ASSAM ELECTRICITY REGULATORY COMMISSION

(AERC)

TARIFF ORDER

TRUE-UP for FY 2016-17,

APR for FY 2017-18 and

Revised ARR

and

TARIFF for FY 2018-19

Assam Electricity Grid Corporation Limited

(AEGCL)

Petition No. 28/2017

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List of Abbreviations

A&G	Administrative 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
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
AS	Accounting Standards
ASEB	Assam State Electricity Board
BST	Bulk Supply Tariff
CAG/C&AG	Comptroller and Auditor General
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CPI	Consumer Price Index
CPPC	Central Pension Processing Centre
CTU	Central Transmission Utility
CWIP	Capital Work-In-Progress
DA	Dearness Allowance
Act /EA 2003	Electricity Act, 2003
FAR	Fixed Asset Register
FCC	Financial Completion Certificate
FINER	Federation of Industry & Commerce of North Eastern Region
GFA	Gross Fixed Assets
GoA	Government of Assam
GPF	General Provident Fund
HRA	House Rent Allowance
IWC/IoWC	Interest on Working Capital
kW	kilo Watt
kWh	kilo Watt Hour

LTA	Leave Travel Allowance
MNRE	Ministry of New & Renewable Energy
MYT	Multi Year Tariff
MU	Million Units
MW	Mega Watt
NEC	North Eastern Council
NERPSIP	North Eastern Region Power System Improvement Project
NTI	Non-Tariff Income
O&M	Operation and Maintenance
PCC	Physical Completion Certificate
PGCIL	Power Grid Corporation of India Limited
PoC	Point of Connection
PSDF	Power System Development Fund
R&M	Repairs and Maintenance
RoE	Return on Equity
ROI	Rate of Interest
ROP	Revision of Pay
SAC	State Advisory Committee
SAMAST	Scheduling, Accounting, Metering and Settlement of Transactions in Electricity
SBI	State Bank of India
SLDC	State Load Despatch Centre
SLM	Straight Line Method
STOA	Short Term Open Access
STU	State Transmission Utility
TSC	Transmission Service Charges
TVS	Technical Validation Session
WPI	Wholesale Price Index

ASSAM ELECTRICITY REGULATORY COMMISSION

Guwahati

Present

Shri Subhash Ch. Das, Chairperson

Shri Dipak Chakravarty, Member

Petition No. 28/2017

Assam Electricity Grid Corporation Limited (AEGCL) - **Petitioner**

ORDER

(Passed on March 19, 2018)

(1) AEGCL filed Petition for approval of Truing up for FY 2016-17, Annual Performance Review (APR) for FY 2017-18 and revised Aggregate Revenue Requirement (ARR) and determination of Tariff for FY 2018-19 as per MYT Regulations, 2015 (Petition No.28/2017) on November 30, 2017.

(2) The Commission held an Admissibility Hearing on December 13, 2017 and admitted the Petition (Petition No. 28/2017) vide Order dated December 13, 2017. The Commission conducted preliminary analysis of the Petition submitted by AEGCL and found that the Petition was incomplete in material particulars. Therefore, additional data and clarifications on the Petition were sought from AEGCL vide letter dated December 14, 2017 and these were submitted by them on December 27, 2017.

(3) On admission of the Petition, in accordance with Section 64 of the Electricity Act 2003, the Commission directed AEGCL to publish a summary of the ARR and Tariff filings in local dailies to facilitate due public participation.

(4) Accordingly, a Public Notice was issued by the AEGCL inviting objections/suggestions from stakeholders to be submitted on or before January 10, 2018. The notice was published in six (6) leading newspapers of the State on December 20, 2017. A copy of the

Petitions and other relevant documents were also made available to the consumers and other interested Parties at the office of the Managing Director of AEGCL and at the offices of the Deputy General Manager of each circle of AEGCL. A copy of the Petition was also made available on the websites of the Commission and AEGCL.

(5) The Commission received suggestions/objections from two (2) stakeholders on the Petitions filed by AEGCL. The stakeholders were notified about the place, date and time of Hearing, to be held at Assam Administrative Staff College, Khanapara, Guwahati on February 17, 2018. The Hearing was held as scheduled. The details are discussed in the relevant Chapters of this Tariff Order.

(6) The Petition was also discussed in the meeting of the State Advisory Committee (SAC) (constituted under Section 87 of the Electricity Act, 2003) held on February8, 2018 at Assam Administrative Staff College, Khanapara, Guwahati.

(7) The Commission, now in exercise of its powers vested under Sections 61, 62, 86 and 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf and taking into consideration the submissions made by the Petitioner, objections and suggestions received from stakeholders and all other relevant materials on record, has approved the True-up for FY 2016-17, APR for FY 2017-18, revised ARR for FY 2018-19, and determined the Transmission Charges for FY 2018-19 as detailed in subsequent pages.

(8) The Commission directs AEGCL to publish a Public Notice intimating the revised Transmission Charges before the implementation of this Order in English and Vernacular newspapers and on the website of AEGCL.

(9) The approved rate of Transmission Charges shall be effective from April 1, 2018 and shall continue until replaced by another Order by the Commission.

(10) Accordingly, the Petition No. 28/2017 stands disposed of.

Sd/-	**Sd/-**
(D. Chakravarty)	**(S. C. Das)**
Member, AERC	**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 (hereinafter referred as the Act or the EA, 2003) has ensured continuity of the Commission under the Electricity Act, 2003.

1.1.2 The Commission is mandated to exercise the powers and functions conferred under Section 181 of the Electricity Act, 2003 (36 of 2003) and to exercise the functions conferred on it under Sections 61, 62 and 86 of the Act from June 10, 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 or retail, as the case may be;
b) To regulate power purchase and procurement process of the 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) That 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 based on their customer category cost of supply;

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 Electricity Plan formulated by the Central Government including the National Electricity Policy and Tariff Policy.

1.3 Background

1.3.1 AEGCL owns and operates the transmission system previously owned by Assam State Electricity Board (ASEB). AEGCL has started functioning as a separate entity from December 10, 2004. The Government of Assam vide Notification No. PEL.151/2003/Pt/3/349 dated August 16, 2005 issued order to give effect to the reorganization of the ASEB and finalization of the provisional Transfer effected as per the provisions of the Act and the First Transfer Scheme. The Government of Assam notified the opening Balance Sheet updated and finalized based on the Audited Accounts of ASEB as on March 31, 2005 under Notification No. PEL/114/2006/120 dated August 29, 2007.

1.4 Multi Year Tariff Regulations, 2015

1.4.1 The Commission, in exercise of the powers conferred under Section 61 read with Section 181(2) (zd) of the Act, has notified the MYT Regulations, 2015 on June 2, 2015. These Regulations are applicable for determination of Tariff for Generation, Transmission, SLDC, Wheeling and Retail Supply for the Control Period of three financial years from April 1, 2016 onwards up to March 31, 2019. These Regulations are applicable to all existing and future Generating Companies, Transmission Licensees and Distribution Licensees within the State of Assam.

1.4.2 AEGCL filed the MYT Petition for approval of ARR for the Control Period from FY 2016-17 to FY 2018-19 and tariff for FY 2017-18 as per MYT Regulations, 2015, along with True-up for FY 2014-15 and FY 2015-16 as per Tariff Regulations, 2006.The

Commission issued the Order on the said MYT Petition on March31, 2017 and approved Transmission Tariff and SLDC Charges for FY 2017-18.

1.4.3 Further, the Commission notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2015, First Amendment, 2017 on November 8, 2017. In the said Regulations, certain provisions regarding the scope of Annual Performance Review, rate of interest for consumer security deposit, etc., have been amended.

1.4.4 Regulation 10 of the MYT Regulations, 2015, as amended in November 2017, specifies that the Commission shall undertake the APR and True-up for the respective years of the Control Period from FY 2016-17 to FY 2018-19, as reproduced below:*"10.3 The scope of the annual review and True up shall be a comparison of the actual performance of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise the following*:

a) ***True Up:*** *a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for the financial year and truing up of expenses and revenue in line with Regulation 11including pass through of impact of uncontrollable items;*

b) *Annual Review: a comparison of the revised performance targets of the applicant for the current financial year with the approved forecast in the Tariff order corresponding to the Control period for the current financial year subject to prudence check including adjusting trajectories of uncontrollable and controllable items*".

1.5 Procedural History

1.5.1 As per Regulation 10.2 of MYT Regulations, 2015, AEGCL is required to file an application for true-up for previous year i.e., FY 2016-17, APR of current year, i.e., FY 2017-18 and tariff for ensuring year, i.e., FY 2018-19, not less than 120 days before the close of the current year.

1.5.2 AEGCL has accordingly filed the Petition for Truing up for FY 2016-17, APR for FY 2017-18 and for approval of revised ARR and Transmission Tariff for FY 2018-19 on November 30, 2017.

1.5.3 The Commission conducted preliminary analysis of the Petition submitted by AEGCL and found that the Petition was incomplete in material particulars. Therefore, additional data and clarifications on the APR Petition were sought from AEGCL during the Technical Validation Session conducted on December 12, 2017. The replies were submitted by them on December 27, 2017.

1.5.4 The Commission held an Admissibility Hearing on December 13, 2017, and admitted the Petition (Petition No. 28/2017) vide Order dated December 13, 2017. On admission of the Petition, in accordance with Section 64 of the Act, the Commission directed AEGCL to publish its Petition in the abridged form and manner to facilitate due public participation.

1.5.5 The copies of the Petition and other relevant documents were made available to consumers and other interested parties at the office of the Managing Director of AEGCL, and offices of the Deputy General Manager of each circle of AEGCL. AEGCL was also directed to make the copy of the Petition available on its website. A copy of the Petition was made available on the website of AEGCL (www.aegcl.org) and also on the website of the Commission (www.aerc.gov.in) in downloadable format. A Public Notice was issued by AEGCL inviting objections/suggestions from stakeholders on or before January 10, 2018, which was published in the following newspapers on December 20, 2017:

Date	**Name of Newspaper**	**Language**
20.12.2017	The Sentinel	English
20.12.2017	The Assam Tribune	English
20.12.2017	Asamiya Pratidin	Assamese
20.12.2017	Dainik Janambhumi	Assamese
20.12.2017	Purbanchal Prahari	Hindi
20.12.2017	Dainik Jugasankha	Bengali

1.5.6 While examining the submission, the Commission observed additional data requirements vis-à-vis replies to original data requirement, which were sought from AEGCL vide letter dated December 14, 2017 and February 21, 2018. AEGCL submitted the replies to such data requirements on December 27, 2017 and February 27, 2018.

1.5.7 The Commission considered the objections received and sent communication to the objectors to take part in Hearing process by presenting their views in person before the Commission. Accordingly, the Commission scheduled a Hearing in the matter on February 17, 2018 at Assam Administrative Staff College, Khanapara, Guwahati. In this context, Notices were dispatched to the stakeholders personally/by Registered Post stating the date and time of Hearing. Also, a comprehensive Notice was published in Six (6) newspapers on February 7, 2018 in Assamese and English language. The Hearing was held at Assam Administrative Staff College, Khanapara, Guwahati on February 17, 2018 as scheduled. All objectors/respondents who participated in the Hearing were given opportunity to express their views on the Petition.

1.5.8 All the written representations submitted to the Commission and oral submissions made before the Commission in the Hearing and the responses of AEGCL have been carefully considered while issuing this Tariff Order. The major issues raised by different consumers and consumer groups along with the response of AEGCL, and views of the Commission are elaborated in Chapter 3 of this Order.

1.6 State Advisory Committee Meeting

1.6.1 A meeting of the State Advisory Committee (SAC) (constituted under Section 87 of the Act) was convened on February 8, 2018.

1.6.2 During the SAC meeting, AEGCL, APGCL and APDCL made presentations on their respective Tariff Petitions filed for FY 2018-19. Apart from this, the issue of devising Action Plan for increasing RPO to 8% for Solar and overall trajectory to 17% including Solar and Non-Solar by 2022 in view of Ministry of New and Renewable Energy (MNRE) letter dated February 11, 2016, was also discussed.

1.6.3 As regards the Tariff Petition for AEGCL, it was discussed that PGCIL Charges have increased during FY 2016-17 on account of revision by CERC and switch over to Point of Connection (PoC) charges. One of the Members observed that PGCIL Charges accounted for 50% of AEGCL ARR. AEGCL submitted that most of the power consumed was imported from outside the State, hence, PGCIL Charges are high.

1.6.4 As regards the Tariff Petition of APGCL, the issues such as status of commissioning of NRPP, LRPP and Myntriang SHEP, status of Margherita Thermal Power Project, Minimum off-take with gas suppliers in view of de-commissioning of NTPS and LTPS, corrective actions for shortfall in generation on account of shortage of gas, etc., were discussed in detailed. It was also discussed that APGCL is losing out generation because of delay in commissioning of NRPP. Principal Secretary, Power, Government of Assam submitted that it is always economical to increase own generation.

1.6.5 As regards the Tariff Petition of APDCL, the issues such as high fixed charges for industries, levy of Minimum Charges instead of Fixed Charges, quality and reliable supply of power, non-uniform increase proposed for all categories, etc., were discussed in detailed. As regards the installation of separate Feeders for HT and Tea consumers, APDCL submitted that in Annual Plan for FY 2017-18, 35 Tea gardens have been selected for providing separate feeders.

1.6.6 As regards RPO trajectory, it was discussed that MNRE issued letter dated February 11, 2016 to States for developing an Action Plan for compliance of RPO up to 2022 and suggested that SERCs should notify RPO trajectory to reach 8% for Solar and 17% for Solar and Non-Solar by 2022. Accordingly, draft amendment was hosted by the Commission for comments of stakeholders. Members of SAC submitted their comments on the same.

1.6.7 The Minutes of the SAC Meeting are appended to this Order as **Annexure 1**.

2 Summary of AEGCL's Petition

2.1 Background

2.1.1 AEGCL submitted the Petition on November 30, 2017, seeking approval for True up for FY 2016-17, APR for FY 2017-18, and revised ARR and Transmission Charges for FY 2018-19. The Transmission Charges are to be recovered from the Assam Power Distribution Company Limited (APDCL), IPPs and other generators, traders and others who utilize the transmission system.

2.2 True-up for FY 2016-17

2.2.1 AEGCL submitted True-up for FY 2016-17 based on the audited accounts. The summary of ARR and Revenue Gap/(Surplus) claimed by AEGCL for FY 2016-17 is shown in the following Table:

Table 2-1: True-up of ARR for FY 2016-17 as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	FY 2016-17
1	PGCIL Charges	590.45
2	Operation and Maintenance Expenses	154.47
2.1	*Employee Cost*	*131.09*
2.2	*Repair and Maintenance*	*14.34*
2.3	*Administrative and General Expenses*	*9.04*
3	Depreciation	81.76
4	Interest and Finance Charges	36.43
5	Interest on Working Capital	25.64
6	Other Debits	0.25
7	SLDC Charges	2.35
8	BST for Pension Trust Fund	158.96
9	Net Prior Period Expenses	4.75
10	**Sub Total**	**1055.06**
11	Return on Equity	15.49
12	**Total Expenditure**	**1070.55**
13	Less: Non-Tariff Income	90.86
14	**Aggregate Revenue Requirement**	**979.69**

Sr. No.	Particulars	FY 2016-17
15	Add: Interest Expenses on State Government Loan approved by the Commission in the Review Order dated 09.04.2015	2.69
16	**Net Aggregate Revenue Requirement**	**982.38**
17	Revenue with Approved Tariff	826.99
18	**Revenue Gap/(Surplus)**	**155.39**

2.2.2 AEGCL has also submitted the SLDC Charges for FY 2016-17, comprising Employee Cost, R&M Expenses and A&G Expenses, as shown in the following Table:

Table 2-2: SLDC Charges for FY 2016-17 as submitted by AEGCL (Rs. Crore)

Particulars	FY 2016-17
Employee Cost	2.03
Repair and Maintenance Expenses	0.01
Administrative and General Expenses	0.31
Total SLDC Charges	**2.35**

2.2.3 AEGCL requested the Commission to approve the above ARR and allow AEGCL to pass on the Revised Revenue Gap after treating gains/losses for FY 2016-17.

2.3 Annual Performance Review for FY 2017-18

2.3.1 AEGCL has estimated the APR for FY 2017-18 based on the actuals of first half of the year and estimated for second half of the year. The summary of APR and Revenue Gap/(Surplus) estimated by AEGCL for FY 2017-18 is shown in the following Table:

Table 2-3: APR for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	FY 2017-18
1	PGCIL Charges	485.18
2	O&M Expenses	199.88
2.1	*Employee Cost*	*174.31*
2.2	*Repair & Maintenance*	*17.11*
2.3	*Administrative & General Expenses*	*8.46*
3	BST for Pension Trust Fund	171.24

Sr. No.	Particulars	FY 2017-18
4	Depreciation	90.53
5	Interest and Finance Charges	33.33
6	Interest on Working Capital	32.58
7	Other Debits	-
8	Return on Equity	17.17
9	Less: Non-Tariff Income	106.79
10	**Aggregate Revenue Requirement**	**923.12**
11	Add: Revenue Gap/(Surplus) after Truing up for FY 2014-15 along with Carrying Cost approved in the Tariff Order dated 31.03.2017	7.43
12	Add: Revenue Gap/(Surplus) after Truing up for FY 2015-16 along with Carrying Cost approved in the Tariff Order dated 31.03.2017	169.15
13	Add: Revenue Gap/(Surplus) for FY 2016-17 approved by the Commission in the Tariff Order dated 31.03.2017 for recovery in FY 2017-18	143.35
14	**Net Aggregate Revenue Requirement**	**1243.05**
15	Total Revenue with Approved Tariff	1192.39
16	Revenue Gap/(Surplus)	50.66

2.3.2 AEGCL has also submitted the SLDC Charges for FY 2017-18, comprising Employee Cost, R&M Expenses and A&G Expenses, as shown in the following Table:

Table 2-4: SLDC Charges for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Particulars	FY 2017-18
Employee Cost	2.27
Repair and Maintenance Expenses	0.12
Administrative and General Expenses	0.69
Total SLDC Charges	**3.08**

2.3.3 Based on the APR, AEGCL requested the Commission to review and allow the Tariff/ARR of Rs. 1246.13 Crore including SLDC charges of Rs. 3.08 Crore for FY 2017-18.

2.4 Revised Aggregate Revenue Requirement for FY 2018-19

2.4.1 AEGCL has projected the revised ARR of Rs. 1332.60 Crore for FY 2018-19, as detailed in the Table below:

Table 2-5: Revised ARR for FY 2018-19 as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	FY 2018-19
1	PGCIL Charges	526.33
2	O&M Expenses	188.53
2.1	*Employee Cost*	*160.46*
2.2	*Repair & Maintenance*	*18.32*
2.3	*Administrative & General Expenses*	*9.75*
3	BST for Pension Trust Fund	194.11
4	Depreciation	104.21
5	Interest and Finance Charges	25.67
6	Interest on Working Capital	34.17
7	Other Debits	-
8	Return on Equity	17.82
9	Less: Non-Tariff Income	107.64
10	Less: Expenses Capitalised	-
11	**Aggregate Revenue Requirement**	**983.20**
12	Add: Revenue Gap/(surplus) for FY 2016-17 approved by the Commission in the Tariff Order dated 31.03.2017 for recovery in FY 2018-19	143.35
13	Add: Revenue Gap/(surplus) after Truing up for FY 2016-17	155.39
14	Add: Revenue Gap/(surplus) after Annual Performance Review for FY 2017-18	50.66
15	**Net Aggregate Revenue Requirement**	**1332.60**
16	Revenue with Approved Tariff for FY 2017-18	1111.72
17	Gap/(Surplus)	220.88
18	Per unit Charges for PGCIL (Rs./kWh)	0.67
15	Per unit Charges of AEGCL excluding PGCIL Charges (Rs./kWh)	0.66
18	**Total Per unit Charges (Rs./kWh)**	**1.33**

2.4.2 AEGCL has also submitted the SLDC Charges for FY 2018-19, comprising Employee Cost, R&M Expenses and A&G Expenses, as shown in the following Table:

Table 2-6: SLDC Charges for FY 2018-19 as submitted by AEGCL (Rs. Crore)

Particulars	**FY 2018-19**
Employee Cost	2.75
Repair and Maintenance Expenses	0.12
Administrative and General Expenses	0.74
Total SLDC Charges	**3.61**

2.4.3 AEGCL requested the Commission to review and allow the Tariff of Rs. 1336.21 Crore including SLDC charges of Rs. 3.61 Crore for FY 2018-19.

3 Brief Summary of Objections Raised, Response of the AEGCL and Commission's Comments

3.1.1 The Commission has received suggestions/objections from two (2) stakeholders on the Petition filed by AEGCL, from the following stakeholders:

Sr. No.	Name of Stakeholder
1	Assam Branch of Indian Tea Association (ABITA), Guwahati
2	Federation of Industry & Commerce of North Eastern Region (FINER)*

Note: The suggestions/objections of FINER were received during the Public Hearing

3.1.2 AEGCL has submitted its responses to the objections/ suggestions received from the above stakeholders.

3.1.3 The Commission considered the suggestions/objections received and notified the stakeholders to take part in the Hearing process by presenting their views in person before the Commission, if they so desired. The Commission held the Hearing at Assam Administrative Staff College, Guwahati on February 17, 2018.

3.1.4 The stakeholders attended the Hearing and submitted their views/suggestions. All the written representations submitted to the Commission and the oral submissions made before the Commission in the Hearing and the responses of AEGCL have been carefully considered while issuing this Tariff Order.

3.1.5 The objections/suggestions made by the stakeholders and responses of the Petitioner are briefly dealt with in this Chapter. The major issues raised by the objectors are discussed below along with the response of the Petitioner (AEGCL) and views of the Commission.

3.1.6 While all the objections/suggestions have been given due consideration by the Commission, only, major responses/objections received related to the ARR and Tariff Petition and also those raised during the course of Hearings have been grouped and addressed issue-wise, in order to avoid repetition.

Issue 1: PGCIL Charges

Objection

ABITA requested the Commission to verify the invoices of PGCIL charges of FY 2016-17, to check whether the Petitioner has claimed the same expenses.

FINER submitted that AEGCL has proposed substantial increase in PGCIL charges for FY 2016-17 without any reasoning. FINER added that it is also not known whether AEGCL is making its submissions on the Tariff Petitions of PGCIL or not. AEGCL has projected lower PGCIL charges in the Petition as compared to the estimated PGCIL charges for FY 2017-18 and FY 2018-19, without submitting any basis. FINER submitted that PGCIL charges are expected to reduce because of much stricter parameters specified in CERC Tariff Regulations.

Response of AEGCL

No reply has been submitted by AEGCL on the above issue.

Commission's View

The Commission has verified the PGCIL bills submitted by AEGCL for FY 2016-17, which tally with the expenses booked under the Audited Accounts. These Charges are payable to PGCIL as billed and are dependent on the POC mechanism, as specified by the Central Electricity Regulatory Commission (CERC). The Commission has allowed the PGCIL Charges for FY 2016-17, as detailed in Chapter 4 of this Order.

As regards PGCIL charges for FY 2017-18 and FY 2018-19, the rulings of the Commission are detailed in Chapter 5 and Chapter 6, respectively, of this Order.

Issue 2: Operation and Maintenance (O&M) Expenses

Objection

ABITA submitted that AEGCL has sought approval of O&M expenses for FY 2016-17 on actual basis. The components of O&M expenses are mainly controllable in nature, therefore, O&M Expenses should not be approved at actuals. ABITA proposed allowance of O&M expenses of Rs.152.76 Crore against Rs.154.57 Crore for FY 2016-17.

ABITA further added that AEGCL has considered employee expenses for FY 2017-18 based on actual salaries paid during the 7 months plus estimate for the months from

November 2017to March 2018. However, AEGCL has not submitted the month-wise cost projections and Revision of Pay (ROP) estimates, while projecting 33% increase in the employee expenses over the actual employee expenses during FY 2016-17. ABITA requested the Commission to approve employee expenses at an escalation rate of 7.2%, which is the average CPI increase of last three years, in line with the MYT Regulations, 2015.ABITA requested the Commission not to approve the ROP and other charges, which should be considered during True Up for the respective year on actual payment basis, subject to prudence check. ABITA proposed Employee expenses of Rs. 141.95 Crore for FY 2017-18 and Rs. 153.70 Crore for FY 2018-19.

ABITA submitted that A&G expenses are controllable in nature, and requested the Commission to disallow the increased A&G expenses proposed in the petition. ABITA requested the Commission to approve A&G expenses and R&M Expenses as per the MYT Order. ABITA requested the Commission to disallow the increased A&G Expenses proposed in the Petition for FY 2017-18 and FY 2018-19. ABITA proposed the R&M expenses of Rs. 165.66 Crore for FY 2017-18 and Rs. 179.53 Crore for FY 2018-19.

FINER submitted that AEGCL is not spending enough on R&M expenses, hence, it has very high employee expenses as a percentage of total ARR. AEGCL should also improve its operational performance with judicious expenditure on R&M to reduce losses and technology intervention to reduce employee expenses.

Response of AEGCL

AEGCL submitted that amounts proposed by ABITA may not be considered because the figures submitted by AEGCL in the True-Up Petitions are the actual expenses incurred by AEGCL in FY 2016-17 as per Statutory and C&AG audited Annual Accounts, and these expenses are uncontrollable in nature.

Commission's View

The Commission has allowed the O&M expenses on normative basis as per the formula specified in the MYT Regulations, 2015 based on the revised CPI and WPI indices for FY 2016-17, FY 2017-18 and FY 2018-19. The Commission has undertaken the sharing of gains or losses based on approved normative expenses and actual O&M expenses for FY 2016-17. The detailed computation of O&M expenses for FY 2016-17 has been given in Chapter 4 of this Order, while the computation of revised normative O&M expenses for FY 2017-18 and FY 2018-19 are elaborated in Chapter

5 and Chapter 6, respectively, of this Order.

Issue 3: Return on Equity

Objection

ABITA requested the Commission to approve the Return on Equity on equity base as approved by the Commission in the MYT Order.

FINER submitted that AEGCL has proposed Return on Equity of Rs.17.85 Crore for FY 2018-19, which is much higher as compared to Rs. 13.99 Crore for FY 2015-16. FINER requested the Commission to approve Return on Equity in accordance with MYT Regulations, 2015 after detailed scrutiny.

Response of AEGCL

AEGCL submitted that it has computed Return on Equity as per Regulation 34 of MYT Regulations, 2015, and requested the Commission to approve the Return on Equity as proposed by AEGCL.

Commission's View

The Return on Equity has been allowed in accordance with the provisions of MYT Regulations, 2015 based on the actual equity addition towards actual capitalisation in FY 2016-17 and proposed capitalisation for FY 2017-18 and FY 2018-19. The detailed rulings of the Commission regarding Return on Equity for FY 2016-17, FY 2017-18 and FY 2018-19 have been elaborated in Chapter 4, Chapter 5 and Chapter 6, respectively, of this Order.

Issue 4: Depreciation

Objection

ABITA submitted that AEGCL has not provided the detailed calculation of depreciation. ABITA proposed depreciation of Rs.13.14 Crore for FY 2016-17 and requested the Commission to consider the methodology used in the MYT Order and not to allow depreciation on assets created from grants. ABITA proposed depreciation of Rs.17.06 Crore and Rs. 21.57 Crore for FY 2017-18 and FY 2018-19, respectively.

FINER submitted that AEGCL has claimed depreciation without updating the Fixed

Asset Register. FINER requested the Commission to disallow any increase in depreciation till the Fixed Asset Register is satisfactorily updated.

Response of AEGCL

AEGCL submitted that it has calculated depreciation as per MYT Regulations, 2015. AEGCL added that as per Government of Assam Order No. PEL. 133/2003/pt/463 dated March 3, 2009, *Grants & subsidies towards creation of capital assets paid by the GoA to ASEB and its successor Companies should be treated as promoter's contribution*. Hence, AEGCL is eligible to claim depreciation on assets created out of grants. AEGCL requested the Commission to approve the proposed depreciation in the Petition.

Commission's View

The Commission has allowed the depreciation for FY 2016-17 to FY 2018-19 as per the methodology considered in MYT Order dated March 31, 2017. The issue of disallowance of depreciation on consumer contribution/grants has been settled several times by the Commission in the past. The Hon'ble APTEL has also ruled that the Commission's decision to disallow depreciation on the assets funded out of grants is correct and is in accordance with the MYT Regulations, 2015. The Commission has accordingly disallowed depreciation on grant funded assets.

AEGCL is hereby directed to submit the Depreciation claim in the future Petitions in line with the principles already settled.

Issue 5: Interest and Finance Charges

Objection

ABITA requested the Commission not to approve the penal interest and other borrowing cost as these costs are incurred due to inefficiency of AEGCL and could have been avoided. ABITA proposed approval of Rs. 2.77 Crore for Truing up of FY 2016-17 based on the methodology followed in the MYT Order.

ABITA further added that AEGCL has assumed the opening loan of Rs. 491.28 Crore in FY 2017-18, which is not in line with the methodology adopted in MYT Order. Also, loan is required to be considered corresponding to the loan component of capitalisation in line with MYT Regulations 2015. ABITA requested the Commission to approve interest of Rs. 9.53 Crore for FY 2017-18 and Rs. 14.13 Crore for FY 2018-19.

FINER requested the Commission not to allow increase in the interest charges, without understanding the proper reason thereof and to disallow the penal interest component. The capitalisation of various assets should be taken into account before allowing the interest component.

Response of AEGCL

AEGCL submitted that it has filed truing up for FY2016-17 as per CAG audited annual accounts. AEGCL further added that other borrowing costs include bank charges, bank commission, etc., which are incurred not due to the inefficiency of AEGCL. These expenses are inevitable for smooth functioning of the Company and hence, could not be avoided. AEGCL has computed interest on loan on actual basis as full year interest on opening balance and day wise on the addition of loan at rates mentioned in the Tariff Petition.

Commission's View

The Commission has allowed the interest expenses on normative basis on the same principle as adopted in the MYT Order and in accordance with the provisions of MYT Regulations, 2015.The Commission has considered the net normative opening loan for FY 2016-17in accordance with the MYT Regulations, 2015, after deducting the accumulated depreciation from the Gross opening normative loan as on April 1, 2016. The Commission has not considered the impact of penal interest in the normative computation of interest on loan capital.

The detailed rulings of the Commission for approval of interest on long-term loan capital for FY 2016-17, FY 2017-18 and FY 2018-19 have been elaborated in Chapter 4, Chapter 5 and Chapter 6, respectively, of this Order.

Issue 6: Interest on Working Capital (IWC)

Objection

ABITA requested the Commission to approve Interest on Working Capital (IWC) of Rs. 23.19 Crore in the Truing up of FY 2016-17. ABITA further added that interest rate should be equivalent to State Bank of India Base Rate as on 1stApril of respective year plus 350 Basis points. The Base Rate applicable is 9.10% and so the Interest rate on working capital works out to 12.60% instead of 12.80% considered by AEGCL. ABITA requested the Commission to approve IWC of Rs. 21.43 Crore and Rs. 23.53 Crore for FY 2017-18 and FY 2018-19, respectively, as per the MYT Regulations, 2015.

FINER submitted that the Commission should approve the IWC in accordance with MYT Regulations, 2015.

Response of AEGCL

AEGCL submitted that it has claimed IWC for FY 2016-17 to FY 2018-19 as per the MYT Regulations, 2015. The O&M expenses and GFA are considered on actuals as per audited accounts. The rate of interest on working capital has been considered in line with the MYT Order issued by the Commission. Hence, the amounts proposed by AEGCL may be approved without any disallowances.

Commission's View

The Commission has approved the IWC in accordance with the MYT Regulations, 2015. For computation of IWC for FY 2016-17, the actual revenue billed has been considered as receivables. Normative O&M expenses have been considered for computation of working capital requirement. The interest rate for working capital has been considered as SBI Base Rate as on 1st April for respective year plus 350 basis points, in accordance with the MYT Regulations, 2015.

The detailed rulings of the Commission for approval of IWC for FY 2016-17, FY 2017-18 and FY 2018-19 have been elaborated in Chapter 4, Chapter 5 and Chapter 6, respectively, of this Order.

Issue 7: Non-Tariff Income

Objection

ABITA submitted that AEGCL has projected Non-Tariff Income (NTI) with a growth of 17.53% in FY 2017-18, and 0.80% in FY 2018-19. ABITA has projected the NTI with escalation of 10% on actuals for FY 2016-17 and requested the Commission to approve NTI as Rs. 99.95 Crore and Rs. 109.94 Crore for FY 2017-18 and FY 2018-19, respectively.

Response of AEGCL

AEGCL requested the Commission to approve the NTI as submitted in the Petition.

Commission's View

The Commission has considered actual NTI for FY 2016-17 based on the audited accounts. The Commission has approved the NTI for FY 2017-18 and FY 2018-19 based on growth rate witnessed in past years. The detailed rulings of the Commission for approval of NTI for FY 2016-17, FY 2017-18 and FY 2018-19 have been elaborated in Chapter 4, Chapter 5 and Chapter 6, respectively, of this Order.

Issue 8: Other Debits

Objection

ABITA submitted that Other Debits comprise Miscellaneous Losses written off and write-off of deferred revenue expenditure, which do not form part of ARR of Transmission Utility. ABITA requested the Commission to disallow the Other Debits after prudence check of different heads as claimed by AEGCL.

Response of AEGCL

AEGCL submitted that Other Debits include some expenses, which are incurred due to certain unavoidable circumstances such as loss of materials on account of flood, cyclone, fire, loss on account of pilferage, loss on sale on scrap, etc. Hence, these expenses may be allowed.

Commission's View

The Commission has not allowed Other Debits for FY 2016-17. The ruling of the Commission regarding the same is elaborated in Chapter 4 of this Order.

Issue 9: Capital Expenditure

Objection

ABITA has proposed the Capital Expenditure and funding for the same as approved in the MYT Order. ABITA requested the Commission not to approve the overestimated capitalisation proposed by AEGCL. The capitalisation should be considered on actual basis during the true up for the respective year. AEGCL in the past has not been able to demonstrate execution of such large capitalisation, which would be required to be reversed at the time of truing up.

FINER submitted that AEGCL should be directed to submit a detailed cost-benefit analysis for each scheme or group of schemes. This analysis should be duly supported by system studies on realistic generation programme and load profile for each year. FINER further added that AEGCL should submit the Transmission Plan comprising vital schemes, viz., power evacuation schemes, system strengthening schemes, reactive power compensation, etc. AEGCL should also submit whether the capital expenditure incurred in previous years has actually been put to proper use or not. AEGCL should also furnish the Fixed Asset Register (FAR), Physical Completion Certificate (PCC), and Financial Completion Certificate (FCC) to the Commission as directed, for allowing capital expenditure and other related expenditure for the Control Period.

Response of AEGCL

AEGCL submitted that Capitalisation proposed by AEGCL are estimated/projected based on the past trends. AEGCL requested to approve the Capitalisation proposed by AEGCL.

Commission's View

The Commission's views regarding the capital expenditure and capitalisation for FY 2016-17, FY 2017-18 and FY 2018-19 have been detailed in Chapter 4, Chapter 5 and Chapter 6, respectively, of this Order.

Issue 10: Transmission Loss

Objection

During the Public Hearing, FINER submitted that AEGCL should be directed to carry out system studies for determination of voltage-wise transmission loss in the system through scientific methods. The energy audit should be undertaken for deciding the actual transmission loss level. FINER submitted that AEGCL should comply with the direction for submission of the voltage-wise losses.

Response of AEGCL

AEGCL submitted that it does not operate at 33 kV level. AEGCL submitted that the overall losses are in line with the Standards specified by the Central Electricity Authority (CEA).

Commission's View

It is clarified that AEGCL does not operate at 33 kV level, which is within the jurisdiction of APDCL.

The Commission has noted the suggestion and steps are being taken to ascertain the voltage wise losses.

Issue 11: Transmission Charges

Objection

FINER submitted that the proposed increase in per unit Transmission Charges will put additional burden on Open Access consumers of Assam, who are already paying substantially high tariff. Hence, AEGCL should make efforts to reduce its operational costs in order to reduce Transmission Charges. FINER further submitted that there is no clarity regarding the formula proposed in MYT Petition for determination of Transmission Charges, since such formula is not supported by Open Access Regulations notified by the Commission. There is no rationale for nearly doubling the Transmission Charges for Long-Term Open Access consumers every year. Similarly, Transmission Charges for Short Term Open Access Consumers, have also been increased. The proper formula should be adopted for such increase.

Response of AEGCL

AEGCL has not submitted any replies on the above said Objection.

Commission's View

The Transmission Charges approved in the MYT Order were based on the capitalisation projected and approved by the Commission. As the actual capitalisation has been much lower than the approved levels, the Transmission Charges have also been correspondingly adjusted. The Commission's methodology and approved Transmission Charges for FY 2018-19 have been detailed in Chapter 7 of this Order.

Issue 12: SLDC Charges

Objection

FINER submitted that SLDC charges are proposed to be increased from FY 2017-18 and FY 2018-19. The Commission should re-check the calculations for the increase as no calculations have been given in the Petition for the proposed SLDC Charges.

Response of AEGCL

AEGCL submitted that SLDC Charges claimed in the Petition for FY 2016-17 are actual charges as per audited accounts. Hence, ABITA's views should not be accepted.

Commission's View

The actual SLDC Charges comprising O&M expenses, have been allowed by the Commission after true-up for FY 2016-17, based on prudence check. The SLDC Charges for FY 2017-18 and FY 2018-19 have been projected based on the increase in normative O&M expenses, in accordance with the MYT Regulations, 2015.

Issue 13: Revenue Gap/(Surplus) for FY 2016-17 and FY 2017-18 and Revised ARR for FY 2018-19

Objection

ABITA requested the Commission to approve revenue deficit of Rs. 48.69 Crore for FY 2016-17 and projected surplus of Rs. 86.27 Crore for FY 2017-18 to be carried forward for computation of revised Tariff for FY 2018-19. ABITA proposed the revised ARR for FY 2018-19, which is lower than the ARR approved in the MYT Order. ABITA requested the Commission to revise the Transmission Charges accordingly.

Response of AEGCL

AEGCL requested the Commission to approve the Revenue Gaps as proposed by AEGCL.

Commission's View

The treatment of Revenue Gap/(Surplus) arising out of True-up for FY 2016-17and the revised Transmission Charges for FY 2018-19 have been detailed in Chapter 7of this Order.

Issue 15: Approach for True-up

Objection

FINER submitted that the truing up should be done by the Commission as per the provisions of the MYT Regulations, 2015 read with the principles laid down in the Judgments of the Hon’ble Supreme Court and Hon’ble APTEL.

FINER submitted that the truing up should not be done without completion of reconciliation, as mentioned by the Auditors in various notes to accounts.

Response of AEGCL

AEGCL submitted that it has made its claims for Truing up for FY 2016-17 based on audited annual accounts. AEGCL submitted that the reconciliations are made with Balance Sheet items, viz., inter-unit reconciliations, reconciliation of receivables and payables, etc., which do not affect the ARR components.

Commission’s View

The Commission has undertaken the Truing up for FY 2016-17 based on the audited accounts, after due prudence check, and in accordance with the provisions of MYT Regulations, 2015, as elaborated in Chapter 4 of this Order.

4 Truing up for FY 2016-17

4.1 Methodology for Truing Up

4.1.1 The Commission had approved the ARR for the Control Period from FY 2016-17 to FY 2018-19 in the MYT Order dated March 31, 2017.

4.1.2 AEGCL submitted the Truing-up Petition for FY 2016-17 based on audited annual accounts and provisions of MYT Regulations, 2015, wherever applicable. AEGCL has sought true-up for FY 2016-17, with the Revenue Gap/(Surplus) to be recovered during FY 2018-19.

4.1.3 The Commission approves the cost parameters through approval of the ARR at the beginning of the year, keeping in view the data available at that point of time. The cost approvals for each of the items are based on projection of expenses and revenue before beginning of the year and the provisions of MYT Regulations, 2015, wherever applicable. The projections might vary over the course of the year.

4.1.4 The actual cost/values for certain elements/parameters may vary as against the approved cost during the year due to various controllable and uncontrollable factors. The Licensee may end up with higher or lower expenditure, as the case may be, at the end of the year as against the approved cost.

4.1.5 The Commission analyses the actual expenditure for the previous year/years based on the audited Annual Accounts of the Licensee and allows/disallows the recovery of the actual expenditure through the ensuing year's tariff, subject to prudence check.

4.1.6 In the present Chapter, the Commission has carried out the Truing up for FY 2016-17 based on the submissions of AEGCL, audited annual accounts for FY 2016-17 and provisions of MYT Regulations, 2015.

4.1.7 In this Chapter, the Commission has analyzed all the elements of actual expenditure and revenue of AEGCL for FY 2016-17, and undertaken the truing-up of expenses and revenue in accordance with Regulation 10.1 of the MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between AEGCL and its beneficiaries, in accordance with Regulation 13 of the MYT Regulations, 2015.

4.2 Transmission Loss

4.2.1 AEGCL submitted the Transmission Loss of 3.54% for FY 2016-17 for the purpose the Truing up, as shown in the following Table:

Table 4-1: Transmission Loss for FY 2016-17 as submitted by AEGCL

Sr. No.	Particulars	FY 2016-17	
		MYT Order	Actual
1	Energy Injected (MU)	9390.00	8239.77
2	Energy Sent Out (MU)	9057.00	7948.08
3	Transmission Loss (%)	3.54%	3.54%

Commission's Analysis

4.2.2 The Commission has verified the Transmission loss through documentary evidences submitted by AEGCL. It is noted that the actual Transmission loss for FY 2016-17 is equal to Transmission Losses approved by the Commission in MYT Order.

4.2.3 Accordingly, the Commission approves the Transmission Loss of 3.54% for FY 2016-17, after Truing up.

4.3 Revenue from Operations

4.3.1 AEGCL has claimed Revenue of Rs. 826.99 Crore for FY 2016-17for Truing up purpose.

Commission's Analysis

4.3.2 The Commission had approved net ARR of Rs. 826.99 Crore for FY 2016-17 in the MYT Order dated March 31, 2017. The same amount has been claimed by AEGCL as Revenue of Rs. 826.99 Crore for FY 2016-17. However, during FY 2016-17, AEGCL billed APDCL based on the Tariff Order dated July 24, 2015 and accordingly, the audited accounts for FY 2016-17 reflects actual revenue as Rs. 537.92 Crore.

4.3.3 **In view of the above, the Commission approves the actual revenue of Rs. 537.92 Crore as per the audited accounts, for the Truing up for FY 2016-17.**

4.4 Non-Tariff Income

4.4.1 The Commission had approved the Non-Tariff Income of Rs. 85.99 Crore for FY 2016-17 in the MYT Order dated March 31, 2017. Against this, AEGCL has claimed Non-Tariff Income of Rs. 90.86 Crore for FY 2016-17, as per the Audited Accounts.

Commission's Analysis

4.4.2 The Commission has sought details of Miscellaneous Income of Rs. 76.01 Crore as given in the audited accounts. On scrutiny of the same, it is observed that AEGCL has billed incentive on Transmission Availability of Rs. 10.50 Crore for FY 2016-17 after issuance of MYT Order dated March 31, 2017. AEGCL submitted that it has computed the incentive inadvertently as per AERC (Terms and Conditions of Tariff) Regulations, 2006 (herein after referred as "Tariff Regulations, 2006"). However, the same has been rectified and incentive was revised to Rs. 5.45 Crore as per MYT Regulations, 2015. Accordingly, AEGCL has issued the credit bill of Rs. 5.05 Crore to APDCL on February 21, 2018.

4.4.3 Since, the audited accounts of FY 2016-17 reflect the incentive amount of Rs. 10.50 Crore, the Commission has considered the amount of Rs. 10.50 Crore as income for the purpose of Truing up.

4.4.4 AEGCL is entitled to retain the incentive on Transmission Availability computed as per Regulation 67 of MYT Regulations, 2015. The computation of incentive has been done separately in subsequent Section of this Order, and has been added to the ARR, to ensure that the same is retained by AEGCL.

4.4.5 **In view of the above, the Commission approves the Non-Tariff Income at Rs. 90.86 Crore for FY 2016-17 as per the Audited Annual Accounts, for the purpose of truing up.**

4.5 PGCIL Charges

4.5.1 AEGCL has claimed actual PGCIL Charges of Rs. 590.45 Crore for FY 2016-17, against PGCIL Charges of Rs. 529.77 Crore approved in the MYT Order dated March 31, 2017.

Commission's Analysis

4.5.2 The Commission has scrutinised PGCIL Charges claimed by AEGCL vis-à-vis monthly bills submitted by AEGCL. The Commission notes that PGCIL Charges claimed are gross billed amount. However, rebate received and credit given to Open Access Consumers have been shown separately under Non-Tariff Income. The PGCIL Charges are to be paid in accordance with the Orders issued by the CERC. The actual expenditure incurred by AEGCL towards PGCIL charges as per the Audited Accounts is Rs. 590.45 Crore for FY 2016-17. Further, AEGCL has paid Delayed Payment Charges (DPC) of Rs. 10.70 Crore to PGCIL. As DPC incurred by AEGCL for delayed payment to PGCIL cannot be passed on to the beneficiaries, DPC of Rs. 10.70 Crore has been disallowed for the purpose of Truing up.

4.5.3 **Therefore, the Commission approves PGCIL Charges of Rs. 579.75 Crore for FY 2016-17 after truing up.**

4.6 O&M Expenses

4.6.1 AEGCL submitted the O&M expenses for FY 2016-17 consisting of following heads:

a) Employee expenses
b) R&M expenses
c) A&G expenses

The claim of AEGCL under various heads of O&M expenses are discussed below:

4.6.2 **Employee Expenses**

AEGCL submitted that Employee expenses comprise salaries, dearness allowance, bonus, terminal benefits in the form of pension and gratuity funding, leave encashment, and staff welfare expenses. AEGCL has claimed Rs. 131.09 Crore towards employee expenses for FY 2016-17.

4.6.3 **Repairs and Maintenance (R&M) Expenses**

Repairs and Maintenance Expenses are incurred for the day to day upkeep of the transmission network of the company and form an integral part of the company's efforts towards reliable and quality power transmission as also in reduction of losses in the system.

AEGCL has submitted that assets of AEGCL are old and require regular maintenance to ensure uninterrupted operations. AEGCL has also stated that it has been trying its best to ensure uninterrupted operations of the system and has accordingly been undertaking necessary expenditure for R&M activities regularly. AEGCL has claimed Rs. 14.34 Crore for FY 2016-17.

4.6.4 **Administrative and General (A&G) expenses**

Administrative expenses mainly comprise rents, telephone and other communication expenses, professional charges, conveyance and traveling allowances, other debits. AEGCL has claimed A&G expenses of Rs. 9.04 Crore for FY 2016-17.

Commission's Analysis

4.6.5 As regards O&M Expenses for the Control Period for FY 2016-17 to FY 2018-19, Regulation 68.9 of MYT Regulations, 2015 specifies as under:

"68.9 The O&M expenses for the nth year and also for the year immediately preceding the Control Period shall be approved based on the formula given below:

-

$O\&M_n = R\&M_n + EMP_n + A\&G_n$

Where –

- $O\&M_n$ *– Operation and Maintenance expense for the nth year;*
- EMP_n *– Employee Costs for the nth year;*
- $R\&M_n$ *– Repair and Maintenance Costs for the nth year;*
- $A\&G_n$ *– Administrative and General Costs for the nth year;*

68.10 The above components shall be computed in the manner specified below:

- $EMP_n = (EMP_{n-1}) \times (1+G_n) \times (\text{CPI inflation})$
- $R\&M_n = K \times (GFA_{n-1}) \times (\text{WPI inflation})$ and
- $A\&G_n = (A\&G_{n-1}) \times (\text{WPI inflation}) + \text{Provision}$

Where –

- EMP_{n-1} *– Employee Costs for the (n-1)th year;*
- $A\&G_{n-1}$ *– Administrative and General Costs for the (n-1) th year;*
- *Provision: Cost for initiatives or other one-time expenses as proposed by the*

Distribution Licensee and validated by the Commission.

- *'K' is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;*
- *CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;*
- *WPI inflation – is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years;*
- *GFA_{n-1} - Gross Fixed Asset of the transmission licensee for the n-1th year;*
- *G_n is a growth factor for the nth year. Value of G_n shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking, and any other factor that the Commission feels appropriate:"*

4.6.6 In accordance with the above Regulations, the Commission in MYT Order dated March 31, 2017 has allowed O&M Expenses on normative basis. However, AEGCL has claimed O&M Expenses on actual basis. AEGCL was asked to submit the computation of O&M expenses in accordance with Regulation 68 of MYT Regulations, 2015. Subsequently, AEGCL has submitted the normative O&M expenses as per the formula specified in the MYT Regulations, 2015.

Table 4-2: Normative O&M Expenses for FY 2016-17 submitted by AEGCL (Rs. Crore)

Particulars	FY 2016-17
Employee Expenses	142.78
R&M Expenses	14.86
A&G Expenses	7.57
O&M Expenses	165.21
O&M Expenses – Transmission	162.86
O&M Expenses – SLDC	2.35

4.6.7 For the purpose of truing up for FY 2016-17, the Commission has computed the O&M Expenses on normative basis as per Regulation 68 of the MYT Regulations, 2015. Any variation between normative O&M expenses and actual O&M Expenses has been considered under sharing of gains and loss on account of controllable items as per Regulation 13 of MYT Regulations, 2015.

4.6.8 For computation of normative employee expenses for FY 2016-17, the Commission has adopted the following approach:

a) The employee expenses approved after True-up for FY 2015-16 have been considered as base expenses.
b) CPI inflation has been computed as average increase of CPI for the period from FY 2013-14 to FY 2015-16, which works out to 7.21%
c) Considering the expansion of transmission network in FY 2016-17, growth factor of 1% has been considered as per the MYT Order.
d) Employee expenses for SLDC have been considered same as submitted by AEGCL. Employee expenses for Transmission has been derived after deducting the employee expenses for SLDC from normative employee expenses.

4.6.9 The normative employee expenses approved in the true-up for FY 2016-17 are shown in the following Table:

Table 4-3: Approved Employee Expenses for FY 2016-17 (Rs. Crore)

Particulars		**FY 2016-17**
Employee Expenses for Previous Year	EMP_{n-1}	131.85
Growth Factor	G_n	1%
CPI Inflation	CPI	7.21%
Employee Expenses		**142.76**
Employee Expenses -Transmission		**140.73**
Employee Expenses -SLDC		**2.03**

4.6.10 For computation of R&M Expenses for FY 2016-17, the Commission has considered the following approach:

a) WPI inflation has been computed as average increase of WPI index for period from FY 2013-14 to FY 2015-16, which works out to 0.94%.
b) K-factor governs the relationship between R&M expenses and Gross Fixed Assets. The Commission has analysed the relationship between approved R&M expenses and Gross Fixed Assets for the period from FY 2011-12 to FY 2015-16 in MYT Order. Accordingly, the K-factor for the Control Period has been approved as 1.01%. The same K-factor has been considered for computation of normative R&M Expenses for FY 2016-17. Since, K-factor has been computed on the basis of

average GFA, for working out R&M expenses for FY 2016-17, average GFA for previous years has been considered.

c) R&M expenses for SLDC have been considered same as submitted by AEGCL. R&M expenses for Transmission has been derived after deducting R&M expenses for SLDC from normative R&M expenses.

4.6.11 The normative R&M expenses approved for FY 2016-17 are shown in the following Table:

Table 4-4: Approved R&M Expenses for FY 2016-17 (Rs. Crore)

Particulars		FY 2016-17
Opening GFA for previous year		1,345.80
Closing GFA for previous year		1,544.59
Average GFA for previous year	GFA_{n-1}	1,445.20
K Factor	K	1.01%
WPI Inflation	WPI	0.94%
R&M Expenses		14.71
R&M Expenses – Transmission		**14.70**
R&M Expenses- SLDC		**0.01**

4.6.12 For computation of A&G expenses for FY 2016-17, the Commission has adopted the following approach:

a) The A&G expenses approved after True-up for FY 2015-16 have been considered as base expenses.

b) WPI inflation has been computed as average increase of WPI for period from FY 2013-14 to FY 2015-16, which works out to 0.94%

c) The Commission has not considered any provision for initiatives or other one-time expenses for A&G expenses, as per MYT Order.

d) A&G expenses for SLDC have been considered same as submitted by AEGCL. A&G expenses for Transmission have been derived after deducting the A&G expenses for SLDC from normative A&G expenses.

4.6.13 The normative A&G expenses for FY 2016-17 are shown in the following Table:

Table 4-5: Approved A&G Expenses for FY 2016-17 (Rs. Crore)

Particulars		FY 2016-17
A&G Expenses for Previous Year	$A\&G_{n-1}$	7.43
WPI Inflation	WPI	0.94%
Provision	Provision	0.00

Particulars		**FY 2016-17**
A&G Expenses		**7.50**
A&G Expenses -Transmission		**7.19**
A&G Expenses -SLDC		**0.31**

4.6.14 The normative O&M expenses approved by the Commission for FY 2016-17 is shown in the following Table:

Table 4-6: Normative O&M Expenses approved by Commission for FY 2016-17 (Rs. Crore)

Sr. No.	**Particulars**	**FY 2016-17**		
		MYT Order	**Actual**	**Approved after Truing up**
1	Employee Expenses	140.65	131.09	140.73
2	Repairs and Maintenance Expenses	14.82	14.34	14.70
3	Administrative & General Expenses	7.33	9.04	7.19
Total		**162.80**	**154.47**	**162.62**

4.6.15 Further, Regulation 11.2 of MYT Regulations, 2015 specifies *O&M Expenses (excluding terminal liabilities with regard to employees on account of changes in pay scales or dearness allowance due to inflation)* as controllable factors. Hence, for undertaking sharing of gains or losses, the Commission has excluded the terminal liabilities from normative as well as actual Employee expenses. Accordingly, terminal liabilities are allowed on actual basis.

4.6.16 The sharing of gains or (losses) on account of O&M Expenses is shown in the following Table:

Table 4-7: Sharing of gains or losses for O&M Expenses for FY 2016-17 (Rs. Crore)

Sl. No.	**Particulars**	**Actual**	**Normative**	**Gains/(losses)**	**Gains/(Losses) to be shared with APDCL**
		a	**b**	**c=(b-a)**	**d=c x 1/3**
1	Employee Cost	131.11	140.73		
2	Less: Terminal Liabilities	19.74	21.48	1.74	1.74*
3	Employee Cost excl. Terminal Liabilities	111.37	119.25	7.88	2.63
4	Repair & Maintenance	14.34	14.70	0.36	0.12
5	Administrative & General Expenses	9.04	7.19	(1.85)	(0.62)

Sl. No.	Particulars	Actual	Normative	Gains/(losses)	Gains/(Losses) to be shared with APDCL
		a	b	c=(b-a)	d=c x 1/3
6	**Total**	**134.75**	**141.14**	**8.13**	**3.87**

Note – No sharing of gains or losses has been considered for Terminal liabilities.

4.6.17 Since, normative O&M expenses are higher than actual expenses, the gain of Rs. 3.87 Crore has been shared and passed on through ARR.

4.7 SLDC Charges

4.7.1 AEGCL submitted the SLDC Charges of Rs. 2.35 Crore for FY 2016-17 against the approved charges of Rs. 2.37 Crore in the MYT Order. The SLDC Charges mainly comprise Employee expenses, R&M expenses and A&G Expenses.

Commission's Analysis

4.7.2 The Commission approves the SLDC Charges of Rs. 2.35 Crore for FY 2016-17 as submitted by AEGCL, after truing up.

4.8 Capital expenditure and Capitalisation

4.8.1 AEGCL submitted actual Capital Expenditure and capitalisation for FY 2016-17 as shown in the following Table:

Table 4-8: Actual Capital Expenditure and Capitalisation as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	FY 2016-17	
		Approved in Business Plan Order dated 01.09.2016	Actual
1	Capital Expenditure	388.47	65.76
2	Capitalisation	164.71	84.09

4.8.2 As regards the funding, AEGCL submitted that funding of Capital Expenditure is done through various sources namely Loans, Grants, Equity and Debt. No infusion of equity has been made other than equity capital allocated to the companies in the Opening Balance Sheets (OBS) of the Companies in their organization. Accordingly, all new addition of assets is created by funding from grants and loan. The funding of capitalisation as submitted by AEGCL is shown in the following Table:

Table 4-9: Funding of Capitalisation for FY 2016-17 as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	FY 2016-17	
		Approved in Business Plan Order	Actual
1	Equity	0.00	0.00
2	Grant	32.66	66.18
3	Loan	132.05	17.91
4	Total Capitalisation	164.71	84.09

Commission's Analysis

4.8.3 The Commission has approved the scheme-wise capital expenditure and capitalisation in the Business Plan Order dated September 1, 2016. However, in the MYT Order, the Commission has approved the capital expenditure and capitalisation based on the past trends for the purpose of tariff computation. The Commission sought the details of scheme-wise actual capital expenditure and capitalisation for FY 2016-17. The Commission notes that the actual capital expenditure and capitalisation incurred in FY 2016-17 is much lower than the values approved in Business Plan Order.

4.8.4 For the purpose of the truing up, the Commission accepts the actual capital expenditure and capitalisation for FY 2016-17. As regards the funding of capitalisation, the Commission has considered the actual funding as submitted by AEGCL.

4.8.5 In view of the above, the Capital Expenditure, capitalisation and its funding as approved by the Commission for FY 2016-17 is shown in the following Table:

Table 4-10: Capital Expenditure and Capitalisation for FY 2016-17 approved by Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	AEGCL	Approved after Truing up
1	Capital Expenditure	185.16	65.76	65.76
2	Capitalisation	82.36	84.09	84.09
	Funding of Capitalisation			
3	Equity	0.00	0.00	0.00
4	Grant	16.33	66.18	66.18
5	Loan	66.03	17.91	17.91
6	**Total**	**82.36**	**84.09**	**84.09**

4.9 Depreciation

4.9.1 The Commission had approved the Depreciation of Rs. 12.97 Crore for FY 2016-17 in the MYT Order dated March 31, 2017. As against this, AEGCL has claimed depreciation of Rs. 81.76 Crore for FY 2016-17 for the purpose of True-up.

4.9.2 As regards the depreciation on assets funded through grants for FY 2016-17, AEGCL submitted that Grants received from Government of Assam (GoA) towards total investment of the project is in the nature of promoter's contribution and are being accounted for in compliance with Accounting Standards (AS) 12 notified by Ministry of Corporate Affairs. Accordingly, AEGCL has considered depreciation on such assets created out of promoter's contribution.

4.9.3 As regards the difference in Accumulated Depreciation submitted in the Petition vis-à-vis Accumulated Depreciation in the Audited Accounts for the respective years, AEGCL submitted that Accumulated Depreciation submitted in the Petition has been calculated as per Tariff Regulations, 2015, but it has been calculated as per the Companies Actin the Audited Accounts.

Commission's Analysis

4.9.4 The Commission has considered the opening GFA for FY 2016-17 as per the closing GFA value approved in True up of FY 2015-16 vide MYT Order dated March 31, 2017. The Commission has computed depreciation as per scheduled rates specified in the Tariff Regulations, 2015.

4.9.5 As per Regulation 33 of the MYT Regulations, 2015, the total depreciation during the life of the asset shall not exceed 90% of the original cost of Asset. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation in excess of 90% of the original cost of asset under different asset heads.

4.9.6 The issue of disallowing depreciation on grant funded assets has been settled several times in earlier Tariff Orders by the Commission and the Hon'ble APTEL has also ruled that the Commission's decision to disallow depreciation on the assets funded out of grants is correct, and in accordance with the AERC MYT Regulations, 2015.

4.9.7 Hence, in line with the approach adopted in the previous Orders and as specified in

Regulation 33 of the MYT Regulations, 2015, the Commission has not considered the depreciation on assets funded through grants, consumer contribution or capital subsidy, for FY 2016-17.

4.9.8 The depreciation approved in the truing up for FY 2016-17 is given in the Table below:

Table 4-11: Depreciation approved for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation as per MYT Regulations, 2015
1	Land & Rights	29.13	0.04	-	-
2	Building	27.48	3.04	3.34%	0.41
3	Hydraulic	2.64	-	5.28%	0.15
4	Other Civil Works	57.35	12.12	3.34%	2.12
5	Plant & Machinery	706.90	51.76	5.28%	34.71
6	Lines & Cable Net work	710.84	16.39	5.28%	16.85
7	Vehicles	4.40	0.28	9.50%	0.12
8	Furniture & Fixtures	3.59	0.23	6.33%	0.12
9	Office Equipment	2.26	0.23	6.33%	0.11
10	**Grand Total**	**1544.59**	**84.09**		**54.58**
11	**Asset excluding Land**	**1515.46**	**84.05**	**3.50%**	
12	Opening Grants towards GFA				964.05
13	Closing Grants towards GFA				1,030.23
14	Less: Depreciation for Grants/ Consumer Contribution				34.95
15	**Net Total**				**19.64**

4.9.9 **The Commission accordingly approves Depreciation of Rs. 19.64 Crore for FY 2016-17 after truing up.**

4.10 Interest and Finance Charges

4.10.1 The Commission had approved Interest and Finance Charges of Rs. 2.70 crore for FY 2016-17 in the MYT Order dated March 31, 2107. As against this, AEGCL has claimed Interest and finance charges of Rs. 36.43 Crore for FY 2016-17 based on Audited Accounts.

Commission's Analysis

4.10.2 The Commission has approved Interest on loan capital for FY 2016-17 on normative basis as per Regulation 35 of MYT Regulations, 2015. As per the above said Regulation, the Normative Loan Outstanding as on April 1,2016 is derived after reducing the cumulative repayment as admitted by the Commission up to March 31, 2106 from the Goss Normative Loan. Accordingly, the Commission has computed the net normative loan outstanding as on April 1, 2016 as shown in the following table.

Table 4-12: Computation of Normative loan outstanding as on April 1, 2016 (Rs. Crore)

Particulars	As on April 1, 2016
Gross Fixed Assets (a)	1544.59
Gross Fixed Assets excluding Land (b)	1515.46
Opening CWIP (c)	921.72
Grant (CWIP + Assets) (d)	1550.39
Grant towards GFA (e=d*b/(b+c))	964.05
Equity (f)	99.93
Gross Normative Loan (g=a-e-f)	480.61
Less: Cumulative repayment (net depreciation, excluding the depreciation for assets funded through grants, approved by the Commission in True-up Orders) (h)	603.30
Net Normative loan (i=g-h)	(122.69)
Net Normative loan considered for FY 2016-17	**0.00**

4.10.3 The Commission has considered the opening net normative loan as on April 1, 2016 as NIL as shown in the above Table. The addition of loan has been considered equal to debt portion of capitalised works as approved by the Commission in this Order. The loan repayment has been considered equivalent to depreciation approved in this Order.

4.10.4 As per MYT Regulations, 2015, weighted average rate of interest shall be computed based on outstanding loan as on April 1, 2016. The Commission sought details of outstanding loan as on April 1, 2016 along with documentary evidences. The Commission notes that ADB loan of Rs. 89.39 Crore at interest rate of 10.50% and State Government loan of Rs. 354.37 Crore at weighted average interest rate of 10.12% are outstanding as on April 1, 2016. Accordingly, weighted average interest rate has been computed as 10.19% for computation of interest on loan capital.

4.10.5 The Interest on loan capital as approved by the Commission for FY 2016-17 is shown in the following Table:

Table 4-13: Approved Interest on loan Capital for FY 2016-17 (Rs. Crore)

Particulars	Approved after Truing up
Net Normative Opening Loan	0.00
Addition of normative loan during the year	17.91
Normative Repayment during the year	19.64
Net Normative Closing Loan	0
Interest Rate	**10.19%**
Interest Expenses	**0**

4.10.6 **The Commission considers Interest on loan Capital as NIL for FY 2016-17 for truing up.**

4.11 Return on Equity

4.11.1 AEGCL has claimed the Return on Equity of Rs. 15.49 Crore for FY 2016-17 as approved by the Commission in the MYT Order. AEGCL has considered no equity addition during FY 2016-17.

Commission's Analysis

4.11.2 The Commission has approved the Return on Equity in accordance with Regulation 34 of the MYT Regulations, 2015. The Commission has considered the addition of equity equivalent to equity portion of capitalised works as approved in this Order. Therefore, the approved Return on Equity at 15.50% is shown in the Table below:

Table 14: Return on Equity approved by the Commission for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Approved after Truing up
1	Opening Equity Capital	99.93
2	Equity addition during the year	-
3	Closing Equity	99.93
5	Rate of Return on equity	15.50%
6	**Return on Equity**	**15.49**

4.11.3 **The Commission approves the Return on Equity of Rs. 15.49 Crore for FY 2016-17 after Truing up.**

4.12 Interest on Working Capital (IoWC)

4.12.1 AEGCL submitted that Interest on Working Capital (IoWC) has been calculated on normative basis as per the provisions of MYT Regulations, 2015. The rate of interest is State Bank of India Base Rate as on April 1, 2016 plus 350 basis points. AEGCL has claimed IoWC of Rs. 25.64 Crore for FY 2016-17 for Truing up.

Commission's Analysis

4.12.2 The Commission has computed IoWC in accordance with Regulation 37.2 of the MYT Regulations, 2015. The rate of Interest has been considered equal to State Bank of India Base Rate as on 1stApril of FY 2016-17 plus 350 basis points, i.e., 12.80%

4.12.3 For computation of working capital requirement, the normative O&M Expenses and actual revenue billed as receivables have been considered. IoWC approved by the Commission in the truing up for FY 2016-17 is shown in the following Table:

Table 4-15: Interest on Working Capital for FY 2016-17 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	Claimed by AEGCL	Approved after True-up
1	O&M expenses for one month	13.57	13.07	13.75
2	Maintenance spares @ 15% of O&M Expenses	24.42	23.52	24.75
3	Receivables for two months	137.40	163.73	89.65
4	Total Working Capital requirement	175.39	200.32	128.15
5	Rate of Interest	12.80%	12.80%	12.80%
6	**Interest on Working Capital**	**22.45**	**25.64**	**16.40**

4.12.4 **Accordingly, the Commission approves Interest on Working Capital of Rs. 16.40 Crore for FY 2016-17 for the truing up.**

4.13 Other Debits

4.13.1 AEGCL has claimed Other Debits of Rs.0.25 Crore for FY 2016-17 based on the Audited Accounts as against NIL approved in the MYT Order dated March 31, 2017.

Commission's Analysis

4.13.2 The Commission has analysed the details and justification submitted by AEGCL for Other Debits for FY 2016-17. The Commission notes that Other Debits includes the expenses towards loss on obsolescence of stores, compensation for injuries, deaths and damages to outsiders.

4.13.3 The Commission is of view that these expenses are well within the control of AEGCL. Hence, the Commission has disallowed Other Debits for FY 2016-17 as claimed by AEGCL. Accordingly, the Commission considers Other debits as NIL for FY 2016-17.

4.14 BST for Pension Fund (Special Charges for Terminal Benefits)

4.14.1 In the MYT Order dated March31, 2017, the Commission had approved special charges on Bulk Supply Tariff at 20 paise per unit amounting to Rs. 161.74 Crore for FY 2016-17. AEGCL has claimed Rs. 158.96 Crore as BST for Pension Fund as per the audited annual accounts for FY 2016-17.

Commission's Analysis

4.14.2 The Commission approves the BST for Pension Fund (Special Charges for Terminal Benefits) of Rs. 158.96 Crore for FY 2016-17 as claimed by AEGCL based on audited accounts.

4.15 Net Prior Period Expenses/(income)

4.15.1 AEGCL has claimed net prior period expenses of Rs. 4.75 Crore for FY 2016-17, based on the Audited Accounts.

Commission's Analysis

4.15.2 The Commission has analysed the component-wise details and justification for Net Prior period expenses/(income) for FY 2016-17 as submitted by AEGCL. The Commission has considered the treatment of prior period items based on the treatment allowed to that particular item in the true-up of the year to which the expenses/(income) pertain.

4.15.3 The Commission has disallowed the prior period expenses/(income) towards depreciation since, this expense had not been allowed by the Commission in the past Orders based on audited accounts,and had allowed depreciation based on its own computations.

4.15.4 The Net prior period expenses/(income) submitted by AEGCL and approved by the Commission for FY 2016-17, are shown in the following Table:

Table 4-16:Net Prior Period expenses/(income) approved for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	AEGCL's Submission (as per Accounts)	Approved after Truing up
	Prior Period Expenses		
1	Depreciation under provided in prior period	3.52	-
2	Other Expenses relating to prior period	1.33	1.33
3	**Sub-total**	**4.85**	**1.33**
	Prior Period Income		
4	Excess provision for depreciation in prior period	0.01	-
5	Other Income relating to prior period	0.08	0.08
6	**Sub-total**	**0.10**	**0.08**
	Net Prior Period Expenses/(Income)	**4.75**	**1.24**

4.15.5 **Accordingly, the Commission approves the Net Prior Period Expenses of Rs. 1.24 Crore for FY 2016-17 after Truing-up.**

4.16 Income Tax

4.16.1 AEGCL has not claimed any amount towards Income Tax as per the audited accounts for FY 2016-17.

Commission's Analysis

4.16.2 Therefore, the Commission considers the Income Tax as Nil for FY 2016-17.

4.17 Incentive for Transmission Availability

4.17.1 AEGCL has billed the amount of Rs. 10.50 Crore towards incentive for Transmission Availability higher than normative Availability. Subsequently, AEGCL submitted that it has computed the incentive inadvertently as per Tariff Regulations, 2006. However, the same has been rectified and incentive was revised to Rs. 5.45 Crore as per MYT Regulations, 2015. Accordingly, the credit bill of Rs. 5.05 Crore was issued to APDCL on February 21, 2018.

Commission's Analysis

4.17.2 Regulation 67 of the MYT Regulations, 2015 specifies Normative Transmission Availability of 98% for full recovery of transmission charges and 98.5% for incentive consideration.

4.17.3 The actual Transmission Availability for AEGCL for FY 2016-17 is 99.913% on annual basis. The Commission sought the details of monthly Transmission Availability duly certified by SLDC, which was submitted by AEGCL. Also, the computation and payment of Transmission Charges has been linked to monthly Transmission Availability computed as per Regulation 71 of the MYT Regulations, 2015. Accordingly, the Commission has computed the Incentive on Transmission Availability as shown in the following Table:

Table 4-17:Incentive on Transmission Availability for FY 2016-17 as approved by the Commission (Rs. Crore)

Sr. No.	Month	No. of Days in Month	Monthly Transmission Charges	Actual Availability (%)	Transmission Charges inclusive of incentive	Incentive
1	Apr-16	30	71.14	98.26%	71.14	0.00
2	May-16	31	73.52	99.32%	74.13	0.61
3	Jun-16	30	71.14	99.05%	71.54	0.40
4	Jul-16	31	73.52	99.58%	74.32	0.81
5	Aug-16	31	73.52	99.47%	74.24	0.72
6	Sep-16	30	71.14	99.05%	71.54	0.40
7	Oct-16	31	73.52	99.56%	74.31	0.79
8	Nov-16	30	71.14	98.91%	71.44	0.30
9	Dec-16	31	73.52	99.01%	73.90	0.38
10	Jan-17	31	73.52	98.91%	73.82	0.31
11	Feb-17	28	66.40	99.42%	67.02	0.62
12	Mar-17	31	73.52	97.37%	73.04	(0.48)
		365	**865.60**	**99.91%**	**870.45**	**4.86**

4.17.4 **The Commission approves the Incentive of Rs. 4.86 Crore on account of higher Transmission Availability.**

4.18 ARR after Truing Up of FY 2016-17

4.18.1 Considering the above heads of expense and revenue, the net ARR and Revenue Gap/(Surplus) approved after true-up for FY 2016-17 is shown in the following Table:

Table 4-18: ARR approved after Truing up for FY 2016-17 (Rs. Crore)

Sl.	Particulars	MYT Order	Proposed by AEGCL	Approved after truing up
1	PGCIL Charges	529.77	590.45	579.75
2	O&M Expenses	162.80	154.47	162.62
a	*Employee Cost*	*140.65*	*131.09*	*140.73*
b	*R&M Expenses*	*14.82*	*14.34*	*14.70*
c	*A&G Expenses*	*7.33*	*9.04*	*7.91*
3	*SLDC Charges*	*2.37*	*2.35*	*2.35*
4	Depreciation	12.97	81.76	19.64
5	Interest & Finance Charges	2.70	36.43	0.00
6	Interest on Working Capital	22.45	25.64	16.40
7	BST for Pension Trust Fund	161.74	158.96	158.96
8	Other Debits	-	0.25	0.00
9	Net Prior Period Expenses	-	4.75	1.24
10	Return on Equity	15.49	15.49	15.49
11	Income Tax	-	-	-
12	Less: Non-Tariff Income/ Other Income	85.99	90.86	90.86
13	**Aggregate Revenue Requirement**	**824.30**	**979.69**	**865.60**
14	Add: Incentive on Transmission Availability	**-**	**-**	4.86
15	Add: Sharing of (Gains)/Losses	**-**	**-**	(3.87)
16	**Net ARR**	**824.30**	**979.69**	**866.58**
17	Add: Interest Expenses on State Govt. Loan approved by the Commission in Review Order date 09.04.2015	2.69	2.69	2.69
18	**Total recoverable ARR**	**826.99**	**982.38**	**869.27**

4.19 Revenue Gap/(surplus) for FY 2016-17

4.19.1 AEGCL has considered the revenue of Rs. 826.99 Crore for computation of Revenue Gap/(surplus) arising out of Truing up for FY 2016-17. AEGCL has claimed Revenue Gap of Rs. 155.39 Crore after Truing up for FY 2016-17.

Commission's Analysis

4.19.2 For computation of Revenue Gap/(Surplus), the Commission has considered the actual revenue billed as Rs. 537.92 Crore as per audited accounts for FY 2016-17. Accordingly, the Commission has computed the Revenue Gap/(Surplus) arising out of Truing up for FY 2016-17 as shown in the following Table:

Table 4-19:Revenue Gap/(Surplus)after Truing up for FY 2016-17 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Proposed by AEGCL	Approved after truing up
1	Total recoverable ARR	982.38	869.27
2	Revenue with Approved Tariff for FY 2016-17	826.99	537.92
3	Gap/(Surplus)	155.39	331.35

4.19.3 The Commission has considered the recovery of Revenue Gap/(Surplus) arising out of Truing up for FY 2016-17 separately in Chapter 7 of this Order.

5 Annual Performance Review for FY 2017-18

5.1 Methodology for Annual Performance Review

5.1.1 The Commission has approved the ARR for each year from FY 2016-17 to FY 2018-19 in the MYT Order dated March 31, 2017.

5.1.2 Regulation 10.3 of the MYT Regulations, 2015, as amended in November 2017, specifies that the Commission shall undertake the APR and True-up for the respective years of the Control Period from FY 2016-17 to FY 2018-19, as reproduced below: *"10.3 The scope of* ***the annual review*** *and True up shall be a comparison of the actual performance of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise the following*:

…

b) Annual Review: a comparison of the revised performance targets of the applicant for the current financial year with the approved forecast in the Tariff order corresponding to the Control period for the current financial year subject to prudence check including adjusting trajectories of uncontrollable and controllable items**."** ***(emphasis added)***

5.1.3 AEGCL submitted the Annual Performance Review (APR) Petition for FY 2017-18, supported by actual information available till September 2017 and estimated the next six months values. AEGCL has sought APR for FY 2017-18, with the estimated Revenue Gap/(Surplus), to be recovered from APDCL.

5.1.4 However, from the above said Regulation, as amended in November 2017, it is clear that the main objective of APR is to compare the performance targets for FY 2017-18 vis-à-vis approved forecast in the MYT Order. The Revenue Gap/(Surplus) arising out of APR for FY 2017-18 shall not be passed on to the beneficiaries, and the same shall be considered at the time of Truing-up only.

5.1.5 In the present Chapter, the Commission has analysed the submission of all the elements of ARR vis-à-vis approved values in MYT Order for FY 2017-18. The Commission has computed the Revenue Gap/(Surplus) as an indication of the performance in FY 2017-18. No sharing of gains/(losses) has been undertaken at this stage and the same shall be considered at the time of Truing up for FY 2017-18.

5.2 Transmission Loss

5.2.1 AEGCL submitted the Transmission Loss of 3.49% for FY 2017-18, as shown in the following Table:

Table 5-1: Transmission Loss for FY 2017-18 as submitted by AEGCL

Sr. No.	Particulars	FY 2017-18	
		MYT Order	AEGCL
1	Energy Injected (MU)	9,404.00	9168.25
2	Energy Sent Out to APDCL (MU)	9,076.00	8561.84
3	Energy Sent Out to Open Access Consumers (MU)	-	286.44
4	Energy Sent Out (MU)	9,076.00	8848.28
5	Transmission Loss (MU)	328.00	319.97
6	Transmission Loss (%)	3.49%	3.49%

Commission's Analysis

5.2.2 The Commission has observed that there is decline in the energy injected into the network as compared to energy injection approved in MYT Order. The Commission observes that the Transmission Loss submitted by AEGCL is in line with target approved in the MYT Order dated March 31, 2017.

5.2.3 Hence, the Commission accepts the submission of AEGCL and approves the Transmission Loss of 3.49% for FY 2017-18, subject to prudence check at the time of Truing up.

5.3 Transmission Availability

5.3.1 As regards the Transmission Availability, AEGCL has not submitted any projection for FY 2017-18.

5.3.2 Regulation 67 of the MYT Regulations, 2015 specifies Normative Transmission Availability of 98% for full recovery of transmission charges and 98.5% for incentive consideration. Also, the computation and payment of Transmission Charges has been linked to monthly Transmission Availability computed as per Regulation 71 of the MYT Regulations, 2015.

5.3.3 The Commission notes that actual Transmission Availability of AEGCL as 99.914% for FY 2016-17 is higher than Normative Transmission Availability as specified in MYT Regulations, 2015. AEGCL should strive for maintaining and improving further its performance regarding Transmission Availability. The computation of incentive/disincentive on account of Transmission Availability shall be undertaken at the time of truing up for FY 2017-18 in line with the MYT Regulations, 2015.

5.4 Non-Tariff Income

5.4.1 The Commission had approved the Non-Tariff Income at Rs. 85.99 Crore for FY 2017-18 in the MYT Order dated March 31, 2017. As against this, AEGCL has submitted Non-Tariff Income of Rs. 106.79 Crore for FY 2017-18.

Commission's Analysis

5.4.2 It is observed that Non-Tariff Income has increased in past years. The Commission provisionally approves Non-Tariff Income of Rs. 95.40 Crore, by escalating the Non-Tariff Income of Rs. 90.86 Crore as approved for FY 2016-17 with escalation of 5%. The actual Non-Tariff income will be allowed at the time of truing up, subject to prudence check.

5.5 PGCIL Charges

5.5.1 AEGCL has submitted PGCIL Charges of Rs. 485.18 Crore for FY 2017-18, as against PGCIL charges of Rs. 534.55 Crore approved for FY 2017-18 in the MYT Order dated March 31, 2017. AEGCL has projected the PGCIL charges for FY 2017-18, considering the actual bills received up to September, 2017, and projected the bills to be received against PGCIL Charges from October, 2017 to March, 2018. The month-wise PGCIL Charges submitted by AEGCL are shown in the following Table:

Table 5-2: PGCIL Charges for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Particulars	FY 2017-18
April	39.71
May	43.38
June	39.71
July	39.71
August	47.87

Particulars	FY 2017-18
September	43.32
October	36.75
November	36.75
December	42.24
January	36.75
February	36.75
March	42.24
Total	**485.18**

Commission's Analysis

5.5.2 The Commission has considered the PGCIL charges as submitted by the Petitioner. However, the Commission will allow PGCIL Charges on actual basis based on the prudence check based on the audited annual accounts at the time of true up.

5.5.3 Therefore, the Commission provisionally approves PGCIL Charges of Rs. 485.18 Crore for APR of FY 2017-18.

5.6 Operation and Maintenance Expenses

5.6.1 AEGCL submitted that O&M expenses for FY 2017-18 have been computed on the basis of revised estimates for FY 2017-18 and consist of following heads:

d) Employee expenses
e) R&M expenses
f) A&G expenses

The claim of AEGCL under various heads of O&M expenses are discussed below:

5.6.2 **Employee Expenses**

AEGCL submitted that Employee expenses include salaries, bonus, other benefits like medical expense reimbursement, LTA, etc., and terminal benefits in the form of pension, gratuity, leave encashment, staff welfare, etc. AEGCL has estimated Employee Expenses considering trend of past year's employee expense, increase in dearness allowance, and its impact on other allowances such as HRA, field allowances, PF, etc. Additionally, AEGCL considered increase in salary due to regular increments as well as promotion and new recruitments. The employee expenses have been estimated during FY 2017-18 based on actual salaries paid during first six months. For the next six months, it has been estimated based on the 23.5% hike in salary from January 2018, due to impact of Revision of Pay (ROP), 2016, including increase by two instalments of dearness allowance from the month of January 2018. The impact of arrears due to ROP, 2016 amounting to approximately Rs. 28.50 Crore from January 01, 2016 to November 30, 2017 has been considered. AEGCL has proposed the Employee Expenses of Rs. 174.31 Crore for FY 2017-18.

5.6.3 **R&M Expenses**

AEGCL submitted that R&M expenses are directly related to age of the assets, and its wear and tear during the period. Considering past trends, the expenditure for FY 2017-18 will increase due to presence of vintage assets, which require periodical and higher repairs. AEGCL has considered the actual expenses incurred during 6 months plus estimated for 6 months. AEGCL has estimated R&M expenses of Rs. 17.11 Crore for FY 2017-18, as against the R&M Expenses of Rs. 16.26 Crore approved in the MYT Order.

5.6.4 **A&G Expenses**

AEGCL submitted that A&G expenses mainly comprise rents, telephone and other communication expenses, professional charges, conveyance and travelling expenses, etc. AEGCL has considered the actual expenses incurred during 6 months plus estimated for 6 months. The estimated charges for Pension Payment through Central Pension Processing Centre (CPPC) amounting to Rs. 0.23 Crore has been considered. AEGCL has projected the A&G Expenses of Rs. 8.46 Crore for FY 2017-18, as against the A&G Expenses of Rs. 7.45 Crore for FY 2017-18 approved in MYT Order.

The O&M Expenses proposed by AEGCL as against the O&M Expenses approved in the MYT Order are shown in the following Table.

Table 5-3: O&M Expenses for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Particulars	FY 2017-18	
	Approved in MYT Order	Submitted by AEGCL
Employee Expenses	152.25	174.31
Repairs & Maintenance Expenses	16.26	17.11
Administrative & General Expenses	7.45	8.46
Total O&M Expenses	**175.97**	**199.88**

Commission's Analysis

5.6.5 As discussed in earlier Chapter, the Commission in MYT Order has approved the O&M

Expenses on normative basis as per Regulation 68.9 of MYT Regulations, 2015. AEGCL has submitted O&M expenses based on previous year's O&M expenses and applicable increase towards Salaries, Dearness Allowance, etc.

5.6.6 Further, the normative O&M expenses were sought from AEGCL in accordance with Regulation 68 of MYT Regulations, 2015, which were submitted by AEGCL as shown in the following Table:

Table 5-4: Normative O&M Expenses for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Particulars	FY 2017-18
Employee Expenses	141.64
R&M Expenses	16.19
A&G Expenses	9.45
O&M Expenses	**167.28**
O&M Expenses - Transmission	**164.20**
O&M Expenses – SLDC	**3.08**

5.6.7 MYT Regulations, 2015 specify that any variation between normative O&M expenses and actual O&M Expenses shall be considered under sharing of gains and loss on account of controllable items as per Regulation 13 of MYT Regulations, 2015 at the time of truing up for respective year. Since, the actual audited expenses for FY 2017-18 are not available at this stage, the Commission approves the Normative O&M Expenses for FY 2017-18.

5.6.8 For computation of normative employee expenses for FY 2017-18, the Commission has adopted the following approach:

e) The normative employee expenses approved for FY 2016-17 have been considered as base expenses for FY 2017-18.
f) CPI inflation has been computed as average increase of CPI for the period from FY 2014-15 to FY 2016-17, which works out to 5.35%.
g) Considering the expansion of transmission network over the FY 2017-18, growth factor of 1% has been considered as per the MYT Order.
h) Employee expenses for SLDC have been considered same as submitted by AEGCL. Employee expenses for Transmission has been derived after deducting the employee expenses for SLDC from normative employee expenses.

5.6.9 The normative employee expenses approved for FY 2017-18 is shown in the following Table:

Table 5-5: Approved Employee Expenses for FY 2017-18 (Rs. Crore)

Particulars		FY 2017-18
Employee Expenses for Previous Year	EMP_{n-1}	142.76
Growth Factor	G_n	1%
CPI Inflation	CPI	5.35%
Employee Expenses		**151.91**
Employee Expenses -Transmission		**149.64**
Employee Expenses -SLDC		**2.27**

5.6.10 For computation of normative R&M Expenses for FY 2017-18, the Commission has considered the following approach:

d) WPI inflation for computation of R&M Expenses works out to -0.22% as per MYT Regulations, 2015. However, it would not be appropriate to approve lower R&M expenses for FY 2017-18 than that allowed for the previous year in view of increase in transmission network every year. Hence, the Commission exercising its power under Regulation 116 *(Power to relax)* considered as average increase of WPI for the period from FY 2013-14 to FY 2015-16, which works out to 0.94%. The same WPI has also been considered for computation of normative R&M Expenses for FY 2016-17.

e) K-factor has been considered as 1.01% as approved in MYT Order. Since, K-factor has been computed on the basis of average GFA, for working out R&M expenses for FY 2017-18, average GFA for previous year has been considered.

f) R&M expenses for SLDC have been considered same as submitted by AEGCL. R&M expenses for Transmission has been derived after deducting R&M expenses for SLDC from normative R&M expenses.

5.6.11 The normative R&M expenses approved for FY 2017-18 is shown in the following Table:

Table 5-6: Approved R&M Expenses for FY 2017-18 (Rs. Crore)

Particulars		FY 2017-18
Opening GFA for previous year		1,544.59
Closing GFA for previous year		1,628.68
Average GFA for previous year	GFA_{n-1}	1,586.64
K Factor	K	1.01%

Particulars		FY 2017-18
WPI Inflation	WPI	0.94%
R&M Expenses		16.15
R&M Expenses – Transmission		**16.03**
R&M Expenses- SLDC		**0.12**

5.6.12 For computation of A&G expenses for FY 2017-18, the Commission has adopted the following approach:

e) The normative A&G expenses approved for FY 2016-17 have been considered as base expenses for computation of normative A&G expenses for FY 2017-18.

f) As discussed in earlier para, the Commission has considered the WPI inflation of 0.94%, after relaxation.

g) The Commission has not considered any provision for initiatives or other one-time expenses for A&G expenses.

h) A&G expenses for SLDC have been considered same as submitted by AEGCL. A&G expenses for Transmission have been derived after deducting the A&G expenses for SLDC from normative A&G expenses.

5.6.13 The normative A&G expenses approved for FY 2017-18 is shown in the following Table:

Table 5-7: Approved A&G Expenses for FY 2017-18 (Rs. Crore)

Particulars		FY 2017-18
A&G Expenses for Previous Year	$A\&G_{n-1}$	7.50
WPI Inflation	WPI	0.94%
Provision	Provision	0.00
A&G Expenses		**7.57**
A&G Expenses -Transmission		**6.88**
A&G Expenses -SLDC		**0.69**

5.6.14 AEGCL has claimed an amount of Rs. 28.50 Crore towards Revision of Pay (ROP), 2016 in FY 2017-18. Further, AEGCL submitted that ROP, 2016 was declared in the month of December, 2017. Accordingly, an amount of Rs. 3.20 Crore is to be paid towards arrears payment in FY 2017-18. The remaining amount of arrears is likely to be paid in the months of April, 2018, October 2018 and January 2019. AEGCL has also submitted the office-wise details of impact of ROP, 2016.

5.6.15 In this regard, the Commission observes that the implementation of Seventh Pay Commission has been started in AEGCL. Accordingly, the Commission has provisionally considered an amount of Rs.3.20 Crore in FY 2017-18 and Rs. 25.30 Crore in FY 2018-19. The amount against ROP has been approved over and above the normative Employee expenses provisionally approved by the Commission for FY 2017-18.

5.6.16 Further, the Commission directs AEGCL to submit actual impact on account of revision of pay, along with detailed justification and documentary evidences on basis of Audited Accounts for FY 2017-18 at time of Truing up.

5.6.17 In view of the above, the Commission provisionally approves the O&M expenses as shown in the following Table in the APR for FY 2017-18:

Table 5-8: Approved O&M Expenses for FY 2017-18 (Rs. Crore)

Particulars	Proposed by AEGCL	Approved for APR
Employee Expenses	145.81	149.64
R&M Expenses	17.11	16.03
A&G Expenses	8.46	6.88
O&M Expenses	**174.08**	**172.55**
Add: Impact of Revision of Pay	25.80	3.20
Total O&M Expenses	**199.88**	**175.75**

5.7 SLDC Charges

5.7.1 AEGCL submitted the SLDC Charges of Rs. 3.08 Crore for FY 2017-18 against the approved charges of Rs. 2.60 Crore.

Commission's Analysis

5.7.2 The Commission provisionally approves the SLDC Charges of Rs. 3.08 Crore for FY 2017-18 as submitted by AEGCL.

5.8 Capital Expenditure and Capitalisation

5.8.1 AEGCL has projected the Capital Expenditure for FY 2017-18 against different schemes of the Government of India and the Government of Assam as approved by the Commission in the Business Plan Order dated September 1, 2016. The Capital Expenditure and Capitalisation proposed by AEGCL is shown in the following Table:

Table 5-9: Capital Expenditure and Capitalisation for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Sl.	Particulars	Approved in Business Plan Order dated 01.09.2016	Proposed by AEGCL for APR
1	Capital Expenditure	307.46	245.97
2	Capitalisation	447.56	358.05

5.8.2 AEGCL has envisaged the funding of Capital Expenditure through various sources categorized under the headings Grants and Loans. The funding of capitalisation submitted by AEGCL is shown in the following Table:

Table 5-10: Funding of Capitalisation for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Sl. No.	Particulars	Approved in Business Plan Order dated 01.09.2016	Proposed by AEGCL for APR
1	Equity	13.54	10.83
2	Grant	374.72	299.78
3	Loan	59.30	47.44
4	**Total Capitalisation**	**447.56**	**358.05**

Commission's Analysis

5.8.3 The scheme-wise capital expenditure was approved by the Commission in the Business Plan Order dated September 1, 2016. During the MYT proceedings, the Commission observed that AEGCL has considered the capitalisation and capital expenditure lower than that approved in the Business Plan Order. In the MYT Order, the Commission had approved capital expenditure and capitalisation based on information regarding latest status of works and past trends of capital expenditure of AEGCL.

5.8.4 The Commission sought the scheme-wise details of proposed capital expenditure and capitalisation vis-à-vis capital expenditure approved by the Commission in Business Plan Order for respective schemes. From the scheme-wise details submitted by AEGCL, it is observed that AEGCL has deferred the implementation of schemes for which funding is yet to be finalised. For example, AEGCL has not considered the

NERPSIP schemes approved in the Business Plan Order because funds for such schemes are not yet approved. Further, AEGCL has also deferred the schemes for which fund source is not yet finalised. AEGCL has considered ongoing schemes and scheme for which fund is arranged, e.g., PSDF Schemes, NEC Schemes, Annual Plan-Government of Assam, etc.

5.8.5 The Commission in MYT Order had approved capitalisation of Rs. 303.79 Crore for FY 2017-18, against which AEGCL has proposed capitalisation of Rs. 358.05 Crore. The capitalisation of Rs. 358.05 Crore proposed by AEGCL for FY 2017-18 is much higher than actual capitalisation of Rs. 84.09 Crore in FY 2016-17. Further, the Commission notes that AEGCL has deferred the capital expenditure allowed by the Commission. The actual capital expenditure incurred in FY 2016-17 is much lower of the capital expenditure approved by the Commission. Eventually, the spill over works from FY 2016-17 will get completed in FY 2017-18. As FY 2017-18 is almost completed, the Commission provisionally approves the Capitalisation for FY 2017-18 equal to the Capitalisation approved in the MYT Order.

5.8.6 The Commission further clarifies that the approach adopted by the Commission does not bar AEGCL from implementing the schemes as approved in Business Plan Order dated September 1, 2016. AEGCL should make its best efforts to incur the capital expenditure provisionally approved in Business Plan Order and envisaged in Power for All document.

5.8.7 As regards the funding of capitalisation, the Commission in MYT Order has considered normative funding of estimated capitalised works as per the provisions of MYT Regulations, 2015, which have been considered as input for the determination of Tariff. The grants considered against each project has been excluded for the purpose of debt: equity ratio. The Commission has restricted the equity component to maximum of 30% of amount of capitalised works, after reducing the grant component. The balance amount has been provisionally approved as funded by loans.

5.8.8 The Commission has continued with the above said approach adopted in MYT Order and provisionally approves the funding of capitalised works, based on scheme-wise analysis, as shown in the following Table:

Table 5-11: Funding of capitalised works for FY 2017-18 as approved by the Commission (Rs. Crore)

Particulars	Approved for APR
Grant	201.44
Equity	6.74
Debt	95.61
Total Capitalisation	**303.79**

5.9 Depreciation

5.9.1 The Commission had approved the Depreciation of Rs. 17.07 Crore for FY 2017-18 in the MYT Order dated March 31, 2017.As against this, AEGCL had submitted depreciation of Rs. 90.53 Crore for FY 2017-18 for APR.

5.9.2 AEGCL submitted that it has calculated Depreciation taking into consideration of opening balance of assets and provisional capitalisation during FY 2017-18. As specified in Regulation 33.2 and 33.4 of the MYT Regulations, 2015, the depreciation has been calculated as per the Straight Line Method considering the depreciation up to maximum of 90% of the capital cost of the asset. Depreciation on the assets added during FY 2017-18 has been calculated for 180 days, assuming the date of commissioning of the assets as middle of the financial year. AEGCL has considered depreciation on assets created out of Grants.

Commission's Analysis

5.9.3 The Commission has considered the opening GFA for FY 2017-18equivalent to the closing GFA for FY 2016-17as approved in this Order. The Commission has computed depreciation as per scheduled rates specified in the MYT Regulations, 2015.

5.9.4 As per Regulation 33 of the MYT Regulations, 2015, the total depreciation during the life of the asset shall not exceed 90% of the original cost of Asset. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation in excess of 90% of the original cost of asset under different asset heads.

5.9.5 The issue of disallowing depreciation on grant funded assets has been settled several times in earlier Tariff Orders by the Commission and the Hon'ble APTEL has also ruled that the Commission's decision to disallow depreciation on the assets funded out of grants is correct, and in accordance with the MYT Regulations, 2015.

5.9.6 Hence, in line with the approach adopted in the MYT Order and as specified in Regulation 33 of the MYT Regulations, 2015, the Commission has not considered the depreciation on assets funded through grants, consumer contribution or capital subsidy, for FY 2017-18.

5.9.7 The depreciation provisionally approved for FY 2017-18 in APR is given in the Table below:

Table 5-12: Depreciation approved for FY 2017-18 (Rs. Crore)

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation as per MYT Regulations, 2015
1	Land & Rights	29.17	-	-	-
2	Building	30.52	5.80	3.34%	0.55
3	Hydraulic	2.64	0.50	5.28%	0.04
4	Other Civil Works	69.47	13.19	3.34%	2.54
5	Plant & Machinery	758.66	144.09	5.28%	39.88
6	Lines & Cable Net work	727.23	138.12	5.28%	20.93
7	Vehicles	4.68	0.89	9.50%	0.13
8	Furniture & Fixtures	3.82	0.73	6.33%	0.15
9	Office Equipment	2.49	0.47	6.33%	0.13
10	**Grand Total**	**1628.68**	**303.79**		**64.35**
11	**Asset excluding Land**	**1599.51**	**303.79**	**3.67%**	
12	Opening Grants towards GFA				1030.23
13	Closing Grants towards GFA				1231.67
14	Less: Depreciation for Grants/ Consumer Contribution				41.55
15	**Net Total**				**22.80**

5.9.8 The Commission provisionally approves Depreciation of Rs. 22.80 Crore in the APR for FY 2017-18.

5.10 Interest and Finance Charges

5.10.1 The Commission had approved Interest and Finance Charges of Rs. 9.41 crore for FY 2017-18 in the MYT Order dated March 31, 2107. As against this, AEGCL has claimed

Interest and finance Charges of Rs. 33.33 Crore for FY 2017-18.

5.10.2 AEGCL submitted that interest expenses on account of long-term loans depends on outstanding loan, repayments, and prevailing interest rates on the outstanding loans. Further, the projected capital expenditure, capitalisation and the funding of the same also have a major bearing on the long-term interest expenses. AEGCL has considered the Opening balance of Loan for FY 2017-18 as Rs. 491.28 Crore. The Normative loan addition in FY 2017-18 has been computed at Rs. 55.70 Crore as per the Capex and Capitalisation plan. The repayment of loan has been considered as 1/10th of portion of loan, which becomes due in every financial year. The rate of interest on the loans has been considered as 10.19% as approved in the MYT Order. Accordingly, Interest and finance charges as submitted by AEGCL is shown in the following Table:

Table 5-13: Interest and Financing charges for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Particulars	MYT Order	AEGCL
Interest on Loans	9.41	52.86
Less: Interest Capitalised	-	24.71
Net Interest on Loans (A)	9.41	28.15
Other Finance Charges (B)	-	0.25
Interest on General Provident Fund (C)	-	4.93
Total (A+B+C)	**9.41**	**33.33**

Commission's Analysis

5.10.3 The Commission in MYT Order has approved Interest and finance charges on normative basis for FY 2017-18 as per Regulation 35 of MYT Regulations, 2015. For the APR, the Commission has considered the same approach and approved the Interest and finance charges on normative basis.

5.10.4 The closing net normative loan for FY 2016-17 is approved as Nil in this Order, as discussed in the earlier Chapter. Hence, the Commission has considered the net normative loan as on April 1,2017 as Nil. The addition of loan has been considered equal to debt portion of capitalised works as approved in this Order. The loan repayment has been considered equivalent to Depreciation approved in this Order.

5.10.5 As per MYT Regulations, 2015, weighted average rate of interest shall be computed based on actual outstanding loan as on April 1, 2017. The Commission sought details of outstanding loan as on April 1, 2017 along with documentary evidences. The Commission notes that ADB loan of Rs. 93.03 Crore at interest rate of 10.50% and State Government loan of Rs. 398.23 Crore at weighted average interest rate of 10.12% are outstanding as on April 1, 2017. Accordingly, weighted average interest rate has been computed as 10.18% for computation of interest on loan capital.

5.10.6 The Interest on loan capital as approved by the Commission for FY 2017-18 is shown in the following Table:

Table 5-14: Approved Interest on loan Capital for FY 2017-18 (Rs. Crore)

Sr. No.	Particulars	Approved for APR
1	Net Normative Opening Loan	0.00
2	Addition of normative loan during the year	95.61
3	Normative Repayment during the year	22.80
4	Net Normative Closing Loan	72.81
5	Interest Rate	10.18%
6	**Interest Expenses**	**3.71**

5.10.7 The Commission provisionally approves Interest on loan Capital of Rs. 3.71 Crore in APR for FY 2017-18.

5.11 Return on Equity

5.11.1 The Commission has approved the Return on Equity (ROE) of Rs. 16.01 Crore for FY 2017-18 in MYT Order. As against this, AEGCL has claimed the Return on Equity of Rs. 17.17 Crore for FY 2017-18.ROE has been calculated at 15.5% as specified in Regulation 34 of MYT Regulations 2015, as shown in the following Table:

Table 5-15: Return on Equity for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	MYT Order	AEGCL
1	Opening Equity Capital	99.93	99.93
2	Equity addition during the year	6.74	10.83
3	Closing Equity	106.67	110.76
4	Rate of Return on Equity	15.50%	15.50%
5	**Return on Equity**	**16.01**	**17.17**

Commission's Analysis

5.11.2 The Commission has approved the Return on Equity in accordance with Regulation 34 of the MYT Regulations, 2015. The Commission has considered the addition of equity equivalent to equity portion of capitalised works as approved in this Order. Therefore, the approved Return on Equity at 15.50% is shown in the Table below:

Table 5-16: Return on Equity for FY 2017-18 approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Approved for APR
1	Opening Equity Capital	99.93
2	Equity addition during the year	6.74
3	Closing Equity	106.67
5	Rate of Return on equity	15.50%
6	**Return on Equity**	**16.01**

5.11.3 Accordingly, the Commission provisionally approves Return on Equity of Rs. 16.01 Crore in APR for FY 2017-18.

5.12 Interest on Working Capital (IoWC)

5.12.1 AEGCL submitted that IoWC has been calculated on normative basis as per the provisions of MYT Regulations, 2015, as shown in the Table below:

Table 5-17: Interest on Working Capital for FY 2017-18 as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	MYT Order	AEGCL
1	O&M expenses for 1 month	14.66	16.91
2	Maintenance spares @ 15% of O&M Expenses	26.40	30.44
3	Receivables for two months	145.87	207.17
4	Total Working Capital	186.93	254.53
5	Rate of Interest	12.80%	12.80%
6	**Interest on Working Capital**	**23.93**	**32.58**

Commission's Analysis

5.12.2 The Commission has computed IoWC in accordance with Regulation 37.2 of the MYT Regulations, 2015. The rate of Interest has been considered equal to State Bank of India Base Rate as on 1st April, 2017 plus 350 basis points, i.e., 12.60%. For computation of working capital requirement, normative O&M expenses including ROP has been considered. Further, receivables have been considered equal to the revenue approved for FY 2017-18 in MYT Order dated March 31, 2017. IoWC approved by the Commission for FY 2017-18 is shown in the following Table:

Table 5-18: Interest on Working Capital for FY 2017-18 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Approved for APR
1	O&M expenses for 1 month	14.90
2	Maintenance spares @ 15% of O&M Expenses	26.82
3	Receivables for two months	199.17
4	Total Working Capital	**240.89**
5	Rate of Interest	12.60%
6	**Interest on Working Capital**	**30.35**

5.12.3 Accordingly, the Commission provisionally approves IoWC of Rs. 30.35 Crore in the APR for FY 2017-18.

5.13 BST for Pension Fund

5.13.1 The Commission had approved BST for Pension fund at 20 paise per unit amounting to Rs. 181.52 Crore for FY 2017-18 in the MYT Order. AEGCL has claimed BST for Pension Fund of Rs. 171.24 Crore as per the estimated energy supplied to APDCL for FY 2017-18.

Commission's Analysis

5.13.2 The Commission approves BST for Pension Fund at 20 paise per unit on the energy transmitted to APDCL, as approved in the Tariff Order on APR of APDCL dated March 19, 2018, as shown in the following Table:

Table 5-19: Approved BST for Pension Fund for FY 2017-18 (Rs. Crore)

Particulars	FY 2017-18
Energy transmitted to APDCL (MU)	8,573.55
BST for Pension Fund at 20 paise per unit	**171.47**

5.14 Income Tax

5.14.1 AEGCL has not claimed any amount towards Income Tax for FY 2017-18.

Commission's Analysis

5.14.2 The Commission has not considered any provision towards Income Tax. The actual Income Tax paid shall be considered based on the documentary evidence submitted at the time of truing up of FY 2017-18, subject to prudence check.

5.15 ARR after Annual Performance Review of FY 2017-18

5.15.1 Considering the above heads of expense and revenue, the net ARR approved after APR for FY 2017-18 is shown in the following Table:

Table 5-20: ARR approved after APR for FY 2017-18 (Rs. Crore)

Sl.	Particulars	MYT Order	Proposed by AEGCL	Approved after APR
1	PGCIL Charges	534.55	485.18	485.18
2	O&M Expenses	175.97	174.31	172.55
a	*Employee Cost*	*152.25*	*145.81*	*149.64*
b	*R&M Expenses*	*16.26*	*17.11*	*16.03*
c	*A&G Expenses*	*7.45*	*8.46*	*6.88*
3	SLDC Charges	2.60	3.08*	3.08
4	Impact of Revision of Pay	-	28.50	3.20
5	Depreciation	17.07	90.53	22.80
6	Interest & Finance Charges	9.41	33.33	3.71
7	Interest on Working Capital	23.92	32.58	30.35
8	BST for Pension Trust Fund	181.52	171.24	171.47
9	Return on Equity	16.01	17.17	16.01
10	Income Tax	-	-	-
11	Less: Non-Tariff Income/ Other Income	85.99	106.79	95.40
12	**Aggregate Revenue Requirement**	**875.07**	**923.12**	**812.94**
13	Add: Revenue Gap/(Surplus) after Truing up for FY 2014-15 along with carrying cost approved in MYT Order	7.43	7.43	7.43
14	Add: Revenue Gap/(Surplus) after Truing up for FY 2015-16 along with carrying cost approved in MYT Order	169.15	169.15	169.15
15	Add: Revenue Gap/(Surplus) after Truing up for FY 2016-17 along with carrying cost approved in MYT Order for recovery in FY 2017-18 and FY 2018-19	143.35	143.35	143.35
16	**Net Aggregate Revenue Requirement**	**1,194.99**	**1,243.05**	**1,132.87**

** Note – AEGCL has not considered in computation of total ARR*

5.16 Revenue Gap/(Surplus) for FY 2017-18

5.16.1 AEGCL has considered the revenue of Rs. 1192.39 Crore for computation of Revenue Gap/(Surplus) arising out of Annual Performance Review for FY 2017-18. AEGCL has claimed Revenue Gap of Rs. 50.66 Crore after APR for FY 2017-18.

5.16.2 For computation of Revenue Gap/(Surplus), the Commission has considered the revenue of Rs.1194.99 Crore to be recovered from tariff in FY 2017-18 as approved in the MYT Order. Accordingly, the Commission has computed the Revenue Gap/(Surplus) arising out of APR for FY 2017-18 as shown in the following Table:

Table 5-21:Revenue Gap/(Surplus) after Annual Performance Review for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Proposed by AEGCL	Approved after APR
1	Net ARR	1,243.05	1,132.87
2	Revenue with Approved Tariff	1,192.39	1,194.99
3	Revenue Gap/(Surplus)	50.66	(62.12)

5.16.3 **The APR reveals a surplus of Rs. 62.12 crore for FY 2017-18. It is only Indicative, in the absence of Audited Annual Accounts for FY 2017-18. Hence, this is not carried forward to ARR for FY 2018-19. It will be considered during the Truing up process for FY 2017-18, after the Audited Annual Accounts are made available.**

6 Revised ARR for FY 2018-19

6.1 Introduction

6.1.1 The Commission, vide its Order dated March 31, 2017 had approved the ARR for FY 2018-19. This Chapter deals with the determination of revised ARR for FY 2018-19 in accordance with the provisions of MYT Regulations, 2015, submissions made by AEGCL with respect to the amounts approved in the MYT Order dated March 31, 2017.

6.2 Transmission Loss

6.2.1 AEGCL has projected the Transmission Loss for FY 2018-19, as detailed in the Table below:

Table 6-1: Transmission Loss as submitted by AEGCL for FY 2018-19

Particulars	AEGCL
Energy Injected (MU)	10380.31
Energy Sent Out (MU)	9705.55
Energy Sent Out to Open Access Consumers	317.67
Transmission Loss (MU)	357.09
Transmission Loss (%)	3.44%

Commission's Analysis

6.2.2 The Commission in the MYT Order dated March 31, 2017 has approved the Transmission Loss of 3.44% for FY 2018-19. AEGCL has projected the Transmission loss of 3.44%, which is in line with the Transmission loss approved in MYT Order.

6.2.3 In view of this, the Commission approves the Transmission loss of 3.44% for FY 2018-19.

6.3 Transmission Availability

6.3.1 AEGCL has not submitted any projection of Transmission Availability for FY 2018-19.Regulation 67 of the MYT Regulations, 2015 specifies Normative Transmission Availability of 98% for full recovery of transmission charges and 98.5% for incentive consideration. Also, the computation and payment of Transmission Charges has been linked to monthly Transmission Availability computed as per Regulation 71 of the MYT Regulations, 2015.

6.3.2 The Commission notes that actual Transmission Availability of AEGCL of 99.914% for FY 2016-17 is higher than normative Transmission Availability specified in MYT Regulations, 2015. AEGCL should strive for maintaining and further improving its performance regarding Transmission Availability. The computation of incentive/disincentive on account of Transmission Availability shall be undertaken at the time of truing up for FY 2018-19 in line with the MYT Regulations, 2015.

6.4 Annual Transmission Charges for FY 2018-19

6.4.1 Regulation 62.10 of the MYT Regulations, 2015 specifies the components of Annual Transmission Charges as under:

> *"62.10 The annual transmission charges for each financial year of the Control Period shall provide for the recovery of the aggregate revenue requirement of the Transmission Licensee for the respective financial year of the Control Period, as reduced by the amount of non-tariff income and income from Other Business, as approved by the Commission and comprising the following:*
>
> *Aggregate revenue requirement:*
>
> *a) Return on Equity Capital;*
>
> *b) Interest on Loan Capital;*
>
> *c) Depreciation;*
>
> *d) Operation and maintenance expenses;*
>
> *e) Interest on working capital and deposits from Transmission System Users;*
>
> *minus:*
>
> *f) Non-tariff income; and*
>
> *g) Income from Other Business, to the extent specified in these Regulations*
>
> *Provided that in case of competitively awarded transmission system projects in pursuance of Section 63 of the Act and in accordance with guidelines for competitive bidding for transmission, the annual transmission charges shall be*

as per the Annual Transmission Service Charges (TSC) quoted by such competitively awarded transmission projects."

6.4.2 In line with the above provision, the Commission has determined the net ARR of Rs. 971.25 Crore for FY 2018-19 in MYT Order. Further, based on the Truing up for FY 2016-17 and APR for FY 2017-18 (although the Gap/(Surplus) has not been taken into account, as stated in Chapter 5 of this Order), the Commission now determines the revised ARR for FY 2018-19 as discussed below:

6.5 Non-Tariff Income

6.5.1 The Commission has approved NTI of Rs. 85.99 Crore for FY 2018-19 in the MYT Order. As against this, AEGCL has submitted NTI of Rs. 107.64 Crore for FY 2018-19.

Commission's Analysis

6.5.2 It is observed that NTI has increased in past years. The Commission has projected NTI of Rs. 100.17 Crore, by escalating the NTI of Rs. 90.86 Crore approved for FY 2016-17 with annual escalation of 5%. The actual NTI will be allowed at the time of truing up, subject to prudence check.

6.6 PGCIL Charges

6.6.1 AEGCL has projected PGCIL Charges for FY 2018-19 as Rs. 526.33 crore, by considering 10% escalation over PGCIL Charges proposed for FY 2017-18.

Commission Analysis

6.6.2 The Commission in MYT Order had approved PGCIL Charges of Rs. 582.67 Crore for FY 2018-19. AEGCL has projected the PGCIL charges lower than approved in MYT Order. The Commission accepts the submission of AEGCL and approves the PGCIL Charges of Rs. 526.33 Crore for FY 2018-19 as submitted by AEGCL.

6.7 Operation and Maintenance (O&M) Expenses

6.7.1 AEGCL submitted that O&M expenses for FY 2018-19 have been computed on the basis of revised estimates for FY 2017-18 and consist of following heads:

a) Employee expenses
b) R&M expenses
c) A&G expenses

The claim of AEGCL under various heads of O&M expenses are discussed below:

6.7.2 **Employee Expenses**

AEGCL submitted that the employee expenses have been estimated considering trend of past year's employee expense, increase in dearness allowance, its merger and its impact on other allowances such as HRA, field allowances, PF, etc.

The employee expenses for FY 2018-19 have been projected by considering the annual increase of 7% (3% from the month of July, 2018 to December 2018 and 4% from the month of January 2019 to March 2019) and 3% increase on account of annual increase in increment for calculating the employee expenses for FY 2018-19. AEGCL has projected the employee expenses of Rs. 160.46 Crore for FY 2018-19.

6.7.3 **R&M Expenses**

AEGCL submitted that R&M expenses are directly related to age of the assets, and its wear and tear during the period. Considering past trends, the expenditure for FY 2018-19 will increase due to presence of vintage assets, which require periodical and higher repairs. AEGCL projected R&M Expenses of Rs. 18.32 Crore for FY 2018-19.

6.7.4 **A&G Expenses**

AEGCL has projected A&G expenses by considering annual increase of 7% based on the past trends. The projected charges for Pension Payment through CPPC amounting Rs. 0.94 Crore have been considered. AEGCL proposed the A&G expenses of Rs. 9.75 Crore for FY 2018-19.

Commission's Analysis

6.7.5 As discussed in earlier Chapter, the Commission in MYT Order has approved the O&M Expenses on normative basis as per Regulation 68.9 of MYT Regulations, 2015. It is noted that AEGCL has submitted O&M expenses based on previous year O&M

expenses and applicable increase towards Salaries, Dearness Allowance, etc.

6.7.6 The normative O&M expenses have been sought from AEGCL in accordance with Regulation 68 of MYT Regulations, 2015. AEGCL submitted the Normative O&M expenses as shown in the following Table:

Table 6-2: Normative O&M Expenses for FY 2018-19 as submitted by AEGCL (Rs. Crore)

Particulars	FY 2018-19
Employee Expenses	150.71
R&M Expenses	18.45
A&G Expenses	9.55
O&M Expenses	178.71
O&M Expenses – Transmission	**175.10**
O&M Expenses – SLDC	**3.61**

6.7.7 MYT Regulations, 2015 specify that any variation between normative O&M expenses and actual O&M Expenses shall be considered under sharing of gains and loss on account of controllable items as per Regulation 13 of MYT Regulations, 2015 at the time of truing up for respective year. The Commission approves the Normative O&M Expenses for FY 2018-19.

6.7.8 For computation of normative employee expenses for FY 2018-19, the Commission has adopted the following approach:

a) The normative employee expenses approved for FY 2017-18 have been considered as base expenses for FY 2018-19.
b) CPI inflation has been computed as average increase of CPI for the period from FY 2014-15 to FY 2016-17, which works out to 5.35%.
c) Considering the expansion of transmission network over the FY 2017-18, growth factor of 1% has been considered as per the MYT Order.
d) Employee expenses for SLDC have been considered same as submitted by AEGCL. Employee expenses for Transmission has been derived after deducting the employee expenses for SLDC from normative employee expenses.

6.7.9 The normative employee expenses approved for FY 2018-19 is shown in the following Table:

Table 6-3: Approved Employee Expenses for FY 2018-19 (Rs. Crore)

Particulars		FY 2018-19
Employee Expenses for Previous Year	EMP_{n-1}	151.91
Growth Factor	G_n	1%
CPI Inflation	CPI	5.35%
Employee Expenses		**161.64**
Employee Expenses -Transmission		**158.89**
Employee Expenses -SLDC		**2.75**

6.7.10 For computation of normative R&M Expenses for FY 2018-19, the Commission has considered the following approach:

a) As discussed in earlier Chapter, the Commission has considered the WPI inflation of 0.94%, after relaxation.

b) K-factor has been considered as 1.01% as approved in MYT Order. Since, K-factor has been computed on the basis of average GFA, for working out R&M expenses for FY 2018-19, average GFA for previous year has been considered.

g) R&M expenses for SLDC have been considered same as submitted by AEGCL. R&M expenses for Transmission has been derived after deducting R&M expenses for SLDC from normative R&M expenses.

6.7.11 The normative R&M expenses approved for FY 2018-19 is shown in the following Table:

Table 6-4: Approved R&M Expenses for FY 2018-19 (Rs. Crore)

Particulars		FY 2018-19
Opening GFA for previous year		1,628.68
Closing GFA for previous year		1,932.47
Average GFA for previous year	GFA_{n-1}	1,780.58
K Factor	K	1.01%
WPI Inflation	WPI	0.94%
R&M Expenses		18.12
R&M Expenses – Transmission		**18.00**
R&M Expenses- SLDC		**0.12**

6.7.12 For computation of normative A&G expenses for FY 2018-19, the Commission has adopted the following approach:

c) The normative A&G expenses approved for FY 2017-18, have been considered as base expenses for computation of normative Employee expenses for FY 2018-19.

d) As discussed in earlier para, the Commission has considered the WPI inflation of

0.94%, after relaxation.

e) The Commission has not considered any provision for initiatives or other one-time expenses for A&G expenses.

f) A&G expenses for SLDC have been considered same as submitted by AEGCL. A&G expenses for Transmission have been derived after deducting the A&G expenses for SLDC from normative A&G expenses.

6.7.13 The approved normative A&G expenses for FY 2018-19 is shown in the following Table:

Table 6-5: Approved A&G Expenses for FY 2018-19 (Rs. Crore)

Particulars		FY 2018-19
A&G Expenses for Previous Year	$A\&G_{n-1}$	7.57
WPI Inflation	WPI	0.94%
Provision	Provision	0.00
A&G Expenses		**7.64**
A&G Expenses -Transmission		**6.90**
A&G Expenses -SLDC		**0.74**

6.7.14 In view of the above, the Commission approves the O&M expenses as shown in the following Table for FY 2018-19:

Table 6-6: Approved O&M Expenses for FY 2018-19 (Rs. Crore)

Particulars	AEGCL's Submission	Approved by the Commission
Employee Expenses	160.46	158.89
R&M Expenses	18.32	18.00
A&G Expenses	9.75	6.90
Total O&M Expenses (Net of SLDC Charges)	**188.53**	**183.79**

6.7.15 As discussed in the earlier Chapter on APR for FY 2017-18, the Commission has provisionally considered an amount of Rs.3.20 Crore in FY 2017-18 and Rs. 25.30 Crore in FY 2018-19 for ROP, 2016 based on actual pay out. The amount of ROP has been approved over and above the normative Employee expenses approved by the Commission for FY 2018-19.

6.7.16 Further, the Commission directs AEGCL to submit actual impact on account of revision of pay, along with detailed justification and documentary evidences on basis of Audited Accounts for FY 2018-19 at the time of Truing up.

6.8 SLDC Charges

6.8.1 AEGCL submitted the SLDC Charges of Rs. 3.61 Crore for FY 2018-19 against the approved charges of Rs. 2.88 Crore.

Commission's Analysis

6.8.2 The Commission accepts the submission of AEGCL and approves the SLDC Charges of Rs. 3.61 Crore for FY 2018-19.

6.9 Capital Expenditure and Capitalisation

6.9.1 AEGCL has projected the Capital Expenditure for FY 2018-19 against different schemes of the Government of India and the Government of Assam as approved by the Commission in the Business Plan Order dated September 1, 2016. The Capital Expenditure and Capitalisation proposed by AEGCL is shown in the following Table:

Table 6-7: Capital Expenditure and Capitalisation for FY 2018-19 as submitted by AEGCL (Rs. Crore)

Sl.	Particulars	Approved in Business Plan Order	AEGCL's Submission
1	Capital Expenditure	1076.57	1138.06
2	Capitalisation	45.58	135.09
	Funding of Capitalisation		
3	Grant	34.09	109.03
4	Equity	1.50	4.21
5	Loan	9.99	21.85
6	Total Capitalisation	45.58	135.09

Commission's Analysis

6.9.2 The scheme-wise capital expenditure was approved by the Commission in the Business Plan Order dated September 1, 2016. In the MYT Order, the Commission has approved capital expenditure and capitalisation based on information regarding latest status of works and past trends of capital expenditure of AEGCL.

6.9.3 The Commission sought the scheme-wise details of proposed capital expenditure and capitalisation vis-à-vis capital expenditure approved by the Commission in Business Plan Order for respective schemes. As discussed in earlier Chapter, AEGCL has revised the Capital expenditure and capitalisation for FY 2018-19 based on latest status of works and funding available for schemes.

6.9.4 The Commission accepts the revised submission of AEGCL regarding the capital expenditure and capitalisation for FY 2018-19 and accordingly approves the capitalisation of Rs. 135.09 Crore as submitted by AEGCL.

6.9.5 As regards the funding of capitalisation, he Commission has continued with the approach adopted in MYT Order. The Commission has computed normative funding of estimated capitalised works as per the provisions of MYT Regulations, 2015, which have been considered as input for the determination of Tariff. The grant considered against each project has been excluded for the purpose of debt: equity ratio. The Commission has restricted the equity component to maximum of 30% of amount of capitalised works, after reducing the grant component. The balance amount has been provisionally approved as funded by loans.

6.9.6 In view of the above, the Commission approves the funding of capitalised works based on scheme-wise analysis, as shown in the following Table:

Table 6-8: Funding of capitalised works for FY 2018-19 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Approved by the Commission
1	Grant	109.03
2	Equity	4.21
3	Debt	21.85
4	**Total Capitalisation**	**135.09**

6.10 Depreciation

6.10.1 AEGCL submitted Gross Fixed Assets and Depreciation for FY 2018-19 as per MYT Regulations, 2015. The depreciation has been calculated taking into consideration the opening balance of assets and the proposed capitalization.

6.10.2 The depreciation is calculated as per the Straight Line method up to maximum of 90% of the capital cost of the asset. The depreciation on the assets added during the year has been calculated for 180 days assuming the date of commissioning of the assets as middle of the Financial Year. AEGCL has projected depreciation of Rs. 104.21 Crore for FY 2018-19.

Commission's Analysis

6.10.3 The Commission has considered the opening GFA for FY 2018-19 equivalent to the closing GFA for FY 2017-18as approved in this Order. The Commission has computed depreciation as per scheduled rates specified in the MYT Regulations, 2015.

6.10.4 As per Regulation 33 of the MYT Regulations, 2015, the total depreciation during the life of the asset shall not exceed 90% of the original cost of Asset. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation in excess of 90% of the original cost of asset under different asset heads.

6.10.5 The issue of disallowing depreciation on grant funded assets has been settled several times in earlier Tariff Orders by the Commission and the Hon'ble APTEL has also ruled that the Commission's decision to disallow depreciation on the assets funded out of grants is correct, and in accordance with the MYT Regulations, 2015.

6.10.6 Hence, in line with the approach adopted in the MYT Order and as specified in Regulation 33 of the MYT Regulations, 2015, the Commission has not considered the depreciation on assets funded/to be funded through grants, consumer contribution or capital subsidy, for FY 2018-19.

6.10.7 In view of the above, the Commission approves depreciation for FY 2018-19 as shown in the following Table:

Table 6-9: Depreciation approved for FY 2018-19 (Rs. Crore)

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation as per MYT Regulations, 2015
1	Land & Rights	29.17	-		-
2	Building	36.32	2.58	3.34%	0.69
3	Hydraulic	3.14	0.22	5.28%	0.03
4	Other Civil Works	82.66	5.87	3.34%	2.86
5	Plant & Machinery	902.75	64.07	5.28%	45.37
6	Lines & Cable Net work	865.35	61.42	5.28%	26.20
7	Vehicles	5.57	0.40	9.50%	0.18
8	Furniture& Fixtures	4.55	0.32	6.33%	0.19
9	Office Equipment	2.96	0.21	6.33%	0.15

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation as per MYT Regulations, 2015
10	**Grand Total**	**1932.47**	**135.09**		**75.68**
11	**Asset excluding Land**	**1903.30**	**135.09**	**3.84%**	
12	Less: Depreciation for Grants/Consumer Contribution				49.39
13	**Net Depreciation**				**26.29**

6.11 Interest on Loan Capital

6.11.1 AEGCL submitted that the interest expenses on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. The projected capital expenditure and its funding also have a major bearing on the long-term interest expenditure. AEGCL has considered the opening balance of loan for FY 2018-19 as Rs. 546.98 Crore. The normative loan addition during FY 2018-19 has been considered as Rs. 74.37 Crore. The repayment of loan has been considered equal to 1/10th portion of loan, which becomes due in every Financial Year. AEGCL has projected Interest on the loans at rate of 10.19% as approved in MYT Order. AEGCL submitted Interest and finance charges for FY 2018-19 as shown in the Table below:

Table 6-10: Interest Charges for FY 2018-19 as submitted by AEGCL (Rs. Crore)

Particulars	MYT Order	AEGCL's Submission
Total Interest on Loans	14.01	59.47
Less: Interest Capitalized	-	39.33
Net Interest on Loans (A)	14.01	20.14
Other Finance Charges (B)	-	0.25
Interest on General Provident Fund (C)	-	5.28
Total (A+B+C)	**14.01**	**25.67**

Commission's Analysis

6.11.2 The Commission in MYT Order has approved Interest and finance charges on normative basis for FY 2018-19 as per Regulation 35 of MYT Regulations, 2015. For revised projection of ARR, the Commission has considered the same approach and approves the Interest and finance charges on normative basis.

6.11.3 The Commission has considered the net normative loan as on April 1, 2018 equivalent to closing net normative loan for FY 2017-18. The addition of loan has been considered equal to debt portion of capitalised works as approved in this Order. The loan repayment has been considered equivalent to Depreciation approved in this Order.

6.11.4 As per MYT Regulations, 2015, the weighted average rate of interest shall be computed based on actual outstanding loan as on April 1, 2018. The Commission sought details of projected outstanding loan as on April 1, 2018 based on existing loans and addition of loan as per proposed capital expenditure. The Commission notes that ADB loan of Rs. 93.03 Crore at interest rate of 10.50% and State Government loan of Rs. 448.13 Crore at weighted average interest rate of 10.12% are projected outstanding loans as on April 1, 2018. Accordingly, weighted average interest rate has been computed as 10.18% for computation of interest on loan capital.

6.11.5 The Interest on loan capital as approved by the Commission for FY 2018-19 is shown in the following Table:

Table 6-11: Approved Interest on loan Capital for FY 2018-19 (Rs. Crore)

Particulars	Approved by the Commission
Net Normative Opening Loan	71.08
Addition of normative loan during the year	21.85
Normative Repayment during the year	26.29
Net Normative Closing Loan	66.64
Interest Rate	10.18%
Interest Expenses	**7.01**

6.12 Return on Equity

6.12.1 AEGCL has computed Return on Equity at 15.50% as specified in Regulation 34 of the MYT Regulations, 2015. AEGCL submitted ROE of Rs. 17.82 Crore for FY 2018-19.

Commission's Analysis

6.12.2 The Commission has approved the Return on Equity in accordance with Regulation 34 of the MYT Regulations, 2015. The Commission has considered the addition of equity equivalent to equity portion of capitalised works as approved in this Order. Therefore, the approved Return on Equity at 15.50% is shown in the Table below:

Table 6-12: Return on Equity for FY 2018-19 approved by the Commission (Rs. Crore)

Sr. No.	Particulars	AEGCL's Submission	Approved by the Commission
1	Opening Equity Capital	110.76	106.67
2	Equity addition during the year	4.21	4.21
3	Closing Equity	114.97	110.88
5	Rate of Return on equity	15.50%	15.50%
6	**Return on Equity**	**17.82**	**16.86**

6.13 Interest on Working Capital

6.13.1 AEGCL submitted the IoWC on normative basis as per the provisions of the MYT Regulations, 2015. The rate of interest has been considered as State Bank of India Base Rate plus 350 basis points. AEGCL has considered rate of interest of 12.80% as approved in MYT Order. AEGCL submitted the IoWC of Rs. 34.17 Crore for FY 2018-19.

Commission's Analysis

6.13.2 The Commission has computed IoWC in accordance with Regulation 37.2 of the MYT Regulations, 2015. As per the Regulation, the rate of Interest shall be equal to State Bank of India Base Rate as on 1st April of the respective year plus 350 basis points. Since, Base Rate for April 1, 2018 is not available, the rate of interest considered for computation of IoWC for FY 2017-18 has also been considered for FY 2018-19. Accordingly, rate of interest of 10.60% has been considered for computation of IoWC for FY 2018-19.

6.13.3 IoWC as approved by the Commission for the FY 2018-19 is shown in the following Table:

Table 6-13: Interest on Working Capital for FY 2018-19 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	AEGCL's Submission	Approved by the Commission
1	O&M expenses for One month	15.88	16.01	17.72
2	Maintenance spares @ 15% of O&M Expenses	28.59	28.82	31.90
3	Receivables for two months	161.91	222.10	193.44
4	**Total Working Capital**	206.39	266.93	**243.07**
5	Rate of Interest	12.80%	12.80%	12.60%
6	**Interest on Working Capital**	**26.41**	**34.17**	**30.63**

6.14 Provision of Income Tax

6.14.1 The Commission has not considered any provision towards Income Tax. The actual Income Tax paid shall be considered based on the documentary evidence submitted at the time of truing up of FY 2018-19, subject to prudence check.

6.15 BST for Pension Fund

6.15.1 AEGCL submitted BST for Pension Fund of Rs. 194.11 Crore at 20 paise per unit on projected energy wheeled for FY 2018-19.

Commission's Analysis

6.15.2 The Commission approves BST for Pension Fund at 20 paise per unit on the energy transmitted to APDCL, as approved in the Tariff Order for FY 2018-19 for APDCL dated March 19, 2018, as shown in the following Table:

Table 6-14: BST for Pension Fund for FY 2018-19 as approved by the Commission (Rs. Crore)

Particulars	FY 2018-19
Energy transmitted to APDCL (MU)	9,361.09
BST for Pension Fund at 20 paise per unit	**187.22**

6.16 Summary of Revised ARR for FY 2018-19

6.16.1 The summary of Revised ARR as submitted by AEGCL and as approved by the Commission is given in the Table below:

Table 6-15: Revised ARR for FY 2018-19 as approved by the Commission (Rs. Crore)

Sl.	Particulars	MYT Order	AEGCL's Submission	Approved by the Commission
1	PGCIL Charges	**582.67**	**526.33**	**526.33**
2	O&M Expenses	**190.61**	**188.53**	**183.79**
2.1	*Employee Expenses*	*164.78*	*160.46*	*158.89*
2.2	*R&M Expenses*	*18.25*	*18.32*	*18.00*
2.3	*A&G Expenses*	*7.58*	*9.75*	*6.90*
3	SLDC Charges$	2.88	3.61	3.61
4	Impact of Revision of Pay	-	-	25.30
5	Depreciation	21.57	104.21	26.29
6	Interest on Loan Capital	14.01	25.67	7.01
7	Interest on Working Capital	26.41	34.17	30.63
8	BST for Pension Trust Fund	202.02	194.11	187.22
9	Return on Equity	17.07	17.82	16.86
10	Income tax	-	-	-
11	Less: Non-Tariff income	85.99	107.64	100.17
12	**Aggregate Revenue Requirement**	**971.25**	**983.20**	**906.87**

$ - SLDC Charges have already been included in O&M Expenses in AEGCL's submission. However, it has been separated in approved values.

7 Tariff for FY 2018-19

7.1 Cumulative Revenue Gap/(Surplus) and Net ARR for recovery

7.1.1 AEGCL submitted the net ARR for recovery through tariff in FY 2018-19 including the past year Revenue Gap/(Surplus), as shown in the following Table:

Table 7-1: Net ARR for recovery as submitted by AEGCL (Rs. Crore)

Sr. No.	Particulars	FY 2018-19
1	Stand-alone Aggregate Revenue Requirement	983.20
2	Add: Revenue Gap/(Surplus) for FY 2016-17 approved in MYT Order for recovery in FY 2018-19	143.35
3	Add: Revenue Gap/(Surplus) after Truing up for FY 2016-17	155.39
4	Add: Revenue Gap/(Surplus) after Annual Performance Review for FY 2017-18	50.66
5	**Net ARR for recovery through tariff (excluding SLDC Charges)**	**1,332.60**
6	**SLDC Charges for recovery through tariff**	**3.61**

Commission's Analysis

7.1.2 The Revenue Gap/(Surplus) along with carrying cost arising out of Truing up for FY 2016-17 has been considered in ARR for FY 2018-19 for recovery through Tariff. No Revenue Gap/(Surplus) has been proposed to be recovered through tariff in FY 2018-19 arising out of APR of FY 2017-18.

7.1.3 The Commission has adopted the following approach:

(a) In the MYT Order, the Commission has undertaken provisional Truing up for FY 2016-17 and provisionally approved the Revenue Gap of Rs. 286.70 Crore. Out of this, Revenue Gap of Rs. 143.35 Crore was allowed in the APR for FY 2017-18 for recovery through tariff. The remaining amount of Revenue Gap was kept aside for recovery through tariff in FY 2018-19.

(b) In the present Order, the Commission has undertaken the final Truing up for FY 2016-17 and approved the revised Revenue Gap. Since, the amount of Rs. 143.35 Crore has already been passed through in FY 2017-18, the Commission has considered the remaining amount to be passed through in FY 2018-19.

(c) The Revenue Gap/(surplus) for FY 2016-17 to be considered in FY 2018-19 is shown in the following Table:

Table 7-2: Revenue Gap/(Surplus) for FY 2016-17 approved for recovery in FY 2018-19 (Rs. Crore)

Sr. No.	Particulars	MYT Order	AEGCL	Approved in this Order
1	**Net ARR for FY 2016-17**	**824.62**	**982.38**	**869.27**
2	Revenue from Tariff	537.92	826.99	537.92
3	**Revenue Gap/(Surplus)**	**286.70**	**155.39**	**331.35**
4	*Less: Revenue Gap/(surplus) of Sl. 3 above considered in FY 2017-18*	*143.35*	*143.35*	*143.35*
5	Net Revenue Gap/(Surplus) of Sl. 3 above considered in FY 2018-19	143.35	298.74	188.00

7.1.4 The Commission has computed the carrying cost as shown in the following Table:

Table 7-3: Carrying Cost for Revenue Gap/(Surplus) for FY 2016-17 approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19
1	Opening Balance	-	331.24	188.00
2	(Recovery)/Addition during year	331.35	(143.35)	(188.00)
3	Closing balance	331.35	188.00	-
4	Rate of Interest (%)	12.80%	12.60%	12.60%
5	**Carrying Cost**	**21.21**	**32.72**	**11.84**
6	**Total Carrying Cost**	**65.77**		

7.1.5 The Commission has considered the recovery of total carrying cost, i.e., Rs. 65.77 crore on Revenue Gap/(Surplus) for FY 2016-17 in FY 2018-19.

7.1.6 In view of the above, the Commission approves the Net ARR for recovery for FY 2018-19 as shown in the following Table:

Table 7-4: Net ARR for FY 2018-19 for recovery as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	AEGCL	Approved in this Order
1	Net ARR for Transmission for FY 2018-19	968.38	983.20	903.26
2	SLDC Charges for FY 2018-19	2.88	3.61	3.61
3	**Consolidated ARR**	**971.26**	**986.81**	**906.87**
4	Revenue Gap/(Surplus) for FY 2016-17	143.35	298.74	188.00
5	Carrying Cost for FY 2016-17	-	-	65.77
6	Revenue Gap/(Surplus) for FY 2017-18	0.00	50.66	-
7	**Net ARR for recovery through Tariff**	**1,114.61**	**1,336.21**	**1,160.64**
8	**Net ARR for Transmission**	**1,111.72**	**1,332.60**	**1,157.03**
9	**Net ARR for SLDC**	**2.88**	**3.61**	**3.61**

7.2 Transmission tariff for FY 2018-19

7.2.1 AEGCL has proposed the transmission tariff as shown in the following Table:

Table 7-5: Proposed Transmission tariff as submitted by AEGCL (Rs. Crore)

Particulars	FY 2018-19
Revenue Requirement for SLDC	3.61
Revenue Requirement for AEGCL (excluding SLDC)	1332.60
Total Aggregate Revenue requirement for AEGCL (a)	1336.21
Anticipated Energy Transmission (MU) (b)	10046.69
Transmission Loss (%)	**3.44**
Average Transmission Charges (Rs. Per unit)	1.33
Transmission Charge for Long Term Open Access Consumer (Rs/MW/Month)	2070579.60
Transmission charge for Short Term Open Access Consumer (Rs./kWh)	**31.50**
SLDC Charge Rs. /MW/day	**43.35**

Note: * - Maximum Contracted Capacity has been considered as 2110 MW for FY 2018-19.

Commission's Analysis

7.2.2 As regards the transmission tariff, Regulation 62 of MYT Regulations, 2015 specifies as under:

"62 Components of Tariff

62.1 The transmission charges for access to and use of the intra-State transmission system shall

comprise any of the following components or a combination of the following components:

a. transmission system access charges;

b. annual transmission charges;

c. per unit charges for energy transmitted; and

d. reactive energy charges.

… …. ”

7.2.3 In accordance with above said Regulation, the Commission has determined the Annual Transmission Charges and Transmission System Access Charges for FY 2018-19. The Annual Transmission Charges payable by APDCL and Transmission system access charges payable by other users of AEGCL transmission system are arrived at based on Net ARR of AEGCL and the energy handled by the transmission system.

7.2.4 **Annual Transmission Charges for APDCL**

The Annual Transmission Charges for FY 2018-19 shall be equal to Net ARR approved for recovery for FY 2018-19, i.e., Rs. 1,157.03 Crore.

The Commission has also determined the Annual Transmission Charges in terms of Rs./kW/ month and per unit charges. The Commission has considered the maximum Contracted capacity of 2110 MW as submitted by AEGCL and estimated energy supplied to APDCL as 9,361.09 MU as approved in Tariff Order of APDCL for FY 2018-19.

The Annual Transmission Charges shall be recovered on monthly basis as transmission charge from the users who shall share the Transmission Charge in proportion of the allotted transmission capacity.

The transmission charge (inclusive of incentive) payable for a calendar month for a transmission system or part thereof shall be computed in accordance with Regulation 71.2 of MYT Regulations, 2015. This monthly Transmission Tariff shall be shared by all long-term and medium-term open access customers on monthly basis (presently only APDCL) in the ratio of their allotted capacities.

AEGCL shall raise the bill for the transmission charge (inclusive of incentive) for a month based on its estimate of Transmission System Availability Factor for the month computed as per Appendix II of MYT Regulations, 2015. The adjustments, if any, shall be made on the basis of the Transmission System Availability Factor to be certified by the SLDC within 30 days from the last day of the relevant month.

For representation purposes, the approved Transmission Charges works out to Rs. 1.24/kWh for FY 2018-19.

7.2.5 Transmission System Access Charges

The Commission notes that ARR for AEGCL includes PGCIL Charges which are pertaining to purchase of power by APDCL. Hence, for the purpose of determining transmission system access charges, the Commission has excluded the PGCIL charges from the approved Net ARR for FY 2018-19, which works out to **Rs. 630.70 Crore.**

Table 7-6: Transmission Access Charges approved by the Commission for FY 2018-19 (Rs. Crore)

Sr. No.	Particulars	FY 2018-19
1	Net ARR for Transmission	1,157.03
2	Less: PGCIL Charges	526.33
3	Net ARR for computation of Transmission Access Charges	630.70
4	Energy transmitted to APDCL and Open Access Consumers (MU)	9678.76
5	Transmission Access Charges (Rs./kWh)	0.65

For short-term Open Access customers, the Transmission Charges shall be: Rs. 0.65/kWh

Note:

1) The Commission has considered Annual Maximum Peak for FY 2018-19 as 2110 MW.

2) Any recovery on account of short-term open access charges shall be considered as Non-Tariff Income..

7.3 Annual SLDC Charges for FY 2018-19

7.3.1 SLDC Charges approved for FY 2018-19 are Rs. 3.61 Crore, which are allocated to APDCL as single user.

7.3.2 However, the SLDC charges to be charged for any other Long-term/Medium-term user are as given below:

Approved SLDC charge for APDCL for 2018-19 is Rs. 3.61Crore.

The approved SLDC charges for Long-term/Medium-term Users of Transmission System for FY 2018-19 are Rs. 46.87 per MW per day.

7.3.3 The annual SLDC charges as determined by the Commission shall be allocated between the Beneficiaries using the intra-State transmission system on the basis of contracted transmission capacity. The SLDC shall furnish necessary monthly bills at the rate of one twelfth of the annual charges as approved by the Commission, to the users of intra State Transmission System being monitored and serviced by it for each billing month within seven days after the last day of the preceding month. The Beneficiaries shall make payment to the SLDC of the amounts due within one month of the date of receipt of the bill.

7.3.4 The Short-term open access customers using the intra-State transmission system shall pay only such scheduling charges to the SLDC as approved by the Commission.

7.4 Applicability of Tariff

7.4.1 The approved Transmission tariff and Annual SLDC Charges for FY 2018-19 shall be effective from April 1, 2018 and shall continue until replaced/modified by Order of the Commission.

Sd/-	Sd/-
(D. Chakravarty)	**(S. C. Das)**
Member, AERC	**Chairperson, AERC**

8 Directives

The Commission issued certain directives to AEGCL in the past Orders, with an objective of attaining operational efficiency and streamlining the flow of information, which would be beneficial to the sector and the Petitioner, both in the short-term and long-term.

As regards the directives issued by the Commission, AEGCL has submitted the report to the Commission on compliance. The Commission has reviewed the compliance of directives submitted by AEGCL. The Commission hereby issues the following directives (including Directives from Sl. 1 to 5, which are reiterated) to AEGCL as under:

Directive 1: Funding from Government of Assam for employer's contribution to Terminal Liabilities based on Actuarial valuation

AEGCL is directed to expedite the funding from Government of Assam for employer's contribution to Terminal Liabilities based on actuarial valuation done as on September 30, 2012.

Directive 2 – Segregation of SLDC from AEGCL

The Commission directs AEGCL to complete the process of segregation of accounts of SLDC from AEGCL, in order to file separate Aggregate Revenue Requirement Petition for the next Control Period. AEGCL should submit present status and future plan of action along with timelines.

Directive 3 – Approval for deviation in Capital Expenditure scheme approved in Business Plan Order dated September 1, 2016

The Commission directs AEGCL to take prior approval of the Commission in case of any addition and/or deletion of schemes or any change in funding pattern of schemes approved in Business Plan Order dated September 1, 2016. AEGCL shall also take prior approval of the Commission in case of any emergency works, apart from the works approved in Business Plan Order dated September 1, 2016, to be carried out during the Control Period from FY

2016-17 to FY 2018-19.

Directive 4 – Change in beneficiary of PGCIL

The Commission directs AEGCL and APDCL to work out the modalities to make APDCL rather than AEGCL the beneficiary of PGCIL, before the commencement of the next MYT Control Period (from FY 2019-20 onwards), so that the PGCIL bills are raised to APDCL directly. AEGCL should exclude the PGCIL Charges in their Tariff Petition with effect from FY 2019-20.

Directive 5 – Energy Audit and Implementation of SAMAST

The Commission directs AEGCL to carry out the Energy Audit for FY 2018-19 and submit the report based on the metered energy at different interconnection points, including the status of metering, functional meters, etc. This Report, with details of Transmission Losses, should be submitted along with the next Tariff Petition. AEGCL is directed to implement SAMAST at the earliest.

Directive 6 – Claim of Depreciation

The Commission directs AEGCL to submit its claim of Depreciation in the future Petitions in line with the principles already settled by Hon'ble APTEL and in line with the provisions of MYT Regulations, 2015.

Directive 7 – Revision of Pay

The Commission directs AEGCL to submit actual impact on account of Revision of Pay, including detailed calculation and justification along with documentary evidences based on Audited Accounts for FY 2017-18 and revised projections for FY 2018-19. AEGCL should maintain details of expenses incurred on ROP in FY 2017-18 and FY 2018-19 and also for the arrears paid separately.

Directive 8 – Compliance of Audit Observations

The Commission noted that Statutory Auditors and CAG have made several comments on the Audited Accounts. AEGCL is directed to take corrective actions on the same expeditiously.

Further, AEGCL is directed to submit the status of compliance of above Directives to he Commission at the end of each quarter. The Commission will review the status in the month following the end of the quarter.

Sd/-	**Sd/-**
(D. Chakravarty)	**(S. C. Das)**
Member, AERC	**Chairperson, AERC**

9 Annexures

9.1 Annexure – 1 - Minutes of the 22nd Meeting of the State Advisory Committee

The 22nd meeting of the State Advisory Committee (SAC) was held on 8th February, 2018 at the Administrative Staff College, Guwahati.

The list of members, invitees and other officers/consultants present is appended at Annexure – A.

Presiding over the meeting, the Hon'ble Chairperson (Off.), AERC, Shri D. Chakravarty welcomed all members and invitees of the State Advisory Committee. Shri Chakravarty briefly explained that the purpose of the meeting was primarily to discuss the tariff petitions filed by the State Power utilities for FY 2018-19 and the uniform Renewable Purchase Obligation (RPO) targets proposed by the Ministry of New & Renewable Energy (MNRE), Government of India. This was followed by an introductory session among the members and invitees. Thereafter, the agenda items were taken up for discussion in seriatim. The important points raised by the Hon'ble Members during the course of discussions are briefly recorded below.

Agenda No. 1: Confirm the Minutes of the 21st meeting of SAC held on 04.03.2017

The Minutes of the 21st Meeting of the Committee were circulated among the Members and Special Invitees. No comment was received on the Minutes. With the approval of the members, the Minutes of the 21st meeting of the SAC were confirmed.

Agenda No. 2: Action Taken on the minutes of the 21st Meeting of SAC.

A power-point presentation was made by Consultant, Shri J. Bezbaruah from AERC on the salient features of action taken reports submitted by the power utilities. Hard copies of the action taken reports were also circulated among the members of SAC. The Chairperson (Off.), AERC asked the respective utilities to respond to any query from the SAC Members. The queries/ suggestions from the members and respective replies are noted below:

i) Representative from CII, Ms S. Sarma commented that RPO targets and its fulfillment through purchase of Renewable Energy Certificates (RECs) is an additional financial burden on the State. She questioned as to whether RPO fulfillment is necessary at present, given the fact that availability of renewable energy in the State is limited.

   It was informed from the Chair that RPO targets were set by the Commission considering the policy directives of the Government of India. Besides, opinion of the Stakeholders were also considered while fixing the RPO targets, therefore, RPO fulfillment cannot be avoided by the obligated entities. Shri Chakravarty observed that a State like Assam has sufficient renewable energy potential which needs to be harnessed by the obligated entities in order to avoid buying RECs. That is one of the objectives of RPO – to encourage generation of renewable energy. He stated that the issue may be discussed further when the agenda item for RPO is taken up.

ii) Regarding installation of separate feeders for HT and Tea Consumers, Secretary ABITA, Shri A. Sharma stated that the consumers in North Bank particularly Udalguri, Lakhimpur, Rangapara and Biswanath need to be looked into given the poor power situation prevailing in those areas. He stated that the North Bank is yet to be covered in the proposed plan.

In his reply, MD APDCL, Shri P. Gupta (IAS) stated in the Annual Plan for FY 2017-18, 35 gardens have been selected for providing separate feeders at an estimated cost of Rs 8.31 Cr and the tender process for these are underway. He informed that, in addition, execution of separate feeders for 85 Tea gardens is going on under ADB funding at an estimated cost of Rs 35 Crore. He further informed that if there was any tea garden which needs to be taken up on priority, it can be added to the list in the next budget. He stated that the list of Tea estates included for feeder separation will be provided to ABITA.

Representative from AIMO, Shri H. Sutodiya informed that Karbi Anglong district was the least yielding district of Assam with regard to tea. The power situation in Karbi Anglong District is not at all conducive for the few organized tea gardens situated there, and therefore, these gardens may be considered for feeder separation on priority. He explained that with implementation of the Government of India "Power for All" Schemes, a number of domestic consumers have been added to the feeders providing power to the gardens. As a result, the power quality has deteriorated in these gardens and separate feeders are likely to help the situation.

Hon'ble Chairperson (Off.), AERC requested APDCL to look into the matter and MD, APDCL assured to do so.

iii) Hon'ble Member, AERC, Shri S.C. Das IAS (Retd.) expressed surprise that tariff for the 2 MW Namrup Solar PV project was quoted so high at Rs 6.57 /kWh and that too when land was offered for free. He observed that the cost of solar power was declining and tariffs determined by the Commission recently for solar projects including land cost is around Rs 6 /kWh. Shri Das suggested that since the 2 MW Project was abandoned by APGCL, the Company may now consider setting up a Grid Interactive solar plant of higher capacity instead.

MD APGCL, Ms. Kalyani Baruah informed that the Company has already decided to set up a solar plant of 15 MW in Namrup as land is available.

Member AERC, Shri S.C Das further suggested that APGCL should explore the possibility of setting up solar projects in other areas of Assam as well. He observed that the price of solar power is likely to decrease further.

MD APDCL informed that the price quoted by APDCL in the recent reverse auction for solar power without evacuation facility was in the range of Rs 4.36 /kWh and Rs 4.48/ kWh and PPA with developers are likely to be signed within 31st March, 2018.

Ms S. Sharma, CII suggested that tariffs determined should be commensurate with voltage at which power is supplied, connected load, etc.

Shri K. Medhi, Secretary, NESSIA asked the status regarding the proposal for installation of prepaid meters in 5 Circles of Assam, whether annual calenders for generating consumer awareness published by APDCL were being circulated among the consumers, the status of distribution of LEDs and status of the Amguri and Chandrapur Solar Power Projects.

MD, APDCL, Shri P. Gupta (IAS) informed as follows:

- Although decision was taken to install prepaid meters in the 5 highest loss making districts of Assam from savings under ADB funds, the same was diverted to the lower Kopili project and material procurement for transformers. Inspite of this, installation of prepaid meters has been taken up intensively. Around 22,000 prepaid meters have been procured and these are being installed and more shall be done in future.
- Annual calenders are displayed in all the APDCL collection and billing offices so that awareness can be generated among consumers visiting these offices. Besides, various awareness programs to ensure safety and other issues have been undertaken by the respective field offices.
- Approximately 20 lakh LED bulbs have been distributed so far under UJALA and DELP schemes. Consumers can have real time information regarding distribution of LEDs through the UJALA App of the Government of India.
- MD, APGCL, Ms K. Baruah informed that the 70 MW Amguri Solar Project is progressing well and is likely to come under operation within 2019. She further informed that the 20 MW Chandrapur Solar plant was found to be unfeasible due to its undulating structure.

  The Principal Secretary, Power, Government of Assam, Shri J. Baruah (IAS) informed that Government of India has proposed extension of the National Grid gas pipelines to Assam. He stressed that APGCL may seize the opportunity to start a gas based thermal power station in Chandrapur. Besides, since modern thermal plants require lesser manpower and space, the available infrastructure at Chandrapur might be used to house a training institute for power sector employees of the State.

iv) Shri J. Baruah (IAS), Principal Secretary, Power, Government of Assam stated that he was contemplating to hold a meeting with ABITA and tea associations to discuss the issues related to tea gardens as it was an important sector contributing more than 10 % of APDCL's revenue.

v) Prof. B.K. Roy, NIT Silchar observed that the Companies did not provide any reply/ status to many issues discussed during the last meeting. He suggested that if action against any issue was pending, the companies should inform so.

On his query regarding status of constitution of Coordination Committees (to resolve power related issues with the tea gardens), it was informed by MD, APDCL that meetings have been held among officers of APDCL and tea garden officials from time to time and a number of issues were resolved, wherever possible. However, APDCL was considering institutionalizing the Committees so that they met every month.
Ms S. Sarma, CII requested that these committees should be formed for other HT consumers as well.

Hon'ble Chairperson (Off.), AERC requested that the status of the functioning of these Committees be forwarded to the Commission.

Prof, B.K. Roy, NIT Silchar also suggested that awareness programmes on power sector may be organized in schools through quiz, debate and essay writing competitions, etc. He opined that such programmes can be very effective and could be conducted by the local APDCL offices and cost involvement would be minimal.

Agenda No. 3 (i) : Presentation on Tariff Petition for FY 2018-19 by AEGCL

There was a brief power point presentation on the revised Annual Revenue Requirement and tariff for FY 2018-19 along with true up for FY 2016-17 and Annual Performance Review for FY 2017-18. The status of ongoing projects in AEGCL was also discussed. The following discussions took place during the course of the presentation.

i) Shri H. Sutodiya, AIMO wanted to know the reason behind cheap power i.e less than Rs 3/ kWh from Bhutan. Hon'ble Member, AERC Shri S.C. Das informed that most of the power projects in Bhutan are hydro based projects and subsidized by the Government and therefore, cheaper.

ii) Ms S. Sarma, CII suggested that Assam should try to procure this cheap power as the requisite infrastructure to transmit this power is available.

Hon'ble Member, AERC Shri S.C. Das informed that the power from Bhutan cannot be procured directly by APDCL as it is international power and is allocated by the Government of India. He informed that Assam has been allocated 118 MW from Nikasu Power Project, Bhutan which is likely to be received from July, 2019.

MD, APDCL, Shri P. Gupta (IAS) stated that cross-border power transmission Regulations are yet to be framed by the Central Commission.

Hon’ble Member, AERC Shri Das informed that till such time these Regulations are framed, power can be transmitted through bilateral arrangement as is being done by Tripura and Bangladesh.

Representative from IEX, Shri N. Sabikhi informed that although cross – border trading is presently being done on bilateral mode, it may become possible for Assam to buy power directly through the exchanges as the CERC Regulations (which is under draft stage) permits term ahead transactions for cross border trading. He further informed that once the system is in place, Assam will be able to compete with any other State in India on the exchange for cross border power from SAARC nations (barring Pakistan and Afghanistan).

iii) Shri S. Agarwal, FINER asked the reasons behind increase in the PGCIL and depreciation charges than what was approved by the Commission in FY 2016-17 and FY 2017-18.

MD, AEGCL, Shri S. N. Kalita informed that PGCIL charges have increased on account of the revision by CERC and switch over to Point of Connection charges. He further informed that depreciation charges shown during the presentation were inclusive of grants and is likely to change, as the Commission do not allow grants in depreciation to be passed on to tariff.

iv) Shri K. Medhi, Secretary, NESSIA observed that more than 50% of AEGCL cost accounted for PGCIL charges. Therefore, he suggested that the Company may try to built and augment its own network at least within the State, particularly, in view of the new initiatives under Advantage Assam and accommodate the anticipated increased power flow.

MD, AEGCL Shri S. N. Kalita informed that since most of the power consumed within the State was imported from outside the State, PGCIL charges were high. MD, AEGCL remarked that the suggestion was noted. He informed that plans are already on to augment the capacity of the State transmission network and steps would be taken accordingly.

Agenda No. 3 (ii): Presentation on Tariff Petition for FY 2018-19 by APGCL

APGCL made a brief power point presentation on the revised Annual Revenue Requirement and tariff for FY 2018-19 along with true up for FY 2016-17 and Annual Performance Review for FY 2017-18. The status of ongoing projects in APGCL was also discussed. The important points raised by the participants during the course of the presentation are summarized below:

i) MD, APGCL, Ms K. Baruah informed that the Lakwa Replacement Power Project (LRPP) of 70 MW will become operational from April 2018. The LRPP will replace the LTPS Stage I Project of 60 MW.

ii) Regarding the status of 70 MW Amguri Solar Power Project, MD APGCL reiterated that SECI is the consultant for the project and tender has been floated for reverse bidding with a capping of Rs 3.50/ kWh. She informed that the Capacity Utilization Factor (CUF) for the project is considered as 17%.

Representative from ABITA, Shri A. Kakati mentioned that the climatic conditions in the region was perhaps not very conducive for setting up solar projects. Citing an example of a private100 KW solar plant set up, he stated that CUF achieved from this Solar Plant is much lesser than expected at about 14%, He, however, said that this may be so due to location of the solar plant, which is near to Bhutan.

MD, APDCL, Shri P. Gupta (IAS) informed that the CUF recorded at the 5 MW solar power project at Balipara is 15.5%. MD, APDCL stated that solar projects constitute a sizeable part of power generation in Germany even when intensity of solar radiation is relatively less than in Assam. Member, AERC observed that lower CUF may also be due to sub-standard quality of the solar panels being supplied.

iii) On a query from Ms S. Priyadarshini, Associate Prof, DCB Girls' College regarding the status of Namrup Replacement Power Project (NRPP) and Myntriang SHEP, it was informed by MD, APGCL, Ms. K. Baruah that NRPP could not be commissioned last year due to some unfortunate breakdowns in the plant machineries. M/s Bharat Heavy Electricals Limited (BHEL), the developer of the project has sought extension for commissioning of the project and it was expected that the plant may be commissioned by September, 2018.

Regarding Myntriang SHEP, it was informed that Stage I of the project would come into operation by April 2018. Stage II of the project is already under operation.

Replying to a query from Prof. B.K. Roy, regarding who would bear the enhancement in project cost caused by delay of NRPP, MD APGCL stated that penalty charges have already been incurred on M/s BHEL due to the time overrun and any additional project cost would be entirely borne by M/s BHEL. Nevertheless, APGCL is losing generation due to delay in commissioning of NRPP.

iv) Shri K. Medhi, NESSIA stated that the Margherita Thermal Power Project has been inordinately delayed and enquired regarding the status of the project.

MD, APGCL, Ms K. Baruah informed that the Ministry of Power, Government of India has approved an enhanced 3,200 (800x4) MW thermal Power Plant in Margherita and NTPC Limited has recently submitted a DPR for the first phase i.e. 1600 (800x2) MW of the Project. Ms.Baruah further informed that the most crucial parameter for the successful commissioning of the project is grant of coal linkage. The DPR is now under examination and once it is finalized along with the coal linkage, the project is likely to be commissioned within 5 years. However, the present production capacity of the NER Coal Fields is only about 1 million ton per year which is insufficient to run a coal based project of this capacity. As providing Coal linkage to the project is a prerogative of the Government of India, therefore, no concrete timeline can be drawn at present regarding the completion of the project.

v) Shri S. Agarwal, FINER questioned APGCL on the status of their agreement with the gas suppliers with regard to minimum off take/ supply of gas in view of the decommissioning of the APGCL Stations of Namrup & Lakwa.

MD, APDCL explained that according to the GSA with Oil India Limited (OIL), in case of less off take of gas by APGCL than agreed quantity, due to decommissioning /breakdown of any generating unit, the Company would be required to compensate OIL and if OIL is unable to supply gas as per the agreement, it would have to compensate APGCL. As per this arrangement, Rs 1.49 Cr is payable to OIL.

Shri Agarwal commented that since APGCL was not receiving adequate gas supply for its power stations, APGCL may explore the possibility of buying gas from traders at competitive rates on rental basis to avoid loss in generation and also paying compensation against minimum guaranteed quantity.

vi) Ms. S. Sarma, CII questioned regarding the present shortfall in generation in the State and strategy, if any, to overcome this shortfall.

MD, APGCL, Ms K. Baruah informed that at present the gross generation from APGCL generating units was around 240 MW although average peak demand is 1450 MW and off-peak demand is around 1200 MW. Ms Baruah informed that a number of new projects are under different stages of development namely the 120 MW Lower Kopili Hydro Electric Project, Myntriang Stage I, NRPP and LRPP besides, a number of Solar projects. It was informed that replacement plants namely NRPP and LRPP would contribute additional 60 MW power into the system (50 MW and 10 MW respectively).

The Principal Secretary, Power, Government of Assam, Shri J. Baruah (IAS) informed that in addition to APGCL, the Distribution Company procured power from Central Sector Generating Sectors, through bilateral and exchange trading, Banking, etc to meet the demand for the State. He further informed that although there was an occasionally shortfall during peak hours, the Company could sell power during off-peak hours. He stressed that although there was power available from different sources outside the State, it always made economic sense to increase own power generation as APDCL power cost about Rs 4.09/ unit, power from outside cost around Rs 5.23/unit.

vii) CII Representative suggested that since the State has surplus power during off-peak hours, the industries may be incentivized to shift their load to the off-peak hours.

Member AERC, Shri S.C. Das opined that such a provision through Time of Day Tariffs already exist in the State for four categories of industrial consumers namely Oil & Coal, Tea, HT Industry I & HT Industry II.

viii) Prof. B.K. Roy, NIT Silchar questioned whether the Company carried out preventive maintenance as it was observed that Unit I of Stage II Myntriang SHEP was under forced shutdown from 20.11.2016 due to Thrust Pad bearing damage.

It was informed from APGCL that the damage was caused due to landslide in the area and mud rushing into the power station. It was stated that removing mud from the station itself took over two months and there was more than just bearing damage. However, proper precaution has been undertaken to ensure that such damage is not repeated. APGCL informed that the breakdown was due to natural calamity and unforeseen. It was further informed that preventive maintenance is practiced in the Company for smooth functioning of the generating units. In KLHEP, which is now over 10 years in operation, engineers from Japan visit the project regularly as a component of preventive maintenance.

Agenda No. 3 (iii): Presentation on Tariff Petition for FY 2018-19 by APDCL

There was a short Power Point presentation from APDCL on the revised Annual Revenue Requirement and tariff for FY 2018-19 along with true up for FY 2016-17 and Annual Performance Review for FY 2017-18. The following discussions took place during the course of the presentation:

i) Shri H. Sutodia, AIMO sought clarification on a few points. These along with the respective replies as noted below –
   a. Fixed charge collected from the consumers is meant to recover the infrastructure costs for supplying power. The infrastructure costs are likely to reduce over the years due to depreciation, etc. The fixed charge component is already high for the industries and whether any study is being done by the Discom to review the infrastructure cost with regard to the connected load of the consumers.
   b. MD, APDCL, Shri P. Gupta (IAS) informed that fixed charge levied by the Discom is not linked to the infrastructure and its expansion of the Company alone but rather consist of the Operation and maintenance charges including salary to its employees. Major chunk of the fixed cost almost 60% constitutes payment to generating units which is collected in two parts – fixed and variable.
   c. Whether minimum charges can be levied instead of separate fixed and consumption charges.
   d. APDCL replied that "Minimum Charge" is an old concept and most of the State utilities have done away with it. Minimum charges consisted of fixed charge and other charges like energy charge. As per Electricity Act 2003, tariffs must constitute of at least two charges – fixed and variable.
   e. The supervision and other charges are collected from the new consumers wanting to set up industries in the State under "Make in Assam", despite the fact that the cost of

materials are borne by the consumers themselves. Whether these supervision and other charges be done away with.

f. MD, APDCL Shri P. Gupta (IAS) clarified that the supervision charge is a miscellaneous charge constituting 15% of the labour charge and these charges are not connected to material cost. Member, AERC, Shri Das further clarified that prior to 2005; supervision charge was 15% of the entire cost which was quite high, however, AERC stepped in and reduced this charge to 15% of labour cost only. He observed that by levying these charges, the Discom take the responsibility that the line has been properly constructed following the norms and safety standards.
g. Industries in the State, particularly tea and food processing units require to maintain a steady backup of spares and machineries so as to meet exigencies, whenever required. Whether there can there be a provision of additional connected load without affecting the fixed charges.
h. Shri P. Gupta (IAS) MD, APDCL informed that as per the new AERC Supply Code Regulations, 2017, the industries would be allowed to contract the demand as per their requirement irrespective of their connected load.
i. Hon'ble Member, AERC, Shri S.C. Das clarified that seasonal industries had to declare a minimum 65% of the connected load as contracted demand. But with notification of the AERC Supply Code Regulations, 2017, the industries may declare contracted demand as per their requirement, however; such demand cannot be more than the sanctioned connected load for the industry. He stated that the new Regulations may be downloaded from the official website of the Commission.

ii) Shri K. Medhi, NESSIA offered the following suggestions –

a. If the quality of power improves, a nominal and reasonable increase will be considered justified by the consumers as the price of all necessary commodities have risen over the years. Therefore, the Discom should make efforts to provide good quality, reliable power to its consumers.
b. From the tariff proposal, it can be seen that increase proposed in the fixed charge for industrial, commercial and domestic consumers are not uniform.
c. Load survey for the consumers is not conducted regularly and as such, the Discom is losing substantial revenue on account of fixed charge. The connected load of the consumers tend to increase over the years with increase in their electrical equipments, however, such increase is hardly intimated to the Discom. Although, the Discom give notices of voluntary load declaration from time to time, this may not be as effective as load survey.
d. The tariff for General Purpose consumers consisting of temples, mosque etc is already high. Due to this many organizations resort to unauthorized means of getting power instead of legal ways. Therefore, tariff for this category needs to be reviewed.
e. 90% of the meters in Jeevan Dhara category are either defective or not working and these need to be replaced.

Hon'ble Chairperson (Off.), AERC thanked the member for his suggestions.

Shri P. Gupta (IAS), MD, APDCL informed that tariff increase proposed for all categories is not uniform as in some categories tariff is already high.

Hon'ble Member AERC, Shri S.C. Das stated that the industrial sector is actually cross subsidizing the domestic consumers through higher tariffs. In fact, if voltage based tariff would have become applicable, tariffs for many industrial categories would have decreased as they were receiving power at a higher voltage causing low loss in the power network. However, such an arrangement would be a heavy burden to the domestic consumers and therefore, Commission follows the tariff policy while determining tariff.

iii) Ms S. Sarma, CII opined that voltage fluctuations in remote areas were severe and corrective measures need to be initiated in this regard.

Member AERC, Shri S.C. Das stated that infrastructure must be improved to encourage setting up of industries in rural areas. He opined that tariff determination based on voltage fluctuations would not be feasible, however, feeder separation of domestic and industry, initiated by the Company, should help improve the situation in rural areas considerably.

iv) Shri H. Sutodiya, AIMO suggested that the intimation regarding anticipated power failures should be given to the industrial units.

Principal Secretary, Power Government of Assam, Shri J. Baruah (IAS) suggested that this can be done for all IRCA consumers through email, mobile numbers.

v) Shri S. Agarwal, FINER gave the following suggestions:

a. The Company should give rebate on load factor, increase the rebate on power factor to encourage consumers for efficient power utilization and performance.
b. With the possibility of more industries coming into the State with *Advantage Assam*, newer categories for HT consumers must be introduced. Also, both LT and HT consumers should be encouraged to opt for receiving power at a higher voltage by providing incentives in tariff.

vi) Shri N. Sabikh, IEX stated that depending on the type of industry like continuous, seasonal, etc. tariff may be formulated in a way (by increasing/ decreasing the fixed charge and decreasing /increasing the energy charge) so that the average cost to the industry remains same and revenue expected to be recovered for the Discom also remains intact.

He complemented the Discom for managing their power portfolio effectively. The power purchase is 70-80% of the ARR and there is still scope of optimizing the same. IEX has developed a system which allows the Discom to optimize their power purchase on a day-ahead basis whether that power is from a State or Central generator. The discoms need to put in their quantum of power to buy into the system on a day ahead basis, and the most optimal power portfolio would be made available. Maharashtra, Bihar, Punjab are now trying to use this system to optimize their power purchase. He stated that although, it may not be possible to optimize the power purchase everyday, it can be done for a substantial period over the year, benefitting the discom by saving on its power purchase cost.

vii) Prof. B.K. Roy NIT, Silchar asked what the temporary rate for an agricultural consumer will be above 7.5 Hp.

It was informed that the consumer will come under HT temporary category.

viii) Ms S. Sarma, CII requested if an awareness campaign could be conducted on the functioning of the prepaid meters by the Discom. She offered that CII may also be a partner for the campaign.

The Discom agreed to the suggestion.

Agenda No 6: Promotion of Renewable Energy and RPO trajectory

A presentation was made by Shri N.K. Deka, Consultant (T), AERC on the RPO Regulations and its amendments notified by the Commission from time to time which is briefly discussed in the following paragraphs:

The Commission notified the AERC (RPO and its Compliance) Regulations, 2010 on 2nd November, 2010 fixing a trajectory for both solar and non-solar RPO compliance for FY 2010-11 up to FY 2014-15. Subsequently, the Commission amended the RPO Regulation, 2010 vide 1st Amendment notification dated 15th October, 2015 and provided a RPO trajectory for FY 2015-16 to FY 2018-19 keeping in mind the renewable resources available within the State and the views received from the obligated entities.

The Ministry of Power (MoP), GoI notified the new National Tariff Policy (NTP) dated 28.01.2016. and in light of the NTP, the Ministry of New & Renewable Energy (MNRE) issued a letter dated 11.02.2016 to the states requesting to develop Action plan for compliance of RPO upto 2022 and suggesting the SERCs to notify the RPO trajectory so as to reach 8% Solar and overall trajectory of 17% including Solar & Non-Solar by 2022.

In compliance of the National Tariff Policy and MNRE requests; the Commission initiated the process of revising the 2nd amendment of RPO trajectory. The above draft amendment Regulations were hosted on the Commission's website and Public Notice was issued in the newspapers for objections/ suggestions from stakeholders.

After carefully examining, the suggestions from public/utilities and availability of RE Resources within the state and considering the impact of revision of RPO on the retail tariffs, the Commission revised the RPO trajectory and notified the same vide 2nd amendment to RPO regulations, 2010 on 14th March, 2017 as below:

FY	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Non –Solar	3%	5%	6%	7%	8%	9%
Solar	1%	4%	5%	6%	7%	8%
Total	4%	9%	11%	13%	15%	17%

It may be mentioned here that on 22.07.2016, MNRE, GoI issued another guideline proposing a uniform Long-term trajectory of RPOs for Non-Solar & Solar Energy for FY 2016-17 to FY 2018-19 for all States/Union Territories, where it was proposed that 17% overall RPO may be achieved by FY 2018-19 itself. The same is shown in table below:

FY	2016-17	2017-18	2018-19
Non –Solar	8.75%	9.50%	10.25%
Solar	2.75%	4.75%	6.75%
Total	11.50%	14.25%	17.00%

As the Commission notified the revised RPO trajectory in accordance with NTP on 14th March, 2017 another revision within the year would have additional burden on the obligated entities. The matter was therefore, placed before the SAC for deliberation and advice.

Hon'ble Chairperson (Off.), AERC informed that the matter is under deliberation at the Forum of Regulators and it has been also proposed that the differentiation between solar and non-solar RPO be removed.

The following deliberations took place after the presentation:

i) MD, APDCL, Shri P. Gupta, IAS stated that it was becoming increasingly difficult to buy renewable power either through the exchanges and also through DEEP portal as bidders are not available. He stated that a number of renewable projects are under implementation within the state and until these projects are commissioned, there will be no option left but to buy Renewable Energy Certificates (RECs).
ii) Member AERC, Shri S.C Das stated that the matter has been placed before the State Government and it is now the State Government to give policy directives in this regard. The Commission has complied with the directives of the Government of India after taking the views of the stakeholders concerned and accordingly made the trajectory upto 2021-22.
iii) Shri S. Agarwal, FINER commented that RPO trajectory should be based on the available RE resources within the state. He observed that the tariff of the State is already high and increase in RPO trajectory may force the obligated entities to buy RECs which would further increase the tariff burden on the consumers. He also stated that trading of solar RECs have been kept on a hold by the Hon'ble Supreme Court due to pricing issues.
iv) Ms S. Sarma, CII stated that till such time the RE potential in the State is tapped to a certain extent, perhaps the RPO targets may be kept lower.

v) Chairperson (Off.) AERC, Shri D. Chakravarty explained that these are policy initiatives of the Government of India and every State is expected to follow the same irrespective of the present RE availability in the State. RECs have been introduced so that States not having RE potential/ availability can purchase these in the exchanges. He further observed that the Commission has to monitor compliance by the obligated entities in accordance with its Regulations.

vi) Shri N. Sibikhi, IEX stated that RPO compliance is a national initiative to improve the green portfolio. He observed that RPO is comparable to taxation to encourage and benefit renewable energy producers. He stated that the States have to decide whether to make or buy RE. RE producing potential differ across different States within the country and it is always economical to produce renewable power in States that have greater potential depending on the climatic conditions and natural resources available. Therefore, States not having RE potential or yet to develop adequate RE generating units may resort to buying RECs from the exchanges to meet their RPO. The REC market was developed for this reason. He stated that the Discoms throughout the nation, initially, were deferring buying RECs, however, they have now started buying RECs to meet the RPO shortfall to clear their backlogs. As such, the REC market has seen an upsurge in the previous year and he expressed apprehension that if the trend continues, the floor price for RECs may be discontinued.

vii) Shri S. Agarwal, FINER observed that although, the Discoms had the option of setting up renewable generation projects through developers, the Captive consumers had no option left but to buy RECs to meet their non solar obligations because they can set up rooftop solar plants, however, may not be able to set up non-solar projects. This would increase their cost of production and ultimately, the consumers would have to bear the cost.

viii) Shri N. Sibikhi, IEX stated that as the term RPO goes, Renewable Purchase is perceived as an Obligation rather than as a Responsibility. He observed that it may not be feasible for a small industry to set up a renewable generation unit; therefore buying RECs may be the only viable option.

ix) Shri S. Agarwal, FINER requested that RPO trajectory of other States may be studied vis -a- vis their availability before drawing the trajectory for Assam.

x) MD, AEGCL, Shri S.N. Kalita also requested that a detailed study may be done before deciding on the RPO trajectory.

xi) Shri K. Medhi, NESSIA asked regarding the solar potential of the State mentioned in the State Solar Policy and incentives available. it was informed by the Principal Secretary, Power, Shri J. Baruah, IAS that solar potential has been stated as 14000 MW and incentives to industries have also been provided. No incentive has been provided regarding grant of land for solar projects as most of the land available is fertile in nature.

Agenda No. 5: Any Other matter.

No other matter came up for discussion.

Chairperson (Off.), AERC assured the members that the tariff proposals of the utilities would be prudently scrutinized and the valuable suggestions offered by each stakeholder would be taken into account while determining tariffs for FY 2018- 19.

The meeting ended with vote of thanks from the Chair.

Sd/-

(D. Chakravarty)

Chairperson (Off.),

Assam Electricity Regulatory Commission.

ANNEXURE –A

LIST OF MEMBERS, SPECIAL INVITEES & OFFICERS PRESENT

MEMBERS

1. Shri Dipak Chakravarty, Chairperson (Off.), AERC
2. Shri Subhash Chandra Das, Member, AERC
3. Shri Jishnu Baruah, IAS Principal Secretary, Power, Government of Assam and Chairman APDCL/AEGCL/APGCL
4. Shri Abhijit Sharma, Secretary. ABITA

   Shri Abhijit Kakati, MRK, ABITA
5. Shri Harsh Sutodiya, EC Member, AIMO
6. Shri J.N. Baruah, Board Member, AASSIA
7. Shri Saurabh Agarwala, Chairman, Power Committee, FINER

   Shri Saurabh Burakhi, FINER
8. Birendra Kr. Das, President, Grahak Suraksha Sanstha
9. Nitin SabiKhi, AUP, IEX
10. Ms. Shanta Sarma, CII, NE Chapter
11. Ms. Sushmita Priyadarshini, Associate Profesor, DCB Girl's College
12. Prof. B.K. Roy, HoD, Electrical, NIT, Silchar

SPECIAL INVITEES

1. Shri Puru Gupta, IAS, Managing Director, APDCL
2. Ms. Kalyani Baruah, Managing Director, APGCL
3. Shri Satyendra Nath Kalita, Managing Director, AEGCL
4. Shri Sailen Baruah, President, NESSIA
5. Shri Kumud Medhi, Secretary, NESSIA.

OFFICERS FROM APDCL

1. Shri Dilip Kr. Saikia,CGM / PP&D, APDCL
2. Shri Pankaj Kr. Bhuyan, CGM (COM), APDCL
3. Shri Binoy M Saikia, GM (TRC), APDCL
4. Shri Sanjib Goswami,GM(RE), APDCL

5. Shri Ramendra Choudhary, DGM(COM-T), APDCL
6. Shri Pradeep Kr. Baishya, AGM, APDCL
7. Shri Nilmadhab Deb,AM (F&A), APDCL

<u>OFFICERS FROM AEGCL</u>

1. Shri M.J. Saikia, CGM, AEGCL
2. Shri Suresh Kaimal, AGM (F&A)AEGCL
3. Shri G.K. Bhuyan, AGM, AEGCL
4. Shri Debasish Paul, AM(F&A), AEGCL
5. Shri Rupam Dhar, AO, AEGCL

<u>OFFICERS FROM APGCL</u>

1. Shri Anil Kr. Phukan, CGM (GEN), APGCL
2. Shri Meena B. Choudhary, GM, APGCL
3. Shri Ranjit Das, DM, APGCL
4. Shri A.K.S. Zaman, AM, APGCL

<u>OFFICERS FROM AERC</u>

1. Shri S.K Roy, Secretary, AERC
2. Shri A.N. Devchoudhury, Joint Director (Tariff), AERC
3. Shri A. Purkayastha, Deputy Director (Finance), AERC
4. Shri G. Sharma, Deputy Director (Engg.), AERC

<u>CONSULTANTS FROM AERC</u>:

1. Ms. P. Sharma, Sr. Consultant, AERC
2. Shri N.K. Deka, Consultant (Technical), AERC
3. Shri S. Tamuli, Consultant (I), AERC
4. Shri J. Bezbaruah, Consultant (II), AERC