 2011-12 has been submitted with actual figures supported by Financial Statements of APDCL. APDCL has prayed that the Commission should pass the Order after scrutinizing the records placed before it.

The financial statement up to FY 2010-11 has been audited and vetted by CAG. For FY 2011-12, the audited statement has been sent to CAG for finalization.

Comments of the Commission:

The Commission has analysed the True up Petition filed by APDCL for FY 2011-12 vis-à-vis the Order issued for APDCL, and APDCL's Annual Accounts, in order to have the base figures for the future period. APDCL, vide its letter dated June 1, 2013 submitted the Annual Statement of Accounts for FY 2011-12 along with CAG Audit Report. Due to delay in filing of the Petition along with the Audited Annual Statement of Accounts during the regulatory process, the True up Petition was not published for objections/suggestions from the public and hence, the Commission has not undertaken true up for FY 2011-12 and Annual Performance Review for FY 2012-13 for APDCL, in this Order.

Issue No. 3: Maintainability of the MYT Petition

Asom Mahila Sangha, All Assam SSI Association, Indian Association of Lawyers (Assam Branch), All India Trade Union Congress, Assam Chamber of Commerce, All India Students Federation, Brihattar Guwahati Maati Pattan Daabi Samittee, Retired

Employees' Forum, Aam Aadmi Party, All Assam Student Union, and others submitted that MYT Petition filed by APDCL has many anomalies, such as

- (i) Photocopies of affidavit are without any Petition number, Case Number, signature and date, etc.
- (ii) Blank formats in Page Nos. 112, 113, 114, 115, 121 and at other places,
- (iii) The Petition includes technical, financial and legal details without signature and seal of any responsible officer/ engineer,
- (iv) There is no list of concerned officers along with contact numbers so that general public can contact them and get clarifications on different issues,
- (v) In the affidavit format, the first sentence at top is written as "Before The Assam State Electricity Regulatory Commission, Guwahati", whereas it should be "Before The Assam Electricity Regulatory Commission, Guwahati (AERC)".

They submitted that with all these anomalies, the present Petition is not maintainable. They further enquired from APDCL and the Commission, the reasons for publishing the MYT Petition having mistakes at the cost of Rs. 300/- each, from 17 April, 2013 for finalization of tariff proposal for next three years.

They further submitted that APDCL, in its MYT Petition has mentioned that *"In this ARR and Tariff Petition, the ARR and Tariff has been calculated based on estimation of requirements under different heads, without taking into consideration of numerous recoverable claims for past period which are under pendency before the Hon'ble Commission"*. They requested the Commission to direct APDCL to clarify and present the actual picture along with the impact on the proposed tariff proposal for non-recovery of Rs. 262.26 Crore and claim pending for an amount Rs. 855.89 Crore for better understanding of the consumers on such a vital issue.

Response of APDCL:

APDCL has noted the various observations. The Petition no. is provided by the Commission and all the documents submitted to the Commission have been made available to public as per procedure adopted. All the information is furnished in the Petition in table no. 2.10, under clause 2.4.6 in page no. 21 to 24. The other information is also furnished in different tables.

Comments of the Commission:

In this context, the last MYT Tariff Order also refers to certain mistakes by APDCL, which were corrected by the Commission at the time of issuance of the Petition. The Commission is of the view that the anomalies pointed out by objectors are avoidable. In this context, the Commission has already issued separate directives regarding creation of a dedicated Tariff Regulatory Cell. As regards non-maintainability of the Petition, the Commission has carried out due scrutiny of the Petition and has obtained necessary information for issuance of the Tariff Order. As regards the past revenue gaps, the same have been addressed in Chapters 4 and 5 of the Order.

Issue No. 4: Hike in Tariff**Objections:**

Krishak Mukti Sangram Samiti (KMSS), Assam, submitted that APDCL's rationale for increased power tariff is based on poor arguments and irrational urge for converting a public service to a business. APDCL has failed to deliver regular supply of electricity to various consumers of Assam and therefore, has no moral right to increase tariff.

Shri Jayanta Deka and others submitted that proposed tariff hike is too high in comparison with past increases and is also not in consonance with the tariff prevailing in other States such as Andhra Pradesh, Maharashtra, West Bengal, Delhi and Gujarat, and therefore, the same should be rejected.

Grahak Suraksha Sanstha opposed APDCL's proposal to hike fixed charges by 100% to 300%, and requested the Commission to disapprove the same. They further submitted that proposed increase for Jeevan Dhara and Domestic A category of consumers is not justified and accordingly requested the Commission to disapprove the same.

NESSIA and M/s Frontier Publications Pvt. Ltd requested the Commission to reject the proposal to hike tariff.

Assam Jyeshtha Nagarik Sanmilan submitted that frequent price hike for supply of electricity are leading to harassment of consumers, and requested a thorough discussion on the issue.

Shri. Sarbeswar Das, Bharatiya Janata Party and others submitted that electricity tariff has been hiked a number of times in the past, and further tariff hike is unreasonable.

All Assam SSI Association requested the Commission not to encourage increase in electricity tariff until a significant improvement in quality of power supply along with formulation of transparent strategy for improvement of scheme for uninterrupted power supply is achieved by APDCL.

Shri Robindra Nath Barthakur submitted that the tariff structure proposed in the Petition is much higher as compared to what it should have been as per rules. He submitted that the reasons that have contributed to the proposed tariff structure include the failure of APDCL to collect proper revenue due to abolition of internal financial controls of erstwhile ASEB, loss incurred due to financial mismanagement and lack of inventory control of APDCL.

Shri. R. N. Barthakur submitted that financial mismanagement of APDCL as elaborated below has resulted in the need for tariff hike:

- a) As per CAG Report for FY 2008-09, due to non-incorporation of Income Tax clause in the Power Purchase Agreement with M/s Eastern India Powertech Limited (EIPL), APDCL has incurred a loss of Rs. 6.95 crore
- b) Showing Rs. 3.52 crore as provision for additional power purchase cost is incorrect
- c) Power purchase cost has been shown higher by Rs. 12.25 crore
- d) Due to wrong computation of depreciation for Lower Assam Electricity Distribution Company Limited (LAEDCL) for FY 2006-07, a loss of Rs. 37.72 crore has been reported
- e) The value of obsolete equipment for FY 2007-08 has been shown wrongly as Rs. 6.75 crore.
- f) Non-maintenance of accounts for interest by Central Assam Electricity Distribution Company Limited (CAEDCL) has led to a wrong figure of Rs. 5.39 crore.

Mahanagar Unnayan Samittee submitted that the common consumers have every right to protest against the tariff hike caused by faulty electricity policy and gross mismanagement in the matter of electricity generation, transmission, and distribution.

Shri Kumud Ch. Borah, Bhartiya Cha Parishad, Abasarprapta Jestha Nagarik Sanstha requested that the Commission should devise a proper profit/loss sharing mechanism due to controllable and uncontrollable factors so as to ensure progressive reduction in tariff for end use consumers, while at the same time incentivize the Utilities to perform efficiently.

Shri Deven Dutta referred to APDCL's proposal for Jeeban Dhara, Domestic A, Domestic B and Bulk consumer category and submitted that proposal for increase in tariff is not acceptable. He cited various reasons for increase in the A&G expenses and submitted that there is no logic in proposed increase of electricity tariff and requested the Commission to dismiss the proposal to increase tariff.

Ahom Royal Council, Assam and Assam Jatiyatabadi Yuva Chatra Parishad and others submitted that the Commission should not permit the hike proposed by APDCL. Further, Ahom Royal Council, Assam submitted that they shall approach the High Court in case the tariff is increased.

Response of APDCL:

APDCL submitted that it has proposed a uniform tariff increase, and the Commission may pass the Order as it deems appropriate. APDCL also submitted that the comparison of existing tariff and proposed tariff has not taken into consideration the FPPPA charge already levied. It submitted that once this charge is merged with the existing tariff, the proposed percentage increase in tariff will be minimal. In reply to objections raised by Shri Barthakur, APDCL submitted that the tariff proposal has been prepared with due care considering all aspects and as per Regulations. While denying the allegation pertaining to financial mismanagement, lack of Inventory control, and abolishment of Internal Financial Control, APDCL submitted that it has adopted strict financial control. Further, all the CAG observations have been dropped. As regards increase in A&G expenses, APDCL submitted that it has noted the comments.

APDCL submitted that as per AERC Regulations, proposal for tariff fixation is to be submitted each year. Accordingly, APDCL had filed the Petition before the Commission. The Commission issued Order on May 16, 2011, which was made applicable from May 24, 2011. It further submitted that cost of distribution along with other items expenditure for electricity production has increased significantly. Further, there is increase in demand of power/electricity to large extent, resulting in increased amount of energy requirement and hence, power purchase, to meet the demand.

APDCL replied that the present average tariff in the State of Assam, based on a comparison of latest Tariff Orders issued in various States, is not the highest.

Comments of the Commission:

The Commission has carried out due prudence check of various parameters of ARR, and examined the assumptions and proposals made by the Utility. The Commission has considered the objections/suggestions of the objectors and APDCL's views while determining the tariff. As per Section 111 of the Act, any person aggrieved by an Order made by the Commission may prefer an appeal before the Hon'ble Appellate Tribunal of Electricity.

Issue No. 5: Cross Subsidy

Objections:

Krishak Mukti Sangram Samiti (KMSS), Assam, submitted that tariff for those who are at the higher end of the consumption slab can be increased substantially to cross subsidise the poorest consumers.

ABITA and Bharatiya Cha Parishad submitted that the domestic and other LT consumers continue to remain highly subsidized and in the absence of any direct subsidy from the State Government to the economically weaker sections, Industrial and other HT consumers are required to bear the burden of cross-subsidy. ABITA requested the Commission to approve a time frame for removal of cross subsidy in the MYT Control Period.

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, submitted that the State Government should provide subsidy in the manner provided by other States to reduce the burden of tariff hike.

Assam Tea Planters Association, Bharatiya Cha Parishad and North Eastern Tea Association submitted that APDCL is not showing any desire or proposal to claim subsidies from the State Government. They requested that any tariff so approved must take into account the subsidy component to be received from the Government of Assam.

Response of APDCL:

APDCL submitted that one of the indirect methods to minimize the cross-subsidy has already been made applicable in the form of FPPPA charges, which is the same for all categories of consumers. The other method is the fixed consumer charge. APDCL welcomed the suggestions made by the objectors in this regard. In reply to objection regarding APDCL's desire/proposal to claim subsidy, APDCL submitted that it is the prerogative of the State Government to declare subsidy and accordingly the tariff is adjusted.

Comments of the Commission:

The Commission has attempted to limit the cross subsidy to $\pm 20\%$ of average cost of supply while determining the tariffs for different categories of consumers as per the guidelines stipulated under the Tariff Policy. As regards provision of subsidy by State Government, APDCL vide its letter no. APDCL/ACT/HQ-Cash/Copr.A/C/2010/53 dated April 23, 2013 has requested the State Government to consider grant of subsidy/assistance under Section 65 of the Electricity Act, 2003. Further, the Commission vide its letter dated May 4, 2013 has brought to the notice of the State Government, the tariff hike proposal made by the Utility, and has requested the State Government to communicate its decision regarding subsidy being offered to any class of consumers to reduce the cost of power to those categories, if the Government decides, so that the same can be considered while determining the tariff. The State Government vide its letter dated August 22, 2013 communicated its decision to provide financial support to APDCL amounting to maximum of Rs. 200 Crore for FY 2013-14. The State Government vide its letter dated September 23, 2013 clarified that it is pleased to allow targeted subsidy of Rs. 1.10 per unit for Jeevan Dhara (BPL consumers) for consumption upto 30 units per household per month or else allow a subsidy of Rs. 0.70 per unit per household per month for total consumption upto 120 units by Jeevan Dhara consumers if they consume more than 30 units in a month, and a subsidy of Rs. 0.70 per unit for upto 120 units per month by domestic category 'A' consumers and further clarified that the balance amount, if any, may be utilized against the past period outstanding liabilities in the ARR of APDCL. The Commission has considered the subsidy while determining the tariff.

Issue No. 6: Consumer Charges

Objections:

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, questioned the rationale behind APDCL's proposal to levy Customer Charges.

ABITA submitted that no justification has been provided regarding proposed Consumer Charges. ABITA also submitted that as per Para 8.4(1) of the Tariff Policy, the Utility is allowed to recover the ARR in the form of two part tariff and requested the Commission to disallow such charges, which are outside the legal framework.

All Assam SSI Association submitted that in Part III No. 24, Tariff Income (d) of AERC Tariff Regulations, it is clearly mentioned that distribution licensee can charge only Fixed Charge, Wheeling Charge, Demand Charge and Energy Charge, hence, the proposed consumer charge as per the Tariff Petition is unjustified.

Abasarprapta Jestha Nagarik Santha and FINER submitted that the consumers are already paying fixed charges, electricity duty and FPPPA charge in addition to energy charge, and proposed enhancement would jeopardise the economic condition of the common consumer.

Grahak Suraksha Sanstha submitted that the proposed Consumer Charge is very high and also amounts to indirect increase in tariff and requested the Commission to disapprove the same.

The All India Manufacturers' Organization submitted that the proposed Consumer Charge is penal in nature and should be disallowed by the Commission.

Assam Tea Planters Association, Bharatiya Cha Parishad, and North Eastern Tea Association submitted that Consumer Charges for HT Category – VI is not warranted as APDCL is already collecting the fixed charge/capacity charges every month and this proposal should be disallowed by the Commission.

KMSS opposed APDCL's proposal to levy Consumer Charges.

Response of APDCL:

Consumer Charges are being levied by every Utility for the services rendered to the consumer. The proposal is based on the Tariff Policy, where the tariff should be fixed based on cost considerations. The Consumer Charge as proposed in the MYT Petition is another means of achieving the ARR allowed by the Commission. If this Charge is not allowed, then this amount will have to be accommodated in Demand Charge and/or Energy Charges in the tariff. The proposed Consumer Charge is same for all categories of consumers in HT category.

Comments of the Commission:

The Commission has examined the proposal of APDCL and considered it prudent to reject the proposal of the Utility, for reasons elaborated in the Tariff Philosophy in Chapter 5 of this Order.

Issue No. 7: Distribution Losses**Objections:**

Krishak Mukti Sangram Samiti (KMSS) and Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, submitted that Assam has high T&D losses and there has not been much improvement in recent years.

All Assam SSI Association submitted that in spite of AERC guidelines and huge funds being pumped into the modernization of the distribution network, T&D loss shown in the Petition is very high. He submitted that the loans and grants received from ADB, R-APDRP, and the State Government have not been utilized properly by APDCL to modernize the distribution network resulting in huge Transmission and Distribution losses, which ultimately has to be borne by the consumer by way of increased tariff. He further submitted that due to APDCL's mismanagement, more power than the actual requirement has to be purchased. He added that in other States, Distribution Licensees adopt adequate measures to minimize T&D loss while the same is not being done by APDCL.

Shri Deven Dutta submitted that distribution loss projected by APDCL under different tables mentioned in the Tariff Petition do not tally and are misleading.

Assam Tea Planters Association and North Eastern Tea Association and Bharatiya Cha Parishad requested the Commission to direct APDCL to reduce high T&D losses

and bring the same to the all-India level by identifying the feeder-wise /sub-division wise causes and take appropriate steps before submitting their Petition.

North Eastern Small Industries Association submitted that the distribution losses are on the higher side, and the data regarding actual losses should be published.

M/s Frontier Publications Pvt. Ltd submitted that APDCL has not mentioned the reasons for failure to achieve the target level of distribution losses nor has it mentioned the measures taken by it to achieve such targets.

Assam Branch of Indian Tea Association submitted that

- (i) The present level of losses at 24.90% as claimed for FY 2012-13, and the proposed reduction in losses at 0.50% for each year of the Control Period, is indicative of the Petitioner's lack of focus on efficiency improvements in the power distribution business.
- (ii) ABITA requested the Commission to consider the approved loss level at 19.60% for FY 2012-13 and approve the annual reduction of 1% during the Control Period in line with Abraham Committee recommendations.
- (iii) ABITA also prayed to the Commission to disallow the power purchase cost against the additional units purchased on account of the higher distribution losses.
- (iv) Even after undertaking huge amount of capital expenditure, there seems to be no improvement in the system losses, which raises serious concerns regarding the appropriateness of the Capital Expenditure incurred.

Dibrugarh Nagarik Sangha submitted that from the Petition, it is seen that the transmission and distribution losses during the Control Period are almost double of the all India utility norms of about 22%. They further submitted that as compared to past trend, from Table 2.9 of the Petition, it is clear that rather than decreasing, T&D losses have increased and no measures have been adopted to eradicate T&D losses during the years up to FY 2012-13. They further submitted that the energy loss due to theft/ pilferage is visibly rampant and APDCL has failed to contain losses. They further requested the Commission to disallow losses proposed by APDCL and direct APDCL to adopt a foolproof scheme to reduce the losses to all-India levels, by indentifying the areas and causes of such losses and taking necessary steps, before approving the ARR and Tariff. They also requested the Commission to allow

distribution loss as per the target provided for FY 2011-12 in the true-up and ascertain target as per the Abraham Committee Report.

Mahanagar Unnayan Samittee submitted that despite considerable expenditure on system improvement in the past years in order to enhance the distribution capacity and to reduce T&D losses, neither actual cost benefit assessment of these schemes has been quantified nor breakup analysis of cumulative projects in terms of optimum T&D losses and efficiency of the system has been considered by APDCL. The manner of project allotment and execution needs to be investigated by an appropriate independent enquiry, as this would ultimately get reflected in tariff in the form of either interest burden, return on equity, or depreciation account of APDCL, irrespective of whether such funds have come as grant or loan to APDCL.

Asom Mahila Sangha, All Assam Student Union, Shri Dibakar Baruah, All India Trade Union Congress, Shri. R. N. Barthakur and others enquired from APDCL regarding the details of loss due to the huge amount of unpaid energy bills, theft of energy, and loss due to mismanagement in terms of planning. They further enquired as to where these losses are loaded if not under distribution losses.

Abasarprapta Jestha Nagarik Santha requested the Commission to direct the Utilities to give details of AT&C losses as against T&D losses and reduced these losses effectively, within a given time frame. It further suggested that appropriate loss reduction at least 5% annual reduction will ensure reduction in the end use tariff.

FINER submitted that keeping in mind the proposed Capital Expenditure Plan on the strengthening and up-gradation of sub-transmission and distribution works under R-APDRP and under ADB, the loss reduction trajectory should be approved in accordance with the suggestions of the Abraham Committee Report.

Response of APDCL:

APDCL submitted that due to implementation of RGGVY schemes, the LT network has increased manifold in the rural areas, making it difficult to arrest T&D losses. Reducing the distribution losses is always at the top of APDCL's agenda and it has achieved considerable improvement in this regard. The loss figures show some upward trend and one of the reasons for increase in distribution losses of APDCL is the expansion of LT distribution network for meeting the target of providing connections to additional 10 lakh BPL connections mostly in the remote areas of the

State, in order to fulfil the obligation to provide electricity as per the National Electricity Policy. APDCL is striving to achieve the distribution loss targets of 15% by implementation of ongoing projects under R-APDRP and other upcoming projects.

As regards different loss levels provided in the tables in the Petition, APDCL submitted that the total transmission and distribution loss is not arrived by mere arithmetical addition-subtraction at different levels.

Comments of the Commission:

The high distribution losses of the Distribution Licensee has always been a cause of concern to the Commission and several directives have been issued from time to time to restrict the Distribution Losses. These include introduction of prepaid meters in the Government departments/commercial buildings, spot billing, MRI downloads for all HT and non domestic consumers, etc. However, the Commission notes that APDCL's efforts in this regard have not been up to the mark and APDCL will have to make conscious efforts to reduce the distribution losses from the existing levels. The Commission has given detailed directives to APDCL in this regard, as elaborated in Chapter 6 of this Order. For the purpose of determination of ARR and Tariff, the Commission has considered the distribution losses for FY 2012-13 as approved in the Order for FY 2012-13 and fixed the distribution loss trajectory for FY 2013-14 to FY 2015-16 after due consideration to the recommendations of the Abraham Committee. The target distribution loss trajectory for FY 2013-14 to FY 2015-16 have been elaborated in Chapter 4 of this Order.

Issue No. 8: Sales Forecast

Objections:

Assam Branch of Indian Tea Association submitted that there are a number of anomalies in the data provided by APDCL as regards sales to Jeevan Dhara category, such as monthly consumption per consumer of 35 units has been considered during FY 2011-12 and has also been retained for the MYT period, though the ceiling monthly consumption for this category is 30 units per month.

Shri Deven Dutta submitted that APDCL has projected increase of around 32% to 35% in load against Jeeban Dhara category consumers as compared to that in FY 2012-13. APDCL has submitted that there will be similar growth in consumers of the said category due to implementation of RGGVY. However, as per Power Department and ASEB sources, the completion of work was targeted by December, 2012. He

further sought various details from APDCL such as approved no. of villages and BPL households to be electrified, work completed till date and balance work, additional power requirement, etc. He submitted that the growth of rural small Industries, Urban Small Industries and Small industries up to 50 kVA is projected at 4.4%, 1.67% and 6.1%, respectively, and sought the details for the same.

ABITA submitted that APDCL, in its Petition, has stated that its sales forecast is based on historical sales trend. However, the sales growth projected for FY 2013-14, FY 2014-15, and FY 2015-16 at 10.7%, 12.6% and 13.6%, respectively, are very much on the higher side in comparison with the immediate 4-year Compounded Annual Growth Rate (CAGR) of 8.9% as well as year-on-year growth rate of 7.7% and opined that the sales forecast is grossly on the higher side and is not substantiated by historical trends submitted by APDCL. ABITA also submitted that in other States, CAGR of sales for 5 to 10 years is generally considered as a reliable basis for sales forecasting along with applications pending for release of connection in case of HT consumers. They requested the Commission to approve overall year-on-year sales growth of not more than 8.9% for FY 2013-14, FY 2014-15, and FY 2015-16.

Assam Tea Planters Association and North Eastern Tea Association submitted that the growth rate considered for projecting the category-wise number of consumers and the connected load are unrealistic and requested the Commission to reject this data.

FINER submitted that as per provisions of the Tariff Regulations, 2006, the Distribution Company is required to submit actual monthly load curves of previous two years, indicate particulars of open access consumers, traders and other licensees' (category-wise) using its system, demand and energy wheeled for them separately for supply within and outside the area of supply and such data must be provided by the licensee to the Commission for better sales forecasting. However, APDCL has considered the break-up of past sales and CAGR growth rates for different categories of consumers from FY 2008-09 to FY 2011-12 for the purpose of sales estimation. FINER further indicated certain discrepancies in the computation of CAGR as submitted by APDCL in its Petition.

Response of APDCL:

The projection of Jeevan Dhara connections have been made as per the target of RGGVY projects for Assam for the respective period. The anomaly pointed out by the Respondent has been addressed based on Data Validation Meeting held with officials of the Commission.

For other categories, APDCL has projected the sale of electricity considering both the historical trends and based on the expansion of network as a result of number of projects undertaken with financial assistance from different agencies as a part of reform process. Further, the projected figures are in line with 18th Electric Power Survey Report made by CEA.

Comments of the Commission:

The energy sales to Jeevan Dhara (BPL) consumers who are being connected under RGGVY have been revised based on the connections likely to be given and based on normative consumption of 30 units per connection per month. The energy sales to other categories of consumers have been estimated based on past trends, which is a well established method for demand forecast. The details of category-wise sales and growth rates considered by the Commission for projection have been elaborated o Chapter 4 of this Order.

Issue No. 9: Power Purchase**Objections:**

Assam Branch of Indian Tea Association submitted that the power purchase cost projected for the Control Period is an over-estimate and has not been substantiated by APDCL, and requested the Commission to direct APDCL to submit the actual invoices from various sources for power purchased during FY 2012-13 so that the Commission can approve the power purchase cost after due validation.

Krishak Mukti Sangram Samiti (KMSS), Assam, submitted that optimum generation from the existing generating stations need to be ensured. The plant load factor of thermal generating stations is low and needs to be improved. Further, power generation at Kopili HEP and Karbi Longpi HEP is continuously declining.

The All India Manufacturers' Organization submitted that APDCL should undertake collaborative arrangements to keep uncertain power purchase costs under control.

All Assam SSI Association submitted that sources of power purchase considered in the Petition are yet to be commissioned and have rare chances of being commissioned in FY 2014-15 also. They submitted that APDCL has failed to mention additional power requirement in lean period when the hydro power output is reduced significantly. They further submitted that as per information provided by APDCL, it could not procure additional power due to exceeding the allotted capacity of transmission feeder operated by PGCIL. They added that the auditors report available in audited Annual Statement of Accounts for FY 2010-11, reflected that supporting documents relating to power purchase are not available for verification. They requested the Commission to reject the Petition on the grounds of non-submission of power purchase bills and documents.

Mahanagar Unnayan Samittee submitted that APDCL has failed to supply load to the consumers as per the contract agreement entered into with the consumers. They submitted that despite knowing the fact that the generating capacity of NE region invariably fails in the lean hydel generation period of the year, APDCL is over dependent on hydel generation, therefore, a pragmatic energy procurement plan needs to be made. As regards the power purchase cost they submitted that since the actual power purchase cost differed from the approved cost, the cause of such escalation should have been verified along with redressal measures as the same is shared by the State and the common consumers. They further requested the Commission to probe into the matter.

Retired Employees' Forum, Shri Dibakar Baruah, Asom Mahila Sangh, Assam Chamber of Commerce, Brihattar Guwahati Maati Pattan Daabi Samittee, Indian Association of Lawyers (Assam Branch) and others submitted that on comparison of energy injected without transmission losses submitted by AEGCL and the gross energy generation within the State submitted by APDCL, it is clearly evident that the State generation capacity is merely around 27% to 32% of the total demand. As regards the same, they enquired from APDCL regarding various details of the total project-wise generation capacity of power project within the State of Assam, its present status; along with proposed projects if any for the period 2013 to 2025; and the steps and initiatives that have already been taken by the concerned Power Companies to increase the power generation capacity related to the existing projects during year 2000 to March 2013 along with the achievements and visions to generate more power in the next twelve years (FY 2013 – FY 2025).

Shri Deven Dutta sought certain details from APDCL regarding power purchase and transmission constraints.

Shri. R. N. Barthakur submitted that a loss of Rs. 79.53 lakh was incurred as per CAG Report of FY 2008-09, due to violation of Power Purchase Agreements (PPA) with power suppliers.

Response of APDCL:

The power purchase cost has been projected based on tariffs approved by the Central Electricity Regulatory Commission (CERC) for the existing stations, and for upcoming stations, the power purchase rates have been taken from their respective Detailed Project Reports (DPR's). Other relevant documents and records have been made available to the Commission to substantiate the rates and quantum of energy to be purchased. There is no intention on the part of APDCL for getting any extra amount, which is not based on facts supported by proper records.

APDCL submitted its reply to various details sought regarding power purchase and transmission constraints, and submitted that the tariff of all the Central Generating Stations has shown a manifold increase mainly due to revision of gas price as well as revision of Annual Fixed Charge for all the CGS Units by the CERC for the Control Period 2009-14.

As regards the loss on account of violation of PPA, the matter has been taken up with the competent authority.

Comments of the Commission:

The Commission has kept in view the objector's suggestions and APDCL's responses and approved the power purchase cost after due verification of applicable CERC Orders, power purchase bills, etc., as elaborated in Chapter 4 of this Order.

Issue No. 10: Power from Renewable Energy Sources

Objections:

Krishak Mukti Sangram Samiti (KMSS), Assam submitted that solar power should be encouraged.

Response of APDCL:

APDCL submitted that it has taken the following initiatives

- (i) APDCL has signed a Power Supply Agreement with NVVNL on February 29, 2012 for sale of bundled power (5 MW solar + 5 MW Thermal) on long-term basis under scheme of JNNSM Phase-1. Further, the bundled power is allocated to Assam vide letter no. NVVN/SO & Comml/JNNSM Phase-I dated July 12, 2013.
- (ii) APDCL has also signed a PPA with Moser Baer for purchase of Solar Power from their proposed plants (5 MW) in the State of Assam. Similar PPA has also been approved by APDCL for purchase of 5 MW Solar power from LANCO.
- (iii) APDCL has installed 100 kW roof-top off grid Solar power plant in its Headquarter Building situated in Paltanbazar, Guwahati, Assam, which was commissioned in Sept. 2012.
- (iv) APDCL, at the request of Rajiv Bhawan, Guwahati has allowed installation of a 2 kW LT Roof Top Solar PV under net metering arrangement, which was commissioned on 02.10.2012. It was further observed that the plant is running successfully and contributing approximately 180 units per month to the grid and the consumer in return is getting a benefit of Rs.900/month. APDCL opined that the scheme may be popularized for mass acceptance by the consumers by offering capital subsidy and other benefits extended under North East Industrial and Investment Promotion Policy (NEIPP).
- (v) APDCL also submitted certain other initiatives taken for promoting solar energy.

Comments of the Commission:

The Commission has considered purchase from Renewable Energy (RE) sources for each year of the Control Period in accordance with the provisions of Regulation 4 of the AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010, which specify the Renewable Purchase Obligation for the respective year. APDCL has to ensure that it procures the necessary quantum of RE power and fulfil its RPO requirements.

Issue No. 11: Capital Expenditure

Objections:

Assam Branch of Indian Tea Association submitted that APDCL has not provided the complete details of the Capital Expenditure proposed during the Control Period. They further requested the Commission to study the proposed Capital Expenditure

schemes in detail and direct APDCL to justify the technical and financial feasibility of such projects.

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, submitted that APDCL has not made any proposal for improving the operation and maintenance of the system, such as upgradation of the systems by introduction of IT, and requested the Commission to direct APDCL accordingly.

Assam Tea Planters Association and North Eastern Tea Association, Dibrugarh Nagarik Sangha, and Bharatiya Cha Parishad requested the Commission not to allow any further Capital Expenditure until direction of Physical Verification Report of Fixed Assets by competent and reliable authority at the end of each financial year is produced/ complied.

Response of APDCL:

APDCL submitted that capitalization of fixed assets is done on the basis of physical verification report and is a pre-requisite for finalization of the Financial Statements. APDCL further submitted that detailed schemes for Capex funding have been submitted to the Commission during the Data Validation meeting.

Comments of the Commission:

The Commission has noted the objections and APDCL's reply. The Capital Expenditure and Capitalisation for the Control Period have been considered after due prudence check and after considering the past trend in this regard.

As regards submission of the Physical Verification Report on Fixed Assets, the Commission in its latest Tariff Order has issued necessary directives and directed APDCL to commence the verification at the earliest and confirm the same to the Commission.

Issue No. 12: Interest and Finance Charges

Objections:

Assam Branch of Indian Tea Association submitted that APDCL has not provided any details of the outstanding loans, repayment, interest rate on each loan, etc., and requested the Commission to clarify all discrepancies and the basis of computation of

interest expenses before allowing any interest expenses to APDCL for the MYT period.

Krishak Mukti Sangram Samiti (KMSS), Assam, submitted that APDCL should immediately submit the details of loans procured from ADB and also publish a White Paper on this matter. KMSS further submitted that Assam receives aid and the State needs to return only 28% of the loan taken from the Centre or international organizations. However, Assam has been shown as paying more interest than the other States.

Shri. R. N. Barthakur submitted that the loan taken from ADB has been misused and false utilisation report has been submitted to ADB, without actual completion of work for which the loan was taken.

Bharatiya Cha Parishad requested the Commission to seek detailed information regarding loans and interest charges from APDCL and allow Interest and Finance charges based on reasonable level of approved capitalization.

Response of APDCL:

APDCL has claimed interest and finance charges in the ARR as per actuals only, and the interest has been calculated as per respective terms and conditions of loan agreements. Any further data that may be required by the Commission will be submitted. APDCL supports the respondent's prayer that these charges may be allowed judiciously by the Commission after due scrutiny of the available records. APDCL submitted that the interest on Consumers' Security Deposit has been included in the financial statement of APDCL.

APDCL has been drawing the funds from ADB under direct payment module. As such, the issue of submission of false utilisation certificate does not arise.

Comments of the Commission:

The Commission has allowed interest and finance charges as per AERC Tariff Regulations after prudence check of utilization of loans for capital works.

Issue No. 13: Depreciation

Objections:

Assam Branch of Indian Tea Association submitted that as the Petition has been filed as per AERC (Terms and Conditions for Determination of Tariff) Regulations, 2006, consideration of depreciation rate as per the CERC (Terms and Conditions of Tariff) Regulations, 2009, which allows higher rate of depreciation is not justified. The higher rate of depreciation would allow APDCL to charge higher depreciation and would unnecessarily increase the ARR. ABITA requested the Commission to allow depreciation only on assets created out of loan and equity contributions at the rate of depreciation approved by the Commission.

Dibrugarh Nagarik Sangha and Bharatiya Cha Parishad requested the Commission allow depreciation only on the assets created out of loan and equity contribution at the rate of depreciation approved by the Commission.

Response of APDCL:

The depreciation rate of 5.27% is the prevailing depreciation rate in the electricity sector across the country as per the norms specified by CERC. Hence, the objection that APDCL is claiming higher depreciation is not based on facts.

Comments of the Commission:

The depreciation has been allowed as per the applicable AERC Tariff Regulations, and not as per the CERC Tariff Regulations as sought by APDCL. Depreciation has been allowed only on the assets capitalized, and depreciation has not been allowed on assets created through grants, subsidies, etc.

Issue No. 14: Bad Debts

Objections:

Assam Branch of Indian Tea Association and North Eastern Tea Association submitted that bad and doubtful debts should not be allowed in the ARR as this item shows the inefficiency of the Utility to recover the dues from the consumers, and requested the Commission to direct APDCL to take appropriate action for recovery of past dues.

The All India Manufacturers Organization submitted that the proposed expenses are without any justification and reflects very strongly on the efficiency and productivity of the staff employed as well as the administrative systems and practices. They submitted that there is lot of scope to minimize such expenses and to reduce the burden on the electricity consumers.

Shri Deven Dutta submitted that every year, the scheme is announced by APDCL for waiver of interest surcharges and payment of principal amount for last six months for some of the consumers, who failed to pay their bills for years. He sought details such as revenue lost by APDCL due to such waiver of interest surcharges and non-payment of bills for last six months, along with reasons for imposition of such revenue loss on genuine and law abiding consumers.

Assam Tea Planters Association submitted that provision for bad debts is without any basis and APDCL should be held accountable for recovery of such dues.

Response of APDCL:

APDCL submitted that the provision for bad and doubtful debts specified in the AERC Tariff Regulations is after due consideration only, and is not linked with efficiency or inefficiency of the Utility. APDCL is taking all necessary steps to recover its arrears/dues, in spite of this, there are always some debts which are totally unrecoverable. APDCL further submitted that there is no logic in linking arrears to the inefficiency of the Utility.

In response to objections from Shri Deven Dutta, APDCL submitted that there is a provision in AERC Tariff Regulations to accommodate the gap due to bad debts. In line with the Regulations this gap is kept at 1% of total revenue.

Comments of the Commission:

A small amount of bad debts may be inevitable in the electricity distribution business where a number of consumers are involved and are spread over a vast area. However, this does not mean that the Utility should assume that the entire revenue billed will not be recovered, and accept certain proportion of bad debts. Also, once a provision for bad debts is created, any write-off of bad debts, in accordance with clearly prescribed policies and guidelines, should be set off against this provision, rather than creating an ever-increasing provision for bad debts. However, since,

APDCL has not written off the bad debts and there is sufficient provision for bad debts, the Commission has disallowed further provisioning for bad debts.

The necessary directive in this regard is given in Chapter 6 of this Order.

Issue No. 15: Return on Equity (RoE)

Objections:

Assam Branch of Indian Tea Association, Bharatiya Cha Parishad submitted that the performance of APDCL is extremely poor on several grounds such as availability and reliability of power supply, consumer services, etc., and requested the Commission to allow RoE at 7% against the proposed RoE of 14% for FY 2013-14 to FY 2015-16.

FINER submitted that although no equity infusion has been done by APDCL in FY 2013-14, yet it has claimed RoE of Rs. 35.11 Crore. Further, FINER in its rejoinder submission objected to APDCL's contention that not allowing the RoE will jeopardize APDCL doubly. It also submitted that AERC Tariff Regulations provides for an RoE of 14%, and there can be no question of following any other Regulations or principles.

Response of APDCL:

APDCL submitted that the RoE claimed at 14% on the equity base is as per the AERC Tariff Regulations, which is lower than the prevailing norms across the power sector, i.e., 16.5%. The Commission, in its previous Tariff Orders, has allowed the ARR after considering all the factors including the performance. Therefore, under-performance of the Utility, if any, has already been penalized and further disallowance of RoE will jeopardize the interests of APDCL further, which is against the general principle of natural justice.

Comments of the Commission:

The Commission has allowed the Return on Equity as per the AERC Tariff Regulations. However, the Commission has given several directions to APDCL in this Order, in addition to the directions given in the previous Orders, requiring APDCL to improve its performance in several areas.

Issue No. 16: Operation and Maintenance (O&M) Expenses

Objections:

Assam Branch of Indian Tea Association submitted that APDCL has computed some norms for projecting the O&M expenses, without providing any basis for the base norms for FY 2009-10. Further, though APDCL has proposed 5.60% increase in the norms, the actual increase proposed in O&M expenses is more than 13% for each year of the Control Period. They added that segregation of O&M expenses into the different sub-heads, viz., Employee, A&G and R&M expenses, has not been provided. While submitting that the proposed higher O&M expenses have not been substantiated by reasons, ABITA requested the Commission to allow escalation only upto 8% on the approved FY 2012-13 numbers in line with the methodology followed by the Commission in the last MYT Order.

The All India Manufacturers' Organization submitted that mechanical increase in employee expenses is not justified, as the Sixth Pay Commission liabilities have already been met. They also requested the Commission to do a detailed scrutiny of O&M expenses.

Assam Tea Planters Association and North Eastern Tea Association submitted that details regarding number of employees, etc., are not available and projection of employee expenses on account of wage revision, normal increase in salary and allowances is very high and needs to be brought to the optimum level. They further requested not to allow the recruitment of additional staff.

All Assam SSI Association submitted that salary paid to the employees of APDCL is very high and no recruitment has been done for last few years, which resulted in average age of employees of organization above 50 years, thereby leading to inefficiency.

Dibrugarh Nagarik Sangha submitted that for FY 2012-13, the total O&M expenses projected by APDCL in its Petition is Rs. 618.45 Crore including Rs. 540.54 Crore employee expenses and the same has increased due to sale of 4277 MU. However, as per directive 4, APDCL has admitted the employee cost to be 24% of the total revenue income from sale of power at existing tariff. They submitted that from Annexure B of the Petition, it is evident that APDCL has failed to keep its commitment to identify surplus staff and deploy them after proper training, in the

areas including customer services, meter reading, billing, and revenue realization so as to provide better service to the customer. They submitted that contrary to the promise of rationalization, APDCL has projected higher employee expense at (26.66%) in FY 2015-16, while the same is claimed to be (23.42%) in FY 2012-13. He added that on similar lines, O&M expenses for FY 2015-16 are estimated at 30% while for FY 2012-13, the same is 26.80%. They submitted that all this clearly indicates APDCL's intention to retain its top heavy establishment simply by increasing tariff of the consumers and therefore, requested the Commission to disallow the proposed mechanical increase in tariff which is barely a speculation without any comprehensive policy for rationalization.

Abasarprapta Jestha Nagarik Santha submitted that APDCL has not made any attempt to rationalize the O&M cost. It further submitted that APDCL has a huge number of employees who are neither profitably engaged nor efficiently managed. It further submitted that APDCL is spending a huge sum of money by maintaining a large number of employees in the rolls and restricting and rationalizing the work force of APDCL might yield a good amount of savings.

Mahanagar Unnayan Samittee submitted that in the truing up of FY 2009-10 and FY 2010-11, the employee expenses have been brought down from the approved amount, which is a relief to the electricity consumers. However, there is still scope for reducing the same further with better human resource planning.

FINER submitted that it is extremely important to deliberate on R&M expenses for new and old assets for FY 2009-10 before the Commission approves the norms for O&M. FINER further submitted that derived O&M expenses for FY 2010-11 and FY 2011-12 are higher than the actual O&M expenses. FINER requested the Commission to direct APDCL to submit a detailed comparative chart of O&M expenses for past ten years, and then approve the norms for O&M expenses. Further, the employee expenses during FY 2013-14 have been proposed by considering 25% increase over actual base expenditure for FY 2011-12 and FY 2012-13 with additional annual increase of 18%. This proposal has been made as per broad guidelines of CERC Tariff Regulations; however, the same must be restricted to a maximum of 8% as approved in last Tariff Order.

FINER in its rejoinder submission submitted that APDCL instead of giving comparative chart has contended that the projections are based on FY 2009-10

audited accounts. It further submitted that APDCL still has not provided the break-up of employee cost, A&G cost and R&M cost.

KMSS submitted the per unit O&M cost for various States (Andhra Pradesh-3.48 paise, Gujarat- 11.92 paise, Himachal Pradesh- 6.01 paise, West Bengal- 0.94 paise, Maharashtra – 8.93 paise, Tamil Nadu- 5.70 paise) along with the national average of around 7.66 paise. It further submitted that per unit O&M cost for Assam for FY 2011-12 is around 23.14 paise and the same need to be justified. KMSS also referred to the report of the Planning Commission for the year 2009-10 and submitted that establishment and administrative cost for Assam is around 25.7%. It further submitted that no. of employees per unit sale of electricity in case of Assam is of 4.57 (Andhra Pradesh-0.71, Karnataka-0.95, Pondichery-0.79, Gujarat- 1.14, West Bengal- 0.94)

Response of APDCL:

APDCL submitted that the MYT Petition contains the basis of O&M norms in para 2.7.1 (page 28). APDCL added that the objector has erred in considering only the increased claim for O&M expenses, without taking into consideration the increase in the asset base. The assets related to distribution lines and substations have increased considerably along with increase in the number of consumers. To serve these extra consumers, APDCL has already recruited many employees at different levels in the recent past. This has also resulted in increase in O&M expenses to some extent. The year on year escalation of 5.6% considered by APDCL is lower than the CERC norm of 5.72%. APDCL also clarified that segregation of the O&M expenses is given in the Forms annexed to the Petition.

APDCL submitted that APDCL is burdened with unavoidable employee cost as per the terms of the agreement at the time of unbundling of erstwhile ASEB.

Comments of the Commission:

The Commission has noted the objections and APDCL's reply. The O&M expenses for the Control Period have been considered after due prudence check and after considering the past trend in this regard, as elaborated in Chapter 4 of this Order.

Issue No. 17: Interest on Working Capital

Objections:

Assam Branch of Indian Tea Association submitted that the amount of Consumer Security Deposit available with APDCL has not been adjusted against the working capital requirement, resulting in over-projection of working capital requirement and higher interest cost.

FINER submitted that APDCL in the Petition has stated that according to the AERC Tariff Regulations, 2006. The Commission, in its MYT Order on July 24, 2009 has taken the rate of interest on working capital equal to the short-term prime lending rate of SBI as on April 1, 2008, which was 13.25%, and accordingly, APDCL has used the same principle for computing the interest on working capital during FY 2013-14 to FY 2015-16. FINER further submitted that this claim of APDCL is not in accordance with the provisions of the AERC Tariff Regulations, 2006 wherein it is stated that the interest rate to be considered would be the short-term prime lending rate of SBI as on April 1 of the financial year for which the licensee files Petition for ARR and tariff proposal and yet APDCL has considered SBI prime lending rate as on April 1, 2008. FINER further submitted that SBI has stopped declaring the Prime Lending Rate after August, 2011 and hence, some other parameter needs to be prescribed by the Commission for computing the interest rate. FINER suggested that since, all the banks have shifted to Advance Rate/Base Rate regime, a linkage may be made with the Advance Rate/Base Rate of SBI.

Response of APDCL:

APDCL submitted that it is not claiming any extra amount under this head as pointed out by the objector. Though, there is an amount of security deposit collected from the consumers, it is to be appreciated that APDCL is allowing interest on this amount at a rate higher than the prevailing Bank Rate. Further, details of payments towards this head are given in the Financial Statements of APDCL for the respective years.

APDCL submitted that the interest on working capital shall be as per Tariff Regulations.

Comments of the Commission:

The Commission has computed the working capital requirement and interest thereon in accordance with the AERC Tariff Regulations, after deducting the amount of Consumer Security Deposit, as elaborated in Chapter 4 of this Order.

Issue No. 18: FPPPA**Objections:**

The All India Manufacturers' Organization submitted that as per the FPPPA formula, fuel supply costs are periodically revised leading to neutralization of the fuel cost component, therefore, the costs on other direct/indirect heads should be minimal.

Tezpur Nagarik Sabha submitted that as APDCL is not a power generating company but only a power supply company, therefore, the question of purchase of fuel by APDCL does not arise. He further requested that Fuel Purchase Adjustment (FPA) should be abolished from the monthly bills.

Dibrugarh Nagarik Sangha requested the Commission that the FPPPA charges should be struck down since such illegal payments cannot be imposed on the consumers after paying due energy charges approved by the Commission.

Response of APDCL:

APDCL submitted that the FPA charge has been already abolished. But due to increase of power purchase cost, FPPPA cost is to be recovered from the consumers as per the approved formula.

Comments of the Commission:

The Commission has noted the objection. The Commission has allowed the different heads of expenditure in accordance with the AERC Tariff Regulations and after due prudence check.

Issue No. 19: Periodicity of filings and past claims**Objections:**

Assam Branch of Indian Tea Association submitted that as APDCL is not complying with the periodicity in filing of its Petitions as per the Regulations, it is leading to delays in issuance of Tariff Orders. Also, there is large accumulated gap for which APDCL is proposing carrying cost, which results in further burdening the existing consumers. The objector requested the Commission to disallow any revenue gap of previous years and recovery of interest charges on the same, as the delay is purely attributable to APDCL. ABITA also submitted that as per the Tariff Policy, power

purchase cost is the only uncontrollable parameter, which is already allowed to be recovered as per the FPPPA formula specified by the Commission, hence, any claims of past years, i.e., FY 2008-09, FY 2009-10 and FY 2010-11 should not be allowed in the current Control Period.

All Assam SSI Association submitted that as per guidelines provided by the Commission, MYT Petition should be filed on or before December 1, 2012, however, APDCL has filed the ARR and Tariff Petition on January 31, 2013.

Response of APDCL:

APDCL submitted that the MYT Petition was to be filed by December 1, 2012 and APDCL filed the Petition on January 31, 2013 with due permission from the Commission. The delay is mainly due to the suo-motu proceedings (Order) of the Commission dated October 31, 2012 for submission of Petition for truing up for FY 2010-11, performance review for FY 2011-12 and ARR & Tariff for FY 2012-13, by November 15, 2012. As a result of being occupied with the aforementioned Petition, there was a delay in submission of the MYT Petition, which is not purely attributable to APDCL. APDCL further submitted that past period claims are always made in case of un-controllable costs or amount payable to APDCL but considered as Regulatory Asset by the Commission for certain reasons.

Comments of the Commission:

The Commission shares the concerns raised by the objectors regarding the delay in filing of the ARR and Tariff Petitions by APDCL, and this issue has also been deliberated from time to time in the fora such as State Advisory Committee. During the present proceedings also, APDCL had to be reminded to file the Petition for true-up for FY 2011-12. In this context, the Commission is of the opinion APDCL should build the necessary skills/capacity to comply with the regulatory requirements, in view of the APTEL Judgment. The Commission has given detailed directives in this regard in Chapter 6 of this Order.

Issue No. 20: Assumptions while projecting ARR

Objection:

Assam Branch of Indian Tea Association submitted that the ARR for each year of the Control Period has been over-projected by considering assumptions, which are

unreasonable and unsubstantiated and requested the Commission to continue with the existing tariff thereby disallowing the proposed tariff hike.

Bharatiya Cha Parishad submitted that some of the variations have occurred due to errors/misappropriations considered by APDCL while projecting the parameters and further requested the Commission to apply proper judgement while approving the variations while Truing up on account of controllable and uncontrollable parameters.

Response of APDCL:

APDCL submitted that the ARR has been calculated based on the components explained in the Petition. Further, APDCL has no intention of making any extra claim that is not due to it, and the amount claimed by it under different heads of ARR are required for efficient running of the organization and for delivering service to the esteemed consumers.

Comments of the Commission:

The Commission has noted the objection. The Commission has allowed the different heads of expenditure in accordance with the AERC Tariff Regulations and after due prudence check.

Issue No. 21: Determination of Contract Demand

Objection:

The Assam Branch of India Tea Association and Bharatiya Cha Parishad submitted that the Commission, in its earlier Order, has fixed the lower limit of the Contract Demand as 65% of the Connected Load, and such a limitation in respect of HT consumers is not prevalent in any of the power Utilities. They submitted that the maximum demand actually required by tea gardens is between 30% to 50% of total connected load and not 65%.

Assam Tea Planters Association, Bharatiya Cha Parishad, North Eastern Tea Association, and ABITA further submitted that the billable demand should be linked to the sanctioned / contract demand as declared by the consumer based on his understanding of power requirement / loading pattern and not on the connected load, as connected load comprises of several electrical load/installations, which are not

used simultaneously. They requested the Commission to modify the proposal to suit the ground realities of the Tea Industry, together with settlement of past disputes.

Response of APDCL:

APDCL submitted that this point has already been addressed before various platforms including the judiciary. Therefore, it needs no further explanation that this method is the best suited method for both the consumer as well as the Utility.

Comments of the Commission:

The Commission does not see any need to revisit the present arrangement at this juncture.

Issue No. 22: Voltage-wise cost of supply

Objection:

Assam Branch of Indian Tea Association submitted that the Commission had proposed the voltage wise “Cost of Supply” mechanism in its Tariff order for FY 2006-07 and along with Bharatiya Cha Parishad requested the Commission to pursue the determination of voltage-wise “Cost of Supply” for realistic determination of retail tariffs. ABITA also submitted that the Commission, in its MYT Order, had directed APDCL to prepare such data, which would be useful for implementing the voltage-wise cost of supply, however, till date, APDCL has not submitted any such information.

FINER suggested that the Commission may fix the tariff at 132 kV level for EHT category also, since during the Control Period, EHT category will become a reality and consumers will start taking power at 132 kV level. FINER further submitted that this will lead to substantial decrease in the loss levels and the tariff of the industrial consumers can be based on voltage wise cost of supply to such industrial consumers. FINER in its rejoinder submission stated that APDCL in its reply has not dealt with the Policies and Judgments cited by FINER and reiterated its contention.

Response of APDCL:

APDCL submitted that it will surely submit the required data, if it is so directed by the Commission. APDCL clarified that it has no reservation to any form of tariff structure or calculation thereof, so long as it benefits the consumers as well as the Utility.

Comments of the Commission:

The Commission expresses its displeasure towards APDCL's casual approach in responding to this objection. As rightly pointed out by the objector, the Commission had directed APDCL to submit the desired computations of voltage-wise and category-wise cost of supply, first in FY 2006-07 and thereafter from time to time. In this context, though the Commission had directed APDCL to carry out studies to ascertain the voltage-wise and consumer category-wise cost of supply over a period of one year, APDCL, in the present Petition, in its compliance to Directive 9, has submitted few samples of MRI data. For the purpose of this Order, the Commission has continued with the approach of determining tariffs on the basis of average cost of supply, in the absence of any data regarding voltage-wise cost of supply.

Issue No. 23: Pro-rata adjustment of Fixed Charges based on availability of supply**Objection:**

Assam Branch of Indian Tea Association and Bharatiya Cha Parishad submitted that APDCL has started allowing relief to certain consumers in accordance with the formula for pro-rating of Fixed Charges, and highlighted certain related issues. ABITA requested the Commission to

- (i) allow prorating of Fixed Charges directly on the basis of the duration for which power is made available by the Utility,
- (ii) direct the Utility not to apply any Fixed Charges for Tea and Coffee establishment category unless the hours of supply is substantiated by meter downloaded data provided to consumers,
- (iii) direct APDCL to set up a special camp for Tea and Coffee establishments for on-the-spot resolution of anomalies that have been observed in several bills over the past year/months.

Assam Tea Planters Association and North Eastern Tea Association, Bharatiya Cha Parishad submitted that the consumer never gets constant voltage and constant frequency of supply and it requested the Commission to allow prorating of Fixed Charges directly on the basis of the duration for which power is made available by APDCL.

Response of APDCL:

APDCL submitted that the methodology adopted in this regard is in accordance with the provision of Supply Code Regulations notified by the Commission. APDCL contended that it has implemented the directive in a very transparent manner. APDCL further averred that if there is some variation, which is most unlikely, the case may be forwarded with specific mention of such consumers and APDCL will take necessary action as per the provision of the Regulations.

Comments of the Commission:

The Commission has noted the objection and APDCL's response in this regard. However, for individual grievances regarding billing disputes, etc., the consumers should seek relief under the appropriate grievance redressal mechanism established by the Commission, since, the Commission does not have the jurisdiction to adjudicate on individual billing disputes.

Issue No. 24: Fixed Charges and Energy Charges**Objections:**

Tezpur Nagarik Sabha submitted that at the time of release of new connections, the consumers provide all the materials and equipment required for electricity connection, and even pay load security for every kW of connecting load. They added that fixed charges per kW per month are arbitrary and absolutely unreasonable. They further requested that fixed charges per kW per month should be abolished immediately. As regards energy charges, they submitted that increase in electricity energy charges up to 37% is absolutely unacceptable to the consumers.

North Eastern Small Industries Association submitted that the proposed revision of Fixed Charges for Industries upto 50 kVA from Rs. 40 to Rs. 90 per kVA would adversely affect the functioning of small scale industries and requested the Commission to reduce the existing Fixed Charges along with power tariff and reject the proposed hike in Fixed Charges.

The All India Manufacturers' Organization submitted that the proposed increase in the Fixed Charges for various categories of industries, when the industries are in dismal position, and the State and Central Governments are offering incentives to attract investors, cannot be justified. They further submitted that the proposed

increase will adversely affect the small entrepreneurs and encourage unhealthy and illegal practices.

Mahanagar Unnayan Samittee has requested the Commission to intervene in the matter and ensure a reasonable wheeling charge.

Response of APDCL:

APDCL submitted that the aim of two-part tariff is to realise revenue as per use of electricity. The fixed cost is related to maintaining the power supply system, whereas other part is directly related to the unit consumption. Since, all the consumer categories do not use power in the same pattern during the 24 hrs. of the day, the fixed charge is calculated accordingly. If this is abolished, the fixed component of the tariff will have to be borne by all the consumers equally, which will affect the domestic consumers as a whole.

APDCL submitted that the proposed tariff hike corresponds to the increase in ARR and considers the past pattern adopted in each case, and is also guided by the Tariff Policy and the State Industrial Policy.

Comments of the Commission:

The Commission has considered the objections/suggestions of the objectors and APDCL's views, while determining the tariff including Fixed Charges and Energy Charges.

Issue No. 25: Quality of Supply

Objections:

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, highlighted the problems related to voltage fluctuation and overloaded transformers, and submitted that APDCL should ensure maintenance of adequate voltage. They also submitted that Energy Charges should be based on the voltage supplied to consumers, and Charges should be appropriately reduced on the basis of voltage fluctuation.

North Eastern Small Industries Association complained that there is prolonged unscheduled load shedding, frequent power interruptions, and poor quality of power supply, with consumers in the domestic category and Small Scale Sectors being the worst sufferers.

The All India Manufacturers' Organization submitted that prolonged power failures and low voltage have forced industrial consumers to install and run captive gensets. Further, the quality of supply is also damaging the electronic equipment and plant and machinery, adding to their operational costs.

Assam Tea Planters Association and North Eastern Tea Association submitted that the quality and the availability of power supply is not in accordance with the AERC Regulations and APDCL continues to disregard the directives issued by the Commission. They further submitted that APDCL must improve the quality and reliability of power supply to consumers, where the plant operations are critical. They requested the Commission to adopt some mechanism to monitor this aspect of electricity supply and requested the Commission to fix responsibility and penalties on the concerned officers.

Mahanagar Unnayan Samittee submitted that though there is a massive shortage of electricity for the general people, APDCL has been maintaining continuous and quality power supply to Government residential complexes and other VIP areas, which are not even metered and whose electricity bills are paid by the state exchequer based on single point metering. They submitted that creation of privileged consumers by APDCL is in violation of Article 14 of the Constitution, as it has discriminated against the common consumers vis-a-vis such privileged consumers. They further requested the Commission to direct APDCL to restore the equity for all consumers.

Response of APDCL:

APDCL submitted that it shall take due care to ensure the quality of supply including the prescribed voltage of supply. As regards the incidences of load shedding, APDCL submitted that due to unprecedented drought conditions, non-supply of allotted power by the Central Sector Utilities, and also the restriction imposed on the ER-NER transmission corridor, which are beyond the control of APDCL, there was acute shortage of power, resulting in load shedding beyond schedule. However, APDCL is trying its best to manage power procurement from different sources in order to maintain the system. With the onset of the monsoon, the situation has improved considerably, and is expected that the situation will further improve in the coming days.

Comments of the Commission:

The Commission has noted the objections in this regard, and has issued a directive to APDCL to improve the quality of supply to all categories of Consumers, particularly in rural areas, and submit periodical reports with all backup data. The Commission will closely follow up on the action taken by the Utility.

Issue No. 26: Billing of Government Connections**Objections:**

Shri Jayanta Deka and others have submitted that an effective campaign should be launched among the consumers specially among the employees of the State and Central Government for prevention of misuse of electricity during the office hours.

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, submitted that prepaid meters should be installed in all government departments.

NESSIA submitted that realization of electricity bills from Government establishments needs to be improved.

Response of APDCL:

APDCL submitted that it has noted the suggestion regarding running a campaign to increase the awareness regarding energy conservation amongst Government employees. As such, the tariff proposal has been submitted after duly factoring the constraints and limitations.

APDCL submitted that it is a misconception that Government establishments have large outstanding dues. The Government of Assam pays a fixed amount every month against the electricity bills. At the end of each financial year, the accounts are reconciled and the outstanding, if any, is paid by the Government in the subsequent year. It may be mentioned that balance outstanding dues of Rs. 70.83 Crore for FY 2012-13 have been already been provided for in the budget for FY 2013-14 and are expected to be realized shortly.

Comments of the Commission:

The Commission has noted APDCL's reply in this regard. The Commission in this Order has also issued a directive to APDCL for submitting the report indicating Circle

wise outstanding past dues till March 2013, and initiatives taken for recovery of past dues.

Issue No. 27: Recovery of past dues from consumers

Objection:

Shri Jayanta Deka and others submitted that a number of bills amounting to several crores of rupees are outstanding and strong measures need to be taken to realize those amounts. He submitted that the illegal connections should be checked and measures for imposition of fines and disconnections should be taken, which would cover up the deficit to some extent and would give relief to low-income consumers.

Abasarprapta Jestha Nagarik Santha submitted that there are huge recoverable dues and if APDCL could recover the same, it would substantially improve the financial situation of APDCL. However, instead of making such attempts, APDCL is passing this on to consumers by increasing the charges.

Shri D. D. Baruah submitted that APDCL should try to recover unpaid bills along with the interest.

Response of APDCL:

APDCL submitted that as a result of various steps taken up by APDCL, outstanding dues have been reduced from 115 days to 85 days during the last three years. APDCL also submitted that the following initiatives have been taken

- (i) Special recovery cell is created,
- (ii) Revenue recovery fortnight is organized from time to time
- (iii) Money suits are filed to recover outstanding dues from PD consumers
- (iv) Special Police Station has been constituted to arrest theft of power.

Comments of the Commission:

The Commission has noted the objection and APDCL's reply in this regard.

The Commission in this Order has also issued a directive to APDCL for submitting the report indicating Circle wise outstanding past dues till March 2013, and initiatives taken for recovery of past dues.

It is also clarified that recovery of past dues will help to improve the cash flow of APDCL, however, the past deficits will not reduce, since the revenue for the previous

periods has been considered on accrual basis, and is not dependent on the actual amounts collected by APDCL.

Issue No. 28: Consumer related issues

Objections:

Brihattar Dakshin Guwahati Unnayan Samannayrakshi Samity, Guwahati, submitted that there is only one consumer service phone line/number for serving entire Guwahati city, which remain busy all the time. They added that for handling complaints, more phone lines and regional complaint booths functioning on 24x7 basis should be provided.

Grahak Suraksha Sanstha submitted that it is essential that the consumers are given importance as stakeholders in the power sector and it is necessary for the service provide to educate consumers on issues relating to changes in the power sector.

NESSIA submitted that supply voltage to the consumer should be mentioned in the monthly electricity bill, and the bill should be prepared on the basis of voltage of supply.

Assam Tea Planters Association and North Eastern Tea Association submitted that in case of metering done through electronic meters, the consumers should be trained to extract digital reading data from such meters to utilise the same for practising conservation of energy. They further submitted that the present condition allowing payment to be made by cash/local cheque/DD needs to be modified to allow payment by bank electronic transfer.

Further, Abasarppta Jestha Nagarik Santha submitted that APDCL's services need improvement, like establishing regional complaint booths functioning 24x7, increasing the number of transformers to reduce the load of existing transformers, maintenance of adequate voltage and printing the same on all energy bills, and reducing the charges on the basis of voltage fluctuations.

Response of APDCL:

APDCL submitted that it appreciates the suggestions and shall take due care.

Comments of the Commission:

The Commission, in its earlier Orders, has issued directives to APDCL to improve the quality of service. The Commission has given further directives in this regard, as elaborated in Chapter 6 of this Order.

Issue No. 29: Tea Sector - Treatment of non-factory and statutorily prescribed facilities as non-industrial and charging the same at domestic rate

Assam Tea Planters Association and North Eastern Tea Association submitted that the Tea sector has availed the electricity service/connection for providing and maintaining statutory welfare measures like hospital, dispensaries, crèches, schools, water supply and recreational facilities to the resident population of workers in the Tea Estates, at the tariff applicable for tea category. They submitted that there is no commercial activity involved in providing statutory welfare measures to workers in tea plantations, whereas, the operation in the estates like growing tea, coffee and rubber are primarily agricultural operations and real commercial activity in the plantation is only the manufacturing activity. They requested to treat all non-factory and statutorily prescribed facilities as non-industrial activities, to be charged at the electricity tariff applicable for domestic category.

Bharatiya Cha Parishad submitted that Tea Industry being one of the prime industries in the State of Assam, is one of largest employers in the State and in other States prime industries are required to pay lower tariff in order to further promote the industry. However, the tea and coffee estates are being charged higher fixed charges and energy charges as compared to other categories in Assam. Bharatiya Cha Parishad requested the Commission that since, tea/coffee growing and processing is a major contributor to the GDP of the State and provide employment to socially weaker sections of society, hence, impetus should be provided to the industry by approving fixed and energy charges that are lower than the applicable tariff for general industry and other HT consumers.

Response of APDCL:

APDCL submitted that the issues raised by Assam Tea Planters Association and North Eastern Tea Association are prayers before the Commission.

In response to issues raised by Bharatiya Cha Parishad, APDCL submitted that the figures submitted by the respondent do not show the actual position as far as financial accounting is concerned, Further, though the tariff for this category is high

as compared to others, the payment made by the category is lower than that made by other categories having lower charges. APDCL also submitted that the incentives given to them by allowing the off-season facility is not available to other categories with lower fixed charges, which they must acknowledge.

Comments of the Commission:

The Commission has noted the submission and dealt with the same while discussing the Tariff Philosophy in Chapter 5 of this Order.

Issue No. 30: Revenue from Sale of Power

All Assam SSI Association submitted that in FY 2010-11, APDCL has shown revenue from sale of power to single-point franchisees, which are not an approved category in AERC Tariff Order. They had demanded for an enquiry as well as intervention from the Commission for gross violation of MYT Order and outright rejection of the latest Petition filed by APDCL.

Mahanagar Unnayan Samittee submitted that such unscientific and unprofessional management of its rural distribution network by APDCL affects the electricity tariff, since, realization from the franchisee is lower than the cost of energy consumed. They further submitted that APDCL is yet to implement any complete energy auditing system even in the towns and at Guwahati in particular, let alone the rural areas and from the recent tariff proposal filed by APDCL it is evident how it has deflected from the issue.

Mr. R. N. Barthakur submitted that the appointment of Franchisees under SPPS/IBDF Schemes are not taken up properly by APDCL and all norms have been flouted.

Response of APDCL:

ADPCL submitted that Franchisee system has been developed in accordance with the provision of the EA 2003 and Rules and Regulations made thereunder and as per the policy recommended by the Government of India, and has resulted in increase of revenue. Therefore, the sale of power through the franchisee will figure in the total sale.

Comments of the Commission:

The Commission has noted the objections in this regard, and has issued a directive to APDCL to inform the Commission on each occasion when it appoints a

Franchisee, and the terms of such appointment as well as process of such appointment shall be submitted to the Commission. Further all details of such schemes, including number of feeders, number of agencies, revenue and collection before and after handing over to Franchisee, rate at which power is sold to Franchisee, etc., shall be submitted every six months for each such Franchisee scheme.

Issue No. 31: Calculation of total Load

Tezpur Nagrik Sabha submitted that the methods for calculation of total load for a consumer by ASEB/APDCL are totally unreasonable. He submitted that the concerned authorities add the wattage of all electrical equipment and appliances and then the computation is done by considering every 5 ampere plug point as 100 W and 15 ampere plug point as 1000 W. He added that a household does not use all electrical equipment/ appliances and every available plug point simultaneously. He further suggested that the electrical load of a household should be computed on the basis of actual average consumption of power.

Response of APDCL:

The calculation of connected load on the basis of electrical appliances connected is a generally accepted principle all over the country. As the average consumption will vary from time to time, the electrical load will also keep changing if this method is allowed. This will jeopardize the works of distribution and also require the consumer to change their agreement frequently.

Comments of the Commission:

The Commission agrees with the response of the APDCL.

Issue No. 32: Compliance to directives-Energy Auditing

Mahanagar Unnayan Samittee submitted that vide its Tariff Order dated 16 May 2011, the Commission had issued certain directives on pilferage and energy auditing to APDCL. They submitted that in compliance to above directives, APDCL has appointed some unqualified private contractors as distribution franchisees to take possession of 11 kV feeders and related consumers to ensure power supply and realize payments, to give fresh connections, etc., in the rural areas. However, such franchisees give unmetered electrical connection to rural consumers by realizing exorbitant amount, and most of these franchisees have defaulted even in making the calculated payment amount to APDCL. They submitted that in spite of the above,

these franchisees are neither penalized nor have they been disallowed from continuing their business at the cost of APDCL's own loss.

Response of APDCL:

ADPCL submitted that energy auditing is presently being undertaken by APDCL to reduce Distribution loss. APDCL has installed meters at all 33 kV sub-station, 33 kV lines, 11 kV lines and DTRs. Further, in order to assess the LT line loss, energy audit at DTR level has also taken up. APDCL submitted that with the implementation of R-APDRP project, it is expected that the loss level will come down to below 15% in the coming years.

Comments of the Commission:

The Commission's comments on the status of compliance of old and fresh Directives are discussed in Chapter 6 and the Commission has issued a directive to APDCL to inform the Commission on each occasion when it appoints a Franchisee, and the terms of such appointment as well as process of such appointment shall be submitted to the Commission. Further all details of such schemes, including number of feeders, number of agencies, revenue and collection before and after handing over to Franchisee, rate at which power is sold to Franchisee, etc., shall be submitted every six months for each such Franchisee scheme.

Issue No. 33: Advisory Committee

Brihattar Guwahati Maati Pattan Daabi Samittee, Indian Association of Lawyers (Assam Branch), Aam Aadmi Party, All India Students Federation (Assam State Council) and others enquired from the Commission regarding the details of the 21 member Advisory Committee of the Commission that needs to be formed as per the Act. They further enquired regarding the details of all the meetings and participants of such meetings held between FY 2005-06 to FY 2012-13.

Response of APDCL:

No response.

Comments of the Commission:

The Commission vide its notification dated August 30, 2004 has notified the AERC (Constitution of State Advisory Committee and its function) Regulations, 2004. The Commission has already constituted the State Advisory Committee under the aforementioned Regulations. The Commission has been annexing the minutes of

meetings of the State Advisory Committee to the Tariff Order. Additionally, objectors may obtain details of such meeting from the office of the Commission by following proper procedure.

Issue No. 34: Interest on Security Deposit

FINER submitted that APDCL has considered interest on security deposit @7% p.a. on the opening balance for respective years whereas, the Commission in its MYT Order for the Control Period from FY 2010-11 to FY 2012-13 had considered RBI interest rate for determination of interest on security deposit. FINER submitted that there is no rationale for seeking 7% p.a. on the security deposits with respect to the interest on loan.

Grahak Suraksha Sanstha submitted that in spite of the Commission's directions, APDCL has not included the interest payable to consumers on the Security Deposit. On the issue of interest on Security Deposit, All Assam SSI Association submitted that APDCL has in its Petition shown Interest on Security Deposit being adjusted in the consumer's bills, however, in reality consumers are deprived of the interest being accrued against the load security.

The All India Manufacturers' Organization submitted that payment or adjustment of interest amount due is not transparently shown in the monthly bills and details of amount due, period of adjustment and method of adjustment are not shown in the monthly bill. They requested the Commission to formulate a mechanism for refund/adjustment of interest amount due.

Response of APDCL:

APDCL submitted that it claims interest and finance charges in the ARR as per actuals only. APDCL submitted that the interest on Consumers' Security Deposit has been included in the financial statement of APDCL.

Comments of the Commission:

The Commission has allowed the Interest on Security Deposit as per the AERC (Electricity Supply Code and Related Matters) Regulations, 2004 (First Amendment), 2007, as elaborated in Chapter 4 of this Order. Further, the Commission has also issued directions to APDCL in this Order.

Issue No. 35: Peak Tariff or Peak Hour Surcharge

FINER submitted that Peak hour surcharge or Higher energy charge during peak - period is being applied by the licensees across the country to balance the consumption between peak and off-peak period as well as to maintain the grid stability. FINER submitted that APDCL has proposed peak hour surcharge at level of Rs. 11.50 per unit, which is highest in the country. FINER submitted that such a high surcharge will lose the objective to stagger the load or optimization of consumption as it may lead to shut down of operation by industries during peak hours to remain competitive in the market. FINER further requested the Commission to approve peak hour charges that are at a reasonable level.

Response of APDCL:

APDCL submitted that the pattern of tariff is devised mainly for the benefit of consumers who can use power for night hours, thereby shifting the demand from peak to off-peak. In case consumer uses power for 24 hours a day, the average rate will be respective average tariff. The duration of peak hours is calculated from the demand curve of the respective State only. Proposed TOD tariff for peak hours is far below the alternate cost of energy at the prevailing time.

Comments of the Commission:

The Commission has considered the objections/suggestions of the objector and APDCL's views, while determining the tariff. The tariff differential in TOD tariffs has been retained at existing levels.

Issue No. 36: Long Peak Period

FINER submitted that duration of peak hours approved in MYT Order for last Control Period of FY 2012-13 was between 1700-2200, i.e., five hours, and energy charges levied on power consumption during this period was Rs. 6.25 per unit. FINER further submitted that while the peak period has been projected same in this MYT Petition, the peak hour charges have almost doubled (Rs. 11.5 per unit). FINER submitted that APDCL's inability to reduce peak hour period indicates the incompetence in power supply planning by the State. FINER also added that the consumers are not aware of changes in load curves over the years so as to reach to a conclusion if the peak period for utility has changed. FINER further requested the Commission to direct APDCL to provide annual load curves with the Petition to give a clear picture of the peak load period available to the consumers.

Response of APDCL:

APDCL submitted that the system load curve shows that the peak hour period is longer in comparison to other parts of the country, which may be due to geographical location.

Comments of the Commission:

The Commission has considered the objections/suggestions of the objector and APDCL's views, while determining the tariff. The duration of the peak period has been retained at existing levels.

Issue No. 37: Open Access Charges

FINER, in its rejoinder, submitted that the Commission may consider fixing the open access charges along with the tariff, so that persons wishing to take open access can plan their transactions.

Response of APDCL:

APDCL submitted that the Commission vide its Order in the Suo-Motu Petition No. 1/ 2012 has already determined the transmission charge, wheeling charge and cross-subsidy charge. Further, APDCL has started implementation of the Open Access provision for consumers having connected load of 1 MW and above and connected on 33 kV and above network through dedicated service.

Comments of the Commission:

The Commission vide its Order dated 28 February, 2013 had determined wheeling charges for use of distribution system of APDCL by other licensees or generating companies or captive power plants or consumers / users who are permitted open access at 33 kV voltage level under Section 42(2) of the Electricity Act, 2003. The Commission has determined wheeling charges in Chapter 7 of this Order.

Issue No. 38: Use of English Language in Commission's administrative works and proceedings

Assam Sahitya Sabha submitted that they are not opposed to use of English language as such, and opined for use of Assamese language as a State language for all purposes by the Commission.

Response of APDCL:

No response.

Comments of the Commission:

Regulation 4 of the AERC (Conduct of Business) Regulations, 2004 specifies the language of the Commission to be followed by the Commission. The Regulations empower the Commission to conduct the proceedings in Assamese language. Further, documents in languages other than English are accepted by the Commission subject to the same being accompanied by a translation thereof in English.

Issue No. 39: Peak-Off Peak Tariff

Assam Branch Indian Tea Association in their additional submission submitted that in the tea industry, irrigation is primarily required during the winter months, i.e., October to April when the rainfall is scanty and drought conditions prevail. Therefore, the tea estates are compelled to draw power during the off-peak season resulting in higher recorded demand and incidence of overdrawal penalty. It requested that in respect of irrigation related load, the concept of peak and off-peak season should be reversed for seasonal industries like Tea Industries. It also proposed that October to April should be classified as the peak season and the remaining months as off-peak season for the purpose of irrigation load.

Response of APDCL:

APDCL submitted that with changing climate and demand profile of tea garden it is seen that power demand remains substantial for all months of year. Power consumption cannot be differentiated for irrigation or factory under one category. The Commission may abolish the off-season tariff to accommodate such eventuality. APDCL further submitted that the penalty and incentive is for discouraging and encouraging consumers in order to maintain a standard load according to the network capacity.

Comments of the Commission:

The Commission agrees with the response of the APDCL. The seasonal consumption cannot be differentiated for irrigation load and factory load under the same connection.

Issue No. 40: Levy of Penalty in respect of Regulation 2.2 of Supply Code

Assam Branch Indian Tea Association vide their additional submission submitted that as per Regulation 2.2 of AERC (Electricity Supply Code and Related Matters) Regulations, 2004, the maximum Contract Demand for 11 kV supply voltage is 1200 kVA. In line with the Regulations, the levy of additional 3% metering charges to

consumers drawing power at 11 kV should be on the basis of contracted demand and should be applicable when the contracted demand exceeds 1200 kVA. However, the consumers are being penalized on this account based on their connected load if the same is above 1000 kVA, which is incorrect and is not compliant with the existing provisions of the Regulations, It further requested the Commission to clarify the same in the Schedule of Tariff.

Response of APDCL:

APDCL submitted that the connected load is the maximum demand of a consumer who is connected to the system. Such connected load is considered for construction of network. The Supply Code deals with the reliability and hence the connected load is considered for this purpose.

Comments of the Commission:

The Commission has reviewed the provisions in this regard vis-a-vis the AERC Supply Code Regulations in view of the objector's submissions. APDCL should strictly adhere to the AERC Supply Code Regulations and Tariff Order issued from time to time.

Issue No. 41: Expenditure on Installation of 11 kV HT Breaker to be undertaken by APDCL

Assam Branch Indian Tea Association vide their additional submission submitted that Zonal Electrical Inspectorate has mandated the installation of 11 kV HT breaker in place of Gang Switch. As APDCL is responsible for up-gradation and up-keep of the distribution system, the responsibility of installation of the same lies with the distribution Utility. It also submitted that it will be impossible to bear the huge expenditure towards installation of such breakers by the consumers. Therefore, the Commission is requested to direct APDCL for inclusion of such cost towards installation of HT Breakers in their Capital Expenditure Plan.

Response of APDCL:

APDCL submitted that as per the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, all consumers having load above 5 MW are required to be connected through a breaker.

Comments of the Commission:

The CEA Regulations are required to be followed, and the cost of 11 kV Circuit Breaker has to be borne by the consumer.

Issue No. 42 : Process for submission of objection

Sh. D.D. Baruah submitted that the process for the submission for objection is very critical and expensive and not possible for general consumers and the same needs to be modified.

Response of APDCL:

No response.

Comments of the Commission:

The AERC (Conduct of Business) Regulations, 2004 specifies the manner of filing of reply/objections. The aforementioned Regulations have been followed since the date of notification of the above-said Regulations, and are also in accordance with the procedure followed by Regulatory Commissions in other States.

Issue No. 43: Cost of the Petition

Assam Jatiyatabadi Yuva Chatra Parishad and others submitted that the cost of tariff Petition of Rs. 300 is very high and it should be made available free of cost.

Response of APDCL:

No response

Comments of the Commission:

The Commission has noted the objection. As regards availability of the Petition free of cost, a copy of the Petition was made available on the website of APDCL (www.laedcl.gov.in) and also on the website of the Commission (www.aerc.nic.in) in downloadable format. However, the printed copy of the Petition cannot be made available free of cost.

Issue No. 44: Government Dues and CAG Report Observations

KMSS submitted that as per CAG reports, a loss of around Rs. 2300 Crore has been incurred during the period from FY 2002-03 to FY 2012-13 by various Board/Companies of the Power Department of Assam due to misappropriation/loss of revenue/fraudulent expenditure/loss of subsidy-incentives. It submitted that this loss

is based on the area-wise sample survey conducted by CAG during the last decade and the total amount of irregularities during this period are unimaginable. It further submitted that the above amount includes an amount of Rs. 1187 crore due from the State Government for FY 2002-03, and if the same is collected from the State Government, then there would be no need for tariff hike. It further submitted that the Company is trying to be financially secure by transferring the entire load of these irregularities onto the consumers through tariff hike.

Key points from compilation of reports submitted are as under:

- a) Expenses against false/doubtful/ unnecessary accounts – Rs. 100.27 Crore (Sample based)
- b) Loss of revenue – Rs. 63.08 Crore (Sample based)
- c) T&D loss- Rs. 464.77 Crore (FY 2006-07 to FY 2010-11 – 5 years) (This loss is in excess of loss approved by the Commission in the respective tariff Orders for the above mentioned years)
- d) Subsidy receivable from Assam Government – Rs. 1181.51 Crore. This was to be received from the State Government against rural electrification
- e) Non receipt of incentives from the Government of India – Rs. 105.99 Crore. This amount was not received from the MOP, GOI due to lackadaisical attitude of the Department.
- f) Division of funds – Rs. 326.27 Crore
- g) Overrun of Cost- Rs. 62.32 Crore

Response of APDCL:

In response, the APDCL has submitted a note on the present status of the audit paragraphs

- (a) on the expenses on the account of false/doubtful and unnecessary accounts, amounting to Rs. 100.27 crore. All these paras have been settled by the Public Accounts Committee (PAC) of the Legislative Assembly.
- (b) Loss of revenue amounting to Rs. 63.08 Crore. All paras have been settled by the PAC.
- (c) T&D losses amounting to Rs. 464.77 Crore. In this regard they have not been allowed any excess T&D loss over and above the approved level
- (d) Subsidy receivable from the Government of Assam amounting to Rs. 1181.51 Crore. RE subsidy has been provided in the Annual Statement of Accounts on accrual basis. Subsidy receivable on this account accumulated upto 2003-04 (i.e., 1181.51 Crore) has been adjusted in the Annual Statement of Accounts for FY 2004-05 as per the approved Financial Reconstruction Plan. PAC has dropped the para.

(e) Non-receipt of incentive from the Government of India amounting to Rs. 105.99 Crore. The incentive for efficiency improvement was not applicable to APDCL/ASEB due to non-achievement of requisite parameters and hence, there was no loss on this account.

(f) The Management agreed to such short diversion to avoid accumulation of surcharge to avail rebate for timely payment from Power Suppliers. Amount thus diverted was recouped on receipt of funds from the Government of Assam under FRP. The PAC noted the same and dropped the para.

(g) Overrun of costs amounting to Rs. 62.32 Crore. The para has been settled by the PAC.

Comments of the Commission:

APDCL has clarified the position, which has been noted. These matters are already within the realm of the Public Accounts Committee of the Assam Legislative Assembly and the Commission would not like to make any further comment at this stage. However, the issues raised have been taken into account and the Commission has allowed different heads of expenditure in accordance with the AERC Tariff Regulations and after due prudence check.

Issue No. 45: Objections on Compliance of Directives

1. Directive 1- Power Theft

Shri. Deven Dutta submitted that although 12 nos. of special police stations have been established to arrest power theft, the police personnel engaged by the police department are posted there as “punishment posting” and are not at all competent to arrest power theft. Further, as these police personnel are deprived of extra income due to non-placement at main police stations, they are conniving with the persons indulging in power theft and do not file cases, in order to earn some extra money. He submitted that merely by establishing one cell to arrest power theft and keeping one telephone connection to arrest power theft, power theft cannot be arrested. Further, no employees are present during night time and even if one is present, the phone is unattended. He sought the detailed district wise list of number of cases filed by these special police stations, no. of cases where punishment has been given to criminals, and the money realized by the CVO by imposing penalty.

Response of APDCL:

APDCL submitted the performance of ASEB Special Police Stations since inception. APDCL further submitted that:

- (1) As per agreement with Department of Home of Govt. of Assam and Assam State Electricity Board, on June 2008, 12 nos. of district wise special police stations were established and the police personnel were placed from the concerned office of Superintendent of Police to arrest power theft.
- (2) These 12 nos. of special police stations are under the 12 nos. of Deputy General Manager (DGM) of APDCL. As per the prepared list of concerned DGM, anti-power theft operation is carried out in different areas of Sub-Divisions. The legal actions are taken by concerned Sub-divisional engineers, against the accused persons after the anti-power theft operation by filing cases in the concerned special police stations as per the provisions of Electricity Act 2003. The concerned Sub-divisional engineers impose penalty as per legal provisions. This provision of imposing penalty is not legally delegated to special police stations.
- (3) For the benefit of the public, APDCL established a Central Power Theft Information Cell to lodge complaint for power theft and other matters. This cell receives complaints by Telephone No. 9678005271 and sends information to different Deputy General Manager/ Sub-Divisional Engineers to take appropriate action. The appropriate action is taken about the complaints. The reports of these appropriate actions are sent to Chief General Manager of APDCL.
- (4) A Central Vigilance Office of APDCL is functioning under the supervision of one senior retired IPS officer. He along with his team of CVO, under the direction of CMD of APDCL, have carried out operations in different areas of Assam against power theft and irregular practices in power connections. The cases against these persons are filed in special police stations and local police stations as per provisions of Electricity Act 2003. Also, investigations are done on corruption charges against officers, employees and related personnel of APDCL and the reports are placed before CMD. It may be mentioned that APDCL has not delegated power to Vigilance Cell for imposing penalty on criminals indulging in power theft, etc. So, after filing of cases, the matter is informed to Sub-Divisional officer and he imposes the appropriate penalty.

2. Directive 2 - Energy Audit

Shri Deven Dutta submitted that under APDRP, the meters were installed on all the 33 kV lines, 11 kV lines, Power Transformers and distributions transformers. He requested a sample energy audit of subdivision-wise 11 kV and Distribution Transformers of Guwahati Electrical Circle- I and Guwahati Electrical Circle-II.

Response of APDCL:

APDCL submitted the energy audit report of GEC- II as a sample for the energy injected in March 2013 and billed in April 2013.

3. Directive 3 - Annual Audit

Shri Deven Dutta submitted that APDCL and other companies spend huge amount of money for annual audit by engaging private establishment / auditor. Even then, companies have not been able to file audit report in a timely manner. He asked APDCL to submit the information about the financial years for which audited annual accounts are yet to be submitted to the AERC. He further questioned about possibility of determination of tariff without certification of the CAG on audited accounts, as the same is illegal.

Response of APDCL:

Please refer the page No. 80 of APDCL's main petition.

4. Directive 6 Customer complaint booth

Shri Deven Dutta submitted that although customer complaint booths are established by spending public money, the services to the consumers are deteriorating day by day. In these complaint booths, either there is no employee or if there is an employee, then APDCL gives the excuse of non-availability of vehicle to attend complaints. Most of them do not have telephone connections. APDCL has not complied with the directive of the AERC.

Response of APDCL:

Please refer the page No. 82 of APDCL's main petition.

5. Directive-7 APDRP

Shri Deven Dutta submitted that (a) As per Table 2.2 of APDCL's tariff petition, it is projected that about 414 km of new LT line and 3054 km of reconductoring of LT line will be done. He enquired as to how much technical loss will be reduced by re-conductoring thousands of LT lines by above mentioned scheme. The Power department of Assam and ASEB had given assurance about reduction of power loss after completion APDRP works. The Commission also approved year-wise transmission and distribution loss while determining the Tariff. He also sought the list

of year wise approved loss and the achieved actual loss by the electricity utilities for FY 2010-11, FY 2011-12 and FY 2012-13.

(b) The number of Jeeban Dhara consumer connections, power connection and growth and quantum has increased enormously during FY 2010-11, FY 2011-12 and FY 2012-13 due to execution of RGGVY. The details of revenue realised from this category during the above mentioned years should be submitted.

Response of APDCL:

Please refer the page No. 82 of APDCL's main petition.

6. Directive-8 Prepaid meters

Shri Deven Dutta submitted that APDCL had delegated the authority to some of the Franchisees for realisation of revenue. As per information, most of the franchisees do not deposit the collected money to APDCL or deposit only part of it. He sought the following information of the above mentioned franchisees by APDCL:

- (1) Circle wise list.
- (2) How much balance outstanding payments are to be paid to APDCL by franchisees along with number of franchisees?
- (3) The number of franchisees leaving this business without paying the revenue?
Who has given the authority to Electricity Authority to impose the burden of meeting this gap due to above reasons, on genuine and general consumers?
- (4) Has APDCL taken any legal or any other procedure against these franchisees, who have not paid the revenue? If not, how this money can be realised?
- (5) Why prepaid meters are not installed in LT line and Distribution Transformers allotted to franchisees?

Response of APDCL:

Please refer the page No. 83 of APDCL's main petition. APDCL further submitted the information in response to point no.1, 2 and 3.

7. Directive-14

Shri Deven Dutta sought details on the following:

- (a) At present how many electro-mechanical or Ferrari meters are being replaced?
- (b) How many these types of meters are still in service under Guwahati Electrical Circles?
- (c) When will these meters be changed to digital static meters?
- (d) Whether separate meters have been installed in residential quarters of ministers,

MLAs and other government employees of Dispur Capital complex as well as in quarters of residential colonies of Jawaharnagar IAS colony? If not, why and the time limit of when it will be taken up should be intimated.

(e) How the electricity bills of these residences are realised and at what rate?

Response of APDCL:

(a) At present around 1,20,000 electro-mechanical meters are to be replaced in Assam.

(b) Presently 15,245 numbers of electro-mechanical meters are still in service

(c) These meters are expected to be replaced within one year.

(d) The separate meters are not connected till date as the billing for the consumption as a whole is done based on single point metering.

(e) The electricity bills of these residences are realized under bulk category.

8. Directive-16 – Conservation of Energy

Shri Deven Dutta submitted that APDCL has not taken adequate steps for conservation of power, e.g.,

(a) The street lights are often lit much before sunset (after noon 4/4-30) and sometimes they continue to be lit long after sunrise and sometimes even for the entire day.

(b) The use of energy efficient transformers is only on paper.

(c) The lights and fans are kept 'on' continuously in the offices of ASEB and government establishments throughout day and night as well as the ACs are also kept running much before the presence of staff-officers in offices and also late into the evening, i.e., long after employees leave their offices. The electrical appliances in many government conference halls and offices are seen to be running throughout the day even without any programme for meeting-conferences of ministers or bureaucrats in the halls.

(d) No initiative appears to have been taken by APDCL for propagation of energy conservation and efficient use of electricity through media coverage. Will it be possible for the energy conservation mission to succeed? Is ASEB setting the right example? Why should the public bear these failures?

The directives of the Commission have not been complied with.

Response of APDCL:

Please refer the page No. 88 of APDCL's main petition. APDCL also submitted that it has taken the advice of the objector seriously.

9. Directive-17 – Consumer Education and Consumer consciousness

Shri Deven Dutta sought details such as

1. How many meetings are being held with consumers during the last year at sub-division, division and circle levels for advocacy of consumer knowledge, consumer consciousness as well as for different rules and regulations?
2. The list of number of responsible higher officials from headquarters present during the meeting and the number of meetings held has to be submitted. The copies of minutes of the meeting of at least ten such meetings have to be submitted.

Response of APDCL:

Please refer the page No. 88 and 89 of APDCL's main petition.

10. Directive-19

Shri Deven Dutta enquired regarding the reasons for not installing meters at governmental residences of Ministers-Bureaucrats and employees apart from government offices.

Response of APDCL:

APDCL submitted that electricity billing for these residences are realized as a whole based on single point metering. As such, the separate metering is not done.

11. Directive-20 – Interest on Consumer Security Deposit

Shri Deven Dutta submitted that the Commission had directed in FY 2007 for payment or adjustment of interest on security deposit for the year in the last bill of the year. He further sought the details such as whether such payment is made in the following years, list of category wise consumer's security deposit, interest on security deposit and adjusted amount up to March 31, 2013.

Response of APDCL:

As regards payment made against interest on security deposit, APDCL submitted that it has made payment upto March 13, 2012. APDCL further submitted the list.

Comments of the Commission:

The Commission's comments on the status of compliance of old directives and fresh Directives, are discussed in the Chapter 6 and further directives have been issued,

Issue No. 46: Loss due to improper implementation of RGGVY Scheme

Shri. R. N. Barthakur submitted that all the materials utilised in the works of RGGVY Schemes are sub-standard, which result in high maintenance cost thereby increasing the ARR. This also increases the difficulty of the consumers due to frequent interruption of power supply as well as unwarranted financial burden.

Response of APDCL:

The Government of Assam has already formed a Committee to look into the matter and necessary action will follow in due course.

Comments of the Commission:

Noted.

Issue No. 47: Material Accounting System

Shri. R. N. Barthakur submitted that earlier, in the ASEB regime, material accounting system was foolproof. There was a proper system of accounting for procurement, utilisation, transfer, and transportation of material. However, after unbundling of ASEB, such system is not in practice, which has resulted in loss of accounting records of valuable material already purchased under different Government schemes.

Response of APDCL:

APDCL is strictly following standard accounting practices as per Accounting Standards (AS-2) for inventory management. The Company is also going to implement Enterprise Resource Planning (ERP) with Material Management module.

Comments of the Commission:

Noted. APDCL should expedite the implementation of ERP and ensure strict adherence to Accounting Standards.

Issue No. 48: Loss of Interest on Parking of Funds

Shri. R. N. Barthakur submitted that APDCL has wrongly parked some funds in different Financial Institutions, resulting in lower interest earnings. This has resulted in a loss of Rs. 1.83 crore as per the CAG.

Response of APDCL:

The amount of Rs. 1.83 crore is a presumptive loss calculated on hypothetical basis and APDCL has already replied to PAG with proper reasoning. APDCL added that parking of surplus funds is done after due consideration of anticipated requirement, better liquidity to facilitate smooth and timely implementation of projects, administrative convenience and optimum return. Considering the above practical reasons and volume of transactions, APDCL has requested PAG to drop the above para.

Comments of the Commission:

Noted.

4. Analysis and Determination of Annual Revenue Requirement for FY 2013-14 to FY 2015-16

4.1 ENERGY SALES

Appropriate estimation of category-wise energy sales for the Control Period is essential to arrive at the quantum of power to be purchased and the likely revenue from sale of energy. This Chapter examines in detail the consumer category-wise energy sales projected by APDCL in its Multi Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16, and the category-wise sales approved by the Commission.

4.2 APPROACH FOR SALES PROJECTION

APDCL submitted that as the historical trend method has proved to be a reasonably accurate and well accepted method for estimating the number of consumers, the connected load, and energy consumption, it has estimated sales for various customer categories primarily based on the CAGR trends during past years. APDCL further submitted that wherever the trend seemed unreasonable or unsustainable, it has corrected the growth factors to arrive at more realistic projections.

APDCL submitted that for the purpose of sales projections for the period from FY 2013-14 to FY 2015-16, it has analysed the growth in energy consumption for each consumer category. APDCL submitted that the analysis of the growth rate lends insight into the behaviour of each category and hence, forms the basis of forecasting the sales for each category.

4.3 CATEGORY-WISE PROJECTED ENERGY SALES

APDCL submitted that it has considered the past sales and CAGR for different categories of consumers for the period from FY 2008-09 to FY 2011-12. APDCL submitted that for the period between FY 2009-10 and FY 2010-11 it has considered the year on year (Y-o-Y) growth rate, whereas the growth witnessed between FY 2010-11 and FY 2011-12 based on provisional figures for FY 2011-12 is also indicated. The category-wise sales and rate of growth in sales as submitted by APDCL, are shown in the Tables below:

Table 4.1: Historical Trend in Category-wise Units sold (MU)

Sr. No.	Category	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	LT Category				
1	Jeevan Dhara 0.5 kW and 1 kWh/day	34	40	215	273
2	Domestic A- above 0.5 kW to 5 kW	965	973	929	1038
3	Domestic-B above 5 kW to 20 kW	82	100	119	140
4	Commercial Load above 0.5 kW to 20 kW	275	315	354	403
5	General Load	58	64	66	79
6	Public Lighting	6	8	9	10
7	Agriculture up to 7.5 HP	4	4	5	7
8	Small Industries Rural up to 20 kW	41	45	45	49
9	Small Industries Urban	24	25	27	28
	LT TOTAL	1489	1573	1769	2025
	HT Category				
10	HT Domestic 20 kW and above	31	29	27	37
11	HT commercial 20 kW & above	152	167	181	218
12	Public Water Works	47	55	62	58
13	Bulk Supply 20 kW and above				
13 A	Government Educational Institutions	42	45	44	55
13 B	Others	294	289	297	330
14	HT Small Industries upto 50 kVA	19	41	53	20
15	HT Industries-I 50 kVA to 150 kVA	47	50	70	61
16	HT Industries-II above 150 kVA	475	482	551	685
17	Tea, Coffee & Rubber	358	412	356	389
18	Oil & Coal	69	80	99	65
19	HT Irrigation Load above 7.5 HP	21	24	26	25
	HT TOTAL	1555	1674	1767	1945
	Grand Total	3044	3247	3535	3970

Table 4.2: Category wise Growth Rate of Energy Sale

Sr. No.	Category	CAGR (3 years) FY 2011-12 over FY 2008-09	FY 2010-11 over FY 2009-10	FY 2011-12 over FY 2010-11
	LT Category			
1	Jeevan Dhara 0.5 kW and 1 kWh/day	24%	27% #	27%
2	Domestic A- above 0.5 kW to 5 kW	6%	6%	12%
3	Domestic-B above 5 kW to 20 kW	19%	20%	17%
4	Commercial Load above 0.5 kW to 20 kW	14%	12%	14%
5	General Load	11%	4%	19%
6	Public Lighting	15%	15%	8%
7	Agriculture up to 7.5 HP	21%	6%	41%
8	Small Industries Rural up to 20 kW	6%	1%	8%
9	Small Industries Urban	4%	7%	3%
	LT TOTAL	11%	12%	14%
	HT Category			
10	HT Domestic 20 kW and above	8%	-8%	39%
11	HT commercial 20 kW & above	13%	9%	21%
12	Public Water Works	8%	13%	-6%
13	Bulk Supply 20 kW and above			
13 A	Government Educational Institutions	10%	-1%	24%
13 B	Others	4%	3%	11%
14	HT Small Industries up to 50 kVA	18%	22%	-64%
15	HT Industries-I 50kVA to 150 kVA	11%	40%	-13%
16	HT Industries-II above 150 kVA	13%	14%	24%
17	Tea, Coffee & Rubber	4%	-13%	9%
18	Oil & Coal	2%	23%	-34%
19	HT Irrigation Load above 7.5 HP	7%	7%	-3%
	HT TOTAL	-2%	1%	-3%
	All Total	9%	9%	12%

Due to large number of RGGVY connections in FY 2010-11, the actual energy sale growth in Jeevan Dhara category from FY 2009-10 to FY 2010-11 is observed to be more than 400%. Hence, for the purpose of CAGR calculation, this abnormal growth rate has not been considered, instead the Y-o-Y growth rate of next period (FY 2010-11 to FY 2011-12) has been taken for the calculation.

The category-wise number of consumers and rate of growth in number of consumers for the period from FY 2008-09 to FY 2011-12, as submitted by APDCL, are shown in the Tables below:

Table 4.3: Category wise Number of Consumers

Sr. No.	Category	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	LT Category				
1	Jeevan Dhara 0.5 kW and 1 kWh/day	70688	252151	417681	647072
2	Domestic A- above 0.5 kW to 5 kW	1265735	1190050	1257757	1371900
3	Domestic-B above 5 kW to 20 kW	15106	20210	23065	28933
4	Commercial Load above 0.5 kW to 20 kW	150677	157229	163125	170737
5	General Load	22241	24417	26373	28204
6	Public Lighting	650	842	877	961
7	Agriculture up to 7.5 HP	2354	2993	4176	6171
8	Small Industries Rural up to 20 kW	6225	7092	6986	7040
9	Small Industries Urban	3383	3377	3508	3635
	LT TOTAL	1537059	1658361	1903548	2264653
	HT Category				
10	HT Domestic 20 kW and above	711	824	624	641
11	HT commercial 20 kW & above	1414	1589	1831	2046
12	Public Water Works	1805	2225	2353	2765
13	Bulk Supply 20kW and above				
13 A	Government Educational Institution	161	134	191	231
13 B	Others	712	798	876	869
14	HT Small Industries up to 50 kVA	667	714	757	817
15	HT Industries-I 50kVA to 150 kVA	599	654	721	776
16	HT Industries-II above 150 kVA	393	437	498	540
17	Tea, Coffee & Rubber	916	816	870	971
18	Oil & Coal	112	236	256	697
19	HT Irrigation Load above 7.5 HP	929	960	871	847
	HT TOTAL	8419	9387	9848	11200
	Grand Total	1545478	1667748	1913396	2275853

Table 4.4: CAGR in Number of Consumers

Sr. No.	Category	CAGR (3 years) FY 2011-12 over FY 2008-09	FY 2010-11 over FY2009-10	FY 2011-12 over FY 2010-11
	LT Category			
1	Jeevan Dhara 0.5 kW and 1 kWh/day	59%	66%	55%
2	Domestic A- above 0.5 kW to 5 kW	6%	6%	9%
3	Domestic-B above 5 kW to 20 kW	24%	14%	25%
4	Commercial Load above 0.5 kW to 20 kW	4%	4%	5%
5	General Load	8%	8%	7%
6	Public Lighting	14%	4%	10%
7	Agriculture up to 7.5 HP	38%	40%	48%
8	Small Industries Rural up to 20 kW	4%	-1%	1%
9	Small Industries Urban	2%	4%	4%
	LT TOTAL	14%	15%	19%
	HT Category			
10	HT Domestic 20 kW and above	-2%	-24%	3%
11	HT commercial 20 kW & above	13%	15%	12%
12	Public Water Works	16%	6%	18%
13	Bulk Supply 20 kW and above			
13 A	Government Educational Institution	16%	43%	21%
13 B	Others	7%	10%	-1%
14	HT Small Industries up to 50 kVA	7%	6%	8%
15	HT Industries-I 50kVA to 150 kVA	9%	10%	8%
16	HT Industries-II above 150 kVA	11%	14%	8%
17	Tea, Coffee & Rubber	2%	7%	12%
18	Oil & Coal	97%	8%	172%
19	HT Irrigation Load above 7.5 HP	-3%	-9%	-3%
	HT TOTAL	10%	5%	14%
	Grand Total	14%	15%	19%

The category-wise connected load and CAGR of connected load for the period from FY 2008-09 to FY 2011-12, as submitted by APDCL, are shown in the Tables below:

Table 4.5: Category-wise Connected Load (kW)

Sr. No.	Category	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	LT Category				
1	Jeevan Dhara 0.5 kW and 1kWh/day	34848	168422	217189	294603
2	Domestic A- above 0.5 kW to 5 kW	1275870	1225722	1278855	1426015
3	Domestic-B above 5 kW to 20 kW	116642	149020	160067	208288
4	Commercial Load above 0.5 kW to 20 kW	245330	265055	284511	323142
5	General Load	48013	58450	62726	69713
6	Public Lighting	11289	4373	5205	4666
7	Agriculture up to 7.5 HP	6035	7214	9873	12720
8	Small Industries Rural up to 20 kW	70343	72980	76994	82421
9	Small Industries Urban	44142	39092	37744	37995
	LT TOTAL	1852512	1990327	2133162	2459563
	HT Category				
10	HT Domestic 20 kW and above	24622	36995	39044	29885
11	HT commercial 20 kW and above	104894	118952	136550	156603
12	Public Water Works	26233	33047	33691	31603
13	Bulk Supply 20 kW and above				
13 A	Government Educational Institution	24311	22513	25184	32185
13 B	Others	139785	138385	143733	165504
14	HT Small Industries up to 50 kVA	21126	35098	38938	25107
15	HT Industries-I 50 kVA to 150 kVA	42560	44551	50011	54928
16	HT Industries-II above 150 kVA	256592	230553	279861	327868
17	Tea, Coffee & Rubber	298393	276722	282753	310264
18	Oil & Coal	33916	80485	85732	31906
19	HT Irrigation Load above 7.5 HP	49335	47759	46558	50326
	HT TOTAL	1021787	1065058	1162055	1216180
	Grand Total	2874299	3055385	3295217	3675743

Table 4.6: CAGR of Connected Load

Sr. No.	Category	CAGR (3 years) FY 2011-12 over FY 2008-09	FY 2010-11 over FY2009-10	FY 2011-12 over FY 2010-11
	LT Category			
1	Jeevan Dhara 0.5 kW and 1 kWh/day	34%	29%	36%
2	Domestic A- above 0.5 kW to 5 kW	7%	4%	12%
3	Domestic-B above 5 kW to 20 kW	22%	7%	30%
4	Commercial Load above 0.5 kW to 20 kW	10%	7%	14%
5	General Load	13%	7%	11%
6	Public Lighting	-2%	-3%	7%
7	Agriculture up to 7.5HP	28%	37%	29%
8	Small Industries Rural up to 20 kW	-6%	-22%	10%
9	Small Industries Urban	-5%	-3%	1%
	LT TOTAL	10%	11%	2%
	HT Category			
10	HT Domestic 20 kW and above	11%	6%	-23%
11	HT commercial 20 kW & above	14%	15%	15%
12	Public Water Works	7%	2%	-6%
13	Bulk Supply 20 kW and above			
13 A	Government Educational Institution	11%	12%	28%
13 B	Others	6%	4%	15%
14	HT Small Industries up to 50 kVA	14%	11%	-36%
15	HT Industries-I 50kVA to 150 kVA	9%	12%	10%
16	HT Industries-II above 150 kVA	9%	21%	17%
17	Tea, Coffee & Rubber	2%	2%	10%
18	Oil & Coal	27%	7%	-63%
19	HT Irrigation Load above 7.5 HP	1%	-3%	8%
	HT TOTAL	6%	9%	5%
	Grand Total	9%	8%	12%

Based on the above rate of growth of energy sold, number of consumers and connected load, APDCL has projected the category-wise energy sales for the period from FY 2012-13 to FY 2015-16, as given in the Table below:

Table 4.7: Energy Sales Projected by APDCL (FY 2012-13 and FY 2013-14)

Sr. No.	Category	FY 2012-13			FY 2013-14		
		Sale (MU)	Number of Consumers	Connected Load	Sale (MU)	Number of Consumers	Connected Load
	LT Category						
1	Jeevan Dhara 0.5 kW and 1 kWh/day	300	711779	324063	398	944117	429843
2	Domestic A- above 0.5 kW to 5 kW	1099	1453137	1510456	1156	1528287	1588570
3	Domestic-B above 5 kW to 20 kW	168	34720	249946	207	42823	308281
4	Commercial Load above 0.5 kW to 20 kW	420	178002	336891	438	185575	351225
5	General Load	85	30530	75462	92	33047	81684
6	Public Lighting	11	1076	5226	12	1225	5949
7	Agriculture upto 7.5 HP	9	8525	17527	13	11777	24276
8	Small Industries Rural upto 20 kW	51	7350	86049	53	7673	89837
9	Small Industries Urban	28	3635	37995	28	3702	38690
	LT TOTAL	2171	2428754	2643615	2397	2758226	2918355
	HT Category						
10	HT Domestic 20 kW and above	40	687	32021	40	689	32140
11	HT commercial 20 kW and above	247	2314	177143	280	2618	200378
12	Public Water Works	67	3194	36505	78	3689	42167
13	Bulk Supply 20 kW and above						
13 A	Government Educational Institution	64	267	37196	74	309	42988
13 B	Others	354	930	177119	378	995	189549
14	HT Small Industries upto 50 kVA	21	850	26111	23	903	27743
15	HT Industries-I 50 kVA to 150 kVA	67	846	59871	73	922	65268
16	HT Industries-II above 150 kVA	761	600	364577	847	668	405395
17	Tea, Coffee & Rubber	389	971	310264	396	989	315934
18	Oil & Coal	69	746	34140	121	1302	59613
19	HT Irrigation Load above 7.5 HP	27	902	53580	27	902	53580
	HT TOTAL	2106	12306	1308527	2336	13986	1434754
	Grand Total	4277	2441060	3952142	4733	2772212	4353108

Table 4.8: Energy Sales Projected by APDCL (FY 2014-15 and FY 2015-16)

Sr. No.	Category	FY 2014-15			FY 2015-16		
		Sale (MU)	Number of Consumers	Connected Load	Sale (MU)	Number of Consumers	Connected Load
	LT Category						
1	Jeevan Dhara 0.5 kW and 1 kWh/day	466	1259096	520222	550	1671600	631434
2	Domestic A- above 0.5 kW to 5 kW	1260	1597683	1779198	1386	1821358	1992702
3	Domestic-B above 5 kW to 20 kW	263	52732	370107	336	65022	449489
4	Commercial Load above 0.5 kW to 20 kW	481	193319	374788	529	201518	402383
5	General Load	100	35858	91313	110	38830	101734
6	Public Lighting	14	1406	6603	17	1603	7263
7	Agriculture upto 7.5 HP	16	16043	32098	21	22112	42463
8	Small Industries Rural upto 20 kW	56	8067	94056	59	8432	98728
9	Small Industries Urban	29	3761	39077	30	3828	39468
	LT TOTAL	2685	3167965	3307462	3037	3834303	3765663
	HT Category						
10	HT Domestic 20 kW and above	67	1455	56888	115	1728	101261
11	HT commercial 20 kW and above	333	2968	234442	403	3562	281330
12	Public Water Works	88	4247	47749	98	4903	53000
13	Bulk Supply 20 kW and above						
13 A	Government Educational Institution	89	353	49006	107	408	56847
13 B	Others	394	1081	198231	414	1159	210331
14	HT Small Industries upto 50 kVA	31	958	33356	37	1017	37361
15	HT Industries-I 50 kVA to 150 kVA	84	1008	71142	95	1099	78968
16	HT Industries-II above 150 kVA	934	746	440336	1048	830	506387
17	Tea Coffee & Rubber	440	989	319094	484	1004	323069
18	Oil & Coal	151	2078	89711	179	3577	121581
19	HT Irrigation Load above 7.5 HP	32	902	55187	36	902	56291
	HT TOTAL	2642	16784	1595143	3014	20189	1826426
	All Total	5328	3184749	4902604	6051	3854492	5592089

4.4 DETAILED ANALYSIS OF ENERGY SALES PROJECTED

The category-wise energy sales for the Control Period from FY 2013-14 to FY 2015-16 have been projected based on 3-year Compounded Annual Growth Rate (CAGR) during the period from FY 2009-10 to FY 2012-13, and 4-year Compounded Annual Growth Rate (CAGR) during the period from FY 2008-09 and FY 2012-13, as appropriate. The category-wise energy sales projected by APDCL for the Control Period, as summarised in Table 4.7 and Table 4.8 above, are discussed below.

During the scrutiny of the Petition, APDCL was required to submit the category-wise growth rate considered for estimating energy sales, number of consumers and connected load. APDCL submitted that estimated sales, number of consumers and connected load are calculated based on Compounded Average Growth Rate, which is different from the Compounded Annual Growth Rate considered by the Commission. Further, in response to the Commission's query, APDCL also submitted the details of numbers of category-wise consumers and sales for FY 2012-13 till the month of February 2013, which has been considered by the Commission while projecting the sales for the period from FY 2012-13 to FY 2015-16.

LT CATEGORIES

4.11.1 Jeevan Dhara

APDCL has projected new connections and sales to this category as given below:

Table 4.9: Connections and Energy Sales Projected by APDCL

Sr No.	Particulars	FY 2010-11 (Actual)	FY 2011-12 (Actual)	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1	No. of connections	417681	647072	711779	944117	1259096	1671600
2	Sales (MU)	215	273	300	398	466	550
3	Average sales per connection/month (kWh)	53.53	35.11	35.11	36.40	35.27	31.29

Under Jeevan Dhara category, the consumer is expected to consume not more than 1 kWh/day on an average. However, APDCL has considered more than 30 units per connection per month for projecting the sales during the period from FY 2013-14 to FY 2015-16.

During scrutiny of the Petition, the Commission directed APDCL to submit the details of targeted and actual addition of consumers under RGGVY scheme. However, APDCL submitted that the targeted addition of consumers under RGGVY scheme for the period from FY 2013-14 to FY 2015-16 is yet to be finalized by the Government of Assam and REC, and that the addition under the Jeevan Dhara category of consumers is based on CAGR as well as historical basis.

As part of additional data requirement, APDCL was required to submit details of targeted and actual addition of consumers under RGGVY. In spite of several requests APDCL has not submitted the addition for the future years. Further, APDCL submitted that the targeted addition of consumers under RGGVY for the period from FY 2013-14 to FY 2015-16 is yet to be finalised and addition under the Jeevan Dhara category of consumers is based on CAGR as well as historical addition.

In this context, the target and achievement of RGGVY Works (no. of BPL households) in Assam during FY 2010-11 to FY 2012-13 are as shown below:

Table 4.10: Target vs. Achievement of RGGVY

Year	Targets (BPL Households)	Achievements (BPL Households)
FY 2010-11	660312	368959
FY 2011-12	513996	232060
FY 2012-13	343307	101260

As against the new connections projected by APDCL, the Commission has considered addition of new connections constant at 250000, during each year of the Control Period, which in the Commission's view is a reasonable assumption given the past trend. For arriving at number of connections for FY 2013-14, the Commission has considered addition of 250000 new connections to 877110 number of consumers for FY 2012-13, as submitted by APDCL. The release of new services in any year has to be spread out for all 12 months to assess sales during that year. The Commission has also considered consumption of 30 kWh per month for this category of consumers.

The sales under the 'Jeevan Dhara' consumer category are approved by the Commission as below:

Table 4.11: Jeevan Dhara category Sales approved by the Commission (MU)

Year	Energy Sales (MU)
FY 2013-14	361
FY 2014-15	451
FY 2015-16	541

4.11.2 Domestic – A

APDCL has projected the energy sales to this domestic category at 1156 MU for FY 2013-14, 1260 MU for FY 2014-15, and 1386 MU for FY 2015-16.

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and the 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 6%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 6%, and growth in FY 2011-12 over FY 2010-11 as 12%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 6% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, APDCL has considered the growth rates as 9% and 10%, respectively. From the historical trend in category-wise units sold, the computed 3-year, 2-year, and 1-year CAGR with respect to the provisional sales of FY 2012-13 works out to around 4%, 9% and 5%, respectively.

Accordingly, for FY 2013-14, the Commission has considered an annual growth of 5% over the FY 2012-13 sales. For FY 2014-15 and FY 2015-16 also, the same growth of 5% has been considered over the sales of previous year.

Based on above, the Commission approves the sales for Domestic A category for the Control Period, as shown in the Table below:

Table 4.12: Domestic-A category Sales approved by the Commission (MU)

Year	Energy Sales (MU)
FY 2013-14	1150
FY 2014-15	1207
FY 2015-16	1268

4.11.3 Domestic - B

APDCL has projected the sales for the Domestic - B category for the Control Period as shown in the Table below:

Table 4.13: Energy Sales projected by APDCL for Domestic – B Category (MU)

Year	Energy Sales (MU)
FY 2013-14	207
FY 2014-15	263
FY 2015-16	336

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12, and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 19%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 20%, and growth in FY 2011-12 over FY 2010-11 as 17%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 26% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate by APDCL considered is around 27% and 28%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 works out to 18%.

Hence, the Commission has considered the 3-year CAGR of 18% for projecting the sales to this category during the Control Period.

Based on above, the Commission approves the sales for Domestic-B category for the Control Period, as shown in the following Table:

Table 4.14: Sales for Domestic B category approved by the Commission (MU)

Year	Energy Sales
FY 2013-14	194
FY 2014-15	229
FY 2015-16	271

4.11.4 LT Commercial

APDCL has projected energy sales for LT Commercial category for the Control Period as shown in the Table below:

Table 4.15: Energy Sales projected by APDCL (MU)

Year	Energy sales
FY 2013-14	438
FY 2014-15	481
FY 2015-16	529

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 14%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 12%, and growth in FY 2011-12 over FY 2010-11 as 14%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 4% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 10%. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 is 10%, 9% and 4% respectively. The 3-year CAGR seems reasonable, as the commercial activity will pick up with the growing economy.

Therefore, the Commission has considered a growth rate of 10% for projecting the sales during all years of the Control Period.

Based on above, the Commission approves the sales for the Commercial category for the Control Period, as shown in the following Table:

Table 4.16: Approved Sales for Commercial Category (MU)

Year	Energy sales (MU)
FY 2013-14	463
FY 2014-15	510
FY 2015-16	561

4.11.5 LT General Purpose Supply

APDCL has projected energy sales for the LT General Purpose Supply category for the Control Period as shown in the Table below:

Table 4.17: Sales for General Purpose Supply Category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	92
FY 2014-15	100
FY 2015-16	110

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 11%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 4%, and growth in FY 2011-12 over FY 2010-11 as 19%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 16% over FY 2012-13 sales. Further, for FY 2014-15 and for FY 2015-16, the growth rate considered by APDCL is around 8% and 10%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 is 8%, 10% and 7%, respectively.

Therefore, the Commission has considered the 3-year CAGR of 8% for approving the sales for the Control Period.

Based on above, the Commission approves the sales for LT General Purpose Supply category for the Control Period, as shown in the following Table:

Table 4.18: Approved Sales for LT General Purpose Supply Category (MU)

Year	Energy sales (MU)
FY 2013-14	86
FY 2014-15	93
FY 2015-16	100

4.11.6 Public Lighting

APDCL has projected energy sales for Public Lighting category for the Control Period as shown in the Table below:

Table 4.19: Sales to Public Lighting Category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	12
FY 2014-15	14
FY 2015-16	17

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 15%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 15%, and growth in FY 2011-12 over FY 2010-11 as 8%. For projecting sales for FY 2013-14, APDCL has considered zero growth over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth

rate considered by APDCL is around 15% and 17%, respectively. The computed 3–year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 17%, 18% and 28%, respectively.

Considering the growth in sales under this category in the past few years, the Commission has considered 3- year CAGR of 17% as the growth rate during the entire Control Period.

Based on the above, the Commission approves the sales for Public Lighting category for the Control Period, as shown in the following Table:

Table 4.20: Approved Sales for Public Lighting Category (MU)

Year	Energy sales (MU)
FY 2013-14	14
FY 2014-15	17
FY 2015-16	20

4.11.7 Agriculture (upto 7.5 HP)

APDCL has projected energy sales for the Agriculture category for the Control Period as shown in the Table below:

Table 4.21: Sales to Agriculture Category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	13
FY 2014-15	16
FY 2015-16	21

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 21%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 6%, and growth in FY 2011-12 over FY 2010-11 as 41%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 116% over FY 2012-13 sales. Further, for FY 2014-15 and for FY 2015-16, the growth rate considered by APDCL is around 26% and 29%, respectively. The computed 3–year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 10%, 12% and -12%, respectively.

Accordingly, the Commission has considered the 3-year CAGR of 10%, for projecting the sales over the Control Period, since, it was observed that the actual sales for FY 2010-11 to FY 2012-13 to this category is very low as compared to that approved in the Tariff Order dated 16 May, 2011.

Based on the above, the Commission approves the sales for Agriculture category for the Control Period, as shown in the following Table:

Table 4.22: Approved Sales for Agriculture Category (MU)

Year	Energy sales (MU)
FY 2013-14	6
FY 2014-15	7
FY 2015-16	8

4.11.8 Small Industries - Rural upto 20 kW

APDCL has projected energy sales for Small Industries- Rural up to 20 kW category for the Control Period as shown in the Table below:

Table 4.23: Sales to Small Industries- Rural up to 20 kW Category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	53
FY 2014-15	56
FY 2015-16	59

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 6%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 1%, and growth in FY 2011-12 over FY 2010-11 as 8%. For projecting sales for FY 2013-14, APDCL has considered a growth rate of 12% over FY 2012-13 sales. Further, for FY 2014-15 and for FY 2015-16, the growth rate considered by APDCL is around 5%. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 2%, 3%, and -2%, respectively.

It is further observed that the growth levels are significantly lower than that approved for the last Control Period. Therefore, while approving the sales for the Control Period, the Commission has considered the 3-year CAGR of 2%.

Based on above, the Commission has approved the sales for Small Industries-Rural upto 20kW category for the Control Period, as shown in the following Table:

Table 4.24: Approved Sales for Small Industries- Rural up to 20 kW Category (MU)

Year	Energy sales (MU)
FY 2013-14	49
FY 2014-15	50
FY 2015-16	51

4.11.9 Small Industries – Urban

APDCL has projected energy sales for Small Industries- Urban category for the Control Period as shown in the Table below:

Table 4.25: Sales to Small Industries- Urban Category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	28
FY 2014-15	29
FY 2015-16	30

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 4%, Y-o-Y growth in FY 2010-11 over FY 2009-10 is about 7%, and growth in FY 2011-12 over FY 2010-11 as 3%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 7% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 3%. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 2%, -1%, and -5%, respectively.

It is observed that the year on year growth in the provisionally approved sales for FY 2012-13 over FY 2011-12 shows a declining trend, however, since there are

opportunities for the growth of Industry-Urban in the State, the 3-year CAGR of 2% has been considered for approving the sales for the Control Period.

Based on the above, the Commission approves the sales for Small Industries-Urban category for the Control Period, as shown in the following Table:

Table 4.26: Approved Sales to Small Industries - Urban category (MU)

Year	Energy sales (MU)
FY 2013-14	27
FY 2014-15	27
FY 2015-16	28

4.11.10 Temporary Supply

APDCL has not projected energy sales for Temporary category for the Control Period. However, from the scrutiny of APDCL's subsequent submission, it is observed that temporary connections are present. The provisional sales for Temporary Category comprise of 5 MU viz. 1 MU towards Domestic Category and 4 MU towards Non-Domestic category. For projecting sales for the Control Period, the Commission considers appropriate to add provisional sales of FY 2012-13 of temporary category.

Based on the above, the Commission approves the sales for temporary supply for the Control Period, as shown in the following Table:

Table 4.27: Approved Sales to Temporary Category

Year	Energy sales (MU)
FY 2013-14	5
FY 2014-15	5
FY 2015-16	5

HT CATEGORIES

4.11.11 HT Domestic (25 kVA and above)

APDCL has projected energy sales for HT Domestic (25 kVA and above) category for the Control Period as shown in the Table below:

Table 4.28: Sales to HT Domestic (25 kVA and above) category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	40
FY 2014-15	67
FY 2015-16	115

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 8%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as -8%, and growth in FY 2011-12 over FY 2010-11 as 39%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 10% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 70%. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 8%, 17% and -2%, respectively.

In view of the past trend, the Commission has considered the 3-year CAGR of 8% for approving the sales for the Control Period.

Based on above, the Commission approves the sales for HT Domestic (25 kVA and above) category, for the Control Period, as shown in the following Table:

Table 4.29: Approved Sales to HT Domestic (25 kVA and above) category (MU)

Year	Energy sales (MU)
FY 2013-14	39
FY 2014-15	42
FY 2015-16	46

4.11.12 HT Commercial (25 kVA and above)

APDCL has projected energy sales for HT Commercial (25 kVA and above) category for the Control Period as shown in the Table below:

Table 4.30: Sales to HT Commercial (25 kVA and above) category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	280
FY 2014-15	333
FY 2015-16	403

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 13%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 9%, and growth in FY 2011-12 over FY 2010-11 as 21%. For projecting sales for FY 2013-14, APDCL has considered growth rate of 23% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 19% and 21%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 11%, 12% and 4%, respectively. In view of the past trend, the Commission has considered the 3-year CAGR of 11%, while approving the sales for the Control Period.

Based on above, the Commission approves the sales for HT Commercial (25 kVA and above) category, for the Control Period, as shown in the following Table:

Table 4.31: Approved Sales to HT Commercial (25 kVA and above) category (MU)

Year	Energy sales (MU)
FY 2013-14	253
FY 2014-15	281
FY 2015-16	312

4.11.13 Public Water Works

APDCL has projected energy sales for Public Water works category for the Control Period as shown in the Table below:

Table 4.32: Sales to Public Water Works category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	78
FY 2014-15	88
FY 2015-16	98

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 8%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 13%, and growth in FY 2011-12 over FY 2010-11 as -6%. For projecting sales for FY 2013-14, APDCL has considered a

growth rate of 24% over FY 2012-13 sales. Further, for FY 2014-15 and for FY 2015-16, the growth rate considered by APDCL is around 14% and 11%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 5%, 1% and 9%, respectively.

The Commission considers it appropriate to consider the 3-year CAGR of 5% while approving the sales for the Control Period.

Based on the above, the Commission approves the sales for Public Water Works category for the Control Period, as shown in the following Table:

Table 4.33: Approved Sales to Public Water Works category (MU)

Year	Energy sales (MU)
FY 2013-14	66
FY 2014-15	69
FY 2015-16	73

4.11.14 Bulk Supply (25 kVA and above)

a) Government Educational Institutions

APDCL has projected energy sales for Government Educational Institutions category for the Control Period as shown in the Table below:

Table 4.34: Sales to Government Educational Institutions category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	74
FY 2014-15	89
FY 2015-16	107

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 10%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as -1%, and growth in FY 2011-12 over FY 2010-11 as 24%. For projecting sales for FY 2013-14, APDCL has considered the growth rate of 27% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 21% and 20%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 9%, 14% and 5%, respectively.

In view of the past trend, the Commission has considered the 3-year CAGR of 9% while approving sales during the Control Period..

Based on the above, the Commission approves sales for Government Educational Institutions category for the Control Period, as shown in the following Table:

Table 4.35: Approved Sales to Government Educational Institutions category (MU)

Year	Energy sales (MU)
FY 2013-14	63
FY 2014-15	69
FY 2015-16	73

b) Bulk Supply (25 kVA and above-others)

APDCL has projected energy sales for Bulk Supply (25 kVA and above-others) category for the Control Period as shown in the Table below:

Table 4.36: Sales to Bulk Supply (25 kVA and above-others) category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	378
FY 2014-15	394
FY 2015-16	414

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 4%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 3%, and growth in FY 2011-12 over FY 2010-11 as 11%. For projecting sales for FY 2013-14, APDCL has considered a growth rate of 16% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 4% and 5%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 4%, 5% and -1%, respectively. From the past trend it is evident that the high growth has not sustained.

Accordingly, the Commission considers it appropriate to consider the 3-year CAGR of 4% while approving the sales for the Control Period.

Based on the above, the Commission approves sales for Bulk Supply (25 kVA and above-others) category, for the Control Period, as shown in the following Table:

Table 4.37: Approved Sales to Bulk Supply (25 kVA and above-others) category (MU)

Year	Energy sales (MU)
FY 2013-14	340
FY 2014-15	354
FY 2015-16	368

4.11.15 HT Small Industries – Upto 50 kVA

APDCL has projected energy sales for HT Small Industries (upto 50kVA) category for the Control Period as shown in the Table below:

Table 4.38: Sales to HT Small Industries upto 50kVA category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	23
FY 2014-15	31
FY 2015-16	37

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 18%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 22%, and growth in FY 2011-12 over FY 2010-11 as -64%. For projecting sales for FY 2013-14, APDCL has considered a zero growth rate over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 35% and 20%, respectively. The computed 4-year, 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 4%, -18%, -34% and 13%, respectively.

There is a significant dip in the actual sales in FY 2011-12 and the provisionally approved sales for FY 2012-13 over the actual sales of FY 2010-11, whereas, the year on year growth of sales in FY 2012-13 over FY 2011-12 is 13%, hence, it would be prudent to consider a growth rate of 4% equivalent to 4 year CAGR over the

period from FY 2008-09 to FY 2012-13, as the growth rate while approving the sales for the Control Period.

Based on above, the Commission approves sales for HT Small Industries upto 50 kVA category, for the Control Period, as shown in the following Table:

Table 4.39: Approved Sales to HT Small Industries upto 50 kVA category (MU)

Year	Energy sales (MU)
FY 2013-14	24
FY 2014-15	25
FY 2015-16	26

4.11.16

4.11.17 HT Industries-I (50 kVA to 150 kVA)

APDCL has projected energy sales for HT Industries-I (50 kVA to 150 kVA) category for the Control Period as shown in the Table below:

Table 4.40: Sales to HT Industries-I (50 kVA to 150 kVA) category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	73
FY 2014-15	84
FY 2015-16	95

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 11%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 40%, and growth in FY 2011-12 over FY 2010-11 as -13%. For projecting the sales for FY 2013-14, APDCL has considered a growth rate of 33% over FY 2012-13 sales. Further, for FY 2014-1 and FY 2015-16, the growth rate considered by APDCL is around 15% and 13%, respectively. The computed 4-year, 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 4%, 3%, -12% and -11%, respectively.

While computing the growth rate for HT Industries-I (50 kVA to 150 kVA) category, the Commission has considered the provisional sales of FY 2012-13 and accordingly, has computed the 3-year CAGR for the sales consumption from FY 2009-10 to FY 2012-13, which works out to 3%.

Though, the actual sales in FY 2010-11 and for FY 2011-12 have been higher than that approved in the previous Tariff Order, however, the growth rate from FY 2010-11 to FY 2012-13 is showing a declining trend. Therefore, it would be prudent to consider growth rate of 4% equivalent to 4 year CAGR from FY 2008-09 to FY 2012-13 during the Control Period.

Based on the above, the Commission approves sales for HT Industries-I (50 kVA to 150 kVA) category for the Control Period, as shown in the following Table:

Table 4.41: Approved Sales to HT Industries-I (50 kVA to 150 kVA) category (MU)

Year	Energy sales (MU)
FY 2013-14	57
FY 2014-15	59
FY 2015-16	62

4.11.18 HT Industries-II (above 150 kVA)

APDCL has projected energy sales for HT Industries-II (above 150 kVA) category for the Control Period as shown in the Table below:

Table 4.42: Sales to HT Industries-II (above 150 kVA) category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	847
FY 2014-15	934
FY 2015-16	1048

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 13%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 14%, and growth in FY 2011-12 over FY 2010-11 as 24%. For projecting sales for FY 2013-14, APDCL has considered the growth rate of 10% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 10% and 12%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 17%, 18%, and 12% respectively.

The Commission has considered the 3-year CAGR of 17% for approving the sales during the Control Period.

Based on the above, the Commission approves sales for HT Industries-II (above 150 kVA) category for the Control Period, as shown in the following Table:

Table 4.43: Approved Sales to HT Industries-II (above 150 kVA) category (MU)

Year	Energy sales (MU)
FY 2013-14	902
FY 2014-15	1055
FY 2015-16	1234

4.11.19 Tea, Coffee and Rubber

APDCL has projected energy sales for Tea, Coffee and Rubber category for the Control Period as shown in the Table below:

Table 4.44: Sales to Tea, Coffee and Rubber category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	396
FY 2014-15	440
FY 2015-16	484

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 4%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as -13%, and growth in FY 2011-12 over FY 2010-11 as 9%. For projecting sales for FY 2013-14, APDCL has considered the growth rate of 2% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 11% and 10%, respectively. The computed 4-year, 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 2%, -2%, 5%, and -1%, respectively.

It is observed that the growth of 7% approved in the last Control Period has not been sustained and the actual sales have been lower than the approved sales. Though, the 3-year CAGR is -2%, however, 2-year CAGR from FY 2010-11 to 2012-13 has

again increased to 5%. Therefore, it is reasonable to consider a growth of 2% equivalent to 4-year CAGR during the Control Period.

Based on the above, the Commission approves sales for Tea, Coffee and Rubber category for the Control Period, as shown in the following Table:

Table 4.45: Approved Sales to Tea, Coffee and Rubber category (MU)

Year	Energy sales (MU)
FY 2013-14	398
FY 2014-15	406
FY 2015-16	414

4.11.20 Oil and Coal

APDCL has projected energy sales for Oil and Coal category for the Control Period as shown in the Table below:

Table 4.46: Sales to Oil and Coal category as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	121
FY 2014-15	151
FY 2015-16	179

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 2%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 23%, and growth in FY 2011-12 over FY 2010-11 as -34%. For projecting sales for FY 2013-14, APDCL has considered the growth rate of 61% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered by APDCL is around 25% and 19%, respectively. The computed 4-year, 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 2%, -2%, -13%, and 31%, respectively.

In view of the past trend, it is reasonable to consider the growth level of 2% equivalent to 4-year CAGR during the entire Control Period.

Based on the above, the Commission approves sales for Oil and Coal category for the Control Period, as shown in the following Table:

Table 4.47: Approved Sales to Oil and Coal category (MU)

Year	Energy sales (MU)
FY 2013-14	77
FY 2014-15	78
FY 2015-16	80

4.11.21 HT Irrigation (above 7.5 HP)

APDCL has projected energy sales for HT Irrigation (above 7.5 HP) category for the Control Period as shown in the Table below:

Table 4.48: Sales to HT Irrigation (above 7.5 HP) as projected by APDCL (MU)

Year	Energy sales (MU)
FY 2013-14	27
FY 2014-15	32
FY 2015-16	36

APDCL has submitted the sales during the period from FY 2008-09 to FY 2011-12 and 3-year CAGR for the period from FY 2008-09 to FY 2011-12 as 7%, Y-o-Y growth in FY 2010-11 over FY 2009-10 as 7%, and growth in FY 2011-12 over FY 2010-11 as 3%. For projecting sales for FY 2013-14, APDCL has considered the growth rate of -6% over FY 2012-13 sales. Further, for FY 2014-15 and FY 2015-16, the growth rate considered is around 18% and 14%, respectively. The computed 3-year, 2-year and 1-year CAGR with respect to the provisional sales of FY 2012-13 are 5%, 4%, and 13%, respectively. In view of the past trend, it is reasonable to consider the 3-year CAGR of 5% during the entire Control Period.

Based on the above, the Commission approves sales for HT Irrigation (above 7.5 HP) category for the Control Period, as shown in the following Table:

Table 4.49: Approved Sales to HT Irrigation (above 7.5 HP) category (MU)

Year	Energy sales (MU)
FY 2013-14	30
FY 2014-15	31
FY 2015-16	33

4.5 TOTAL ENERGY SALES

Total energy sales as projected by APDCL and approved by the Commission during the Control Period is given in the following Table:

Table 4.50: Total Energy Sales for FY 2013-14 to FY 2015-16 (MU)

Sr. No.	Category	Energy Sales projected by APDCL			Energy Sales approved by the Commission		
		FY 2013-14	FY 2014-15	FY 2015-16	FY 2013-14	FY 2014-15	FY 2015-16
	LT Category						
1	Jeevan Dhara 0.5 kW and 1kWh/day	398	466	550	361	451	541
2	Domestic A- above 0.5 kW to 5 kW	1156	1260	1386	1150	1207	1268
3	Domestic-B above 5 kW to 20 kW	207	263	336	194	229	271
4	Commercial Load above 0.5 kW to 20 kW	438	481	529	463	510	561
5	General Purpose Supply	92	100	110	86	93	100
6	Public Lighting	12	14	17	14	17	20
7	Agriculture upto 7.5HP	13	16	21	6	7	8
8	Small Industries Rural upto 20 kW	53	56	59	49	50	51
9	Small Industries Urban	28	29	30	27	27	28
10	Temporary Supply				5	5	5
	LT TOTAL	2397	2685	3037	2356	2596	2851
	HT Category						
11	HT Domestic 25 kVA and above	40	67	115	39	42	46
12	HT commercial 25 kVA & above	280	333	403	253	281	312
13	Public Water Works	78	88	98	66	69	73
14	Bulk Supply 25 kVA and above						
14 A	Government Educational Institutions	74	89	107	63	69	75
14 B	Others	378	394	414	340	354	368
15	HT Small Industries upto 50 kVA	23	31	37	24	25	26
16	HT Industries-I 50kVA to 150 kVA	73	84	95	57	59	62
17	HT Industries-II above 150 kVA	847	934	1048	902	1055	1234
18	Tea, Coffee & Rubber	396	440	484	398	406	414
19	Oil & Coal	121	151	179	77	78	80
20	HT Irrigation Load above 7.5 HP	27	32	36	30	31	33
	HT TOTAL	2337	2643	3014	2249	2470	2722
	Grand Total	4734	5328	6051	4605	5066	5574

4.6 DISTRIBUTION LOSSES

APDCL submitted that it has achieved a significant reduction in distribution losses during the recent years and that these efforts shall continue and will be enhanced. APDCL submitted that loss reduction is a slow process and it becomes increasingly difficult as the loss levels come down. APDCL submitted that it has not been able to achieve the loss reduction targets for FY 2012-13 as approved by the Commission vide Tariff Order dated 16 May, 2012. The projected distribution loss for the period from FY 2013-14 to FY 2015-16, as submitted by APDCL, is shown in the Table below:

Table 4.51: Distribution Losses Projected by APDCL for FY 2013-14 to FY 2015-16

Sr. No.	Distribution Loss	FY 2012-13 (Actual)	FY 2013-14	FY 2014-15	FY 2015-16
1	LT Lines	16.80%	16.00%	15.80%	15.65%
2	DTRs	3.53%	3.00%	2.78%	2.60%
3	11 kV Lines	7.52%	7.00%	6.90%	6.75%
4	PTR	3.40%	2.50%	2.40%	2.30%
5	33 kV Lines	6.55%	6.00%	5.86%	5.72%
6	Total	25.21%	23.00%	22.50%	22.00%

Commission's view

During the scrutiny of the Petition, the Commission directed APDCL to justify the proposed distribution loss for the period from FY 2013-14 to FY 2015-16 along with the proposed loss reduction trajectory of 0.5% per annum during the Control Period and to submit a note on loss reduction measures. APDCL submitted that due to various ongoing loss reduction measures, the expected distribution loss for FY 2013-14 may come down to 23%. However, the Commission is of the opinion that the justification provided by APDCL is insufficient to substantiate the trajectory proposed. For the purpose of determination of ARR and tariff, the Commission has considered the distribution losses for FY 2012-13 as approved in the Order for FY 2012-13.

Though the Abraham Committee in its Report on R-APDRP has recommended an ATC loss reduction trajectory of 2.0% per annum for losses between 20% to 30% and 1.0% per annum where the losses are lower than 20%, in view of the practicality of achieving the targets and the fact that the Commission has stipulated distribution loss reduction trajectory rather than AT&C loss reduction trajectory, **the**

Commission has stipulated the loss reduction of 1.0% per annum for the period from FY 2012-13 to FY 2013-14 and 0.5% per annum for the period from FY 2013-14 to FY 2015-16. Accordingly, the Commission approves the loss trajectory for the Control Period as below:

Table 4.52: Approved Distribution Loss Trajectory

Year	Distribution Loss (%)
FY 2012-13	19.60%
FY 2013-14	18.60%
FY 2014-15	18.10%
FY 2015-16	17.60%

ADPCL shall make efforts to reduce the distribution losses to the level approved by the Commission, with particular focus on reducing the non-technical loss.

4.7 ENERGY REQUIREMENT

The total energy requirement of the distribution licensee to meet the total energy demand is the sum of approved energy sales and the system losses (distribution losses) approved by the Commission. **The approved energy sales, distribution losses, and approved energy requirement for the Control Period (FY 2013-14 to FY 2015-16) is given in the following Table:**

Table 4.53: Approved Energy Requirement for the Control Period (MU)

Sr. No.	Particulars	As projected by APDCL			As approved by the Commission		
		FY 2013-14	FY 2014-15	FY 2015-16	FY 2013-14	FY 2014-15	FY 2015-16
1	Approved energy sales	4733	5328	6051	4605	5066	5574
2	Distribution loss (%)	1414	1547	1707	1052	1120	1190
		23.00%	22.50%	22.00%	18.60%	18.10%	17.60%
3	Energy input required to the distribution system	6148	6875	7758	5657	6186	6764

4.8 ENERGY BALANCE

APDCL submitted that the energy requirement will be met by supply from APGCL, CSGS, IPPs, and other sources. The Energy Balance for the period from FY 2013-14 to FY 2015-16, as projected by APDCL, is shown in the following Table:

Table 4.54: Energy Balance for FY 2013-14 to FY 2015-16 as projected by APDCL (MU)

Particulars	FY2012-13 (Actual)	FY 2013-14	FY 2014-15	FY 2015-16
Energy Sale (MU)	4277	4733	5328	6051
Distribution Loss (MU)	1319	1414	1547	1707
Distribution Loss (%)	23.57%	23.00%	22.50%	22.00%
Energy Requirement	5596	6148	6875	7758
Transmission Loss (MU)	230	253	283	319
Transmission Loss (%)	3.95%	3.95%	3.95%	3.95%
Total Energy at input of AEGCL (MU)	5826	6400	7158	8077
Pooled Loss of PGCIL (MU)	197	216	240	237
Pooled Loss of PGCIL (%)	3.27%	3.27%	3.24%	2.85%
Total Energy Requirement	6023	6616	7397	8314

Commission's Views

While working out the energy balance, the Commission has considered the transmission loss as approved in the MYT Order dated November 21, 2013 for AEGCL for the period from FY 2013-14 to FY 2015-16, and the pooled inter-State loss of PGCIL (Regional power loss) have been considered on the power sourced from outside the State (except MeSEB) as determined by the RLDC/Power Committee of North Eastern Region for FY 2012-13. The energy balance has been worked out in accordance with energy sales and distribution losses approved by the Commission in Table 4.50 and Table 4.52, respectively. **The energy balance approved by the Commission is shown in the table below:**

Table 4.55: Energy Balance approved by the Commission (MU)

Sr. No	Particulars	Unit	FY 2013-14	FY 2014-15	FY 2015-16
1	Energy sales	MU	4605	5066	5574
2	Distribution loss	MU	1052	1120	1190
		%	18.60%	18.10%	17.60%
3	Energy requirement	MU	5657	6186	6764
4	Intra-State (AEGCL)	MU	241	247	256
	Transmission loss	%	4.08%	3.84%	3.64%
5	Energy input to transmission system	MU	5898	6433	7020
6	Inter-State (PGCIL) pooled loss	MU	165	176	189
		%	3.87%	3.87%	3.87%
	Total Energy Requirement	MU	6063	6609	7209

Note: The PGCIL pooled losses have been considered only on the energy procured from outside the State (except MeSEB)

4.9 ENERGY AVAILABILITY TO APDCL

APDCL submitted that it has been allocated power from the following sources:

- (i) All existing and proposed generators under APGCL are fully allocated to APDCL.
- (ii) Capacity of Central Sector Generating Stations is allocated as per the allocation from the Government of India.

APDCL further submitted that out of the total allocated capacity, some of the stations have not been commissioned yet but are expected to start operations during the period from FY 2013-14 to FY 2015-16.

APDCL submitted that in order to minimize the power purchase cost, it has worked out comprehensive Merit Order Dispatch (MOD) on similar lines as given in previous Tariff Order from the dispatch available based on its PPA with allocated generating stations. APDCL submitted that Non-conventional Energy (NCE) power plants proposed to be commissioned during the period and hydro power plants have been considered as must-run power plants and so they have been excluded from merit order calculations. APDCL submitted that the dispatch from individual generating

stations has been worked out based on the merit order of the variable cost of each generating unit.

APDCL, vide its letter dated May 21, 2013, submitted the power purchase quantum along with cost considering the NCE sources, viz., Solar, Small Hydro, and Biomass.

4.10 POWER PURCHASE

4.10.1 Approach for Calculation of Power Purchase Cost

APDCL submitted that on the basis of the gross energy requirement computed above, the purchase of units from each existing generating station as well as from those proposed to be commissioned under different agencies having contract with APDCL, has been arrived at by preparing a Merit Order for each year. APDCL submitted that the fixed cost for APGCL has been taken as projected by APGCL in its MYT Petition before the Commission for the period from FY 2013-14 to FY 2015-16, while the variable cost has been considered as per prevailing fuel cost for FY 2012-13. APDCL submitted that for IPPs and Central Sector generating stations, fixed cost and variable cost have been considered as per available Tariff Orders of respective Electricity Regulatory Commissions (ERCs). APDCL submitted that for ongoing projects, the latest available estimates have been considered for estimation of power purchase.

4.10.2 Power Purchase cost for the period from FY 2013-14 to 2015-16

Based on the allocated capacities and the merit order stack as described above, the station-wise power purchase quantum and costs for the period from FY 2012-13 to FY 2015-16 as submitted by APDCL, is shown in the Table below:

Table 4.56: Power Purchase Cost and Quantum for FY 2012-13 and FY 2013-14 as projected by APDCL

Sr. No.	Agency/ Source	FY2012-13			FY2013-14		
		Quantum (MU)	Total Charge (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Total Charge (Rs. Crore)	Rate (Rs./ kWh)
1	APGCL (Provisional)	1709.65	477.5	2.79	1740.72	677.19	3.89
2	NEEPCO (Hydro)						

Sr. No.	Agency/ Source	FY2012-13			FY2013-14		
		Quantum (MU)	Total Charge (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Total Charge (Rs. Crore)	Rate (Rs./ kWh)
	KOPII I	311.7	53.72	1.72	441.91	50.03	1.13
	KOPII II	44.94	6.31	1.4	39.36	7.27	1.85
	KHANDONG	78.83	10.49	1.33	108.92	29.55	2.71
	RHEP	498.53	159.59	3.2	455.89	134.32	2.95
	DHEP	80.47	69.93	8.69	80.66	35.23	4.37
3	NEEPCO (TH)						
	AGBPP	935.4	309.44	3.31	883.42	322.9	3.66
	AGTPP	292.71	99.02	3.38	265.76	97.12	3.65
5	NHPC Existing, Lg HEP	153.09	38.03	2.48	131.91	32	2.43
6	NTPC (Existing)						
	FARAKKA	242.86	114.63	4.72	242.86	113.24	4.66
	KAHELGAON-I	102.38	41.72	4.08	102.38	42.13	4.12
	KAHELGAON-II	445.76	187.86	4.21	445.76	189.75	4.26
	TALCHER	134.8	37.21	2.76	134.8	37.81	2.8
7	NTPC (New) BTPs				136.11	57.11	4.20
8	RE Sources						
	Solar (NVVN/NTPC + Oth)	23.72	7.57	3.19	7.52	7.52	10.00
	Small Hydro				337.10	107.49	3.19
	Biomass				8.50	4.42	5.20
	BANSKANDI (SIPP)	52.05	13.5	2.59	52.05	13.74	2.64
9	MeSEB	18.03	7.27	4.03	18.03	7.27	4.03
10	IOCL (AOD)	8.5	2.97	3.49	8.5	2.97	3.49
11	Trading Purchases	695.75	170.18	2.45	0	0	0
12	OTPC	156.04	41.66	2.67	973.74	241.54	2.68
	Total	5985.19	1848.54	3.09	6615.88	2210.59	3.34
	UI Pool	38.77	19.85	5.12			
	AEGCL Charges (Provisional)		439.67			509.67	
	Total	6023.96	2308.06	3.83	6615.88	2720.26	4.11

**Table 4.57: Power Purchase Cost and Quantum for FY 2014-15 and FY 2015-16
as projected by APDCL**

Sr. No.	Agency/ Source	FY 2014-15			FY 2015-16		
		Quantum (MU)	Total Charge (Rs. Crore)	Rate (Rs./ kWh)	Quantum (MU)	Total Charge (Rs. Crore)	Rate (Rs./k Wh)
1	APGCL (Provisional)	1907.2	732.74	3.84	2495.57	894.13	3.58
2	NEEPCO (Hydro)						
	KOPILI I	383.41	50.03	1.3	475.6	50.03	1.05
	KOPILI II	39.36	7.27	1.85	39.36	7.27	1.85
	KHANDONG	108.92	29.55	2.71	122.53	29.55	2.41
	RHEP	455.89	134.32	2.95	512.87	134.32	2.62
	DHEP	80.66	35.23	4.37	80.66	35.23	4.37
4	NEEPCO (TH)						
	AGBPP	883.42	322.9	3.66	883.42	322.9	3.66
	AGTPP	265.76	97.12	3.65	265.76	97.12	3.65
5	NHPC Existing, Lg HEP	131.91	32	2.43	131.91	32	2.43
6	NTPC (Existing)						
	FARAKKA	67.66	31.55	4.66	87.11	40.51	4.65
	KAHELGAON-I	102.38	42.13	4.12	102.38	42.13	4.12
	KAHELGAON-II	133.73	56.92	4.26	133.73	56.92	4.26
	TALCHER	134.8	37.81	2.8	134.8	37.81	2.8
7	NTPC (New) BTPs	857.09	376.54	4.39	994.72	433.86	4.36
8	RE Sources						
	Solar (NVVN/NTPC + Oth)	16.64	16.64	10.0	25.03	25.03	10.00
	Small Hydro	474.67	4.62	5.43	653.81	208.52	3.19
	Biomass	8.50	4.62	5.43	8.50	4.73	5.57
	BANSKANDI (SIPP)	52.05	13.47	2.64	52.05	13.74	2.64
9	MeSEB	18.03	7.27	4.03	18.03	7.27	4.03
10	IOCL (AOD)	8.5	2.97	3.49	8.5	2.97	3.49
11	Trading Purchases	0	0	0	0	0	0
12	OTPC	1266.48	312.35	2.68	1087.32	293.05	2.86
	Total	7397.03	2495.07	3.37	8313.66	2769.1	3.33
	UI Pool						
	AEGCL Charges (Provisional)		529.57			559.67	
	Total	7397.03	3024.74	4.09	8313.66	3328.77	4.00

4.10.3 Transmission Charges

APDCL submitted that the Transmission Charges payable to AEGCL including PGCIL Charges have been calculated as per the charges projected by AEGCL in its MYT Petition for the period from FY 2013-14 to FY 2015-16. The Transmission Charges payable to AEGCL (including PGCIL Charges) as submitted by APDCL are given in the Table below:

Table 4.58: Transmission Charges for the Control Period as projected by APDCL (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
AEGCL Charges (Provisional)	509.67	529.67	559.67

4.10.4 SLDC Charges

APDCL submitted that the Commission has directed AEGCL to file separate ARR for State Load Despatch Centre (SLDC), as per Regulation No. 5 of 2006 of AERC and accordingly, AEGCL has included the SLDC charges along with Transmission ARR in its Petition. Accordingly, SLDC Charges are included in the AEGCL Charges shown above.

4.10.5 Commission's Analysis and Decision

Availability

The net generation by APGCL approved by the Commission in the MYT Order for APGCL for the Control Period from FY 2013-14 to FY 2015-16 is as given below:

Table 4.59: APGCL Generation approved by the Commission

Sr. No.	Name of the Station	FY 2013-14	FY 2014-15	FY 2015-16
1	Namrup TPS	499.86	209.15	209.72
2	Lakwa TPS with WHRU	808.26	726.01	432.46
3	Namrup replacement with WHRU	-	383.39	384.44
4	NRPP WHRU	-	104.36	209.87
5	Lakwa replacement	-	-	401.75
6	Karbi Langpi HEP	388.05	388.05	389.11
7	Lungnit SHEP	-	6.61	26.60

Sr. No.	Name of the Station	FY 2013-14	FY 2014-15	FY 2015-16
8	Myntriang SHEP	17.60	59.24	66.85
	Total	1713.76	1876.82	2120.81

In order to ascertain the availability of the energy individually from each station, the availability as filed by APDCL has been compared with the availability computed on the basis of past 3 years performance of the Generating Stations. Further, while going through the Station-wise energy availability projected by APDCL for the Control Period, the Commission observed that the energy availability from NTPC Farakka-III has not been considered, though some energy from Farakka-III has been allocated to Assam. The Commission has considered the energy availability from Farakka-III also, as per the allocation.

APDCL submitted that the first Unit of NTPC BTPS generating station is likely to be commissioned on 31 March, 2014. However, as the approved energy requirement is being met from the existing generating stations, the Commission has not considered energy availability from this station.

The energy balance for FY 2013-14 to FY 2015-16 approved by the Commission is given below:

Table 4.60: Approved Energy Balance

Sr. No	Particulars	Unit	FY 2013-14	FY 2014-15	FY 2015-16
A	Energy Requirement				
1	Energy sales	MU	4605	5066	5574
2	Distribution loss	MU	1052	1120	1190
		%	18.60%	18.10%	17.60%
3	Energy requirement	MU	5657	6186	6764
4	Intra-State (AEGCL)	MU	241	247	256
	Transmission loss	%	4.08%	3.84%	3.64%
5	Energy input to transmission system	MU	5898	6433	7020
6	Inter-State (PGCIL) pooled loss	MU	165	176	189
		%	3.87%	3.87%	3.87%

Sr. No	Particulars	Unit	FY 2013-14	FY 2014-15	FY 2015-16
7	Total Energy Requirement	MU	6063	6609	7209
B	Energy Available				
	(a) APGCL	MU	1713.76	1876.82	2120.81
	(b) CSGS	MU	3564.73	4421.82	4559.45
	(c) RE	MU	70.30	100.03	130.13
	(d) MeSEB	MU	18.03	18.03	18.03
	(e) Banskandi	MU	52.05	52.05	52.05
	(f) IOCL	MU	8.5	8.50	8.5
	(g) OTPC	MU	345.58	132.18	319.53
	Purchase from bilateral sources/traders/Exchange	MU	290		
	Total				
	Total Energy Requirement	MU	6063	6609	7209
	Surplus Energy available		0	0	0

Note: 1. The PGCIL pool losses have been considered only on the energy procured from outside the State (except MeSEB).

2. Any shortfall in the energy availability from OTPC can be met through purchases from bilateral sources/traders/Power Exchanges, depending on the lowest rate at which power is available

Power Purchase Cost

The Commission in its various communications directed APDCL to submit the detailed breakup of power purchase cost. However, the replies submitted by APDCL were incomplete and lacked consistency, thereby making it difficult for the Commission to analyse the power purchase cost.

APGCL Stations

The tariff approved by the Commission for APGCL's Stations in the MYT Order dated November 21, 2013 for APGCL have been considered for approving the cost of power purchase from APGCL for the Control Period from FY 2013-14 to FY 2015-16.

Central Generating Stations - Thermal

The power purchase cost has two elements, i.e., fixed cost and variable cost. APDCL, in reply to the Commission's query, submitted that the allocation of power from the NTPC Stations are from the unallocated quantum and keeps on varying.

APDCL also submitted that instead of considering the Annual Fixed Cost, the cost has been estimated on historical basis.

For the purpose of fixed cost determination of individual stations, the Commission has considered latest available Tariff Orders issued by CERC. Further, the Commission has considered latest share allocation. However, to determine the energy cost for FY 2013-14, the Commission has considered variable cost as charged by CGS Stations in their latest bills, as submitted by APDCL.

For FY 2014-15 and FY 2015-16, the annual fixed charges and energy charges have been kept constant at FY 2013-14 levels, for the purpose of approving the power purchase expense.

Central Generating Stations - Hydel

For computation of cost of power purchase from Hydel Stations, the Commission has considered latest available Tariff Orders issued by CERC for individual stations. Fixed cost recovery has been considered as per recovery of fixed charges Regulations specified in CERC (Terms and Conditions of Tariff) Regulations, 2009.

Purchase from bilateral sources/traders/Power Exchanges

Due to uncertainty in energy availability from OTPC, the Commission has provisionally considered procurement from bilateral sources/traders/Power Exchanges at the rate of Rs. 2.45/kWh, which is the average rate of power purchase from such sources in FY 2012-13.

Renewable Energy (RE) Sources

The minimum purchase requirement by APDCL from RE energy sources is approved as per relevant Regulations.

The power purchase cost thus, approved for the period from FY 2013-14 to FY 2015-16, is given in the Table below:

Table 4.61: Approved Power Purchase Cost for FY 2013-14 to FY 2015-16

Sr. No.	Agency/Source	FY 2013-14			FY 2014-15		
		Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)
1	APGCL	1713.76	495.11	2.89	1876.82	477.64	2.54
2	NEEPCO (Hydro)						
	KOPII I	441.91	47.71	1.08	441.91	47.71	1.08
	KOPII II	46.70	6.97	1.49	46.70	6.97	1.49
	KHANDONG	108.92	32.31	2.97	108.92	32.31	2.97
	RHEP	517.68	145.43	2.81	517.68	145.43	2.81
	DHEP	100.97	40.03	3.96	100.97	40.03	3.96
3	NEEPCO (TH)						
	AGBPP	963.29	301.19	3.13	963.29	301.19	3.13
	AGTPP	292.26	60.38	2.07	292.26	60.38	2.07
4	NHPC Existing – Lg HEP	166.85	35.86	2.15	166.85	35.86	2.15
5	NTPC (Existing)						
	FARAKKA	166.04	47.64	2.87	166.04	47.64	2.87
	KAHELGAON-I	82.21	23.61	2.87	82.21	23.61	2.87
	KAHELGAON-II	426.37	147.53	3.46	426.37	147.53	3.46
	TALCHER	128.59	27.86	2.17	128.59	27.86	2.17
	FARAKKA-III	122.95	44.76	3.64	122.95	44.76	3.64
6	NTPC (New) BTPS	0	0	0	857.09	376.26	4.39
7	RE Sources						
	Solar (NVVN/NTPC + Oth)	12.13	12.13	10.00	16.53	16.53	10.00
	Small Hydro	50.00	15.95	3.19	75.00	23.93	3.19
	Biomass	8.50	4.42	5.20	8.50	4.62	5.43
8	BANSKANDI (SIPP)	52.05	13.74	2.64	52.05	13.74	2.64
9	MeSEB	18.03	7.27	4.03	18.03	7.27	4.03
10	IOCL (AOD)	8.5	2.97	3.49	8.5	2.97	3.49
11	OTPC	345.58	92.27	2.67	132.18	35.42	2.68
12	Purchase from	290	71.05	2.45	0	0	0

Sr. No.	Agency/Source	FY 2013-14			FY 2014-15		
		Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)	Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)
	bilateral sources/Traders/ Power Exchanges						
	Total	6063.28	1676.16	2.77	6609.44	1918.91	2.90
	UI Pool						
	AEGCL Charges		456.03			495.66	
	SLDC Charges		2.07			2.12	
	Total		2134.26			2416.69	

Sr. No.	Agency/ Source	FY 2015-16		
		Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)
1	APGCL	2120.81	577.70	2.72
2	NEEPCO (Hydro)			
	KOPII I	441.91	47.71	1.08
	KOPII II	46.70	6.97	1.49
	KHANDONG	108.92	32.31	2.97
	RHEP	517.68	145.43	2.81
	DHEP	100.97	40.03	3.96
3	NEEPCO (TH)			
	AGBPP	963.29	301.19	3.13
	AGTPP	292.26	60.38	2.07
4	NHPC Existing – Lg HEP	166.85	35.86	2.15
5	NTPC (Existing)			
	FARAKKA	166.04	47.64	2.87
	KAHELGAON-I	82.21	23.61	2.87
	KAHELGAON-II	426.37	147.53	3.46
	TALCHER	128.59	27.86	2.17
	FARAKKA-III	122.95	44.76	3.64
6	NTPC (New) BTPS	994.72	433.70	4.36

Sr. No.	Agency/ Source	FY 2015-16		
		Quantum (MU)	Total Cost (Rs. Crore)	Rate (Rs./kWh)
7	RE Sources			
	Solar (NVVN/NTPC + Oth)	21.63	21.63	10.00
	Small Hydro	100.00	31.90	3.19
	Biomass	8.50	4.73	5.57
8	BANSKANDI (SIPP)	52.05	13.74	2.64
9	MeSEB	18.03	7.27	4.03
10	IOCL (AOD)	8.5	2.97	3.49
11	OTPC	247.93	71.65	2.89
12	Purchase from bilateral sources/Traders/ Power Exchanges	0	0	0
	Total	7208.51	2146.25	2.98
	UI Pool			
	AEGCL Charges		572.81	
	SLDC Charges		2.15	
	Total		2721.21	

(1) **Transmission Costs**

The Transmission Charges and SLDC charges approved by the Commission in the MYT Order dated November 21, 2013 for AEGCL have been considered for approving the charges payable to AEGCL for the Control Period from FY 2013-14 to FY 2015-16. The transmission costs include the charges to be paid to AEGCL for inter-State transmission to PGCIL for regional transmission of power, and SLDC charges.

The Commission approves the Transmission Charges payable to AEGCL as shown in the table below:

Table 4.62: Approved Transmission Charges (Rs. Crore)

Sr. No.	Details	FY 2013-14	FY 2014-15	FY 2015-16
1	Transmission Charges	456.03	495.66	572.81
2	SLDC Charges	2.07	2.12	2.15
	Total	458.10	497.78	574.96

4.11 TOTAL POWER PURCHASE COST

The total power purchase cost from various sources, transmission charges, and SLDC charges to be paid to AEGCL is aggregated to arrive at total power purchase cost of APDCL as shown in table below:

Table 4.63: Approved Total Power Purchase Costs during the Control Period (Rs. Crore)

Sr. No.	Details	FY 2013-14	FY 2014-15	FY 2015-16
1	AEGCL cost (including SLDC)	458.1	497.78	574.96
2	Cost of Power	1676.16	1918.91	2146.25
	Total Cost of Power Purchase	2134.26	2416.69	2721.21

4.12 OPERATIONS AND MAINTENANCE (O&M) EXPENSES

The O&M expenses include Employee expenses, Repair and Maintenance (R&M) expenses and Administrative and General (A&G) expenses. APDCL submitted that the three components of O&M expenses are mostly linked with the inflationary indices as well as to the addition of assets, which required enhanced expenditure to maintain the assets. APDCL further submitted that the increase of employee expense is also linked with the inflationary pressure, which is reflected as enhanced Dearness Allowance payable to the employees as well as increase in number of employees due to new recruitment required to maintain the assets and other activities.

APDCL submitted that CERC Regulations for transmission assets allows normative amount based on the first year of MYT Period from FY 2003-04 to FY 2008-09 and continued upto FY 2009-14. APDCL stated that although in the past, an attempt was made to introduce norm-based O&M expenses for distribution assets and services, the same did not materialise due to uncertainty of credible data in this regard. APDCL submitted that it has calculated normative data based on different services required to be delivered by the Discom and quantum of assets in respective years. APDCL further submitted that to arrive at the normative figure for FY 2009-10 it has considered the audited figures of FY 2009-10. APDCL submitted that it has enhanced the norms thus arrived by 5.6% annually with increase in the number of services and assets for respective year up to FY 2015-16. ADPCL further clarified that it has considered an annual increase of norms at 5.6% on previous year's

expenses against 5.72% considered and approved by the CERC, considering the present trend during FY 2009-10 onwards and to avoid tariff shock. The normative O&M expenses submitted by APDCL are shown in the Table below:

Table 4.64: Normative O&M Expenses submitted by APDCL (Rs. Lakh)

Sr. No	Particulars	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16
A	No. of Consumers	1667748	1913396	2275853	2605863	2772212	3184748.9	3854492
	Normative charge - A (Rs. Lakh/1000 consumer)	7.50	7.92	8.36	8.83	9.33	9.85	10.40
	O&M - A (Rs. Lakh)	12508.11	15154.10	19034.14	23014.66	25854.93	31365.78	40087.77
B	Energy sale (MU)	3247.38	3535.43	3969.89	4277.34	4733	5328	6051
	Normative Charge - B (Rs. Lakh/MU)	3.00	3.17	3.35	3.53	3.73	3.94	4.16
	O&M-B (Rs. Lakh)	9742.13	11200.24	13280.90	15110.78	17657.29	20988.91	25173.93
C	33 kV Network (Ckt-km)	5800.96	5885.86	6359.01	6472.53	6716.06	6968.75	7230.94
	Normative Charge - C (Rs. Lakh/100 km)	9.50	10.03	10.59	11.19	11.81	12.48	13.17
	O&M-C (Rs. Lakh)	551.09	590.47	673.66	724.08	793.40	869.36	952.58
D	11 kV Network (ckt-km)	46450.83	49457.85	53981.09	55331.42	58673.57	62217.58	65975.67
	Normative Charge - D (Rs. Lakh/100 km)	6.00	6.34	6.69	7.07	7.46	7.88	8.32
	O&M -D (Rs. Lakh)	2787.05	3133.65	3611.78	3909.44	4377.73	4902.12	5489.32
E	LT Network (Ckt-km)	139352.49	148373.55	161943.27	165994.26	176020.70	186652.75	197927.01
	Normative Charge - E (Rs. Lakh/100 Km)	3.50	3.70	3.90	4.12	4.35	4.60	4.85
	O&M-E (Rs. Lakh)	4877.34	5483.89	6320.61	6841.52	7661.04	8578.71	9606.31
F	33/11 kV Substation (MVA)	1775.92	1824.01	1945.53	1983.05	2057.74	2135.23	2215.65
	Normative Charge - F (Rs. Lakh/MVA)	2.50	2.64	2.79	2.94	3.11	3.28	3.47
	O&M-F (Rs. Lakh)	4439.80	4815.39	5423.83	5838.02	6397.13	7009.79	7681.13
G	11/0.4 kV Substation (MVA)	2803.86	2986.76	3308.20	3338.11	3540.50	3755.17	3982.85
	Normative Charge - G (Rs. Lakh/MVA)	2.00	2.11	2.23	2.36	2.49	2.63	2.77
	O&M-G (Rs. Lakh)	5607.72	6308.03	7378.18	7861.81	8805.43	9862.32	11046.06
	Total (A+B+C+D+E+F+G)	40513.24	46685.76	55723.09	63300.32	71546.96	83576.99	100037.10
	Actual Audited O&M expenses (Rs. Lakh)	40930.62	44764.96	51987.00				

APDCL requested the Commission to consider the above and approve the proposed normative O&M expenditure.

Commission's Analysis

During scrutiny of the Petition, the Commission observed that APDCL has submitted O&M expenses in the main Petition as well as under different formats. Further, during Technical Validation Session, APDCL was required to submit the basis of allocation of expenses in FY 2009-10 under different heads. However, the Commission is not satisfied with the justification provided by APDCL. Further, the Regulations provide determination of O&M expenses based on normative level of O&M expenses specified by the Commission. The Commission is of the opinion that such specification of normative O&M expenses will have to be undertaken separately and need to be supported by appropriate data, methods and justification. Accordingly, for the purpose of determination of tariff, the Commission has analyzed each head of O&M expenses separately, as discussed below.

4.12.1 Employee Expenses

APDCL has projected the employee expenses at Rs. 634.77 Crore, Rs. 741.5 Crore, and Rs. 887.53 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

Commission's Analysis

The actual employee expenses for FY 2011-12 are Rs. 461.23 Crore. For arriving at reasonable expenses for FY 2013-14, the Commission has considered an increase of around 8% p.a. twice over the actual employee expense for FY 2011-12. Employee costs for FY 2014-15 and FY 2015-16 are arrived at by further escalating FY 2013-14 costs by 8%, which in view of the Commission should meet the requirement during the said period. Accordingly, **the Commission approves the employee expenses as below:**

Table 4.65: Approved Employee Expenses

Year	Amount (Rs. Crore)
FY 2013-14	537.98
FY 2014-15	581.02
FY 2015-16	627.50

4.12.2 Repair and Maintenance (R&M) Expenses

APDCL has projected the R&M expenses at Rs. 48.61 Crore, Rs. 56.78 Crore, and Rs. 67.97 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

Commission's Analysis

The actual R&M expenses for FY 2011-12 are Rs. 29.13 Crore. This is an item of expenditure which has to be controlled and should be done as such. In view of the vintage of assets and the need to maintain quality of supply to the consumers, for arriving at reasonable expenses for FY 2013-14, the Commission has considered to allow 10% increase per annum twice over the base expense of FY 2011-12. R&M expense for FY 2014-15 and FY 2015-16 are arrived at by further escalating FY 2013-14 costs by 10%, which in the view of the Commission is reasonable. Accordingly, **the Commission approves the R&M expenses as below:**

Table 4.66: Approved R&M Expenses

Year	Amount (Rs. Crore)
FY 2013-14	35.25
FY 2014-15	38.77
FY 2015-16	42.65

4.12.3 Administration and General (A&G) Expenses

APDCL has projected the A&G expenses at Rs. 32.09 Crore, Rs. 37.49 Crore, and Rs. 44.87 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

Commission's Analysis

The actual A&G expenses for the FY 2011-12 are Rs. 15.02 Crore. For arriving at reasonable expenses for FY 2013-14, the Commission has considered an increase of 6% per annum twice over the actual A&G expenses for FY 2011-12. This is an item of expenditure which has to be controlled and has to be done as such. A&G expense for FY 2014-15 and FY 2015-16 are arrived at by further escalating FY 2013-14 costs by 6%, which in view of the Commission is considered reasonable. Accordingly, **the Commission approves the A&G expenses as below:**

Table 4.67: Approved A&G Expenses

Year	Amount (Rs. Crore)
FY 2013-14	16.88
FY 2014-15	17.89
FY 2015-16	18.96

4.13 CAPITAL INVESTMENT

The scheme-wise projected capital expenditure as submitted by APDCL is shown in the Table below:

Table 4.68: Capital Investment Plan – FY 2013-14 to FY 2015-16 (Rs. Crore)

Sr. No.	Scheme	FY 2013-14	FY 2014-15	FY 2015-16
1	TSP	3.50	3.50	3.50
2	SCCP	5.00	5.00	5.00
3	Chief Minister's Power Supply Mission	44.38	15.00	15.00
4	Counterpart Fund	41.50	43.90	-
5	Trade Dev. Fund – Project Related	46.00	-	-
6	Improvement of Distribution System	10.62	10.00	10.00
7	Electrification of L&U Primary School	10.00	-	-
8	Debt servicing of RGGVY	30.00	32.40	34.99
9	JNNSM	5.12	3.00	3.00
	R-APDRP (GoA Share)	25.00	25.00	12.10
	Dedicated Power Supply to Courts	16.00	-	-
	Consultancy for PPP_UAR	4.00	-	-
	ERP	15.00	-	-
	ADB	162.49	144.07	-
	R-APDRP	403.28	271.87	-
	Consumer Contribution	21.22	21.22	21.22
	Total	843.31	574.96	104.81

APDCL submitted that it has envisaged funding of the above mentioned Capital expenditure through various sources, namely, Consumer Contribution, Grants, Equity, and Debt. APDCL submitted that it has considered the grants based on the present budgeted figure available with the Companies. APDCL submitted that the capital expenditure projected for the period from FY 2013-14 to FY 2015-16 have

been proposed to be funded through debt and equity grant as per funding patterns of the schemes.

The detailed breakup of funding of capital expenditure under various projects during the period from FY 2013-14 to FY 2015-16 as submitted by APDCL is shown in the Table below:

Table 4.69: Funding of Capital Expenditure Schemes Proposed by APDCL (Rs. Crore)

Sl.	Scheme	FY 2013-14			FY 2014-15			FY 2015-16		
		Loan	Grant	Consumer Contribution	Loan	Grant	Consumer Contribution	Loan	Grant	Consumer Contribution
1	TSP	3.50	-		3.50	-		3.50	-	
2	SCCP	5.00	-		5.00	-		5.00	-	
3	Chief Minister's Power Supply Mission	44.38	-		15.00	-		15.00	-	
4	Counterpart Fund	41.50	-		43.90	-		-	-	
5	Trade Dev. Fund – Project Related	-	46.00		-	-		-	-	
6	Improvement of Distribution System	10.62	-		10.00	-		10.00	-	
7	Electrification of L&U Primary School	-	10.00		-	-		-	-	
8	Debt servicing of RGGVY	-	30.00		-	32.40		-	34.99	
9	JNNSM	-	5.12		-	3.00		-	3.00	
	R-APDRP (GoA Share)	-	25.00		-	25.00		-	12.10	
11	Dedicated Power Supply to Courts	-	16.00		-	-		-	-	
12	Consultancy for PPP_UAR	-	4.00		-	-		-	-	
13	ERP	15.00	-		-	-		-	-	
14	ADB	16.27	146.42		14.41	129.66		-	-	
15	R-APDRP	403.28	-		271.81	-		-	-	
16	Consumer Contribution	-	-	21.22	-	-	21.22	-	-	
	Total	539.55	282.54	21.22	363.68	190.06	21.22	33.50	50.09	21.22

The total funding of Capex during the Control Period comes from loans, grant and consumer contribution, as given below:

Table 4.70: Summary of Funding Pattern projected by APDCL (Rs. Crore)

Year	Loan	Grant	Consumer's Contribution	Total
FY 2013-14	539.55	282.54	21.22	843.41
FY 2014-15	363.68	190.06	21.22	574.96
FY 2015-16	33.50	50.09	21.22	104.81
Total	936.73	522.69	63.66	1523.08

APDCL has projected loan component as Rs. 936.73 Crore. **The proposed capital expenditure and funding is approved provisionally.**

4.14 CAPITAL EXPENDITURE AND SOURCES OF FUNDING

APDCL submitted that it has projected capital expenditure against different schemes of GOI and GOA for the period from FY 2013-14 to FY 2015-16, as shown in the Table below, along with the source of funding:

Table 4.71: Funding for GoA and GoI Capex Schemes as projected by APDCL (Rs. Crore)

Source	Nature of Funding	FY 2012-13	FY2013-14	FY 2014-15	FY 2015-16
Government of Assam	Loan	43.75	120.00	77.40	33.50
	Grant	230.60	136.12	60.40	50.09
	Total	274.35	256.12	137.80	83.59
ADB Part	Loan	1.84	16.27	14.41	0.00
	Grant	16.57	146.42	129.66	0.00
	Total	18.41	162.69	144.07	0.00
R-APDRP	Loan	173.37	403.28	271.87	0.00
PFC Part	Grant	0.00	0.00	0.00	0.00
	Total	173.37	403.28	271.87	0.00
TOTAL	Loan	218.96	539.55	363.68	33.50
	Grant	247.17	282.54	190.06	50.09
	Total	466.13	822.09	553.74	83.59

The CWIP, capital expenditure, and capitalization for the Control Period from FY 2013-14 to FY 2015-16 as submitted by APDCL are summarized in the table below:

Table 4.72: Projected CWIP, Capex and Capitalisation for FY 2013-14 to FY 2015-16 (Rs. Crore)

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Opening balance	1 471.09	1829.38	2070.76	2618.82	2987.98
Add:					
i) Capital Expenditure	411.81	565.56	972.55	822.28	262.04
ii) Interest & Finance Charges capitalized	3.21	3.91	4.92	5.49	6.14
iii) Other expenses capitalized					
Total Capital expenditure for the year	415.03	569.47	977.46	827.77	268.17
Less: Expenditure Capitalised	56.74	328.09	429.41	458.61	212.44
Closing Balance	1829.38	2070.76	2618.82	2987.98	3043.71

The Commission has observed that projected major capital expenditure is covered under R-APDRP and ADB schemes. As such the Commission would not like to prune down the proposed capital expenditure but would like to reiterate that APDCL should ensure that such proposed capital investment schemes are necessary and do not impose avoidable burden on the consumer by way of tariff increase. The Commission, in this regard, invites attention to the guidelines detailed in para 7.9 of Tariff Order for FY 2008-09 and FY 2009-10 dated July 24, 2009.

Taking into consideration the distribution schemes planned for execution during the Control Period from FY 2013-14 to FY 2015-16, **the capital expenditure and capitalization is provisionally approved as detailed in the table below:**

Table 4.73: Approved capital expenditure and capitalization for FY 2013-14 to FY 2015-16 (Rs. Crore)

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Opening balance of CWIP	1414.59	1760.01	2059.31	2759.41	3153.58
Add:					

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
i) Capital Expenditure	398.95	487.35	843.31	574.96	104.81
ii) Interest & Finance Charges capitalized	3.21	2.27	1.66	2.19	7.68
iii) Other expenses capitalized					
Total Capital expenditure for the year	402.16	489.62	844.97	577.15	112.49
Less: Expenditure Capitalised	56.74	190.33	144.86	182.98	265.99
Closing Balance of CWIP	1760.01	2059.31	2759.41	3153.58	3000.08

4.15 INTEREST AND FINANCE CHARGES

APDCL submitted that interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. APDCL further submitted that projected capital expenditure and funding of the same also have a major bearing on the long-term interest expenditure. APDCL submitted that the opening balance of Loan for the period from FY 2013-14, FY 2014-15, and FY 2015-16 is Rs. 950.39 Crore, Rs 1489.94 Crore, and Rs. 1853.61 Crore, respectively. APDCL submitted that the loan addition has been computed in accordance with the Capex funding plan.

APDCL submitted that repayment of loan or each year has been computed as per terms and conditions of respective loans. APDCL submitted that it has computed Interest on Opening Loans considering the weighted average rate of interest for the last year. APDCL further submitted that the Interest and Finance Charges for the period from FY 2013-14 to FY 2015-16 have been computed on the basis of proposed capital investment plan. APDCL has claimed interest and finance charges at Rs. 96.94 Crore, Rs.106.64 Crore, and 117.3 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

Commission's Analysis

The APDCL has not furnished the details of institution-wise outstanding loans, proposed drawal and proposed repayment of loans during the period from FY 2012-13 to FY 2015-16. In reply to a query, APDCL vide its letter dated 21 May, 2013 submitted the details shown in the table below:

Table 4.74: Source wise outstanding Loan and Interest Payment

A. Government of Assam (Rs. Crore)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Principal				
Opening Balance	315.09	358.84	478.84	556.24
Addition	43.75	120.00	77.40	33.50
Repayment	-	-	-	-
Closing Balance	358.84	478.84	556.24	589.74
Interest				
Opening Balance	203.38	242.88	292.41	353.34
Addition	39.50	49.53	60.93	67.61
Repayment				
Closing Balance	242.88	292.41	353.34	420.95
Average RoI	11.72%	11.83%	11.77%	11.80%

B. ASE Bond (Rs. Crore)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Principal				
Opening Balance	-	-	-	-
Addition				
Repayment				
Closing Balance	-	-	-	-
Interest				
Opening Balance	3.02	-	-	-
Addition				
Repayment	3.02			
Closing Balance	-	-	-	-
Average RoI	-		-	-

C. R-APDRP (Rs. Crore)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Principal				
Opening Balance	176.10	349.47	752.75	1,024.62
Addition	173.37	403.28	271.87	-
Repayment				
Closing Balance	349.47	752.75	1,024.62	1,024.62
Interest				
Opening Balance	15.79	41.94	92.49	177.45
Addition	26.14	50.55	84.96	95.97
Repayment				
Closing Balance	41.94	92.49	177.45	273.43
Average RoI	10%	9%	10%	9%

D. ADB (Rs. Crore)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Principal				
Opening Balance	-	1.84	18.11	32.52
Addition	1.84	16.27	14.41	-
Repayment				
Closing Balance	1.84	18.11	32.52	32.52
Interest				
Opening Balance	-	0.08	0.89	2.97
Addition	0.08	0.82	2.07	2.66
Repayment				
Closing Balance	0.08	0.89	2.97	5.63
Average RoI	8%	8%	8%	8%

In spite of repetitive directions given by the Commission in the earlier Tariff Orders, during the present tariff exercise APDCL has not provided any supporting data/documents to establish that the loan borrowed from the State Government was utilized for capital expenditure. Therefore, the opening balance in respect of the State Government loans has not been taken into consideration for computation of interest and finance charges. For the purpose of calculation of interest expenses, the repayment has been considered equivalent to depreciation. The addition to the loan

is considered in proportion to the approved capitalization during the year. In the absence of supporting documents, the rate of Interest during the Control Period has been considered equivalent to the average rate of interest for FY 2011-12. Based on the data, the interest and finance charges are approved as shown in the Table below:

Table 4.75: Approved Loan Schedule

R-APDRP (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening Balance	292.53	425.73	588.39
Addition	139.24	173.78	-
Repayment	6.04	11.12	14.24
Closing Balance	425.73	588.39	574.15
Average rate of Interest	8%	8%	8%
Interest	30.16	42.58	48.81

ADB (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening Balance	2.00	7.58	16.59
Addition	5.62	9.21	-
Repayment	0.04	0.20	0.40
Closing Balance	7.58	16.59	16.19
Average rate of Interest	8%	8%	8%
Interest	0.39	0.99	1.34

Table 4.76: Approved Interest and Finance Charges (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
R-APDRP	30.16	42.58	48.81
ADB	0.39	0.99	1.34
Total	30.55	43.57	50.15
Less: Interest Capitalized	1.66	2.19	7.68
Interest	28.89	41.38	42.47

The Commission accordingly approves the Interest and Finance Charges at Rs. 28.89 Crore, Rs. 41.38 Crore, and Rs. 42.47 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

4.16 INTEREST ON WORKING CAPITAL

APDCL submitted that it has computed Interest on Working Capital based on the formula for normative working capital interest specified by the Commission in the AERC (Terms and Conditions for Determination of Tariff) Regulations, 2006.

APDCL submitted that vide its MYT Order dated July 24, 2009, the Commission has considered 13.25% as the rate of interest on working capital, which was equal to the short-term prime lending rate of SBI as on 1 April, 2008. APDCL submitted that it has used the same principle for computing interest on working capital during the period from FY 2013-14 to FY 2015-16. The Interest on Working Capital as projected by APDCL is shown in the Table below:

Table 4.77: Interest on Working Capital projected by APDCL (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Working Capital Requirement			
O&M expenses- 1 month	59.62	69.65	83.36
2 month Receivables	448.27	511.59	578.54
1% of GFA	17.54	17.54	17.54
Less: Consumer Security Deposit			
Total Working Capital	525.43	598.78	679.45
Rate of Interest on Working Capital	13.00%	13.00%	13.00%
Interest on Working Capital	68.31	77.84	88.33

Commission's Analysis

As per the AERC Tariff Regulations, 2006, the Interest on Working Capital is to be allowed on normative basis and shall consist of

- a) O&M expenses for one month;
- b) Maintenance spares at 1% of the historical cost of Fixed Assets
- c) Receivables equivalent to 60 days of Average billing of consumers less security deposits of consumers.

Accordingly, **the Interest on working capital has been examined and approved as shown in the Table below.** The rate of interest has been considered at 14.75% as per SBI PLR.

Table 4.78: Approved Interest on Working Capital (Rs. Crore)

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	One month O&M Expenses	53.83	58.94	64.54
2	Maintenance spares @1% of GFA	20.82	25.12	29.70
3	Receivables 60 days	433.62	488.27	543.04
4	Less: Consumer Security Deposit	324.89	331.38	338.01
5	Receivables excluding consumer security deposit	108.73	156.89	205.03
6	Working Capital requirement	183.38	240.94	299.28
7	Rate of Interest on Working Capital	14.75%	14.75%	14.75%
8	Interest on Working Capital	27.05	35.54	44.14

4.17 DEPRECIATION

APDCL submitted that it has computed depreciation after taking into consideration the opening balance of assets in the beginning of the year and the provisional capitalisation. APDCL submitted that as per AERC Regulations CERC rates have to be used for computation of the depreciation to be charged during the year. APDCL submitted that earlier the weighted average rate of depreciation by applying rates specified by CERC was 3.61%. However, with the CERC notification for new rates for FY 2009-10 onwards period, the same has been used for computation of the depreciation charged during the year and the weighted average rate of depreciation works out approximately 5.27%. APDCL submitted that after the computation, depreciation charges have been claimed after apportioning the grant component of assets funding. The detailed computations of depreciation as submitted by APDCL are shown in the following Table:

Table 4.79: Depreciation for the Control Period (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Assets qualifying for Tariff	2808.70	3282.92	3757.15
Accumulated Depreciation	1034.56	1103.27	1175.41
Assets qualifying for Depreciation	1716.23	2190.48	2664.71
Depreciation as per Financial Statements	63.61	68.70	72.14
Depreciation for Tariff	53.63	57.92	60.81

APDCL has claimed Depreciation of Rs. 63.61 Crore, Rs. 68.70 Crore, and Rs. 72.74 Crore for FY 2013-14, FY 2014-15 and FY 2015-16, respectively.

Commission’s Analysis:

As per AERC Tariff Regulations, the depreciation has to be calculated on 90% of opening GFA and the addition during the year at the rates prescribed in the depreciation schedule. In the absence of data submitted by APDCL, the Commission has assumed that the assets will be added in the middle of the year. The weighted average rate of depreciation on 90% of fixed assets is considered for arriving the depreciation on the gross fixed assets.

APDCL, vide its letter dated 15 June, 2013, has projected the grants and consumer contributions for the MYT Control Period. The Commission has considered the apportionment of Grants and Contributions as on first day of the financial year for the MYT Control Period and deducted the depreciation on the grants and consumer contribution components from the eligible depreciation for the relevant years. Further, though, APDCL has claimed the depreciation as per the revised depreciation rates in accordance with the CERC Tariff Regulations, 2009, the Commission has computed the depreciation based on the depreciation rates specified in Annexure I of the AERC (Terms and Conditions for determination of Tariff) Regulations, 2006, for the period from FY 2013-14 to FY 2015-16, as given in the Tables below:

Table 4.80: : Depreciation approved for FY 2013-14 (Rs. Crore)

Sr. No.	Nature of Asset	GFA as on 1.04.2013	Additions during FY 2013-14	Rate of Depreciation	Depreciation as per AERC Regulations
1	Land & Right	12.62	0.03		
2	Buildings	48.03	0.36	1.80%	0.78
3	Hydraulics	0.00	0.00	2.57%	0.00
4	Other Civil Works	41.43	0.37	1.80%	0.67
5	Plant & Machinery	548.68	3.70	3.60%	17.84
6	Lines & Cable Network	870.95	8.54	3.60%	28.36
7	Vehicles	11.68	0.03	18.00%	1.89
8	Furniture & Fixtures	12.68	0.24	6.00%	0.69
9	Office equipment	20.77	0.41	6.00%	1.13

Sr. No.	Nature of Asset	GFA as on 1.04.2013	Additions during FY 2013-14	Rate of Depreciation	Depreciation as per AERC Regulations
10	Other items (provide list)	377.62	131.18		0.00
	Total	1944.47	144.86		51.37
	Average assets OB & CB in FY excluding Land & Rights and Consumer for 2013-14 excluding land cost	1797.61		2.86%	

Particulars		As on 01.04.2013
Grants Available		3464.91
GFA (excluding Consumer Contribution and Lands & Rights)		1735.80
CWIP		2059.31
Total		3795.11
Cumulative grants apportioned in the ratio of GFA and CWIP	GFA	1584.78
	CWIP	1880.13
	Total	3464.91
Depreciation calculated as per the Regulation on the GFA		51.37
Weighted Average Rate of Depreciation		2.86%
Depreciation to be deducted on the assets built on the grants component on 90% asset value		45.29
Depreciation approved		6.08

Table 4.81: Depreciation approved for FY 2014-15 (Rs. Crore)

Sr. No.	Nature of Asset	GFA as on 1.04.2014	Additions during FY 2014-15	Rate of Depreciation	Depreciation as per AERC Regulations
1	Land & Right	12.65	0.04		
2	Buildings	48.39	0.43	1.80%	0.79
3	Hydraulics	0.00	0.00	2.57%	0.00

Sr. No.	Nature of Asset	GFA as on 1.04.2014	Additions during FY 2014-15	Rate of Depreciation	Depreciation as per AERC Regulations
4	Other Civil Works	41.79	0.50	1.80%	0.68
5	Plant & Machinery	552.38	5.03	3.60%	17.98
6	Lines & Cable Network	879.50	11.62	3.60%	28.68
7	Vehicles	11.71	0.04	18.00%	1.90
8	Furniture & Fixtures	12.92	0.28	6.00%	0.71
9	Office equipment	21.18	0.49	6.00%	1.16
10	Other items (provide list)	508.80	164.56		0.00
	Total	2089.32	182.98		51.89
	Average assets OB & CB in FY excluding Land & Rights and Consumer for 2014-15 excluding land cost	1940.27		2.67%	

Particulars		As on 01.04.2014
Grants Available		3768.67
GFA (excluding Consumer Contribution and Lands & Rights)		1859.41
CWIP		2759.41
Total		4618.82
Cumulative grants apportioned in the ratio of GFA and CWIP	GFA	1517.16
	CWIP	2251.51
	Total	3768.67
Depreciation calculated as per the Regulation on the GFA		51.89
Weighted Average Rate of Depreciation		2.67%
Depreciation to be deducted on the assets built on the grants component on 90% asset value		40.58
Depreciation approved		11.32

Table 4.82: Depreciation approved for FY 2015-16 (Rs. Crore)

Sr. No.	Nature of Asset	GFA as on 1.04.2015	Additions during FY 2015-16	Rate of Depreciation	Depreciation as per AERC Regulations
1	Land & Right	12.69	0.13		
2	Buildings	48.82	1.36	1.80%	0.80
3	Hydraulics	0.00	0.00	2.57%	0.00
4	Other Civil Works	42.29	1.80	1.80%	0.70
5	Plant & Machinery	557.41	18.16	3.60%	18.35
6	Lines & Cable Network	891.11	41.93	3.60%	29.55
7	Vehicles	11.75	0.13	18.00%	1.91
8	Furniture & Fixtures	13.20	0.89	6.00%	0.74
9	Office equipment	21.67	1.54	6.00%	1.21
10	Other items (provide list)	673.36	200.06		0.00
	Total	2272.31	265.99		53.27
	Average assets OB & CB in FY excluding Land & Rights and Consumer for 2015-16 excluding land cost	2143.46		2.49%	

Particulars		As on 01.04.2015
Grants Available		3979.95
GFA (excluding Consumer Contribution and Lands & Rights)		2021.13
CWIP		3153.58
Total		5174.72
Cumulative grants apportioned in the ratio of GFA and CWIP	GFA	1554.49
	CWIP	2425.47
	Total	3979.95
Depreciation calculated as per the Regulation on the GFA		53.27
Weighted Average Rate of Depreciation		2.49%
Depreciation to be deducted on the assets built on the grants component on 90% asset value		38.63
Depreciation approved		14.64

The Commission thus, approves the depreciation for the MYT Control Period from FY 2013-14 to FY 2015-16, as below:

Table 4.83: Approved Depreciation (Rs. Crore)

Year	Amount (Rs.Crore)
FY 2013-14	6.08
FY 2014-15	11.32
FY 2015-16	14.64

4.18 INTEREST ON CONSUMER SECURITY DEPOSIT

APDCL submitted that it has considered the Interest on Security Deposit at the rate of 7% p.a. on the opening balance for respective years. APDCL submitted that these are legacy loans which have come from the erstwhile ASEB and thus, these charges are beyond the control of APDCL and hence, are required to be considered in the total financial cost.

Commission's Analysis:

APDCL has projected opening balances of consumer security deposit for the Control Period at Rs.318.52 Crore, Rs. 324.89 Crore and Rs. 331.38 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

As per the AERC (Electricity Supply Code and Related Matters) Regulations, 2004 (First Amendment), 2007 the Distribution Licensee shall pay interest on consumer security deposit at a rate equal to RBI rate as on 1st April of the financial year plus one percent. Hence, the applicable rate of interest works out to 10%, since the RBI Bank Rate as on April 1, 2013 was 9%. The interest on the average consumer's security deposit at 10% works out to Rs. 32.17 Crore, Rs. 32.81 Crore and Rs. 33.47 Crore during the Control Period.

Accordingly, **the Commission has approved the interest on Consumer's Security Deposit for the MYT Control Period from FY 2013-14 to FY 2015-16 as shown in the Table below:**

Table 4.84: Approved Interest on Consumers' Security Deposit

Year	Amount (Rs. Crore)
FY 2013-14	32.17
FY 2014-15	32.81
FY 2015-16	33.47

4.19 PROVISION FOR BAD AND DOUBTFUL DEBTS

APDCL submitted that it has considered Provision for Bad and Doubtful Debts at 1% of the revenue from sale of power. APDCL submitted that the above expense is a legitimate expenditure, which is associated with business risk and since APDCL is in the distribution business, the same is a consumer related expense. APDCL submitted that accordingly, it has computed Provision for Bad and Doubtful Debts at Rs. 26.9 Crore, Rs. 30.7 Crore and Rs. 35.11 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively, which is a 10.4% annual increase from estimated amount of Rs. 24.36 Crore for FY 2012-13.

Commission's Analysis:

It is observed that APDCL has not written off Bad Debts, so far. As per the audited Annual Statement of Accounts, for FY 2010-11 and FY 2011-12, APDCL has written off only Rs. 5 Lakh and Rs. 76 Lakh of bad debts, which indicates that there is sufficient provisioning for bad debts. Allowing further provision towards Bad debts would impact the retail tariff to be determined. Hence, the Commission has not considered Provision for Bad and Doubtful Debts for the MYT Control Period from FY 2013-14 to FY 2015-16. APDCL should analyse the potential of collecting the receivables during these 3 years and submit to the Commission for review and further directions in the matter.

4.20 RETURN ON EQUITY

APDCL submitted that as per the AERC Tariff Regulations, it has claimed the Return on Equity at the rate of 14% on the equity base, which it considered as inadequate. APDCL submitted that it has shown definite sign of improvements during last Control Period and accordingly, it has computed Return on Equity (RoE) considering a rate of return at 14% on average equity based on the opening balance of equity. APDCL submitted that for further boost to the performance there is a need to enhance RoE in line with CERC Regulations.

APDCL submitted that equity capital has been inherited from the Opening Balance Sheet of the Company notified in 2005, which has been considered as apportioned with the assets. APDCL further submitted that with the rearrangement of equity capital of ASEB at Rs. 9984 Lakh, the same has now been transferred to APDCL in the process of winding up of ASEB as per provisions of the Act. APDCL submitted that this rearranged equity base is lower than the stipulated 30% of GFA, and no other new equity has been infused into the capital base during this period, and therefore it has claimed RoE on total equity capital. APDCL has computed the normative return on equity for FY 2013-14 to FY 2015-16 at Rs. 35.11 Crore annually as shown in the Table below:

Table 4.85: Return on Equity for the Control Period (Rs. Crore)

Particular	FY 2013-14	FY 2014-15	FY 2015-16
Equity Capital as per Financial Statements	250.81	250.81	250.81
Equity Capital for Tariff for the year	250.81	250.81	250.81
Return on Equity at 14%	35.11	35.11	35.11

Commission's Analysis:

As per the AERC Taiff Regulations, Return on Equity shall be computed on the Equity Capital employed in the business. The equity capital as on 31.03.2012 stood at Rs. 162.27 Crore. Accordingly, **the Return on Equity approved by the Commission is given in the Table below:**

Table 4.86: Approved Return on Equity (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Equity Capital	162.77	162.77	162.77
Return on Equity @14%	22.79	22.79	22.79

4.21 NON TARIFF INCOME

APDCL submitted that Non Tariff Income from trading of surplus energy by the Discom occasionally to other Utilities outside the State without affecting the peak demand of the system has been estimated from the demand and availability in the system and due to severe constraint in the supply side, the earning has been estimated as nil during the MYT Period, as shown in the following Table:

Table 4.87: Projected Non Tariff Income for the Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Energy Available from Allocated sources (MU)	6616	7397	8314
2	Energy Demand for APDCL (MU)	6616	7397	8314
3	Surplus (MU)	0	0	0
4	Estimated Trading Income (Rs. Crore)	0	0	0

As per Table 4.60, there is no surplus energy available for FY 2013-14, FY 2014-15, and FY 2015-16. **The Commission accordingly considers the non tariff income as nil during the Control Period.**

4.22 OTHER INCOME

APDCL submitted that the revenue from other consumer related Income comprises of revenue on account of charges imposed other than the basic charges applicable to the consumers including income on account of meter rent, wheeling charges, inspection charges and miscellaneous charges. APDCL submitted that in line with the methodology adopted by the Commission in its MYT Order dated 16 May, 2011, it has projected its other Income for the period from FY 2013-14 to FY 2015-16 by escalating the provisional figures of FY 2011-12 by the average increase in number of consumers during FY 2012-13. The revenue from other income as submitted by APDCL is shown in the Table below:

Table 4.88: Revenue from Other Income for the Control Period as projected by APDCL (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Other Income	203.50	227.92	255.27
Number of Consumers	2772212	3184749	3854492

The Commission approves the Other Income at Rs. 203.50 Crore, 227.92 Crore and Rs. 255.27 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively, as projected by APDCL.

4.23 SUBSIDY

APDCL submitted that it has received revenue subsidy/grant of Rs. 252 Crore from Government of Assam (GoA) as assistance for power purchase cost during FY 2010-11 and Rs. 150 Crore during FY 2011-12 and the same have been treated in accordance to the provisions of Section 65 of the EA, 2003. APDCL submitted that it is further expecting an amount of Rs. 150 Crore to be received from GoA as assistance for additional power purchase cost during FY 2012-13. APDCL submitted that in order to balance the level of cross subsidy among different consumer groups it is expected that GoA may provide some amount of subsidy to APDCL and further relieve some section of consumers under Jeevan Dhara, Domestic, Agricultural and small industry, the categories identified by APDCL.

Commission's Analysis:

As regards provision of subsidy by State Government, APDCL vide its letter no. APDCL/ACT/HQ-Cash/Copr.A/C/2010/53 dated April 23, 2013 has requested the State Government to consider grant of subsidy/assistance under Section 65 of the Electricity Act, 2003. Further, the Commission vide its letter dated May 4, 2013 has brought to the notice of the State Government, the tariff hike proposal made by the Utility, and has requested the State Government to communicate its decision regarding subsidy being offered to any class of consumers to reduce the cost of power to those categories, if the Government decides, so that the same can be considered while determining the tariff. The State Government vide its letter dated 22 August, 2013 communicated its decision to provide financial support to APDCL amounting to maximum of Rs. 200 Crore for FY 2013-14. The State Government vide its letter dated 23 September, 2013 clarified that it is pleased to allow targeted subsidy of Rs. 1.10 per unit for Jeevan Dhara (BPL consumers) for consumption upto 30 units per household per month or else allow a subsidy of Rs. 0.70 per unit per household per month for total consumption upto 120 units by Jeevan Dhara consumers if they consume more than 30 units in a month, and a subsidy of Rs. 0.70 per unit for upto 120 units per month by domestic category 'A' consumers and further clarified that the balance amount, if any, may be utilized against the past period outstanding liabilities in the ARR of APDCL. The Commission has considered the subsidy while determining the tariff, as discussed in Chapter 5.

4.24 REVENUE AT EXISTING TARIFF

APDCL has projected Rs. 2713.80 Crore, Rs.3049.04 Crore, and Rs.4310.18 Crore towards revenue income at the existing tariff for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

Commission's Analysis:

The Commission has estimated the sales at 4605 MU, 5066 MU, and 5574 MU for FY 2013-14, FY 2014-15, and FY 2015-16, respectively, and accordingly **revenue income from sale of energy works out to Rs. 2703.54 Crore, Rs. 2965.99 Crore, and Rs. 3260.90 Crore, respectively.**

4.25 ANNUAL REVENUE REQUIREMENT (ARR)

APDCL submitted that based on expenses discussed above, it has computed the Annual Revenue Requirement during the period from FY 2013-14 to FY 2015-16, as shown in the Table below:

Table 4.89: Annual Revenue Requirement for the Control Period as Projected by APDCL (Rs. Crore)

Sr. No.	Particulars	FY 2013-14	FY2014-15	FY2015-16
1	Cost of power purchase	2720.26	3024.74	3328.77
2	Operation & Maintenance Expenses	715.47	835.77	1000.4
2.1	<i>Employee Cost</i>	<i>634.77</i>	<i>741.50</i>	<i>887.53</i>
2.2	<i>Repair & Maintenance</i>	<i>48.61</i>	<i>56.78</i>	<i>67.97</i>
2.3	<i>Administrative & General Expenses</i>	<i>32.09</i>	<i>37.49</i>	<i>44.87</i>
3	Depreciation	63.61	68.70	72.14
4	Interest and Finance Charge	96.94	106.64	117.3
5	Interest on Working Capital	68.61	77.84	88.33
6	Provision for Bad Debts	26.9	30.7	35.11
7	Return on Equity	35.11	35.11	35.11
8	Net Prior Period charges/ (credit)			
9	Total Expenditure/ ARR	3726.6	4179.5	4677.13
10	Revenue at existing Tariff	2713.18	3049.04	3460.03
11	Other Income	203.5	227.92	255.27
12	Revenue Subsidies/ Grants			
13	Total Earning	2916.68	3276.97	3715.30
14	ARR	3726.60	4179.5	4677.13

Sr. No.	Particulars	FY 2013-14	FY2014-15	FY2015-16
15	(Gap)/ Surplus	(809.92)	(902.53)	(961.83)

The ARR approved by the Commission for the Control Period from FY 2013-14 to FY 2015-16 is given in the Table below:

Table 4.90: ARR Approved for the Control Period from FY 2013-14 to FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
		Filed	Approved	Filed	Approved	Filed	Approved
1	Cost of Power Purchase	2720.35	2134.26	3024.72	2416.69	3328.85	2721.21
2	Employee cost	634.77	537.98	741.50	581.02	887.53	627.50
3	Repair & Maintenance Expenses	48.61	35.25	56.78	38.77	67.97	42.65
4	Admin. & Gen. Exp.	32.09	16.88	37.49	17.89	44.87	18.96
5	Depreciation	63.61	6.08	68.70	11.32	72.41	14.64
6	Interest & Finance charges	96.94	28.89	106.64	41.38	117.30	42.47
7	Interest on working Capital	68.31	27.05	77.84	35.54	88.33	44.14
8	Interest on CSD	0.00	32.17	0.00	32.81	0.00	33.47
9	Provision for Bad Debts	26.90	0.00	30.70	0.00	35.11	0.00
10	Return on Equity	35.11	22.79	35.11	22.79	35.11	22.79
	ARR	3726.69	2841.34	4179.48	3198.20	4677.48	3567.82
11	Non-Tariff Income	89.30	0.00	100.02	0.00	112.02	0.00
12	Other Income	203.50	203.50	227.92	227.92	255.27	255.27
	Net ARR	3433.88	2637.84	3851.54	2970.28	4310.18	3312.55
13	Revenue at Existing Tariff	2713.18	2703.54	3049.04	2965.99	3460.03	3260.90
14	Revenue Deficit/(Surplus)	720.70	-65.70	802.50	4.28	850.15	51.66

4.26 REVENUE GAP FOR FY 2013-14 TO FY 2015-16

APDCL submitted that the estimated category wise revenue based on the existing tariff works out to Rs. 2713.18 Crore, Rs. 3049.04 Crore, and Rs. 3460.03 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively.

Based on approved category-wise sales, the total revenue from sale of power at existing tariff including FPPPA is Rs. 2703.54 Crore, Rs. 2965.99 Crore, and Rs. 3260.90 Crore for FY 2013-14, FY 2014-15, and FY 2015-16, respectively. It should

be noted that the average billing rate (total revenue divided by total sales) in FY 2013-14, with existing tariff, works out to Rs. 5.87 per kWh, as against Rs. 5.64 per kWh in FY 2012-13, though the tariff is the same. This is on account of the change in sales mix in FY 2013-14 as compared to the sales mix in FY 2012-13.

Further, in the suo-motu Order for FY 2012-13 dated February 28, 2013, the Commission had observed as under:

“5.4 Estimated Revenue and Revenue (Deficit) / Surplus for FY 2012-13

The total Revenue from sale of Power estimated by the Commission at existing Tariff is Rs.2660.04 crore excluding FPPPA.

The estimated deficit for FY 2012-13 is given in the table below.

Table 5.3: Estimated Revenue and Revenue deficit / (surplus) for FY 2012-13

Sl. No.	Parameters	Estimated by Commission (Rs. Crore)
1	Approved ARR for FY 2012-13 under MYT order dated 16.5.2011	2250.09
2	Add: Deficit in Truing up for FY 2010-11	(259.11)
3	Add: Deficit in Truing up for FY 2009-10	(261.98)
4	Revised ARR for FY 2012-13	2771.18
5	Less: Revenue from sale of power at the existing tariff including FPPPA	2660.04
6	Net Deficit for FY 2012-13 (4-5)	111.14

...

8.2 REVENUE DEFICIT / SURPLUS FOR FY 2012-13

The Commission has estimated the revenue deficit of Rs.521.09 crore based on the truing up of FY 2009-10 and FY 2010-11 and net revenue deficit of Rs.111.14 crore for FY 2012-13 as shown in the Table 5.3.

While estimating the revenue at existing tariff for FY 2012-13, the Commission has adopted the actual average revenue realized per unit through FPPPA charges during FY 2011-12 which was about Rs.0.51 per unit. The Commission noted that the licensee is charging FPPPA per unit at Rs.0.69 from May 2012 to July 2012, Rs.0.76

from August 2012 to October 2012 and at Rs. 1.03 from November, 2012 upto March 2013. Hence ,the Commission expects that the revenue through FPPPA charges will be more than Rs.150 crore than that estimated by the Commission as a result of which there may not be any revenue deficit during FY 2012-13. Hence it is decided not to revise the tariff for FY 2012-13.”

As can be seen from the above extracts of the Tariff Order for FY 2012-13, the Commission had included the revenue gap of FY 2009-10 and FY 2010-11, in the revenue requirement of FY 2012-13, and had estimated that the revenue in FY 2012-13 would amount to Rs. 2810 crore, which was sufficient to meet the entire revenue requirement of FY 2012-13, including the revenue gap of FY 2009-10 and FY 2010-11. However, in reality, APDCL has not earned such revenue. Based on actual revenue earned by APDCL for the first 11 months of FY 2012-13, for which data is available with the Commission, it is estimated that APDCL's revenue in FY 2012-13 would be Rs. 2398 crore, which is a shortfall of Rs. 412 crore as compared to the revenue projected by the Commission in the suo-motu Tariff Order for FY 2012-13. As a result, APDCL has not been able to recover the past revenue gaps of FY 2009-10 and FY 2010-11, as envisaged by the Commission.

Also, as elaborated earlier, the Commission is not undertaking the final truing up for FY 2011-12 and the provisional truing up for FY 2012-13 in this Order, and hence, the full impact of such lower revenue cannot be accurately assessed at this point in time. At the same time, the recovery of these past revenue gaps cannot be delayed indefinitely. Hence, the Commission has decided to allow recovery of Rs. 230 crore out of the past revenue gaps of FY 2009-10 and FY 2010-11, to be recovered through the revised tariffs for FY 2013-14. Once, the final truing up for FY 2011-12 and provisional/final truing up for FY 2012-13 is done, the balance unrecovered revenue gap of previous years can be computed accurately, and the Commission will take a view on the recovery of the same in the subsequent Tariff Orders.

Against this background, the Commission, vide its letter dated May 4, 2013 brought to the notice of the State Government, the tariff hike proposal made by the Utility, and requested the State Government to communicate its decision regarding subsidy being offered to any class of consumers to reduce the cost of power to those categories, if the Government decides, so that the same can be considered while determining the tariff. The State Government vide its letter dated 22 August, 2013 (**Annexure 3**) communicated its decision to provide financial support to APDCL

amounting to maximum of Rs. 200 Crore for FY 2013-14. The State Government vide its letter dated 23 September, 2013 (**Annexure 4**) clarified that it is pleased to allow targeted subsidy of Rs. 1.10 per unit for Jeevan Dhara (BPL consumers) for consumption upto 30 units per household per month or else allow a subsidy of Rs. 0.70 per unit per household per month for total consumption upto 120 units by Jeevan Dhara consumers if they consume more than 30 units in a month, and a subsidy of Rs. 0.70 per unit for upto 120 units per month by domestic category 'A' consumers and further clarified that the balance amount, if any, may be utilized against the past period outstanding liabilities in the ARR of APDCL, subject to maximum of Rs. 200 Crore. The Commission has considered the subsidy while determining the tariff.

In accordance with the above subsidy commitment of the State Government, the subsidy to be allocated to the Jeevan Dhara (BPL consumers) and domestic category 'A' consumers, based on the sales approved for FY 2013-14, works out to around Rs. 100 crore, as shown below:

Table 4.91: Government Subsidy allocated to Jeevan Dhara and Domestic A Categories (Rs. Crore)

Sl.	Category	Approved Sales (MU)	State Government Subsidy (Rs/kWh)	Total amount of subsidy (Rs. Crore)
1	Jeevan Dhara	361	1.10	40
2	Domestic A – first 4 kWh/day	758.91	0.70	53
	TOTAL	1119.67		93*

Note: * - the subsidy amount to be allocated to Jeevan Dhara and Domestic category has been considered as Rs. 100 crore, to accommodate variation in consumption patterns, since, only the balance amount can be utilized against the past period outstanding liabilities in the ARR of APDCL

Accordingly, the balance amount of State Government subsidy of Rs. 100 crore (Rs. 200 crore – Rs. 100 crore) has been utilised against the past revenue gap of Rs. 230 crore proposed to be recovered through the revised tariffs, thereby, resulting in a past revenue gap of Rs. 130 crore to be recovered through the ARR of FY 2013-14.

Hence, **the estimated revenue gap/surplus for FY 2013-14 is given in the table below:**

Table 4.92: Estimated Revenue gap/surplus for FY 2013-14 (Rs. Crore)

Sr. No.	Parameters	Estimated by the Commission
1	Approved ARR for FY 2013-14	2637.84
2	Add: Revenue Gap of previous years considered for recovery	230
3	Less: Revenue Subsidy available for reducing previous years' revenue gap	100
4	Total Revenue Requirement	2767.84
5	Less: Revenue from sale of power at the existing tariff including FPPPA	2703.54
6	Net Deficit for FY 2013-14 (4-5)	64.30

5. Tariff Principles and Design

5.1 INTRODUCTION

In determining the revenue requirement and the retail supply tariff of APDCL for the Control Period, the Commission has been guided by the provisions of the Electricity Act, 2003 and the National Electricity Policy (NEP), the Tariff Policy, CERC (Terms and Conditions of Tariffs) Regulations as well as AERC Regulations.

Section 61 of the Act lays down the broad principles and guidelines for determination of retail supply tariffs. The basic principle is to ensure that tariff should progressively reflect the cost of supply of electricity and reduce the cross subsidies amongst categories within a period to be specified by the Commission. The Act lays down special emphasis on safeguarding of consumers interest and also requires that the costs should be recovered in a reasonable manner. The Act mandates that tariff determination should be guided by factors which “encourage competition, efficiency, economical uses of resources, good performance and optimum investment”. The Tariff Policy notified by the Government of India provides comprehensive guidelines for determination of tariff as also working out the revenue requirement of power utilities. The Commission has followed these guidelines, as far as possible.

The Commission has carried forward, the process of rationalization of tariff in order to ensure that the tariffs reflect as far as practicable, the cost of supply. In order to determine the voltage-wise cost of supply, the Commission requires a number of inputs from the Utility based on the data developed on sustainable basis.

The Hon’ble Appellate Tribunal for Electricity in its Judgment dated 14 March, 2006 in Appeal No. 3 of 2005 filed by some consumers in Assam has observed on implementation of cost of supply as under:

“ ___ The cost of supply of electricity must be determined in accordance with the principle laid down in the Act. Since the relevant data was not available with the Commission, it was not possible for it to determine the “cost of supply of electricity” we cannot ask the Commission to do the impossible. Since in the past the Commission was not in a position to give appropriate

direction for want of data. We will now direct the utilities that the installations be metered at strategic locations to perform energy audit for determining losses and supply to various classes of consumers immediately, so that it is possible for the AERC to determine the cost of supply to different categories of consumers. We presently decide not to interfere with the order of the Commission in this aspect of the matter”.

In this context, the Commission in its Order dated 16 May, 2011 had issued directives to APDCL to carry out a study to ascertain voltage wise and consumer category wise cost of supply. Compliance with the Directives issued and Commission comments have been elaborated in the Directives Chapter.

The data available from APDCL is not adequate to workout the realistic “cost of supply” to various categories of consumers. The Utility shall have to develop sustainable data over a period to arrive at cost of supply for various categories of consumers. Until then, the Commission would follow the mandate of the Tariff Policy that tariff should be within +/- 20% of the average cost of supply at the same time taking into consideration the “cost of supply” implemented by the Commission to various categories of consumers in its earlier Tariff Order. The Commission has set a loss reduction target for the Control Period. Reduction of distribution loss and better performance by APDCL will result in reduction of losses and consequently the average cost of supply.

5.2 REVENUE DEFICIT / SURPLUS FOR FY 2013-14

It is to note that for determination of the ARR for FY 2013-14 to FY 2015-16 and tariff for FY 2013-14, the Commission has considered the latest ARR approved for APGCL and AEGCL. Further, as clarified in the Tariff Order for APGCL, the Commission has considered the impact of truing up for FY 2011-12.

Further, as explained under Chapter 4, the State Government vide its letter dated 22 August, 2013 communicated its decision to provide financial support to APDCL amounting to maximum of Rs. 200 Crore for FY 2013-14. The State Government vide its letter dated 23 September, 2013 clarified that it is pleased to allow targeted subsidy of Rs. 1.10 per unit for Jeevan Dhara (BPL consumers) for consumption upto 30 units per household per month or else allow a subsidy of Rs. 0.70 per unit per household per month for total consumption upto 120 units by Jeevan Dhara

consumers if they consume more than 30 units in a month, and a subsidy of Rs. 0.70 per unit for upto 120 units per month by domestic category 'A' consumers and further clarified that the balance amount, if any, may be utilized against the past period outstanding liabilities in the ARR of APDCL. Accordingly, as explained earlier, the Commission has considered it appropriate to utilise the balance financial support amounting to Rs.100 Crore, as a revenue subsidy, against the past period revenue gap of APDCL. It is pertinent to mention that Para 8 of the Tariff Policy states that *'Making the distribution segment of the industry efficient and solvent is the key to success of power sector reforms and provision of services of specified standards. Therefore, the Regulatory Commissions need to strike the right balance between the requirements of the commercial viability of distribution licensees and consumer interests.....'*

The Commission has estimated the revenue from sale of power at the existing tariff including FPPPA at Rs. 2703.54 Crore. Accordingly, the net revenue gap for FY 2013-14 is of Rs. 64.30 Crore.

5.3 TARIFF DESIGN

The Commission in the present Tariff Order has determined the tariff for the first year of the Control Period. As outlined under earlier Chapter 2 of the Order, ADPCL has proposed category wise retail tariff to meet the revenue gap of around Rs. 720.70 Crore for FY 2013-14. However, on detailed scrutiny of APDCL's revenue requirement proposal, the Commission has arrived at more realistic net revenue gap of around Rs. 64.30 Crore only. The Commission has revised the category-wise tariffs in order to recover the revenue gap of Rs. 64.30 crore, which amounts to an average tariff increase of 2.4%.

The Commission has not contemplated any change in the existing tariff categories and consumption slabs.

APDCL has proposed to levy Consumer Charges in addition to Fixed/Demand Charges and Energy Charges, under the present Petition. The ARR is presently recovered through two part tariff structure Fixed/Demand charges and Energy charges, and allowing recovery through separate charges is not warranted. The Commission has hence, rejected APDCL's proposal to recover Consumer Charges.

The Commission has also retained the fixed charges at the existing levels.

As regards the Tea Sector's request that all non-factory and statutorily prescribed facilities should be treated as non-industrial and charged at domestic rate, the Commission is of the view that this is impractical and the entire consumption of a particular consumer has to be charged under any one category only.

The Commission has reduced the tariffs for Public Water Works category (both HT and LT), since, these categories are public services and may not be required to subsidise other categories. Hence, the Commission has reduced the tariff for this category such that this category neither subsidises nor is subsidised by other categories.

The Commission has also reduced the tariff for the LT General Purpose Supply category, since, this category which primarily includes premises of Charitable organisations, places of worship, small Government offices, etc., may not be required to subsidise other categories to this extent.

The Commission has also retained the tariffs of the Jeevan Dhara category and first slab of the Domestic A category (first 4 kWh per day or first 120 units per month) at the existing levels, with the intention of reducing the burden on these categories, and also since the level of cross-subsidy is also within limits. However, in real terms, the tariff for these two categories will actually be lower than the existing tariff, on account of the State Government subsidy being provided to these two categories.

The Commission has not accepted APDCL's proposal to increase the tariff differential in the TOD tariffs, since the tariff differential sought by APDCL was high, and the existing tariff differential is reasonable. Also, APDCL has not submitted any data to justify its request for increase in the tariff differential in TOD tariffs. Hence, the Commission has retained the existing tariff differential in the TOD tariff for different time slots during the day, so as to ensure that the DSM and energy conservation measures are continued. The necessary directive regarding submission of TOD data has been given in Chapter 6 of this Order.

The Commission has considered marginal increase in tariffs of certain categories of consumers, while it has considered it prudent to reduce the tariff of certain categories, while keeping in view the overall objective of maintaining the cross-

subsidy within the limit of $\pm 20\%$, as given below. **The full cost recovery (before Government subsidy) based category-wise tariffs and increase/decrease in tariff is given in the following Table:**

Table 5.1: Category-wise full cost recovery tariff and increase/decrease in tariff in FY 2013-14

Sr. No.	Consumer Category	Increase/decrease (-) in tariffs		Revised tariffs	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
	LT Group		paise per unit	Rs/kW or Rs/kVA	paise per unit
LT-1	Jeevan Dhara 0.5 kW and 1kWh/day	No change	No change	15	353
LT-II	Domestic A- above 0.5 kW to 5 kW				
	First 4 kWh/day	No change	No change	30	428
	Next 4 kWh/day	No change	12	30	545
	Balance	No change	12	30	615
LT-III	Domestic-B above 5 kW to 20 kW	No change	12	30	575
LT-IV	Commercial Load above 0.5 kW to 20 kW	No change	12	110	615
LT-V	General Purpose Supply	No change	(-) 33	125	515
LT-VI	Public Lighting	No change	(-) 43	120	530
LT-VII	Agriculture upto 7.5HP	No change	(-) 3	30	375
LT-VIII(i)	Small Industries Rural upto 20 kW	No change	17	30	400
LT-VIII(ii)	Small Industries Urban	No change	17	40	425
	Temporary Supply				
	Domestic	No change	37	80	765
	Non-Domestic Non- Agriculture	No change	47	125	975
	Agriculture	No change	37	50	565
	HT Group				
HT-I	HT Domestic 25 kVA and above	No change	27	30	570
HT-II	HT commercial 25 kVA & above	No change	27	115	600

Sr. No.	Consumer Category	Increase/decrease (-) in tariffs		Revised tariffs	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
HT-III	Public Water Works	No change	(-) 38	125	520
HT-IV	Bulk Supply 25 kVA and above				
HT-IV(i)	Government Educational Institutions	No change	7	110	535
HT-IV(ii)	Others	No change	17	145	575
HT-V(A)	HT Small Industries upto 50 kVA	No change	22	40	450
HT-V(B)	HT Industries-1 50kVA to 150 kVA	No change	12	100	515
HT-V(C)	HT Industries-II above 150 kVA	No change	35	140	548
HT-VI	Tea, Coffee & Rubber	No change	17	230	565
HT-VII	Oil & Coal	No change	27	270	580
HT-VIII	HT Irrigation Load above 7.5 HP	No change	27	40	500

The Commission after due consideration to the letter given by Government of Assam indicating its commitment to provide subsidy u/s 65 of the Electricity Act 2003 to selected categories/consumption slabs, has determined the Retail Supply Tariff for APDCL for FY 2013-14, as under:

Table 5.2: Category-wise retail supply tariff and increase/decrease in tariff in FY 2013-14, after accounting for State Government subsidy

Sr. No.	Consumer Category	Increase/decrease (-) in tariffs		Revised tariffs	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
			paise per unit	Rs/kW or Rs/kVA	paise per unit
	LT Category				
LT-1	Jeevan Dhara 0.5 kW and 1kWh/day	No change	(-) 110	15	243*
LT-II	Domestic A-				

Sr. No.	Consumer Category	Increase/decrease (-) in tariffs		Revised tariffs	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
	above 0.5 kW to 5 kW				
	First 4 kWh/day	No change	(-) 70	30	358*
	Next 4 kWh/day	No change	12	30	545
	Balance	No change	12	30	615
LT-III	Domestic-B above 5 kW to 20 kW	No change	12	30	575
LT-IV	Commercial Load above 0.5 kW to 20 kW	No change	12	110	615
LT-V	General Purpose Supply	No change	(-) 33	125	515
LT-VI	Public Lighting	No change	(-) 43	120	530
LT-VII	Agriculture upto 7.5HP	No change	(-) 3	30	375
LT-VIII(i)	Small Industries Rural upto 20 kW	No change	17	30	400
LT-VIII(ii)	Small Industries Urban	No change	17	40	425
	Temporary Supply				
	Domestic	No change	37	80	765
	Non-Domestic Non- Agriculture	No change	47	125	975
	Agriculture	No change	37	50	565
	HT Category				
HT-I	HT Domestic 25 kVA and above	No change	27	30	570
HT-II	HT commercial 25 kVA & above	No change	27	115	600
HT-III	Public Water Works	No change	(-) 38	125	520
HT-IV	Bulk Supply 25 kVA and above				
HT-IV(i)	Government Educational Institutions	No change	7	110	535
HT-IV(ii)	Others	No change	17	145	575
HT-V(A)	HT Small Industries upto 50 kVA	No change	22	40	450
HT-	HT Industries-1	No change	12	100	515

Sr. No.	Consumer Category	Increase/decrease (-) in tariffs		Revised tariffs	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
V(B)	50kVA to 150 kVA				
HT-V(C)	HT Industries-II above 150 kVA	No change	35	140	548
HT-VI	Tea, Coffee & Rubber	No change	17	230	565
HT-VII	Oil & Coal	No change	27	270	580
HT-VIII	HT Irrigation Load above 7.5 HP	No change	27	40	500

Note:

*The above determined rates for LT-I Jeevan Dhara and LT II (A) Domestic A category are contingent on payment of subsidy as agreed by the Government of Assam, failing which, the rates contained in the full cost recovery tariff schedule (Table 5.1) shall become operative

5.4 CROSS SUBSIDY

The Commission has attempted to limit the cross subsidy to $\pm 20\%$ of the average cost of supply in determining the tariffs to different categories of consumers as per guidelines in the Tariff Policy, as shown in the Table below:

Table 5.3: Category-wise cross-subsidy in FY 2013-14

(Rs/kWh)

Sr. No.	Category of consumers	Average Tariff	Average Cost of Supply	Cross-subsidy as Ratio of Average Tariff to ACOS
(1)	(2)	(3)	(4)	(5)
	LT Category			
1.	Jeevan Dhara 0.5 kW and 1kWh/day	4.09	6.01	68.10%
2.	Domestic A- above 0.5 kW to 5 kW	5.23	6.01	87.05%
3.	Domestic-B above 5 kW to 20 kW	6.28	6.01	104.58%
4.	Commercial Load above 0.5 kW to 20 kW	7.15	6.01	118.99%
5.	General Purpose Supply	6.58	6.01	109.45%
6.	Public Lighting	5.90	6.01	98.10%
7.	Agriculture upto 7.5HP	5.10	6.01	84.88%

Sr. No.	Category of consumers	Average Tariff	Average Cost of Supply	Cross-subsidy as Ratio of Average Tariff to ACOS
8.	Small Industries Rural upto 20 kW	4.67	6.01	77.64%
9.	Small Industries Urban	4.94	6.01	82.19%
10.	Temporary Supply			
	(i) Domestic	7.65	6.01	127.30%
	(ii) Non Domestic non Agriculture	9.75	6.01	162.25%
	HT Category			
11.	HT Domestic 25 kVA and above	5.97	6.01	99.32%
12.	HT commercial 25 kVA & above	6.90	6.01	114.81%
13.	Public Water Works	5.99	6.01	99.64%
14.	Bulk Supply 25 kVA and above			
14A	Government Educational Institutions	6.09	6.01	101.38%
14B	Others	6.55	6.01	108.97%
15.	HT Small Industries upto 50 kVA	4.96	6.01	82.62%
16.	HT Industries-I 50kVA to 150 kVA	6.28	6.01	104.48%
17.	HT Industries-II above 150 kVA	6.10	6.01	101.51%
18.	Tea, Coffee & Rubber	7.22	6.01	120.16%
19.	Oil & Coal	7.16	6.01	119.20%
20.	HT Irrigation Load above 7.5 HP	5.72	6.01	95.16%

As can be seen from the above Table, the average billing rate for almost all categories is within the band of 80% to 120% of average cost of supply, which is in accordance with the Tariff Policy.

5.5 FUEL PRICE AND POWER PURCHASE ADJUSTMENT CHARGES (FPPPA)

Fuel Price and Power purchase adjustment charges as per the Regulations notified by the Commission are applicable, which are appended to this Order as **Annexure 2**. As per Regulations 5.2 of the AERC (Fuel and Power Purchase Price Adjustment) Regulations, 2010 “*The FPPPA charges shall not exceed 25% of the variable cost component of tariff or such other ceiling as may be stipulated by the Commission from time to time, where the variable component of tariff is defined as total estimated revenue from energy charges (EC) in a year the approved in the Tariff Order divided*

by total estimated sales of the year. When FPPPA charges exceed 25% of the variable component of tariff, the licensee shall make a petition to the Commission for recovery of the charges over the specified cap which shall be recovered after Commission's scrutiny and directives".

APDCL shall strictly follow the above Regulation and when FPPPA charges exceed 25% of the variable components of the tariff the APDCL shall file a Petition before the Commission and FPPPA charges beyond 25% of the variable cost component of tariff shall be recovered only after Commission's scrutiny and approval.

6. Compliance of Directives by APDCL and new Directives

6.1 COMPLIANCE OF DIRECTIVES ISSUED BY THE COMMISSION

The Commission in its MYT Order dated 16 May, 2011 for FY 2010-11 to FY 2012-13 and Tariff Order dated 28 February, 2013 had issued certain directives to APDCL. APDCL has submitted the Compliance of Directives vide its letter dated 14 February, 2013 under Volume-III of the Petition. Further, APDCL vide its letter dated 17 June, 2013 submitted status of Compliance of Directives/New Directives issued in the Tariff Order dated 28 February, 2013 for FY 2012-13.

The Commission's comments on the status of compliance of old and fresh Directives by APDCL are discussed in this Chapter and further directives have been issued, wherever necessary.

6.2 COMPLIANCE OF OLD DIRECTIVES

Directive 3: File Fixed Assets Registers duly authenticated incorporating Gross Fixed Assets (GFA) at the beginning of the relevant financial year, addition, dispositions / sale proceeds, if any, made during the relevant financial year, and the written down value of the assets at the end of the relevant financial year.

Further, to maintain proper and detailed Fixed Asset Registers at field offices to work out depreciation expenses, the Commission directs them to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets.

Compliance by APDCL:

The Fixed Assets Registers have been prepared unit wise and updated Fixed Asset Registers upto 31.03.2011 submitted.

Commission's Comments:

Noted.

Directive 4: File Physical Verification Report of Fixed Assets by a competent and reliable authority as at the end of each financial year beginning with FY 2005-06 and

onwards.

Compliance by APDCL:

APDCL has decided to outsource the work of Physical Verification of its fixed assets.

Commission's Comments:

Physical verification of the Fixed Assets should be commenced at the earliest with confirmation to the Commission, and the Physical Verification Report should be submitted at the earliest.

Directive 6: Capital Work-in-progress:- To submit the detailed analysis of amount locked up in Capital Work-in-progress year-wise beginning from FY 2005-06 to FY 2007-08 and the conversion of CWIP into Fixed Assets duly reconciling with the Assets Register within two months from date of issue of Tariff Order 2008-10. The utilities shall submit in detail the cost and time of completion of each project and reason for delay (if any).

Compliance by APDCL:

Scheme wise CWIP details for different years is attached.

Commission's Comments:

Noted. The Commission is separately studying the same and shall communicate its observations to APDCL, if required, separately.

Directive 17: Power from Co-generation and Renewable sources:- The utilities / Discoms should make all efforts to procure more power from co-generation and renewable sources, may be through competitive bidding process to promote Renewable Generation.

Compliance by APDCL:

APDCL is committed to purchase Non Conventional Energy from all upcoming generators through MOU/PPA route. Report submitted.

Commission's Comments:

Noted.

Directive 18: Circle-wise Trajectory for Loss Reduction: - Discom is directed to fix-up circle-wise trajectory for loss reduction and prepare a detailed action plan for

reduction of Distribution and AT&C losses during 2009-10. The action plan for reduction of losses during 2009-10 should be submitted to the Commission within 2 months from the date of this order.

Compliance by APDCL:

Various projects in different circles are under implementation under different scheme as R-APDRP, TDF, ADB, etc. Details are attached.

Commission's Comments:

Noted. APDCL should submit the report on the loss levels vis-à-vis the loss reduction trajectory for each circle on a six-monthly basis.

Directive 19: Database on TOD consumption: - The Commission intended to extend the benefit of TOD tariff to other HT category consumers. At present under HT group, Domestic, Commercial, Public Water Works, HT Small Industries and HT Irrigation are not covered under TOD tariff. The Utilities have to build up some database and make available to the Commission the pattern of consumption during different periods of day by different categories under TOD tariff. But the volumes of data in sample forms are not sufficient. The Commission directs that the Load Research Cell under Discoms will collect more data of such consumers and submit to the Commission for making a database on TOD consumption. The data submitted by utilities should be both in hard and soft copy forms.

Compliance by APDCL:

CMRI data of consumers having load of 25 kVA and above are downloaded and monitored under HVCMS project. APDCL has analyzed the consumption pattern in different times of the day of several consumers under HT category and is planning to introduce TOD tariff in HT-Commercial group. Load curve samples of consumers under HT-Commercial category, in support of our opinion are enclosed.

Commission's Comments:

The data given is insufficient. More data as called for in the directive should be submitted at the earliest.

6.3 COMPLIANCE OF THE FRESH DIRECTIVES ISSUED BY THE COMMISSION IN ITS TARIFF ORDER DATED 16TH MAY, 2011

Directive 1: Pilferage of Energy

The need of the hour is to activate the organization to curb the pilferage of power within the premises of provisions of Indian Electricity Act 2003 and also the Indian Penal Code. A task force is to be constituted in different zones to which the entire Licensee area is to be divided to carry out massive raid to arrest pilferage. In case of detection of such theft/pilferage, the concerned authority of the area and personnel attached to them, who have duties to supervise the work, have to be made answerable for punitive action. Those found committing mischief of pilferage should be booked and penal action should be taken.

Compliance by APDCL:

To detect the case of Pilferage and theft of electricity, 12 numbers of special police stations have been constituted at Dhubri, Goalpara, Guwahati, Nalbari, Mangaldoi, Silchar, Nagaon, Tezpur, Golaghat, Jorhat, Dibrugarh and Lakhimpur. A 24 hour 'Central Electricity Theft Control Centre' has been formed at Guwahati dial-9678005171. Performance of APDCL special police station is attached.

Commission's Comments:

The Commission vide its Order dated 16 May 2011 directed APDCL that the Performance Report of special police stations for FY 2011-12 and FY 2012-13 should be submitted to the Commission within April, 2013. The Performance Report should include the number of FIRs lodged, number of persons arrested, number of cases filed in Court, number of persons convicted, total amount of monthly assessment bills, number of raids conducted, etc. Besides, the Report should mention the action taken by the licensee to motivate the police personnel of these police stations, number of police personnel sanctioned for these stations separately for each station, number of personnel actually in position and the payment disbursed to them during the above mentioned years.

ADPCL has submitted the report. However, APDCL should strengthen the special police stations and intensify the process of arresting power theft.

Directive 2: Energy Audit and Demand Side Management

Energy audit is an important and essential tool to identify the high loss (technical and commercial) areas in the system. For carrying out the energy audit, meters are required to be provided at all the feeders from 220 kV to 11 kV level and also distribution transformers on LT side.

The energy audit should be taken up first in all the towns with a population of fifty thousand and above. The first status report on the action taken for energy audit in all the towns should be reported to the Commission by end September, 2011 to issue further directives in this regard, if required.

One of the effective methods to minimize the demand-supply gap is by expediting Demand Side Management (DSM) activities. The Commission vide letter No. AERC 180/2005/Pt I/68 dated 15/09/2010 directed APDCL to constitute a DSM Cell for carrying out load research, formulation of DSM Plans, design, development and implementation of DSM activities, etc. The Commission directs that a status report on the activities of DSM Cell be submitted within 60 days from the date of issue of this Order.

Compliance by APDCL:

A DSM cell is being created in APDCL

1. APDCL initiated the plan for distribution of CFL lamps to rural consumers. Out of 19,98,600 numbers of CFL lamps delivered to different areas, 10,33,500 lamps are already distributed.
2. APDCL has already purchased and installed 3 star rated transformers.
3. APDCL has already undertaken monitoring of High Value consumers through special audit.
4. In order to monitor the consumption of high value consumers, CMRI download of all H.T. consumers have been taken up. In the first phase, APDCL has taken up downloading of CMRI data of consumers having load of 500 kVA and above, and the data has been analyzed and corrective measures taken.
5. To cover all H.T. consumers, a central HVCMS project (High Value Consumer Management System) has been taken up and for implementation of the same M/s. PwC Ltd. has been engaged as Consultant. The project works started in the

month of September 2012. Completion of CMRI download and analysis for all consumers is targeted within 31 January, 2012.

6. Further, from January 2013, APDCL has to discontinue manual reading of meter data and switch over to billing by direct CMRI downloaded data.
7. Further, as stated above, under the initiative of GOI, a smart grid pilot project is proposed under RAPDRP, which includes DSM initiative by segregating consumer load under essential/ nonessential etc.
8. APDCL would implement Bachat Lamp Yojna and the Malaysian firm M/s C Quest Capital Malaysia Ltd. was selected for the project.
9. ADPCL, at the request of Rajeev Bhawan, Guwahati, has allowed installation of 2 kW LT roof top solar PV under a net metering arrangement, which was commissioned on 2 Oct, 2012. The plant is running successfully and contributing approximately 180 units per month to the grid and consumer in return is getting a benefit of approximately Rs. 900 per month.
10. A total of 3253 numbers of pre-paid meters are already purchased, out of which 2624 numbers are installed.

Commission's Comments:

The steps taken by the licensee are noted. The Commission notified the Assam Electricity Regulatory Commission (Demand Side Management) Regulations, 2011 on 10 April, 2012. These Regulations specify 'Constitution of DSM Cell, its Roles and Responsibilities'. The Commission hereby directs APDCL to submit the DSM Plan formulated as per the Regulations to the Commission.

Directive 3: Annual Accounts

The APDCL is directed to accord highest priority and ensure that the accounts are got audited by the Accountant General in time. The provisional accounts for FY 2009-10 are not yet furnished to the Commission. The audited accounts for 2009-10 shall be furnished at the earliest.

Compliance by APDCL:

Submitted up to FY 2011-12

Commission's Comments:

Noted. The APDCL is directed to accord highest priority and ensure that the accounts are got audited by Accountant General in time.

Directive 4: Employee Cost

As per the information made available, the employee cost of APDCL is high which stands at about 24% of the total revenue income from sale of power at existing tariff. APDCL is directed to enforce economy and austerity measures in their operations and take urgent steps to reduce establishment cost by utilizing the existing man-power optimally, and imposing restriction on creation of posts, introducing revised work load norms. APDCL is directed to identify surplus staff and deploy them after proper training, in the area of customer service, in the meter reading, billing and revenue realization so as to provide better service to the consumer. A first report on the action taken may be sent to the Commission by 30, June 2011.

Compliance by APDCL:

Need based analysis has been carried out and recruitments and mobilization/redeployments are done. Extract from the report of organization structure submitted by PwC is attached to the Petition. Training details are enclosed in Annexure.

Commission's Comments:

The HR profiling is noted. However, the reply from APDCL is silent regarding introduction of revised work load norms, provision of training to the existing staff, etc. The Commission in its Order dated 28 February, 2013 had already directed APDCL to provide the information in this regard within April, 2013.

It is observed that ADPCL till date has not submitted the report. APDCL is hereby directed to submit the report without any further delay.

Directive 5: Power from Sishugram Sub-station

North Eastern Small Scale Industries Association represented that two big steel industries in Amingaon area have submitted requisition for entire power requirement of expansion of 50 MVA Sishugram Sub-station and the SSI Industries were asked to wait till the Sishugram project is completed. They request a reservation of 40% power

to be made available to Small Sector Industries from Sishugram Sub-station. A report on the expansion of the Sishugram sub-station capacity, pending industrial small scale sector and other industrial applications, etc., may be submitted to the Commission before 30 June, 2011.

Compliance by APDCL:

Sishugram substation has the capacity of 31.5 x 2 MVA and 40 x 1 MVA. The substation can take power either from Kahilipara or Rangia Grid Substation. However, due to line constraints (Panther Conductor), the line cannot be fully loaded. Steps are being taken to remove the bottlenecks. The present status of load released and yet to be released to different consumers has been already submitted to the Commission.

Commission's Comments:

Noted. APDCL should furnish the latest status of compliance.

Directive 6: Improvement in quality of service

APDCL is directed to take appropriate steps to improve the quality of service, especially quality of supply to its consumers. The quality of power being supplied to consumers, especially in the rural areas needs substantial improvement. Adequate steps need to be taken so that reliable, uninterrupted and quality power is made available to the consumers.

Compliance by APDCL:

Schemes under different funding are being undertaken to improve quality and reliability of service. A total of 27 nos. of Customers Care Centres have been established at the division level and 29 nos. of Consumer's Service Centres at the Sub-division level to take care of consumer complaints, revenue billing and collection, etc., in remote or rural areas.

APDCL has taken initiative for payment of compensation on receipt of claim by the consumers after scrutiny and by adjustment of demand charges. However, no such claims are pending with the department as of now.

Commission's Comments:

Noted. The Commission has received a number of objections pertaining to quality of

supply. APDCL should improve the quality of service to all categories of Consumers, particularly in rural areas, and should submit half-yearly report for all Circles on Reliability Indices (SAIDI, SAIFI and CAIDI) with all backup data..

Directive 7: APDRP Schemes

The status of implementation of APDRP schemes, amount utilized upto 31st March, 2011, the benefits accrued by way of increase in metered sales, reduction of transmission loss, improvement of quality of supply, revenue etc., shall be reported to the AERC by end of July 2011.

Compliance by APDCL:

Report attached.

Commission's Comments:

Noted.

Directive 8: Prepaid Meters

Prepaid meters eliminate the cost of meter reading, bill serving, disconnection / reconnection and avoids wrong readings, delay in bill serving, etc. Since the payment is upfront, it improves the cash flow of the Discom. APDCL may procure some prepaid meters initially after ensuring service facilities and provide to some domestic consumers as a pilot study to encourage and make the consumers to observe the advantages of having prepaid meters facility. Subsequently, APDCL may suggest the consumers to purchase the prepaid meters at their own cost by offering some rebate say about 10% in energy charges.

Compliance by APDCL:

For reduction of AT&C loss and DSM an initiative has been taken by APDCL to install pre-paid meters in consumer's premises. A total of 3253 numbers of pre-paid meters are already purchased, out of which 2624 numbers are installed and a directive has been issued to make it mandatory to install pre-paid meters in all up-coming residential flats of Guwahati city.

Commission's Comments:

Noted. The Commission directs APDCL to take appropriate initiatives along with the

State Government for installation of prepaid meters in the Government Departments as well as autonomous bodies, within three months of issue of this Order, in order to achieve timely settlement of power dues from Government departments to the distribution licensee.

Directive 9: Cost of Supply and Cross Subsidy

As per Section 61 (g) of the Electricity Act, 2003, the Commission has to ensure that the tariff progressively reflects the cost of supply and cross subsidy is reduced within a specified period. In this context, the Commission directs APDCL to carry out a study to ascertain voltage-wise and consumer category-wise cost of supply. The study should be for a period of one year. APDCL may appoint a consultant if necessary to carry out the study. APDCL is also directed that a team of young engineers of APDCL should interact continuously with the consultant and fully familiarize themselves with the subject so that they are in a position to take up such studies themselves in future. The study shall be completed within a period of 18 months from issue of this Order. The progress on this study shall be reported to the Commission every month.

Compliance by APDCL:

With the monitoring and MRI data of higher consumption consumers, required information regarding consumption patterns are being made available for study and updating of cost of supply and cross subsidy. Few samples of MRI data of High value consumers are submitted along with the Petition.

Commission's Comments:

The Commission directs that a detailed report on the study on voltage wise cost of supply and cross subsidy be submitted without any further delay.

Directive 10: Spot Billing

To avoid errors in meter reading / recording delay in bill serving, action may be taken to read/record the meter reading and bill serving for the LT consumers on the spot with handheld computers. Handheld computer prices have come down considerably and many utilities are successfully implementing these procedures.

APDCL shall initiate action in this regard and the progress in this matter may be shared with the Commission.

Compliance by APDCL:

Spot billing machines are introduced in some circles of APDCL on experimental basis. Due to some software related issues some of the circles have discontinued this practice of billing. However, it is still in practice in few sub-divisions.

Commission's Comments:

Noted. APDCL should resolve the software related issues and ensure that more circles of APDCL initiate spot billing in their areas.

Directive 11: Independent third party meter testing arrangement

The National Electricity Policy (NEP) emphasizes the need for establishment of an independent third-party meter testing arrangement. It is noted that the Licensee has not been establishing reliable Independent Testing Laboratories.

The Licensee shall establish more number of testing laboratories in each circle to test more number of meters either new or defective. Setting up of a meter testing lab may not cost much but the persons have to be trained in testing. The progress on upgrading the existing labs and setting up of new labs may be reported to the Commission quarterly. The first such report shall be submitted by July, 2011.

Compliance by APDCL:

All circles are now equipped with electronic test branches for testing of energy meters. Third party inspection arrangement is not yet ready. However, APDCL has proposed setting up of three independent third party meter testing entities in Assam Engineering College, Guwahati, Jorhat Engineering College, Jorhat, and NIT, Silchar.

Commission's Comments:

Noted. All circles should be equipped with independent meter testing laboratories without further delay.

Directive 12: Efficient meter reading billing and collection

Timely meter reading, billing and collection for energy consumed by the consumers can significantly improve the cash flow of the Licensee. The present system should be reviewed with a view to streamlining the process and minimizing the time between actual delivery of power and receipt of revenue. Supervisory officers must counter

check the meter readings taken by the meter readers. Further, the area of meter readers should be changed every year. Although MRI billing is in place for some of the consumers, the Licensee now shall conduct billing through Meter Reading Instrument (MRI) for all HT consumers and large non-domestic consumers. Spot billing preferably by palm top computers may be introduced in the urban areas. The present status of MRI billing for the consumers shall be submitted to the Commission by end June, 2011.

Compliance by APDCL:

It is decided that all the consumers having load of 25 kVA and above will be billed through MRI and data will be analysed.

Commission's Comments:

Meter Reading Instrument (MRI) downloads for all HT consumers and large non-domestic consumers should be made compulsory within a period of three months from the date of this Order and the status report shall be submitted to the Commission by the end of January, 2014. The MRI data should be analysed. Computer generated bills with the sole purpose of avoiding human element in bill generation should be implemented within a fixed time line.

Directive 13: Meter Reading of HT services

The monthly meter reading of HT services shall be entrusted to a Committee of high level officers of the APDCL. All the HT services below 500 kVA contracted demand, meter reading may be done by the concerned Assistant Manager and those above 500 kVA by the concerned Senior Manager / Manager / Deputy Manager. Further, certain percentage of meter readings in each category of consumers shall be done by senior officers of the APDCL upto the level of GM / DGM to control pilferage of electricity. APDCL shall issue suitable instructions in this regard immediately and the Licensee shall also review the percentage of check readings and take action in case of variation between normal meter reading read by meter reader and the check meter reading taken by the officers of the APDCL.

Compliance by APDCL:

All dedicated service lines are now equipped with check meters with required agreement to arrest pilferage of energy. All HT consumers are billed through CMRI reading only.

Commission's Comments:

Noted. Meter Reading Instrument (MRI) downloads for all HT consumers should be made compulsory within a period of three months from the date of this Order and the status report shall be submitted to the Commission by the end of January, 2014.

Directive 14: Replacement of old electromagnetic meters with static meters

A report on the status of metering, type of meters provided in HT and other high value LT installations along with a programme for replacement of such meters with static meters shall be submitted to the Commission by July, 2011.

Compliance by APDCL:

As per demand, the following numbers of old electromechanical meters have been replaced by static Digital meters by different circles of Lower Assam Region under O&M and ABY schemes.

Name of the Circle	Single Phase Meters	Three Phase Meters
GEC-I	4287	152
GEC-II	2653	
Rangia	3888	
Mangaldoi	400	
Kokrajhar	4347	36
Bongaigaon	2200	

Meters replaced under ADB funded schemes:

	Single Phase Meters	Three Phase Meters
LAR	145515	7640
UAR	11003	5690

Commission's Comments:

The above data does not provide details of total number of electro-mechanical meters and percentage replacement achieved till date. Efforts should be made to replace more electro-mechanical meters with Static Digital meters and the latest status report for the entire State of Assam should be submitted to the Commission by January, 2014.

Directive 15: Management Information System

The Board is directed to take urgent steps to build a credible and accurate database and Management Information System (MIS) with unbundled costs and expenditure of the three businesses of the Board, viz., Generation, Transmission and Distribution to make information available on operational and financial issues and get such data updated on monthly basis. Advantage of IT must be taken to institute the MIS. Action must be taken urgently on this and the action taken shall be reported to the Commission by October, 2011. Care must be taken to see that the next tariff petition is supported by an accurate and credible database.

Compliance by APDCL:

Currently, APDCL has taken up a major IT intervention project, i.e., implementation of state-of-art Commercial and Customer Management Systems under GOI funded R-APDRP in 72 towns. The proposed application systems under the R-APDRP will help APDCL in strengthening its consumer interfaces in terms of improvements to metering, billing and collection, asset management, network maintenance, energy accounting, consumer payments and customer relationship management.

Given the massive improvements in business processes in these front office areas, APDCL needs to implement concurrent interventions for the support functions of finance and accounts, human resources management and materials management / procurement, in order to support the initiatives taken under R-APDRP through appropriate intervention. An enterprise resource planning (ERP) programme will be able to support as desired, by providing visibility on management practices of scarce resources e.g. cash, people and distribution infrastructure and by developing the employees to be more accountable and responsible in discharging their functions.

Commission's Comments:

The above direction should be complied without further delay and the report on the same should be submitted by January, 2014.

Directive 16: Energy conservation

A well-known proverb is that energy conserved is energy generated and to conserve energy, the consumers are required to be well educated by way of demonstrations, holding meetings at various levels and through print media so that energy

consumption can be reduced considerably by adopting economy measures such as use of energy efficiency lighting, high efficiency and standard make household appliances, high efficiency pumpsets preferably with labels of Bureau of Energy Efficiency (BEE) and other energy conservation devices. All categories of consumers should be well apprised of the newly developed latest energy conservation devices so that the energy conserved can be utilized for more productive purposes and in consonance with the direction issued by the Ministry of Power, Government of India.

Compliance by APDCL:

Decision has taken to introduce energy efficient DTR in all new schemes.

Commission's Comments:

Noted. More initiatives should be taken by the Company as per schemes formulated by the Government of India.

Directive 17: Consumer education and awareness

The Commission directed APDCL to establish and earmark funds for consumer education and awareness. APDCL was also directed to provide details about the scope of activities to be taken up under this initiative to the Commission within 3 months from the date of issue of the Tariff Order for FY 2008-09 and FY 2009-10. Although, it was informed by APDCL that some measures were taken in this regard, whole hearted approach to this cause seems to be lacking. The Commission vide letter No. AERC 123/2005/Pt I/358 dated 04/02/2011 directed APDCL to incorporate some additional vital information on the reverse of the electricity bills to be served to the consumers. This information in the electricity bills will benefit the consumers in redressal of their grievances. However, till date the required information has not been incorporated in the energy bills. Therefore, the Commission now directs the APDCL to take immediate measures for creating consumer awareness through the print/electronic media, hold meetings at different levels and publish the information as directed on the reverse of the electricity bills. The Commission directs that APDCL submit a status report on the action taken within 60 days from the date of issue of this Tariff Order.

Compliance by APDCL:

For consumer's awareness, periodic advertisements are released in local dailies. Steps to be taken for Grievances redressal are also printed on the reverse side of

energy bills for consumer's knowledge

Commission's Comments:

Noted. Such endeavours by APDCL should continue.

Directive 18: Standards of Performance

In pursuance to the provisions stipulated in Clause 5.1 and Clause 5.4 of the AERC (Distribution Licensees' Standard of Performance) Regulations, 2004 the Licensee is required to furnish to the Commission, in a report for every quarter and in a consolidated annual report for each financial year information as to the Guaranteed and Overall Standards of Performance. The Commission prepared a proforma reflecting the required performance parameters of the distribution licensee and the same was sent to APDCL vide letter No. AERC 326/2009/10 dated 04/12/2009 and the licensee was directed to make arrangements for filling up the required information in the proforma and send it to the Commission regularly as specified in the regulations. Although, information in this regard was received from LAEDCL for FY 2009-10, calculations on service reliability indices were not submitted as specified in the formats. A report on these submissions is available on the Commission's website. No information was received by the Commission for FY 2010-11. The Commission therefore, directs that the required information for FY 2010-11 be submitted within 60 days from the date of issue of this Tariff Order and such information be submitted to the Commission regularly as stipulated in the Regulations.

Compliance by APDCL:

The approved SOP format has been finalized and APDCL has made it mandatory for all circles to submit the SOPs on monthly basis, from July' 2013 onwards.

Commission's Comments:

APDCL has not submitted the information on SOP as per the proforma prepared by the Commission for FY 2010-11 and FY 2011-12 till date despite several reminders for compliance. This information on SOP is required to be published by the Commission as per Section 59 (2) of the Electricity Act, 2003. The Commission had published the information for FY 2009-10. APDCL is required to submit all required details to the Commission for FY 2010-11 and FY 2011-12 latest by the end of December, 2013.

Directive 19: Metering System in All Government Departments and autonomous Bodies

It has been ascertained that due to accumulated outstanding dues of various Government departments, Autonomous bodies and Municipal bodies, the burden of arrears has adversely affected the licensee's Distribution business as well as financial growth of the utility. In view of the above it has become incumbent on the part of Distribution Licensee to switch over to prepaid meters for the Autonomous bodies. The prepaid meters of different locations would be identified and installed by the Distribution Companies and the cost of which would be borne by the Government departments. The APDCL is therefore directed to act accordingly and to take all necessary steps in implementing prepaid metering system within six months from the date of issue of this order. APDCL is directed to engage a Consultant for providing necessary technical assistance and software support required for implementation of prepaid metering system effectively and action taken report on this needs to be intimated to the Commission within two months of the issue of the order.

Compliance by APDCL:

All the Government departments are metered. Further, APDCL is planning to install pre-paid meters in all the government buildings.

Commission's Comments:

Noted. The Commission directs APDCL to take appropriate initiatives along with the State Government for installation of prepaid meters in the Government Departments as well as autonomous bodies within three months of issue of this Order, in order to achieve timely settlement of power dues from Government departments to the distribution licensee.

Directive 20:

APDCL is directed to submit all financial figures in the petition filed for the future ARR and Review / True-up in units of rupees crore.

Compliance by APDCL:

Noted. All figures have been submitted in Rs. Crore.

Commission's Comments:

Noted.

Directive 2: Submission of Power Procurement Plan for the Control Period FY 2013-16

In absence of monthly power procurement plan provided by the APDCL in the MYT Petition for FY 2010-11 to FY 2012-13, the Commission had approved annual power purchase quantum for the period in the MYT Order 16th May, 2011. However, as per Regulations 5.9 of the AERC (Fuel and Power Purchase Price Adjustment Formula) Regulations, 2010, variation in quantum and cost of power procurement has to be considered. Therefore, APDCL is directed to submit the monthly power procurement plan for the subsequent Control Period, i.e., FY 2013-16 along with the MYT Petition.

Compliance by APDCL:

The annual power purchase quantum for the Control Period (2013 to 2016) has been calculated based on the allocated power and merit order stacking. Further, Load Generation Balance Report (LGBR) for 2013-14 is not yet available from different generators at present, hence, monthly power procurement plan for FY 2013-14 has not been prepared at the moment.

Commission's Comments:

In the absence of monthly power procurement plan provided by the APDCL in the MYT Petition, the Commission had approved annual power purchase quantum for the period in this MYT Order, and has also approximated monthly power purchase plan based on the pattern of monthly power purchase observed in the earlier years. APDCL will be entitled for variation in quantum and cost of power procurement with respect to the above approved monthly power procurement plan.

Directive 3: Power Procurement undertaken by APDCL

As per the Section 86(1)(b) of the Electricity Act, 2003, the Commission directs the APDCL to procure all long-term power in line with the "Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensee" issued by the Ministry of Power vide No. 23/11/2004-R&R(Vol.II) dated 19th January, 2005 and amendments dated 30.3.2006, 18.8.2006 and 27.9.2007. Further, it is directed that all short-term power purchases has to be undertaken as per "Guidelines for short-term (i.e., for a period less than or equal to one year) procurement of power by Distribution Licensees through Tariff based bidding process" issued by Ministry of

Power vide No. 23/25/2011-R&R dated 15th May, 2012.

Compliance by APDCL:

At present APDCL is receiving allocated long term power from the Central power sector in line with CERC Regulations. Also, for short-term power procurement, APDCL has been following most of the clauses stipulated under the MoP guidelines. It is expected that short term power procurement w.e.f. April' 2013 will be undertaken fully under the guidelines of the MoP.

Commission's Comments:

The Commission reiterates its direction that all short-term power purchases have to be undertaken as per "Guidelines for short-term (i.e., for a period less than or equal to one year) procurement of power by Distribution Licensees through Tariff based bidding process" issued by Ministry of Power vide No. 23/25/2011-R&R dated 15th May, 2012. In case the same are not followed, then the Commission may be constrained to disallow such purchases in future.

6.4 NEW DIRECTIVES

Directive 1: Creation of Tariff Regulatory Cell

APDCL shall create/constitute a Tariff Regulatory Cell (under an Officer of status/rank not below that of General Manager or equivalent) within one month from date of issue of the Order. A Cell so constituted/created shall be provided with necessary authority and resources so as to look after all the tariff regulatory matters, primarily to provide correct and timely information to the Commission as well stakeholders, who should be the primary source of all data and submissions being filed before the Commission, so as to ensure consistency and timelines of the data submitted and proper co-ordination with the Commission in the tariff determination process.

Directive 2: Distribution Loss reduction

Despite several directives issued by the Commission from time to time, APDCL's efforts towards distribution loss reduction have not been up to the mark. APDCL will have to make conscious efforts to reduce the distribution losses from the existing levels. The action plan for reduction of losses during FY 2013-14 should be submitted to the Commission within 3 months from the date of this order.

Directive 3: Recovery of Past dues

APDCL should submit the report indicating Circle wise pending past dues of the consumer till March 2013, and initiatives taken from recovery of such past dues.

Directive 4: Load Survey

APDCL shall undertake load survey for all Government connections/Utility officials, on a priority basis to assess the present connected load realistically, and modify its consumer records accordingly, in order to recover the fixed charges based on the correct level of connected load, within six months of issue of this Order.

Directive 5: Interest on Consumer's Security Deposit

Interest on Consumers' Security Deposit has to be paid/adjusted in the bills of all the consumer categories, in accordance with the EA 2003 and AERC (Electricity Supply Code and Related Matters) Regulations, 2004 (First Amendment), 2007, since the same is being allowed to be recovered through the ARR and tariff.

Directive 6: Distribution Franchisees (IBDF Scheme)

APDCL shall inform the Commission on each occasion when it appoints a Franchisee, and the terms of such appointment as well as process of such appointment shall be submitted to the Commission. All details of such schemes, including number of feeders, number of agencies, revenue and collection before and after handing over to Franchisee, rate at which power is sold to Franchisee, etc., shall be submitted every six months for each such Franchisee scheme.

Directive 7: Submission of Data on Time of Day (TOD) consumption

APDCL shall submit the data on the category-wise consumption for the categories having TOD tariff, for different time slots during the day, along with the next Tariff Petition.

Directive 8: Submission of Data on Waiver Scheme

APDCL should submit details of waiver schemes offered to consumers for payment of arrears, launched from time to time along with the reasons for launching waiver scheme vs. benefit accrued,

7. Wheeling Charges and Cross subsidy surcharge

7.1 INTRODUCTION

The Commission has in the present Order specified the wheeling charges for distribution business of the licensee.

7.2 ALLOCATION MATRIX

The Commission has considered the following matrix for allocation of rates between the wires business and retail supply business in its Order passed on 21 June, 2012.

Table 7.1: Allocation of matrix for separation of wheeling charges and costs supply cost

Sr. No.	Particulars	Wire Business	Retail Supply Business
1	Power purchase expenses	0%	100%
2	Employee expenses	60%	40%
3	Repair and Maintenance expenses	90%	10%
4	Administration and General expenses	50%	50%
5	Depreciation	90%	10%
6	Interest and Finance charges	90%	10%
7	Interest on working capital	10%	90%
8	Interest on Security deposit	0%	100%
9	Bad debts written off	0%	100%
10	Income tax	90%	10%
11	Return on equity	90%	10%
12	Other income	10%	90%
13	Non-tariff income	0%	100%

7.3 The Commission has adopted the same allocation matrix given in above Table 93 for segregation of the approved ARR for wires business and retail supply business for APDCL for FY 2013-14 as given below:

Table 7.2: Allocation of matrix for separation of wheeling charges and retail supply cost (Rs. crore)

Sr. No.	Particulars	Wire Business	Retail Supply Business	Total
1	Power purchase expenses	0.00	2134.78	2134.78
2	Employee expenses	322.79	215.19	537.98
3	R&M expenses	31.72	3.52	35.25
4	A&G expenses	8.44	8.44	16.88
5	Depreciation	5.47	0.61	6.08
6	Interest and Finance charges	26.00	2.89	28.89
7	Interest on working capital	2.71	24.36	27.06
8	Interest on consumers security deposit	0.00	32.17	32.17
9	Income tax	0.00	0.00	0.00
10	Return on equity	20.51	2.28	22.79
11	Total expenditure	417.64	2424.24	2841.87
12	Less: Other income	20.35	183.15	203.50
13	Less: Non-tariff income	0.00	0.00	0.00
14	ARR	397.29	2241.09	2638.37

7.4 WHEELING CHARGES

The wheeling charges for distribution open access consumers and 33 kV voltage level has been determined from distribution ARR as arrived in Table 7.2 above.

Table 7.3: Wheeling charges approved by the Commission for FY 2013-14

Sr. No.	Particulars	Unit	Total
1	Employee expenses	Rs. Crore	322.79
2	Repair and Maintenance expenses	Rs. Crore	31.72
3	Administration and General expenses	Rs. Crore	8.44
4	Depreciation	Rs. Crore	5.47
5	Interest and Finance charges	Rs. Crore	26.00
6	Interest on working capital	Rs. Crore	2.71
7	Income tax	Rs. Crore	0.00
8	Return on equity	Rs. Crore	20.51
9	Total expenditure	Rs. Crore	417.64
10	Less: Other income	Rs. Crore	20.35

Sr. No.	Particulars	Unit	Total
11	Net ARR	Rs. Crore	397.29
12	Total energy input into Distribution system	MU	5657.38
13	Total distribution cost	Rs. Crore	397.29
14	Distribution cost for wires business for 33 kV voltage level (assuming 35% of cost at 33 kV)	Rs. Crore	139.05
15	Wheeling charges for 33 kV voltage level	Paise/kWh	25

The wheeling charges as given above are applicable for use of distribution system of APDCL by other licensees or generating companies or captive power plants or consumers / users who are permitted open access at 33 kV voltage level under Section 42(2) of the Electricity Act, 2003.

7.5 CROSS SUBSIDY SURCHARGE

The open access consumers are liable to pay the cross subsidy surcharge to compensate the utility for any loss of revenue due to the shifting of the consumer to the open access system. The cross subsidy surcharge for open access customer is to be calculated as per the following formula recommended in the Tariff Policy.

$$S = T - [C(1+L/100)+D]$$

Where,

S is the Surcharge

T is the overall Tariff payable by the relevant category of consumers

C is the weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power.

D is the Wheeling charges

L is the system losses for the applicable voltage level expenses as a percentage.

In accordance with Regulation 4.3 of the AERC (Terms and Conditions for Open Access) Regulations, 2005 consumers with a connected load of 3 MW and above shall be allowed open access with effect from 1 April, 2008. Accordingly, HT category V (C): HT-II Industry consumers may likely opt for open access.

The cross subsidy surcharge based on the above formula for HT-II industry category is shown in the Table below:

Table 7.4: Cross subsidy surcharge for FY 2013-14

Sl. No.	Particulars	Unit	Amount
1	T	Rs./kWh	6.10
2	C	Rs./kWh	3.74
3	D	Rs./kWh	0.25
4	L	%	13.04
5	S=cross subsidy surcharge	Rs/kWh	1.63

Note: The Cross Subsidy Surcharge (CSS) has increased from Rs. 0.23 per kWh to Rs. 1.63 per kWh, primarily on account of the merger of the FPPPA of Rs. 1.03 per kWh with T, which is already being paid by the consumers

8. Schedule of Tariff

This chapter lists the tariffs which are applicable in the State of Assam with effect from 01.12.2013 until replaced by another order of the Commission.

For the purpose of this schedule the consumers are divided into two distinct groups based on consumption and the nature of supply. The consumers are further divided into categories that are supplied electricity at LT and HT voltages.

LT GROUP

Supply Voltage 1 Ph, 230 V AC and 3 Ph, 415 V AC

LT Category-1 Jeevan Dhara:

Applicability

This Tariff shall be applicable for supply of power to any premises exclusively for the purpose of own requirements with a Connected Load of not more than 0.5 kW and consumption upto 1 kWh/day or 30 kWh per month.

(a) Tariff :

Consumption	Energy Charge		Fixed Charge
	Without Government subsidy	With Government Subsidy	
For consumption upto 30 kWh per month.	Rs. 3.53/kWh	Rs. 2.43/kWh*	Rs. 15 per connection per month

N.B: If, during any billing period the consumption exceeds the stipulated 1 kWh/day or 30 kWh per month the consumers will be considered as if they are shifted to the next appropriate higher category.

* - The above determined energy charge for LT-I Jeevan Dhara category is contingent on payment of subsidy as agreed by the Government of Assam, failing which, the energy charge without Government subsidy stipulated above shall become operative.

(b) Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made in full on or before the due date.

(c) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where

applicable): For all payments made by DD, commission shall be borne by the consumers.

- (d) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT Category –II: Domestic A.

Applicability

This tariff shall be applicable for supply of power to consumers having connected load below 5 kW for residential premises, exclusively for domestic purposes only. This shall also include supply of power to occupants of flats in multi storied buildings, if the premises have not been classified under Domestic B or HT Domestic and receiving bulk power at single point without any individual metering arrangements for domestic purposes.

(a) Tariff

Consumption	Energy Charge		Fixed Charge
	Without Government subsidy	With Government Subsidy	
For consumption between 0 - 4 kWh/day or 0 – 120 kWh per month	Rs. 4.28/kWh	Rs. 3.58/kWh*	Rs. 30/kW/month
For consumption of next 4 kWh/day or 121 – 240 kWh per Month	Rs. 5.45/kWh		Rs. 30/kW/month
Balance kWh	Rs. 6.15/kWh		Rs. 30/kW/month.

N.B: * - The above determined energy charge for LT-II Domestic A category for consumption between 0-4 kWh/day is contingent on payment of subsidy as agreed by the Government of Assam, failing which, the energy charge without Government subsidy stipulated above shall become operative.

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5. For consumer having connected load below 0.5 kW, connected load shall be rounded off to 0.5 kW.

- (b) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof in simple interest shall be levied, if payment is not made in full on or before the due date.

- (c) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by local cheque/DD, commission shall be borne by the consumers.
- (d) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

NOTE:

If any part of the domestic connection is utilised for any use other than dwelling purpose like commercial, industrial etc. the entire consumption shall be treated as the case may be, for corresponding category and the respective tariff shall be applied for the entire consumption.

LT Category-III: Domestic-B

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load 5 kW and below 20 kW exclusively for domestic purposes only. This shall also include supply of power to occupants of flats in multi storied buildings, receiving bulk power at single point with individual metering for domestic purposes.

Tariff:

	Energy Charge	Fixed Charge
For all consumption.	Rs 5.75/kWh	Rs. 30/kW/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5.

- (a) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (b) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by local cheque/DD, commission shall be borne by the consumers.
- (c) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

NOTE:

If any part of the domestic connection is utilised for any use other than dwelling purpose like commercial, industrial etc. the entire consumption shall be treated as the case may be, for corresponding category and the respective tariff shall be applied for the entire consumption.

LT Category-IV: LT Commercial

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load below 20 kW to all establishments and institutions of commercial nature and connected with trading activities, including commercial offices, Government. and public sector commercial installations, commercial houses, optical houses, shops, hotels, restaurants, bars, refreshment stalls, showcases of advertisements, theatres, cinema halls, guest houses, laundries, dry-cleaners, Railway stations, public and private bus-stands not covered under any other category of consumers, copy works, X-ray installations, private nursing homes/clinical laboratories, photographic studios, battery charging units, workshops, petrol pumps, factory & printing presses not using motive power in the manufacturing process, private educational and cultural institutions, lodging and boarding houses.

(a) Tariff

	Energy Charge	Fixed Charge
For all consumption.	Rs. 6.15/kWh	Rs. 110/kW/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5. For consumer having connected load below 0.5 kW, connected load shall be rounded off to 0.5 kW

- (b) Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof in simple interest shall be levied, if payment is not made on or before the due date.
- (c) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable): For all payments made by local cheque/DD, commission shall be borne by the consumers.
- (d) Power factor penalty and rebate:
 - (a) Power factor penalty: In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30%

upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.

- (b) Power factor rebate: In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (e) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT Category V- LT General Purpose Supply

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load below 20 kW to all Non-commercial and Non-domestic users of electric power like Government offices, Semi-Government Educational and cultural institutions, Government hospitals, dispensaries, Charitable institutions and Trusts (public or private formed solely for charitable or religious purposes), Dharamshalas, Non-commercial boarding and lodging houses and other Non-commercial institutions.

(a) **Tariff**

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.15/kWh	Rs. 125/kW/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5. For consumer having connected load below 0.5 kW, connected load shall be rounded off to 0.5 kW.

Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.

- (b) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.

- (c) **Power factor penalty and rebate:**
- (a) Power factor penalty: In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
- (b) Power factor rebate: In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (d) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT Category VI-Public Lighting

Applicability

This tariff is applicable to supply of power for street lighting systems in Municipalities, Town Committees and Panchayat etc., Signal systems in roads and park lighting, in areas of Municipality/Town Committee/Panchayat etc.

(a) Tariff

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.30/kWh	Rs. 120/kW/month

N.B. In case any unmetered supply is provided in exigency, the energy shall be assessed considering 12 hours per day burning hours for the energy charge. For example, if the total connected load of the street light service is 1 kW, energy shall be assessed as 12 units per day.

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5. For consumer having connected load below 0.5 kW, connected load shall be rounded off to 0.5 kW.

- (b) Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof

at simple interest shall be levied, if payment is not made on or before the due date.

- (c) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable): For all payments made by DD, commission shall be borne by the consumers.
- (d) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT Category VII-Agriculture

Applicability

This tariff shall be applicable for supply of power for agriculture / irrigation purpose in the agricultural sector for pump sets upto 7.5 HP.

(a) Tariff

	Energy Charge	Fixed Charge
For all consumption.	Rs. 3.75/kWh	Rs. 30/kW/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5. For consumer having connected load below 0.5 kW, connected load shall be rounded off to 0.5 kW.

Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.

- (b) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable): For all payments made by DD, commission shall be borne by the consumers.
- (c) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT Category VIII – Small Industries

Applicability

This tariff is applicable for supply of power for industrial purposes having licence from designated authority of appropriate government and not covered under any other category, for consumers having Contract Demand/Connected Load below 25 kVA (20 kW).

(a) Tariff

	Energy Charge	Fixed Charge
(i) Rural Industries - For all consumption.	Rs. 4.00/kWh	Rs. 30/kW/month
(ii) Urban Industries - For all consumption.	Rs. 4.25/kWh	Rs. 40/kW/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5. For consumer having connected load below 0.5 kW, connected load shall be rounded off to 0.5 kW.

(b) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.

(c) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.

(d) Power factor penalty and rebate:

(a) **Power factor penalty:** In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.

(b) **Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.

(e) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in

force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

LT Category IX: Temporary Supply:

Applicability

This Tariff will be applicable for electric supply of power which is temporary in nature for a period not exceeding one month.

	Charges
Domestic	Rs. 80/kW/day or Rs. 7.65/kWh whichever is higher
Non Domestic non agricultural	Rs.125/kW/day or Rs. 9.75/kWh whichever is higher
Agricultural	Rs. 50/kW/day or Rs. 5.65/kWh whichever is higher.

HT GROUP

Tariff for this group is applicable for those consumers availing power supply at 11 kV or above. Calculations shall be deemed to be in kVA for consumers under this part of the tariff schedule. However, consumers above 25 kVA connected load and drawing power at LT are also covered under this group. During the period of conversion from LT supply to HT supply, the consumer shall have to pay the necessary compensatory charges (10% & 3% of total energy consumption for LT line & DTR respectively).

HT Category I: HT Domestic

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load 25 kVA and above to residential premises, exclusively for domestic purposes only. This shall also include supply of power to occupants of flats in multi storied buildings/ residential colony, receiving bulk power at single point with single metering for domestic purposes.

(a) Tariff:

	Energy Charge	Fixed Charge
For all consumption.	Rs 5.70/kWh	Rs 30/kVA/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5.

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and Related Matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
 - In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.
- (b) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (c) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.
- (d) **Power factor penalty and rebate:**
- (a) Power factor penalty: In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
- (b) Power factor rebate: In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (e) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

NOTE:

If any part of the domestic connection is utilised for any use other than dwelling purpose like commercial, industrial etc. the entire consumption shall be treated as the case may be, for corresponding category and the respective tariff shall be applied for the entire consumption.

HT Category-II: HT Commercial

Applicability

This tariff shall be applicable for supply of power to consumers having Connected Load 25 kVA and above to all establishments and institutions of commercial nature and connected with trading activities, including commercial offices, Government and public sector commercial installations, commercial houses, optical houses, shops, shopping malls, restaurants, hotels, bars, refreshment stalls, showcases of advertisements, theatres, cinema halls, guest houses, laundries, dry-cleaners, Railway stations, public and private bus-stands not covered under any other category of consumers, copy works, X-ray installations, private nursing homes/clinical laboratories, photographic studios, battery charging units, workshops, petrol pumps, factory & printing presses not using motive power in the manufacturing process, private educational and cultural institutions, lodging and boarding houses.

(a) Tariff

	Energy Charge	Fixed Charge
For all consumption.	Rs. 6.00/kWh	Rs. 115/kVA/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5.

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and Related Matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
- In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.

(c) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.

(d) **Power factor penalty and rebate:**

(a) Power factor penalty: In case average power factor in a month for a

consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.

- (b) Power factor rebate: In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (e) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category - III: Public water Works

Applicability

This tariff is applicable for public water supply maintained by Government or Government Corporations, Municipalities, Town Committees and Panchayats.

(a) **Tariff**

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.20/kWh	Rs. 125/kVA/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5.

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and related matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
 - In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.
- (b) Surcharge for delayed payment: Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.

- (c) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable): For all payments made by DD, commission shall be borne by the consumers
- (d) **Power factor penalty and rebate:**
- (a) Power factor penalty: In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
- (b) Power factor rebate: In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (e) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category – IV: Bulk Supply

Applicability

This tariff is applicable to Bulk consumers with a Connected Load not less than 25 kVA provided that the consumers not covered by any other category such as any domestic connection, industries, tea etc. and who make their own internal distribution arrangement at their own cost and receive power at the point of supply at high or extra high voltage. This is further classified as under:

- (i) Government educational institution-like universities, engineering colleges, medical colleges with residential facilities and

- (ii) Others

(a) **Tariff**

(i) **Bulk Government educational institutions**

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.35/kWh	Rs. 110/kVA/month

(ii) **Others**

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.75/kWh	Rs.145/kVA/month

- For supply at voltages higher than as applicable to the consumers as per sec

2.2 of the AERC (Electricity Supply Code and Related Matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.

- In case, metering is done on the L.T side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) **Power factor penalty and rebate:**

- (a) **Power factor penalty:** In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
- (b) **Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (c) **Contract Demand:** The Contract Demand shall be between 70% to 105% as declared by the consumer of the Connected Load converted to kVA at 0.85 power factor. In case declaration /option is not made by the consumer within the stipulated time, 100% of the Connected Load converted to kVA shall be the contracted demand.
- (d) **Billable Demand:** Billing demand shall be 100% of Contracted Demand or Recorded Demand, whichever is higher. In case the meter remains defective in a month, billing demand shall be considered as per clause 4.2.2.4 of AERC (Supply Code and Related Matters) Regulations, 2004, as amended from time to time , *Procedure for Assessment of Consumption* in case of incorrect or stopped meter for seasonal consumer.
- (e) **Overdrawal Penalty:** If the Recorded Demand is higher than the Contracted Demand in a month, then fixed charge based on Contracted Demand shall be levied at three times the normal rate for the portion of demand exceeding the Contracted Demand.
- (f) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (g) **Payments shall be made by cash/local cheque/DD/Electronic Transfer**

(where applicable): For all payments made by DD, commission shall be borne by the consumers.

- (h) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category V (A): HT Small Industries:

Applicability

This tariff is applicable for supply of power for industrial purposes having licence from designated authority of appropriate government and not covered under any other category, for consumers with Connected Load above 25 kVA and upto 50 kVA, irrespective of location of the industry in rural area or urban area.

(a) Tariff

	Energy Charge	Fixed Charge
For all consumption.	Rs. 4.50/kWh	Rs. 40/kVA/month

For the purpose of determination of Monthly fixed charge, the Connected Load shall be rounded up to the next higher kW if the decimal is higher than 0.5 and the nearest lower kW if the decimal is lower than 0.5.

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and Related Matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
- In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) Power factor penalty and rebate:

(a) **Power factor penalty:** In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.

(b) **Power factor rebate:** In case average power factor as maintained by

the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.

- (c) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (d) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.
- (e) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category V (B)-HT-I Industries

Applicability

This tariff is applicable for supply of power to industrial consumers having licence from designated authority of appropriate government and not covered under any other category, at a single point for industrial purposes with Contract Demand/Connected Load above 50 kVA to 150 kVA.

(a) **Tariff**

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.15/kWh	Rs. 100/kVA/month

TOD tariff

Time of Day (TOD) tariff for HT-I industries

Description	Energy charge
Time	Rs./kWh
0600 hrs to 1700 hrs (normal)	5.15
1700-2200 hrs (peak)	7.40
2200-0600 hrs (night)	4.50

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and related matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.

- In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) **Power factor penalty and rebate:**

- (a) **Power factor penalty:** In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
- (b) **Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (c) **Contract Demand:** The Contract Demand shall be between 70% to 105% as declared by the consumer of the Connected Load converted to kVA at 0.85 power factor. In case declaration /option is not made by the consumer within the stipulated time, 100% of the Connected Load converted to kVA shall be the contracted demand.
- (d) **Billable Demand:** Billing demand shall be 100% of Contracted Demand or Recorded Demand, whichever is higher. In case the meter remains defective in a month, billing demand shall be considered as per clause 4.2.2.4 of AERC (Supply Code and Related Matters) Regulations, 2004, as amended from time to time, *Procedure for Assessment of Consumption* in case of incorrect or stopped meter for seasonal consumer.
- (e) **Overdrawal Penalty:** If the Recorded Demand is higher than the Contracted Demand in a month, then fixed charge based on Contracted Demand shall be levied at three times the normal rate for the portion of demand exceeding the Contracted Demand.
- (f) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (g) **Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable):** For all payments made by DD, commission shall be borne by the consumers.
- (h) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category V (C): HT-II Industries

Applicability

This tariff is applicable for supply of power at a single point for industrial purposes having licence from designated authority of appropriate government and not covered under any other category, for Contract Demand/Connected Load above 150 kVA.

(a) Tariff

	Energy Charge	Fixed Charge
Option -1.	Rs. 5.48/kWh	Rs. 140/kVA/month
Option -2	Rs. 4.78/kWh	Rs. 270/kVA/month

A consumer may opt for any one option depending on his requirements by prior intimation to concerned billing unit of Discom. A consumer may change his option only after six months of availing that particular option.

TOD tariff for Option-1 above (only), no TOD Tariff will be applicable for consumers opted for option-2. However, supplier may impose peak hour restriction due to system constraints.

T.O.D tariff for HT-II industries

Description	Energy charge
Time	Rs./kWh
0600-1700 hrs (normal)	4.10
1700-2200 hrs (peak)	5.55
2200-0600 hrs (night)	3.60

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and related matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
- In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) Power factor penalty and rebate:

- (a) **Power factor penalty:** In case average power factor in a month for a

consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.

- (b) **Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (c) **Contract Demand:** The Contract Demand shall be between 70% to 105% as declared by the consumer of the Connected Load converted to kVA at 0.85 power factor. In case declaration /option are not made by the consumer within the stipulated time, 100% of the Connected Load converted to kVA shall be the contracted demand.
- (d) **Billable Demand:** Billing demand shall be 100% of Contracted Demand or Recorded Demand, whichever is higher. In case the meter remains defective in a month, billing demand shall be considered as per clause 4.2.2.4 of AERC (Supply Code and Related Matters) Regulations, 2004, as amended from time to time, *Procedure for Assessment of Consumption* in case of incorrect or stopped meter for seasonal consumer.
- (e) **Overdrawal Penalty:** If the Recorded Demand is higher than the Contracted Demand in a month, then fixed charge based on Contracted Demand shall be levied at three times the normal rate for the portion of demand exceeding the Contracted Demand.
- (f) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (g) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.
- (h) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category VI-Tea, Coffee and Rubber: Seasonal

Applicability

This tariff is applicable for tea, coffee and rubber plantation/production by utilisation of electrical power in factory, irrigation, lighting etc. in the Estate.

(a) Tariff

(i) Seasonal Tariff (April to November)

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.65/kWh	Rs. 230/kVA/month

TOD tariff applicable

T.O.D tariff for Tea, Coffee & Rubber

Description	Energy charge
Time	Rs./kWh
0600-1700 hrs (normal)	5.65
1700-2200 hrs (peak)	7.45
2200-0600 hrs (night)	5.40

Off- Season Tariff (December to March)

Off-Season energy charge for Tea, Coffee and Rubber is Rs. 5.65 / kWh.

Consumer under this category shall have the option to select any continuous maximum 4 (four) months period between September to March in lieu of normal off-season period of December to March. Such option must be exercised on or before 31st August of every year.

Off-Season fixed charge for Tea, Coffee & Rubber minimum 40% of contracted demand during season period.

No benefit of ToD tariffs can be availed by consumers if they opt for the off season tariff option during off-season period.

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and Related Matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.

- In case, metering is done on the L.T side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) **Power factor penalty and rebate:**

- (a) **Power factor penalty:** In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
- (b) **Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (c) **Contract Demand:** The Contract Demand shall be between 65% to 105% as declared by the consumer of the Connected Load converted to kVA at 0.85 power factor. In case declaration /option is not made by the consumer within the stipulated time, 100% of the Connected Load converted to kVA shall be the contracted demand. *Contract Demand for off-season shall be minimum 40% of the seasonal Contract Demand.*
- (d) **Billable Demand:** Billing demand shall be 100% of Contracted Demand or Recorded Demand, whichever is higher. In case the meter remains defective in a month, billing demand shall be considered as per clause 4.2.2.4 of AERC (Supply Code and Related Matters) Regulations, 2004, as amended from time to time, *Procedure for Assessment of Consumption* in case of incorrect or stopped meter for seasonal consumer.
- (e) **Overdrawal Penalty:** If the Recorded Demand is higher than the Contracted Demand in a month, then fixed charge based on Contracted Demand shall be levied at three times the normal rate for the portion of demand exceeding the Contracted Demand.
- (f) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (g) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne

by the consumers.

- (h) **In the event that it is not possible to measure availability to a particular consumer, Fixed Charge @ Rs.230/kVA will be applicable.**
- (i) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category VII -Oil and Coal

Applicability

This tariff shall be applicable for supply of power to consumers at a single point for installations of Oil and Coal Sector.

(a) **Tariff**

	Energy Charge	Fixed Charge
For all consumption.	Rs 5.80/kWh	Rs. 270/kVA/month

(i) **T.O.D Tariff**

T.O.D tariff for Oil & Coal

Description	Energy charge
Time	Rs./kWh
0600-1700 hrs (normal)	5.80
1700-2200 hrs (peak)	7.55
2200-0600 hrs (night)	5.65

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and related matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
- In case, metering is done on the L.T side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) Power factor penalty and rebate:

- (a) **Power factor penalty:** In case average power factor in a month for a

consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.

- (b) **Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (c) **Contract Demand:** The Contract Demand shall be between 70% to 105% as declared by the consumer of the Connected Load converted to kVA at 0.85 power factor. In case declaration /option is not made by the consumer within the stipulated time, 100% of the Connected Load converted to kVA shall be the contracted demand.
- (d) **Billable Demand:** Billing demand shall be 100% of Contracted Demand or Recorded Demand, whichever is higher. In case the meter remains defective in a month, billing demand shall be considered as per clause 4.2.2.4 of AERC (Supply Code and Related Matters) Regulations, 2004, as amended from time to time, *Procedure for Assessment of Consumption* in case of incorrect or stopped meter for seasonal consumer.
- (e) **Overdrawal Penalty:** If the Recorded Demand is higher than the Contracted Demand in a month, then fixed charge based on Contracted Demand shall be levied at three times the normal rate for the portion of demand exceeding the Contracted Demand.
- (f) **Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
- (g) **Payments shall be made by cash/local cheque/DD/Electronic Transfer** (where applicable): For all payments made by DD, commission shall be borne by the consumers.
- (h) **In the event that it is not possible to measure availability to a particular consumer, Fixed Charge @ Rs.270/kVA will be applicable.**
- (i) The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

HT Category VIII: HT Irrigation

Applicability

This tariff shall be applicable for electricity supply for agriculture / irrigation purpose in the agricultural sector for pump set above 7.5 HP and for whom power has been supplied at 11 kV or above.

(a) Tariff

	Energy Charge	Fixed Charge
For all consumption.	Rs. 5.00/kWh	Rs. 40/kVA/month

- For supply at voltages higher than as applicable to the consumers as per sec 2.2 of the AERC (Electricity Supply Code and Related Matters) Regulations, 2004, as amended from time to time, rebate @ 3% shall be applicable on energy consumption for each higher level of voltage.
- In case, metering is done on the L.T. side of the distribution transformer, for a group of consumers receiving power, then for the purpose of billing an additional energy consumption on account of transformer loss computed @ 3% on the consumer's Energy Charges shall be added.

(b) Power factor penalty and rebate:

- (a) Power factor penalty:** In case average power factor in a month for a consumer falls below 85%, a penalty @1% for every 1% fall in power factor from 85% to 60%; plus 2% for every 1% fall below 60% to 30% upto and including 30% shall be levied on total unit consumption. Power factor penalty shall be levied on those consumers where power factor is recorded electronically.
 - (b) Power factor rebate:** In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is above 95%, a rebate of 2% on unit consumption shall be applicable. Power factor rebate shall be allowed on those consumers where power factor is recorded electronically.
- (c) Surcharge for delayed payment:** Surcharge @ 1.5% per month or part thereof at simple interest shall be levied, if payment is not made on or before the due date.
 - (d) Payments shall be made by cash/local cheque/DD/Electronic Transfer (where applicable):** For all payments made by DD, commission shall be borne by the consumers.
 - (e)** The Tariff does not include any tax or duty etc. on Electrical Energy that may be payable at any time in accordance with any law /State Government Rule in force. Such charges, if any, shall be payable by the consumers in addition to tariff charge.

REBATE FOR CONSUMERS

- In order to encourage consumers to switch over to solar water heating system, the Commission introduced a monthly rebate of Rs.30/- in Tariff Order for FY 2005-06 for all consumers who have installed such solar water heating systems for meeting their hot water requirements and these are actually used. The Commission had decided to increase this rebate to Rs. 40/- per month in Tariff Order for FY 2006-07 and continued with same rebate for FY 2007-08 also. To further encourage the use of Solar Water Heaters in the State, the Commission decided to allow the rebate at Rs. 40/- per consumer per month per 100 litres per day (LPD) capacity Solar Water Heaters on fulfillment of the following conditions:-

- (a) The solar water heating system being used by the consumer has to be an authorised/approved product of the Ministry of Non-conventional Energy Sources (MNES), Government of India or the State Nodal Agency.
- (b) To avail this rebate, the consumer will be required to give the licensee an affidavit to the effect that such a system has been installed on his premises and is being used to meet his water heating requirements. The declaration can be verified by the licensee's meter readers / representative, if required.
- (c) In case, any such declaration is found to be false, the licensee apart from taking appropriate legal action against such consumer would be entitled to recover the entire rebate allowed to such consumers with 100% penalty.

The amount of rebate on Solar Water Heaters will be reimbursed by the Ministry of Non-conventional Energy Sources (MNES), Government of India, to the utilities vide Notification No. 3/1/2007/UICA (SE) dated 18th August, 2008, **Clause No. 3.3 : Amendment in building bye-laws & announcement of rebate in property tax/electricity tariff** which states:

"Grant of upto Rs. 10 lakhs will also be available to State Electricity Boards/Utilities that announce rebate in electricity tariff to the users of solar water heating systems in their monthly electricity bills."

The Discoms may claim for grant for the rebate on solar water heating systems from MNES as per the above circular.

- ❖ **In case of Domestic category of consumers**, the higher rating of only one equipment shall be considered for determination of connected load if both Geyser and Air-Conditioner (without heater) are installed and used for domestic purpose only.

↪ These Tariffs take effect from 01.12.2013.

↪ **This Tariff Order shall continue to be applicable until it is replaced by another Order passed by the Commission.**

↵ This Tariff Order is signed by the Assam Electricity Regulatory Commission on 21.11.2013.

Sd/-
(T. Chatterjee)
Member, AERC

Sd/-
(Dr. R. K. Gogoi)
Member, AERC

Sd/-
(N. K. Das)
Chairperson, AERC

Annexure-1

**Minutes of the 17th Meeting of the State Advisory Committee of the Assam Electricity
Regulatory Commission held on 9th May, 2013
at Assam Administrative Staff College, Khanapara, Guwahati.**

The 17th meeting of the State Advisory Committee was held on 9th May, 2013 at the Assam Administrative Staff College, Khanapara at 11:00 a.m.

List of members of the State Advisory Committee along with the officers of the Commission present in the meeting are appended at **Annexure-I**.

At the beginning Shri M.J. Baruah, Secretary, AERC, welcomed the members present and requested the Chairperson, AERC, Shri J. Barkakati to preside over the meeting.

Chairperson, AERC once again welcomed the members and stated the objectives of the State Advisory Committee as mandated by Section 87 and 88 of the Electricity Act, 2003 which are mainly to advise the Commission on major questions of policy, matters relating to quality, continuity and extent of service provided by the licensees, protection of consumer interest, electricity supply and overall standards of performance by the utilities. The Chairperson stated that the Commission has been making utmost efforts to discharge its functions effectively as mandated by Section 86 of the Electricity Act 2003. It was stated that altogether 28 Regulations have been notified by the Commission on different aspects of the power sector for its overall improvement. These include Regulations for promotion of generation of electricity from renewable sources, promotion of investment in electricity industry, specifying standards with respect to quality, continuity and reliability of service by licensees, encouraging demand side management, protection of consumers' interests, etc.

The Chairperson, AERC stated that MYT petitions have been submitted by the power utilities of the state for the FYs 2013-14, 2014-15 and 2015-16 and notifications on the summary of these petitions were already published in 11 newspapers. He stated that the meeting of the State Advisory Commission is convened to discuss these petitions. He further stated that the Commission has been consulting the members of the State Advisory Committee every time as and when the Commission receives any petition for tariff revision from the State power utilities for discussion and their views on the petitions. The Chairperson referred to the judgment of the Hon'ble Appellate Tribunal for Electricity dated 11th November, 2011 which directed every State Commission to issue tariff order for a financial year before 1st April of that year and stated that this is being strictly monitored by the APTEL through the Forum of Regulators.

The Chairperson stated that in the last suo-motu Tariff Order for 2012-13 issued on 28th February 2012, there was no increase in tariff. He further stated that in the Multi Year Tariff

Order for 2010-13 issued on 16.05.2011, the Commission had approved an increase of 15 paise per unit for Jeevan Dhara category and 25 paise per unit for the rest of the categories of consumers and therefore, for the last two years, no tariff resetting had taken place other than FPPPA charges.

The Chairperson said that the Power Purchase Cost accounts for 75% of the Annual Revenue Requirement of the distribution company and due to less contribution from the hydro based Central Sector Generating Stations in the NE region and also due to less availability of gas, the distribution company has been procuring power from the energy exchanges, NTPC, IPPs, etc through short/ medium term arrangements at an average cost of approximately Rs 4.56 per unit. The Chairperson stated that the power purchase cost has been increasing and the petitioners have demanded a tariff increase of 37% over the present tariff. He stated that the Commission is presently scrutinizing the materials/ information submitted by the utilities and shall take an appropriate decision only after prudent checking of all submissions made so far. Meanwhile, it was informed that the Commission had written to the State Government as per section 65 of the Electricity Act 2003 to offer any subsidy to any class of consumers deemed necessary by the Government to provide relief to that class of consumers.

The Chairperson further stated that in the MYT Order for FY 2010-13, the Commission gave directions to the distribution utility to reduce their distribution losses from 22.60% to 19.60% in 2012-13. However, the Chairperson expressed concern that the losses have been increasing over the last two years and as per submissions available, actual distribution loss in 2010-11 is 25.44% against AERC approved 21.60% - an increase of 3.84% and in 2011-12, actual distribution loss in 2011-12 is 26.60% against AERC approved 20.60% - an increase of 6%. The Chairperson called upon all members to actively participate in the discussions and share their views liberally and offer their valuable suggestions and advice.

The Chairperson AERC then asked Shri Anurag Goel, the Commissioner & Secretary to the Government of Assam, Power Department to address the gathering.

Shri Goel stated that the Multi Year Tariff Petitions have implications for the next three years and therefore, these need to be discussed and scrutinized in detail. Speaking on the present power scenario, Shri Goel informed that the power sector is treading in the path of progress since 2004-05 after re-organisation of the erstwhile Assam State Electricity Board in the state. Shri Goel stated that distribution losses have declined to some extent over the last ten year while the number of consumers have more than doubled and demand for power have also increased 2-3 times during the peak period.

Shri Goel informed the members that the Government of Assam has provided the state transmission and distribution companies around Rs 1000 Cr over the last 2-3 years from the Trade Development Fund for improvement of the transmission and distribution networks. Shri Goel also informed that on the insistence of the Government of Assam for increasing the generation capacity of the State, one tranche of the 3 tranches of ADB loan which are usually granted for development of the transmission sector has been earmarked for the state

generation sector. Shri Goel stated that due to many critical issues, the hydro potential of the state could not be harnessed to the maximum; however, efforts are on to develop Renewable Energy projects including solar energy projects. Shri Goel informed that investment in the power sector from the Government of Assam shall continue through in-principle support in the form of equity in the upcoming power projects as in the case of 70 MW Phase I - Lakwa Replacement Project where Rs 79.2 Cr has been invested by the State Government as Equity. Shri Goel stated that the power companies must recover their cost of supply in order to be economically viable; however, the Commission also has to take into account the interests of the consumers while deciding on the tariff.

The Chairperson, AERC thanked Shri Goel and stated that the tariff regulations on renewable energy projects notified by the Commission shall act as guidelines while determining tariff for such projects. The Chairperson further stated that the cost of generation from Solar PV is much higher in Assam and other north eastern states due to higher cost of the projects (as it is remotely located and solar insolation level is much less than that of Gujrat and Rajasthan) and low Capacity Utilization Factor (CUF). In consideration of the above, a high solar tariff in the state is pertinent to ensure viability of solar projects. However, he said that any solar tariff without financial incentive will be prohibitively high and would dissuade the distribution licensee from procuring such power and at the same time will not encourage developers to invest in such projects. The Chairperson stated that in order to attract developers to solar PV power generation in Assam and for economic viability of such projects, adequate policy and regulatory support would be necessary. As such, there is a justification in making a strong plea to the Central Government/MNRE not only to fix higher incentive but also to review the normative operating and financial parameters for solar technology in Assam in particular and North East in general. A realistic capping of solar tariff for Assam will have to be at least Rs 10/kWh. The Commission is concerned that a project cannot financially sustain without such a tariff support.

The Chairperson then asked Shri Jitesh Khosla, Additional Chief Secretary to the Government of Assam, Power Department, to speak on the occasion.

At the outset, Shri Khosla appreciated the good functioning of the Commission since its inception despite several impediments. Shri Khosla stated that the Commission has been regularly issuing tariff orders with several directives to the power utilities, although many Commissions in other advanced states have failed to do so. He called upon all stakeholders to effectively participate in the tariff making process to make the exercise successful. Shri Khosla stated that there are a few challenges faced by the power sector in the state today. These include:

- i) Rising cost of fuel (coal, natural gas) which causes hike in tariff.
- ii) Increasing the efficiency of the existing power stations.

- iii) Balancing the hydro:thermal mix of power by building/enhancing the thermal capacity in the state. Hydro potential is seasonal and generation from the hydro based power stations in the North Eastern Region (NER) dips during the lean winter season causing shortages and hike in power purchase cost.

Shri Khosla stated that keeping in mind the peaking power requirement for trade, household and other purposes, a separate set of regulatory provisions seems essential for effective management of the peak demand and the Commission may formulate a separate set of Regulations in this regard.

Shri Khosla further stated that some excellent projects have been undertaken in the transmission system and this has helped in reducing the transmission losses marginally and the trend needs to be maintained. In the distribution sector too, investments have been made under various schemes of the State and Central Government and distribution losses have been reduced from above 40 % (ten years back) to 27% equivalent to the National Average. It was stated that a lot of investment is necessary to strengthen the transmission and distribution systems further. Shri Khosla stated that the distribution network is expanding rapidly with the Rajiv Gandhi Gramin Vidyutikaran Yojana and appealed to the Commission that electricity usage and pricing may be regulated through tariffs in such a manner so that wastage is minimum. Shri Khosla said that the fuel prices are internationally linked and therefore, its pricing cannot be regulated. However, a part of the extra burden of the fuel cost may be offset through increase in efficiency in production and preventive maintenance of the necessary infrastructure/ equipments.

Shri Khosla emphasized that quality of service needs to improve further, particularly in the rural areas. He also emphasized on the effective usage of Demand Side Management and conservation efforts in reducing electricity consumption, through use of LEDs/ CFLs, energy efficient equipments, etc. Shri Khosla assured that the Government would continue to support all efforts that are made towards DSM activities and for increasing the efficiency of the system.

The Chairperson AERC stated that the Commission is contemplating to draft some Regulations in line with Karnataka and Orissa on Peak Power management.

On a request from the Chairperson AERC, the Managing Director and Chairman, APDCL, Shri Rajiv Yadav, spoke on the occasion. Shri Yadav expressed concern that with the growth of the BPL consumers in rural areas, the distribution losses have increased. He stated that the Company is making efforts to arrest these losses by applying different technological options. Shri Yadav stated that as a State owned utility, implementation of the RGGVY is a priority.

Shri Yadav further stated that the share allocation from the Central Sector Generating Stations (CSGS) located in the North Eastern region was only on paper, the CSGS could provide only 50% of the allocated power to the Distribution Company during the last few

months. Shri Yadav appealed to the Commission that the issue be communicated and deliberated with the Central Electricity Regulatory Commission as the distribution licensee had to pay the fixed charges despite non-availability of energy from the Stations. He further appealed to the Commission that the Central Electricity Authority may be requested to increase the share allocation of Assam from the CSGS located in the North Eastern Region, particularly from the thermal stations. Shri Yadav reiterated that the Company is making efforts to reduce its commercial losses through proper metering, more IT- Based applications, use of prepaid meters, etc. He further informed that the Company is making efforts to increase the number of HT consumers so that distribution losses could be curtailed significantly. Shri Yadav requested the State Government to provide financial assistance of Rs 463.00 Cr in power procurement so as to support the BPL consumers added through the RGGVY.

The MD, APDCL stated that a number of power projects are being envisaged in the coming years, some through the PPP mode which shall contribute in stabilizing the power demand and availability ratio. . He stated that the Company has submitted the MYT petitions for FY 2013-16 before the Commission and expressed hope that the Commission would provide a very judicious tariff structure which would help the company to effectively discharge its duties and obligations. Shri Yadav appealed to the Commission that it may allow the distribution company to recover the tariff gap which has accumulated over the last three years to be realized through electricity tariffs.

The Chairperson, AERC stated that increase in distribution losses is alarming and measures already suggested by the Commission in the last tariff orders need to be implemented to curtail these losses. He further stated that the Government of Assam should take adequate steps to implement the Margherita Project in right earnest and efforts should be made to use the expertise of NTPC by forming a JV Company in implementing the project.

The Chairperson then took up the Agenda for the meeting item-wise.

(1) Agenda Item No. 1: To confirm the Minutes of the 16th Meeting of the State Advisory Committee held on 19.12.2012.

The minutes of the last meeting of the Advisory Committee held on 19.12.2012, was placed before the Committee for confirmation. The minutes of the 16th meeting were accepted and confirmed.

(2) Agenda Item No. 2: Action taken on the Minutes of the 16th Meeting of the State Advisory Committee held on 19.12.2012.

The action taken reports on the minutes of the last meeting were submitted by the APGCL, AEGCL and APDCL to the Commission for information. Copies of the same were also

distributed among the members in the meeting. The deliberations that took place on these minutes are briefly recorded below:

On the issue of higher Auxiliary Power Consumption (APC) than approved, it was informed by APGCL that higher auxiliary consumption is due to Lakwa Waste Heat Recovery Unit commissioned in January, 2012 having APC of 9% and consumption in gas booster compressor in Lakwa TPS and transformer loss of NTPS 132 KV substation for distribution transmission feeders. It was informed by APGCL that action is being taken to remove the distribution feeders from the NTPS 132 KV substation. Further action is also being taken up in LTPS for calibration of energy meter to eliminate possible errors. Regarding higher Station Heat Rate (SHR), it was further informed that as advised by AERC, IIT Guwahati has been engaged for studying the actual SHR of the generating units of LTPS and NTPS and the study report will be submitted to the Commission to review the SHR of NTPS and LTPS in due course of time. APGCL also informed that the Company has been pursuing seriously to expedite the progress of the project works at various levels for their timely completion.

On the status of the 2x250 MW Margherita Coal based Thermal Power Project, it was informed that instead of coal linkage, Government of India would be allocating coal block to the state for the project. A member suggested that Case II bidding may be invited from investors willing to participate in implementation of this project.

On the hydro power stations, it was informed that the 2nd phase (2x1.5 MW) of the 9 MW Myntriang Small Hydro Power Project is likely to be commissioned in June 2013 at a tariff of Rs 0.99/ unit. It was informed that no other hydro project is likely to be commissioned during the FY 2013-14.

The Chairperson AERC suggested that the Detailed Project Reports of the Small Hydro Projects in the State should be taken up immediately and the projects should be implemented within the scheduled timeframe.

AEGCL informed that during the last four years i.e. 2009-10, 2010-11, 2011-12 and 2012-13, transmission losses have been gradually reduced from 6.04%, 4.81%, and 4.21% to 4.15% respectively. AEGCL also informed that the PGCIL transmission charges have been increased to Rs 178.34 Cr and Rs 209.58 Cr for FY 2010-11 and FY 2011-12 respectively from the approved cost of Rs 134.24 Cr mainly due to tariff revision of PGCIL by CERC.

APDCL informed that efforts are being made to motivate personnel at the field level to improve system reliability and for submission of Standards of Performance (SOP) achieved as per formats of AERC for FY 2010-11 and FY 2011-12.

On a query from a member regarding formation of the Load Shedding Protocol (LSP) Committee, APDCL informed that the process for constitution of the Committee is under progress as suggested by the Commission. **The Advisory Committee members requested that a meeting of the LSP Committee be held to discuss the Principles and Protocols of Load Shedding Hours without further delay.**

On the issue of arrear dues to the APDCL from the Government departments, it was

informed that the State Government has made a budget provision of Rs 70.83 Cr against Government consumers and power subsidy for FY 2013-14 which shall be released shortly. It was also informed that for the current year, the Government releases Rs 8 Cr/ month against consumption in Government departments. It was however, informed that the amount is insufficient and no budget provision has been made against arrear of above Rs 13 Cr against the NHRM Hospitals.

The Chairperson AERC, suggested that the distribution company should work out the total amount outstanding upto FY 2012-13 and submit this to the State Government for necessary decision on the matter.

Regarding prepaid meters, it was informed that a total of 3253 prepaid meters have been purchased out of which 2624 were installed and a directive has also been issued to make it mandatory to install prepaid meters in all upcoming residential flats of Guwahati city. **Regarding installation of prepaid meters in Government buildings, it was informed that APDCL has not received any action plan from the State Government.**

Shri Khosla stated that the matter regarding installation of prepaid meters in Government buildings would be considered and informed in due course.

(3) Agenda Item No 3: Appraisal of members of the State Advisory Committee on the present power scenario of the State.

Representatives from APDCL gave a power-point presentation on the prevailing power situation in the state. It was informed during the course of the presentation that 47.62% out of installed capacity of 1235 MW from the Central Sector Generating Stations (CSGS) in North Eastern Region (NER) is allocated to the state of Assam. Out of total installed capacity of 4940 MW from the CSGS located in the Eastern Region (ER), Assam has been allocated only 157 MW. It was further informed that during the past few months, APDCL received only 50% of the power allocated from the NER CSGS. Therefore, there was a shortfall of about 250-300 MW all through these months, particularly, during the peak hours. It was informed that out of 107 MW allocated to the state, only 43 MW was received from the Kopili Hydro Electric Project.

The Chairperson AERC informed that during the recently held Coordination Forum Meeting, the representative from NEEPCO informed that the underwater machineries had undergone corrosion due to acidity in the water and repairs & maintenance works have been taken up. On a query from the Commission as to when the project would be able to generate to its effective capacity, it was informed that the repairs and maintenance works are likely to be completed by March 2014 and the project would be able to generate to its full capacity depending on the inflow of water.

The Chairperson, AERC informed the Committee that Rs 1.03 /unit is being charged as Fuel and Power Purchase Price Adjustment (FPPPA) on electricity consumption for all consumers and therefore, as the distribution licensee is now aware of the fact that power from Kopili Hydro Electric Project will be partially available until March 2014,

the licensee may find some alternative economic source of power to mitigate the shortage.

APDCL informed that the Company was trying to procure power at an average price of Rs 2.50/unit from the Indian Energy Exchange and through Short term Open Access.

(4) Agenda Item No 4: Appraisal of members of the State Advisory Committee on Multi Year Tariff Proposal by the respective utilities.

As per AERC (Terms and Conditions for Determination of Tariff) Regulations 2006, the generation, transmission and distribution companies are required to file Multi Year Tariff petitions for FYs 2013-16 for determination of ARR and tariff by 01.12.2012. Each of the power utilities approached the Commission with petition to grant extension of time upto 31.01.2013 for filing MYT petition for FY 2013-14 to FY 2015-16 stating that the necessary information to submit the petitions was not available and therefore, the documents were not ready. Accordingly, the Commission extended the time by two months upto 31.01.2013.

The Commission informed the members of the State Advisory Committee that the petitions subsequently received from APGCL, AEGCL and APDCL were also deficient in material particulars and Technical Validation Sessions were held between officials of the Commission and the petitioners. Some data/clarifications were further sought from the Commission from time to time and most of these have been submitted except for those required to be submitted after the validation sessions.

The Commission further informed that, as per the Electricity Act 2003, and in line with the procedure followed by AERC for the previous years, notices regarding petitions received for determination of ARR and Tariff for FY 2013-16 were asked to be published in widely circulated dailies. The notifications were published in 11 dailies – 4 Assamese dailies, 3 English, 2 Bengali and 2 Hindi dailies. The last date for receipt of objection petitions was stated in the notifications as 30.04.2013. However, the Commission received a number of requests to extend the time for submission of response petitions and it was decided to extend the date for submission of comments and objections upto 13.05.2013. It was also informed that some petitioners requested that the notices be published in Assamese language in the Assamese newspapers. The Commission directed the power utilities to comply with and accordingly notices in Assamese language were published on 01.05.2013 in Assamese dailies.

The MYT petitions submitted by the utilities were briefly discussed during the meeting and power point presentations on these petitions were also given by all the companies.

After the presentations, a few members of the State Advisory Committee (SAC) enquired regarding billing and collection efficiency. APDCL sources informed that average current billing and collection efficiency was 75% and 95% respectively. **The members suggested that third party study of AT&C losses of the distribution company needs to be conducted and measures to reduce such losses must be taken as in rural areas, it can**

be seen that the losses were in the range of 40%-45%. It was further suggested that third party energy audit need to be done.

Some SAC members enquired on the success of involving franchisees in Single Point Power Supply Scheme. APDCL informed that 26 Nos. of feeders and more than a 100 transformers entrusted to rural franchisees are running smoothly. APDCL further informed that in some areas in Central Assam like Nagaon, franchisee system has been very successful while in lower and upper Assam, it has not been that successful. It was informed that in Nazira and Sivasagar of Upper Assam, new feeders have been allocated to franchisees.

A SAC member pointed out that there were allegations that franchisees were not willing to enter into agreement with the distribution licensee as the revenue target offered to the franchisee were on the higher side and sometimes not achievable. Besides, there were also allegations that in some areas, either the franchisee DTRs were not metered or meters were not working and franchisees were billed on average consumption which led to financial losses to the company.

The Chairperson AERC asked the distribution licensee to make public the number of feeders and transformers offered to franchisees, the commission being offered to the franchisees and other details including increase in the revenue of APDCL after the franchisee system was introduced in a particular area to enhance transparency in the functioning of these franchisees.

It was suggested by a SAC member that the ongoing power projects within the state like Bongaigaon Thermal Power Project, need to be expedited and the Government of Assam should make sure that the law & order situation does not stand as an impediment in timely commissioning of these projects.

Shri Khosla assured the members that action in this regard would be taken.

No other matter was discussed and the meeting ended with a vote of thanks by the Secretary, AERC to everyone present in the meeting.

Sd/-

(J. Barkakati)

Chairperson,

Assam Electricity Regulatory Commission

**List of Persons attending the 17th Meeting of the
State Advisory Committee held on 9th May, 2013**

- (1) **Shri J. Barkakati**, Chairperson, AERC
- (2) **Dr. R. K. Gogoi**, Member, AERC
- (3) **Shri T. Chatterjee**, Member, AERC
- (4) **Shri J. Khosla**, Additional Chief Secretary, Power Deptt., Govt. of Assam.
- (5) **Shri A. Goel, IAS**, Commissioner & Secretary, Power Deptt., Govt. of Assam
- (6) **Shri R. Yadav, IAS**, Chairman, ASEB & CMD, APDCL.
- (7) **Shri M.R. Dutta**, Joint Secretary, Agriculture Deptt., Govt. of Assam
- (8) **Shri G. K. Das**, MD, AEGCL
- (9) **Shri C. Baruah**, Director (Technical), APDCL.
- (10) **Dr P.K. Bordoloi**, Professor & HoD, Deptt. of AEI, GIMT, Guwahati-17.
- (11) **Shri D. Kedia**, Member, Power Committee, FINER, Guwahati.
- (12) **Shri J. Madhav**, Former Chief Advisor to the Chief Minister, Govt. of Assam.
- (13) **Shri A. K. Baruah**, President, All Assam Small Scale Industries Association.
- (14) **Shri G.C. Baishya**, President, Grahak Suraksha Sanstha
- (15) **Shri S. Baruah**, President, North Eastern Small Scale Industries Association
- (16) **Shri K. C. Medhi**, State Secretary, North Eastern Small Scale Industries Association.

Officers of AERC present :

- (1) **Shri M.J. Baruah**, ACS, Secretary, AERC.
- (2) **Shri D. K. Sharma**, Joint Director (Tariff), AERC
- (3) **Shri T. Mahanta**, Deputy Director (Engg.), AERC
- (4) **Shri A. Purkayastha**, Deputy Director (Finance), AERC

Consultants of AERC present:

- (1) **Ms P. Sharma**, Consultant (Finance, Database and Consumer Advocacy), AERC
- (2) **Shri N.K. Deka**, Consultant (Technical), AERC

Annexure-2

পঞ্জীভুক্ত নম্বৰ - ৭৬৮ /৯৭

Registered No.-768/97



THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

নং 168 দিশপুৰ, মঙ্গলবাৰ, 10 এপ্ৰিল, 2012, 21 চ'ত, 1934 (শক)

No.168 Dispur, Tuesday, 10th April, 2012, 21st Chaitra, 1934 (S.E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

ASSAM ELECTRICITY REGULATORY COMMISSION
FUEL AND POWER PURCHASE PRICE ADJUSTMENT FORMULA REGULATIONS,
2010, (AMENDMENT) 2012

NOTIFICATION

The 31st March, 2012

No. AERC. 28/2012.— In exercise of the powers conferred under Section 61(d), 62(4), 86(1)(b) sub-section (1) of section 181 and clause (zp) of sub-section (2) of section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it on that behalf, the Assam Electricity Regulatory Commission makes the following regulations :-

REGULATIONS

1. Short title, extent and commencement:

- (1) These regulations may be called the Assam Electricity Regulatory Commission **(Fuel and Power Purchase Price Adjustment Formula) Regulations, 2010, (Amendment) 2012.**
- (2) These regulations shall extend to the whole of the State of Assam.
- (3) These regulations shall come into force from the date of their publication in the Assam Gazette

2. Introduction: As per Section 62(4) of the Electricity Act 2003, no tariff or part of any tariff may ordinarily be amended more frequently than once in a financial year except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. A reference can be drawn to the provisions of the Tariff Policy notified by the Government of India specifying that the uncontrollable costs be recovered speedily to ensure that the future consumers are not burdened with past costs. The uncontrollable costs include fuel cost, cost on account of inflation, variations in power purchase unit cost including on account of hydrothermal mix in case of adverse natural events etc. The AERC (Terms and conditions for determination of Tariff) Regulations, 2006 also states that "The Commission shall allow the recovery or refund; as the case may be, of additional charge for adjustment of tariff on account of change in fuel related costs of electricity generation and purchase of electricity within the period of a notified tariff order of the Commission." In this regulation, a fuel surcharge formula is specified in order to recover the additional burden on account of changes in fuel price and power purchase cost. Accordingly, the Commission proposes to introduce the regulations to recover the change in fuel price for the approved quantity of generation and power purchase for the distribution licensee.

3. Definitions:

- (1) In these Regulations, unless the context otherwise requires:
 - (a) "Act" means the Electricity Act 2003 (36 of 2003);
 - (b) "Commission" means the Assam Electricity Regulatory Commission;
 - (c) "Generating Company" means any company or body corporate or associating or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;
 - (d) "Licensee" means a person who has been granted a licence under section 14 of the Act, including a person deemed to be a licensee referred to under any of the provisions to Section 14 of the Act;
 - (e) "Tariff" shall mean the schedule of charges for generation and bulk supply, transmission, wheeling and supply of electricity together with terms and conditions thereof;
 - (f) "Unscheduled Interchange" (UI) shall mean unscheduled interchanges as defined in Indian Electricity Grid Code;
 - (g) "Year" shall mean financial year ending on 31st March;
 - (h) "Current Year" shall mean the year in which the statement of annual accounts or petition for determination of tariff is filed;
 - (i) "Previous Year" shall mean the year immediately preceding the current year;

- (j) "Ensuing Year" shall mean the year next following the current year; and
- (k) "State" means the State of Assam.
- (2) The words of expressions occurring in these regulations and not defined herein but defined in the Act shall bear the same meaning as in the Act.

4. FUEL & POWER PURCHASE PRICE ADJUSTMENT (FPPPA) FORMULA

- (i) The amount of Fuel & Power Purchase Price Adjustment (FPPPA) shall be computed as under :

$$V = VF + VPP$$

Where,

V = Amount of incremental Cost in a specified period on account of Fuel & Power Purchase (`).

VF = Amount of differential cost on account of fuels on generation by different power stations of the state generators (`).

VPP = Amount of differential cost on account of Power purchase (`)

- (ii) The FPPPA rate shall be calculated as,

$$\text{FPPPA Recovery Rate (Paise/kWh)} = \frac{V (`)}{\text{Energy sales (KWH)}} \times 100$$

Where Energy sales consist of,

- (a) Metered sale of Energy.... (ES1)
- (b) Assessment of unmetered sale (ES2)
- (c) Deemed sale of Energy on account of excess T&D losses ...(ES3)

Less (d) Energy sale to the Exempted categories of consumers.(ES4)

The deemed sale of energy on account of excess T&D losses is equal to actual T&D losses minus losses allowed by the Commission. In case the figure is negative, the same may be ignored.

The recovery formula shall be as under:

$$\text{FPPPA Recovery Rate (Paise /Kwh)} = \frac{Q_C (RC2-RC1) + Q_O (R02- R01) + Q_G(RG2 - RG1)+ QPP (RPP2-RPP1)}{ES1 + ES2 + ES3 - ES4} \times 100$$

FOR COAL BASED STATION:

Q_c = Quantity of coal consumed during the period in MT as per normative parameter.

$$Q_c = \frac{SHR}{NCV_o} \times \left[\frac{USO (MU)}{(1-AUX)} \right] \times (1+L_o) \times 10^3$$

Q_o = Quantity of oil consumed during the period in KL as per normative parameter.
= Generation (in MU) x specific oil consumption (ml/kWh) as approved by the Commission

USO = Actual unit sent out in MU.

AUX = Auxiliary Consumption Approved by the Commission (in %)

SHR = Station heat rate as approved by the Commission in Kcal./Kwh.

NCV_o = Approved calorific value of coal fired in kcal/kg.

L_o = Transit & storage losses of coal as approved by the Commission.

RC1 = Average rate of coal Ex. Power station coal yard as approved by the Commission for the period in ` / MT.

RC2* = Average rate of coal Supplied Ex. Power station coal yard as per actual for the period in ` / MT.

RO1 = Average rate of oil Ex. Power Station approved by the Commission for that period in ` /K.L.

RO2 = Average rate of oil actually supplied Ex. Power station during the period in ` / K.L.

* If the grade of coal supplied is inferior or superior to the grade considered in the last tariff order, then average rate of coal supplied (RC2) will be corresponding to the grade of coal considered by the Commission in the last tariff order.

FOR GAS BASED STATION:

Q_g = Quantity of Natural Gas consumed as per normative parameters during the period in 1000 SCM.

$$Q_g = \frac{SHR}{NCV_g} \times \left[\frac{USO}{(1-AUX)} \right] \times (1+L_g) \times 10^3$$

- USO = Unit sent out in MU.
- AUX = Auxiliary Consumption approved in percentage.
- SHR = Station heat rate as approved by the Commission in kcal/kWh.
- NCV_G = Approved calorific value of Gas fired in kcal/SCM.
- L_G = Transit & storage losses of Gas as approved by the Commission, if any.
- RG1 = Average rate of Natural gas as approved by the Commission including Transportation in ₹/1000 SCM
- RG2* = Actual Average rate of Gas Supplied during the Period including Transportation in ₹/1000 SCM.

* If the grade of Gas supplied is inferior or superior to the grade considered in the last tariff order, then average rate of Gas supplied (RG2*) will be corresponding to the grade of Gas considered by the Commission in the last tariff order.
[Q_C and Q_O & Q_G will have to be calculated station wise.]

LEGENDS:

- SCM = Standard Cubic Metre
- MU = Million Unit
- KCal = Kilo Calorie
- Kwh = Kilowatt Hour

FOR POWER PURCHASE:

- RPP1 = Average rate of power purchase as approved by the Commission in ₹/kWh.
- RPP2 = Actual Average rate of power purchase during the period in ₹/kWh.
- QPP = Actual Quantity of power purchased during the period in kWh for sale to the Distribution Licensee's scheduled consumers.

N.B: For computation of Power Purchase, the ex-bus cost of energy from generating stations including associated transmission cost shall be considered.

5. Implementation of the formula

- 5.1 The FPPPA will be recovered in the form of an incremental energy charge (₹/KWh) in proportion to the energy consumption and will be forming a part of the energy bill to be served on monthly or any other periodical basis.
- 5.2 The FPPPA charge shall not exceed 25% of the variable component of tariff or such other ceiling as may be stipulated by the Commission from time to time, where the

variable component of tariff is defined as total estimated revenue from energy charges (EC) in a year approved in the last Tariff Order divided by total estimated sales of the year. When FPPPA charges exceed 25% of the variable component of tariff, the Licensee shall make a petition to the Commission for recovery of the charges over the specified cap which shall be recovered after Commission's scrutiny and directives.

- 5.3 The formula will be applied at the end of each quarter by Distribution Licensee without making it necessary to go through the regulatory proceedings. The Distribution Licensee shall, however, be obligated to provide all relevant information to the Commission simultaneously and in any case where the Commission observes any discrepancies, the same will be adjusted during the next quarter. This mechanism will provide administrative and regulatory simplicity.

FPPPA charge is usually incurred by the generating company which is passed on to the distribution utility who in turn recover it from the end consumers. Therefore, the generating company owned by the state shall also provide all relevant details and supporting documents at the end of each quarter to the Commission for reconciliation.

- 5.4 The Fuel and Power Purchase Price Adjustment (FPPPA) charge will be made effective from the date of publication of the Regulations in the official Gazette.

Provided further that the FPPPA charge applicable to each tariff category of consumers shall be displayed prominently at the cash collection centres and on the website of the Distribution Licensee.

Provided that the Distribution Licensee shall put up on its website such details of the additional burden on account of changes in fuel price and power purchase cost and the FPPPA charges levied to all consumers for each quarter along with detailed computations.

- 5.5 Each control period shall be a quarter year i.e. 3 months. Accordingly, Distribution Licensee shall compute and adjust the amount as Fuel and Power Purchase Surcharge. Thus FPPPA surcharge for a quarter shall be charged from the first month of next quarter.

- 5.6 This fuel surcharge formula shall be applicable to the Distribution Licensee till it is amended either on petition or suo-moto. The FPPPA formula will be applicable for all consumers unless exempted by the Commission.

- 5.7 Distribution Licensee shall file detailed computation of actual fuel cost in ₹/kWH for each financial year for each of power stations of the state generators as well as cost of power purchase (Fixed and Variable) from each source/station based on audited accounts and a separate set of calculations with reference to permitted level of parameters as stated in the AERC (Terms and Conditions for determination of Tariff) Regulations, 2006. (audited and certified by cost accountant / chartered accountant).

- 5.8 Distribution Licensee shall file with the Commission all information including actual sales data required for calculation of the Fuel Surcharge (audited and certified by Cost Accountant/ Chartered Accountant) within 60 days of the end of the respective quarter failing which it shall forfeit any future claims on this account. It will also be

incumbent upon Distribution Licensee to reconcile these figures at the end of the year based on audited accounts.

- 5.9 Distribution Licensee shall undertake its power procurement during the year in accordance with the power procurement plan for such year approved by the Commission in accordance with AERC (Terms and Conditions for determination of Tariff) Regulations, 2006. Any variation, during any quarter of a financial year, in the quantum or in the cost of power procured and any procurement from a source other than a previously approved source, in excess of five percent (5%) of quantum or cost, as the case may be, of power procurement for such quarter, as approved by the Commission in the power procurement plan of the Distribution Licensee, shall be only with the prior approval of the Commission.

Provided that a variation in the cost of power procured on account of changes in the price of fuel of allocated/approved generators, calculated in accordance with Regulation 4. above shall not be included in determining the need for prior approval of the Commission under this regulation 5.9.

- 5.10 Distribution Licensee can include a prior period expense for recovery in the subsequent quarters if it can prove to the satisfaction of AERC that the details of the expenses claimed were not available for reasons beyond the control of Distribution Licensee at the time of filing.
- 5.11 In the application of FPPPA formula, Distribution Licensee shall bear all costs/charges accruing on account of purchases done in contravention of the merit order principles.
- 5.12 The actual variable costs computed for all generating stations shall exclude transit and handling losses of all types of fuels beyond the limits specified in Commission's relevant Regulation.
- 5.13 Calculation and levy of such charge shall be subject to scrutiny of the Commission. The Commission shall make available the calculations of licensee or generating company for inspection by any person. The licensee or generating company shall refund or recover, as the case may be, any difference of such charge already recovered by it and approved by the Commission.
- 5.14 In case of any reduction in power purchase and fuel cost if the licensee or generating company fails to refund the additional charge to the consumers/customers within the stipulated time, the Commission shall suo-moto order the licensee or generating company to refund the same with 10 days notice to the licensee.
- 5.15 The Commission shall charge a fee in each quarter for verification of all relevant documents pertaining to FPPPA claimed by the Distribution Licensees and Generating Companies.

The amount of fees shall be zero point one percent (0.1%) of the claimed amount.

- 5.16 In case of any dispute, an appropriate petition in accordance with the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, as amended from time to time or any statutory re-enactment thereof, shall be made before the Commission.

6. Overriding Effect

Notwithstanding anything contained contrary -

- a) in the AERC (Terms and Conditions for Open Access) Regulations, 2005; and

- b) in the AERC (Terms and Conditions for Determination of Tariff) Regulations, 2006; and
- c) in the AERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations 2009; and
- d) in the AERC (Fees) Regulations, 2009.

framed by the Commission under section 181 of the Electricity Act 2003; these regulations will have overriding effect.

7. Power to remove difficulties:

- (a) In case of any difficulty in giving effect to any of the provisions of these Regulations, the Commission may by General or special order, direct the Licensee to take suitable action not inconsistent with the provisions of Electricity Act 2003 which appears to be necessary or expedient for the purpose of removing the difficulty.
- (b) The Distribution Licensee may take an application to the Commission and seek suitable orders to remove any difficulty that may arise in implementation of these Regulations.

8. Issue of orders and directions:- Subject to the provisions of the Act and these regulations, the Commission may, from time to time, issue orders and practice directions with regard to the implementation of these regulations and procedure to be followed for such implementation and matters incidental or ancillary thereto.

9. Saving of Inherent Powers of the Commission:- Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission to adopt a procedure, which is at variance with any of the provisions of these regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these regulations.

10. Power to Amend:- The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provision of these regulations.

11. Interpretation:- All issues arising in relation to interpretation of these regulations shall be determined by the Commission and the decision of the Commission on such issues shall be final.

GAURI REGON,
Secretary,
Assam Electricity Regulatory Commission

Annexure-3

Government of Assam
Power (Electricity) Department
Dispur, Guwahati – 781006

No. PEL 23/2010/Pt-I/54

Dated Dispur the 22nd August, 2013

From : Shri Anurag Goel, IAS,
Commissioner & Secretary,
Power (E) Department,
Dispur, Guwahati – 781006

✓ To : The Secretary,
AERC,
ASEB Complex, 6th Mile,
Khanapara, Guwahati – 22

Sub : Financial support to APDCL for 2013-14 in the form of targeted subsidy.
Ref : 1. AERC letter No. 401/2012/4 Dtd. 4th May, 2013
2. Power Department letter No. PEL.23/2010/Pt-I/51 Dtd. 24th May, 2013

Sir,

With reference to subject and letter mentioned above, I am directed to convey that Government has decided to provide financial support to APDCL amounting to a maximum of Rs.200 Crores for the Financial Year 2013-14 only for the purposes of enabling availability of electricity, ensuing efficiency in distribution, maintaining availability of supply and ensuing reasonableness of tariff to be charged in the interest of consumers belonging to economically weaker sections of the population. "


The targeted subsidy is proposed as follows :-

1. @ Rs.1.10 per unit for approximately 10 Lakh Jeewan Dhara (BPL) consumers for upto 30 units per household per month.
2. @ Rs.0.70 per unit for approximately 16 lakhs domestic category A consumers (APL) for upto 120 units per household per month.

Subject to the above, State Government has no objection if the funds referred to above are taken into account against the annual revenue requirement of APDCL for various purposes while determining the tariff in response to the petition filed by APDCL. Further, APDCL may be directed to reflect the subsidy amount in the individual energy bills.

This subsidy is intended for the year 2013-14 only and for subsequent years of the Multi Year Tariff, the Government may like to confirm at relevant points of time.

Yours faithfully,



Commissioner & Secretary,
Power Department

Memo No. PEL 23/2010/Pt-I/54-A

Dated Dispur the 22nd August, 2013

Copy to :-

1. Addl. Chief Secretary, Power Deptt. for favour of kind information.
2. CMD, APDCL for favour of kind information.
3. Principal Secretary to CM for favour of kind information.
4. SO to Chief Secretary, for kind information of Chief Secretary.
5. PS to Minister, Power for kind information of Hon'ble Minister.


Commissioner & Secretary,
Power Department

Annexure-4

Government of Assam
Power (Electricity) Department
Dispur, Guwahati – 781006

No. PEL.23/2010/Pt-II/7

Dated Dispur the 23rd September, 2013

From : Shri Anurag Goel, IAS,
Commissioner & Secretary,
Power (E) Department,
Dispur, Guwahati – 781006

✓ To : The Secretary,
AERC,
ASEB Complex,
6th Mile, Khanapara,
Guwahati -22

Sub : Financial support to APDCL for 2013-14 in the form of targeted subsidy.
Ref : 1. Our earlier letter no. PEL.23/2010/Pt-I/54 dtd.22-08-2013
2. Your letter no.AERC.401/2012/10 dtd.19th September, 2013


Sir,

With reference to the letters and subject mentioned above, it is to further clarify that the State Government is pleased to allow targeted subsidy of Rs.1.10 per unit for Jeevan Dhara (BPL Consumers) for consumption upto 30 units per household per month or else allow a subsidy of Rs.0.70 per unit per household per month for total consumption upto 120 units by the Jeevan Dhara consumers if they consume more than 30 units in a month and a subsidy of Rs.0.70 per unit for upto 120 units per household per month by domestic category 'A' consumers and the balance, if any, may be utilized against the past period outstanding liabilities of 'Regulatory assets' in the Annual Revenue Requirement of APDCL while determining the tariff for APDCL, subject to a maximum of Rs.200 Crore.

This order will be effective for a period of 12 (twelve) months from the order of tariff by the Commission.

This is for favour of kind information of the Commission.

Yours faithfully,



Commissioner & Secretary,
Power Department

Memo No. PEL.23/2010/Pt-II/7-A

Dated Dispur the 23rd September, 2013

Copy to :-

1. Addl. Chief Secretary, Power Deptt. for favour of kind information.
2. CMD, APDCL for favour of kind information.
3. Principal Secretary, to CM for favour of kind information.
4. SO to Chief Secretary, for kind information of Chief Secretary.
5. PS to Minister, Power for kind information of Hon'ble Minister


Commissioner & Secretary,
Power Department.