



**ASSAM ELECTRICITY REGULATORY COMMISSION  
(AERC)**

**TARIFF ORDER**

March 01, 2019

**True-Up for FY 2017-18, APR for FY 2018-19, ARR  
for the Control Period from FY 2019-20 to FY 2021-  
22 and Tariff for FY 2019-20 for AEGCL**

**and**

**ARR for the Control Period from FY 2019-20 to FY  
2021-22 and Tariff for FY 2019-20 for SLDC**

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

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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
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
CPC	Central Pay Commission
CPI	Consumer Price Index
CSGS	Central Sector Generating Stations
CTU	Central Transmission Utility
CWIP	Capital Work-In-Progress
DA	Dearness Allowance
DISCOM	Distribution Company
EAP	Externally Aided Projects
EPFI	Employees' Pension Fund Investment
FAR	Fixed Asset Register
FCC	Financial Completion Certificate
FINER	Federation of Industry & Commerce of North Eastern Region
FIRR	Financial Internal Rate of Return
GFA	Gross Fixed Assets
GoA	Government of Assam
GPF	General Provident Fund
H1	First Half of the year
H2	Second Half of the year

HRA	House Rent Allowance
IWC/loWC	Interest on Working Capital
kW	kilo Watt
kWh	kilo Watt Hour
LTA	Leave Travel Allowance
MCA	Ministry of Corporate Affairs
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NERLDC	North Eastern Region Load Despatch Centre
NTPC	NTPC Ltd.
O&M	Operation and Maintenance
PCC	Physical Completion Certificate
PGCIL	Power Grid Corporation of India Limited
PoC	Point of Connection
R&M	Repairs and Maintenance
RoE	Return on Equity
ROI	Rate of Interest
RLDC	Regional Load Despatch Centre
ROP	Revision of Pay
SAC	State Advisory Committee
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
UPPCL	Uttar Pradesh Power Corporation Ltd.
WPI	Wholesale Price Index

# **ASSAM ELECTRICITY REGULATORY COMMISSION**

**Guwahati**

Present

**Shri Subhash C. Das, Chairperson**

**Shri Dipak Chakravarty, Member**

**Petition No. 15/2018**

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

## **ORDER**

**(Passed on March 01, 2019)**

- (1) AEGCL filed Petition for approval of Truing up for FY 2017-18 and Annual Performance Review (APR) for FY 2018-19 for AEGCL, and Aggregate Revenue Requirement (ARR) for FY 2019-20 to FY 2021-22 and determination of Tariff for FY 2019-20 for AEGCL and SLDC as per MYT Regulations, 2018 on November 30, 2018. The same was registered as Petition No. 15/2018.
- (2) The Commission held an Admissibility Hearing on December 10, 2018, and admitted the Petition (Petition No.15/2018) vide Order dated December 10, 2018 with direction to furnish the additional data and clarifications, as sought vide letter dated December 10, 2018. Based on preliminary comments of the Commission, AEGCL revised the original Petition and submitted the revised Petition (Petition No. 15/2018) on December 15, 2018.
- (3) On admission of the Petitions (Petition No. 15/2018), 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) 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 ensure



due public participation. A copy of the Petition 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 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) Accordingly, a Public Notice was issued by the AEGCL inviting objections/suggestions from respondents to be submitted on or before January 11, 2019. The notice was published in six (6) leading newspapers of the State on December 18, 2018.

<b>Date</b>	<b>Name of Newspaper</b>	<b>Language</b>
18.12.2018	The Sentinel	English
	The Assam Tribune	English
	Asamiya Pratidin	Assamese
	Dainik Janambhumi	Assamese
	Purbanchal Prahari	Hindi
	Dainik Jugasankha	Bengali

- (6) In response to the Commission's letter dated December 10, 2018, AEGCL submitted their replies on December 26, 2018.
- (7) The Commission observed that there were several inconsistencies and discrepancies even in the revised Petition and the replies to the first set of queries submitted by AEGCL. Accordingly, the Commission raised second set of queries on January 31, 2019 in order to clarify the discrepancies, inconsistencies, and data gaps, and directed AEGCL to submit the consolidated revised documents in order to avoid confusion. AEGCL submitted its reply to the second set of queries on February 5, 2019. However, AEGCL did not submit the duly reconciled consolidated revised documents, and the replies to queries also contained inconsistencies.
- (8) 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 February 5, 2018 at Assam Administrative Staff College, Khanapara, Guwahati.
- (9) The Commission received suggestions/objections from three (3) stakeholders on the Petitions filed by AEGCL. The stakeholders were notified about the place, date and time of Hearing, to enable them to take part in the Hearing. A News Paper notice was also published inviting participation from the General Public as well as the

Respondents. The Hearing was held at Assam Administrative Staff College, Guwahati on February 12, 2019 as scheduled. All stakeholders/respondents who participated in the Hearing were given the opportunity to express their views on the Petitions. The details are discussed in the relevant Chapters of this Tariff Order.

- (10) 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 2017-18 and APR for FY 2018-19 for AEGCL, and ARR for FY 2019-20 to FY 2021-22, and determined the Transmission Tariff and SLDC Charges for FY 2019-20 as detailed in subsequent pages.
- (11) The Commission directs AEGCL to publish a Public Notice intimating the revised Transmission Tariff and SLDC Charges before the implementation of this Order in English and Vernacular newspapers and on the website of AEGCL.
- (12) The approved Transmission Tariff and SLDC Charges shall be effective from April 1, 2019 and shall continue until replaced by another Order by the Commission.
- (13) Accordingly, the Petition Nos. 15/2018 stand disposed of.

**Sd/-**

**(D. Chakravarty)**

**Member, AERC**

**Sd/-**

**(S. C. Das)**

**Chairperson, AERC**

# 1 INTRODUCTION

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## 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 Section 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 Power Plans formulated by the Central Government including the National Electricity Policy and Tariff Policy.

### **1.3 Background**

- 1.3.1 AEGCL is the successor corporate entity of erstwhile ASEB formed pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003 (Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of personnel of the Board to successor entities.
- 1.3.2 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.

### **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 Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2015 (hereinafter referred as "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 AERC (Terms and Conditions of Tariff) Regulations, 2006 (herein after referred as "Tariff Regulations, 2006").The

Commission issued the Order on the said MYT Petition on March 31, 2017 and approved the Transmission Tariff 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., were 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 trueing up of expenses and revenue in line with Regulation 11 including 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 Multi Year Tariff Regulations, 2018**

- 1.5.1 The Commission, in exercise of the powers conferred under Section 61 read with Section 181(2) (zd) of the Act, notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 (herein after referred as “MYT Regulations, 2018”) on July 17, 2018. 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, 2019 onwards up to March 31, 2022. These Regulations are applicable to all existing and future Generating Companies, Transmission Licensees and Distribution Licensees within the State of Assam.
- 1.5.2 Regulation 4.2 of the MYT Regulations, 2018, specifies the MYT framework, as

reproduced below: *“4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, SLDC, Distribution Wheeling Business and Retail Supply Business:*

*(i) Before commencement of Control Period, a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;*

*(ii) A detailed Capital Investment Plan for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;*

*(iii) The applicant shall submit operating norms and trajectories of performance parameters for each year of the Control Period, for the Commission's approval;*

*(iv) The applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for Generating Companies, SLDC, Transmission Licensee, Distribution Wheeling Business and Retail Supply Business, for each year of the Control Period;*

*(v) In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station*

*(vi) Annual Performance review vis-à-vis the approved forecast and categorization of variation in performance as those caused by factors beyond the control of the applicant (uncontrollable items) shall be undertaken by the Commission;*

*(vii) True up of the past years based on audited annual accounts of the licensees and the Generation companies.*

*(viii) The mechanism for pass-through of approved gains or losses on account of uncontrollable items as specified by the Commission in these Regulations;*

*(ix) The mechanism for sharing of approved gains or losses arising out of controllable items as specified by the Commission in these Regulations;*

*(x) Tariff determination for Generating Companies, SLDC, Transmission Licensee and Distribution Wheeling Business and Retail Supply Business, for each financial year within the Control period based on the approved forecast. The tariff shall be reviewed*

*at the time of the true-up and annual performance review.*

*(xi) There will be no true-up of the controllable items except on account of Force Majeure events or on account of variations attributable to uncontrollable items. The variations in the controllable items, as defined in regulation 10, over and above the norms specified will be governed by incentive and penalty framework specified in these regulations.*

*(xii) The tariff determined by the Commission and the directions given in the MYT order shall be the quid pro quo and mutually inclusive. The tariff determined shall, within the time period specified in the order, be subject to the compliance of the directions by the generating company and the licensees to the satisfaction of the Commission. Non-compliance of directions given in the tariff order may also lead to invocation of the provisions of section 142 of the Act.*

*(xiii) The tariff determined by the Commission shall continue to operate till it is modified or revised by the Commission.”*

## **1.6 Procedural History**

- 1.6.1 As per Regulation 4.2 of the MYT Regulations, 2018, AEGCL is required to file an application for true-up for previous year, i.e., FY 2017-18, APR of current year, i.e., FY 2018-19, ARR for the Control Period from FY 2019-20 to FY 2021-22 and tariff for ensuing year, i.e., FY 2019-20, not less than 120 days before the close of the current year.
- 1.6.2 AEGCL filed Petition for approval of Truing up for FY 2017-18 and Annual Performance Review (APR) for FY 2018-19 for AEGCL, and Aggregate Revenue Requirement (ARR) for FY 2019-20 to FY 2021-22 and determination of Tariff for FY 2019-20 for AEGCL and SLDC as per MYT Regulations, 2018 on November 30, 2018. The same was registered as Petition No. 15/2018.
- 1.6.3 The Commission held an Admissibility Hearing on December 10, 2018, and admitted the Petition (Petition No.15/2018) vide Order dated December 10, 2018 with direction to furnish the additional data and clarifications, as sought vide letter dated December 10, 2018. Based on preliminary comments of the Commission, AEGCL revised the original Petition and submitted the revised Petition (Petition No. 15/2018) on December 15, 2018.

- 1.6.4 On admission of the Petitions (Petition No. 15/2018), 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
- 1.6.5 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 ensure due public participation. A copy of the Petition 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 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.
- 1.6.6 Accordingly, a Public Notice was issued by the AEGCL inviting objections/suggestions from respondents to be submitted on or before January 11, 2019. The notice was published in six (6) leading newspapers of the State on December 18, 2018.

<b>Date</b>	<b>Name of Newspaper</b>	<b>Language</b>
18.12.2018	The Sentinel	English
	The Assam Tribune	English
	Asamiya Pratidin	Assamese
	Dainik Janambhumi	Assamese
	Purbanchal Prahari	Hindi
	Dainik Jugasankha	Bengali

- 1.6.7 In response to the Commission's letter dated December 10, 2018, AEGCL submitted their replies on December 26, 2018.
- 1.6.8 The Commission observed that there were several inconsistencies and discrepancies even in the revised Petition and the replies to the first set of queries submitted by AEGCL. Accordingly, the Commission raised second set of queries on January 31, 2019 in order to clarify the discrepancies, inconsistencies, and data gaps, and directed AEGCL to submit the consolidated revised documents in order to avoid confusion. AEGCL submitted its reply to the second set of queries on February 5, 2019. However, AEGCL did not submit the duly reconciled consolidated revised documents, and the replies to queries also contained inconsistencies.
- 1.6.9 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 February 5, 2018 at



Assam Administrative Staff College, Khanapara, Guwahati.

- 1.6.10 The Commission received suggestions/objections from three (3) stakeholders on the Petitions filed by AEGCL. The stakeholders were notified about the place, date and time of Hearing, to enable them to take part in the Hearing. A News Paper notice was also published inviting participation from the General Public as well as the Respondents. The Hearing was held at Assam Administrative Staff College, Guwahati on February 12, 2019 as scheduled. All stakeholders/respondents who participated in the Hearing were given the opportunity to express their views on the Petitions.
- 1.6.11 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.

## **1.7 State Advisory Committee Meeting**

- 1.7.1 A meeting of the State Advisory Committee (SAC)(constituted under Section 87 of the Act) was convened on February 5, 2019 and members were briefed on the MYT Petition of AEGCL. The Minutes of the SAC Meeting are appended to this Order as **Annexure 1**.

## 2 Summary of AEGCL's Petition

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### 2.1 Background

2.1.1 AEGCL submitted the Petition on November 30, 2018 seeking approval for Aggregate Revenue Requirement and determination of Transmission Charges for the Control Period from FY 2019-20 to 2021-22 along with True up for FY 2017-18. 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 Interest and Finance Charges for FY 2016-17

2.2.1 AEGCL submitted that the actual net normative loan should be Rs. 255.57crore as against 'Nil' approved in True-up of FY 2016-17. AEGCL submitted that the Interest and Finance charges for FY 2016-17 should be Rs. 25.95 Crore as against 'Nil' approved by the Commission in the Tariff Order dated March 19, 2018. AEGCL requested the Commission to allow the Interest and Finance Charges of Rs.25.95 crore in the consolidated ARR of FY 2019-20.

### 2.3 True-up for FY 2017-18

2.3.1 AEGCL submitted the True-up for FY 2017-18 based on the audited accounts. The summary of Aggregate Revenue Requirement (ARR) and Revenue Gap/(Surplus) claimed by AEGCL for FY 2017-18 is shown in the following Table:

**Table 1: True-up for FY 2017-18 as submitted by AEGCL (Rs. Crore)**

Sl. No.	Particulars	Approved in MYT Order	AEGCL Submission
1	PGCIL Charges	534.55	509.29
2	O&M Expenses	175.97	170.20
A	Employee Cost	152.25	142.33
B	R&M Expenses	16.26	18.94
C	A&G Expenses	7.45	8.92
3	SLDC Charges	2.60	2.56
4	Depreciation	17.07	21.71

Sl. No.	Particulars	Approved in MYT Order	AEGCL Submission
5	Interest & Finance Charges	9.41	25.02
6	Interest on Working Capital	23.92	27.52
7	BST for Pension Trust Fund	181.52	172.10
8	Return on Equity	16.01	15.49
9	Income Tax	-	8.80
10	Other debits	-	0.90
11	Net Prior period Charges/(Credits)	-	(5.68)
12	Less: Non-Tariff Income/ Other Income	85.99	195.76
13	Aggregate Revenue Requirement	<b>875.06</b>	<b>752.14</b>
14	Add: Revenue Gap/(Surplus) after Truing up for FY 2014-15 along with carrying cost approved in MYT Order	7.43	7.43
15	Add: Revenue Gap/(Surplus) after Truing up for FY 2015-16 along with carrying cost approved in MYT Order	169.15	169.15
16	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
17	Less: Transmission incentive credit bill raised to APDCL as per observation of AG Audit for the FY 2017-18	0	6.39
18	Add: Credit bill raised to APDCL for excess amount of Transmission surcharge billed to APDCL during FY 2017-18, as per observation of AG Audit for the FY 2017-18	0	37.31
19	Net Aggregate Revenue Requirement	<b>1,194.99</b>	<b>1,102.99</b>
20	<b>Incentive on Transmission Availability</b>	-	12.10
21	Add: Sharing of (Gains)/Loss	-	(1.50)
22	ARR after Sharing (Gains)/Losses and Incentive	1,194.99	1,113.59
23	Revenue with Approved Tariff for FY 2017-18	1,194.99	1,194.99
24	<b>Revenue Gap /(Surplus) for FY 17-18</b>	<b>(0.00)</b>	<b>(81.40)</b>

## 2.4 Annual Performance Review of FY 2018-19

2.4.1 AEGCL submitted the APR of FY 2018-19 based on the actual expenses incurred in the first half of FY 2018-19, as shown in the Table below:

**Table 2: Annual Performance Review for FY 2018-19 (Rs. Crore)**

Sl. No.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	PGCIL Charges	526.33	255.80	255.84	511.64
2	O&M Expenses	183.79	100.33	95.02	195.36
A	Employee Cost	158.89	91.41	79.53	170.94
B	R&M Expenses	18.00	5.05	10.08	15.13
C	A&G Expenses	6.90	3.87	5.42	9.29
3	SLDC Charges	3.61	1.54	1.95	3.49
4	Impact of Revision of Pay	25.30	-	-	-
5	Depreciation	26.29	9.89	9.89	19.79
6	Interest & Finance Charges	7.01	12.55	14.02	26.57
7	Interest on Working Capital	30.63	14.44	14.38	28.82
8	BST for Pension Trust Fund	187.22	94.90	94.90	189.80
9	Return on Equity	16.86	7.74	7.74	15.49
10	Income Tax	-	-	-	-
11	Other debits	-	0.00	0.00	0.01
12	Net Prior period Charges/(Credits)	-	(1.31)	-	(1.31)
13	Less: Non-Tariff Income/ Income	100.17	53.12	46.30	99.41
14	<b>Aggregate Revenue Requirement</b>	<b>906.87</b>	<b>442.78</b>	<b>447.46</b>	<b>890.24</b>
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	188.00	94.00	94.00	188.00
16	Carrying Cost	65.77	32.89	32.89	65.77
17	<b>Net Aggregate Revenue Requirement</b>	<b>1,160.64</b>	<b>569.66</b>	<b>574.34</b>	<b>1,144.01</b>
18	Incentive on Trans. Availability	-	<b>2.83</b>	<b>2.83</b>	<b>5.67</b>
19	Add: Sharing of (Gains)/Loss	-	-	-	-

Sl. No.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
20	ARR after Sharing (Gains)/Losses	1,160.64	572.50	577.18	1,149.68
21	Revenue with Approved Tariff for FY 2018-19	1,160.64	580.35	580.35	1,160.70
22	Revenue Gap/(Surplus) for FY 2018-19	-	(7.85)	(3.17)	(11.02)

## 2.5 Multi Year Tariff Determination for FY 2019-20 to FY 2021-22

2.5.1 AEGCL has projected the ARR of Rs. 502.75 Crore for FY 2019-20, Rs. 585.45 Crore for FY 2020-21, and Rs. 702.93 Crore for FY 2021-22 as detailed in the Table below:

**Table 3: ARR for FY 2019-20 to FY 2021-22as submitted by AEGCL**

Sl.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	PGCIL Charges	0.00	0.00	0.00
2	O&M Expenses	214.79	232.16	254.81
A	Employee Cost	181.18	194.58	208.98
B	R&M Expenses	20.71	26.64	34.86
C	A&G Expenses	10.90	10.94	10.97
D	Training Expenses	2.00	0.00	0.00
3	SLDC Charges	0.00	0.00	0.00
4	Depreciation	43.34	80.95	128.91
5	Interest & Finance Charges	33.48	39.67	54.59
6	Interest on Working Capital	15.40	17.45	20.31
7	BST for Pension Trust Fund	201.38	213.90	227.44
8	Return on Equity	19.68	27.89	44.76
9	Less: Non-Tariff Income	25.31	26.57	27.89
<b>10</b>	<b>Aggregate Revenue Requirement</b>	<b>502.75</b>	<b>585.45</b>	<b>702.93</b>

2.5.2 AEGCL has also submitted the ARR for SLDC for the Control Period, as shown in the

following Table:

**Table 4: ARR of State Load Despatch Centre (SLDC) for FY 2019-20 to FY 2021-22 as submitted by AEGCL (Rs. Crore)**

<b>Particulars</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
O&M Expenses	6.33	7.61	9.16
Employee Cost	4.64	5.92	7.55
Repair and Maintenance Expenses	0.48	0.48	0.49
Administrative and General Expenses	1.21	1.22	1.12
Training Expenses	0.25	-	-
Depreciation	0.03	0.12	0.16
Interest & Finance Charges	0.09	0.13	0.25
Interest on Working Capital	0.29	0.35	0.42
Return on Equity	0.01	0.05	0.14
Less: Non-Tariff Income	0.85	0.89	0.93
<b>ARR of SLDC</b>	<b>6.15</b>	<b>7.37</b>	<b>9.20</b>

## **2.6 Prayers of AEGCL**

2.6.1 AEGCL, in its Petition, has prayed as under:

“

- (i) *Accept the Annual Revenue Requirements and Tariff proposal for Transmission Business respectively in accordance with:
  - a. *The guidelines outlined in AERC Orders passed in various matters relating to AEGCL; and*
  - b. *The principles contained in AERC (Terms and Conditions for determination of Tariff) Regulations 2015;**
- (ii) *Condone any inadvertent omissions/errors/rounding off differences/shortcomings and permit AEGCL to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date.*
- (iii) *Pass such further and other Orders, as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.”*

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

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3.1.1 The Commission has received suggestions/objections from four (4) stake holders on the Petition filed by AEGCL, from the following objectors:

Sl. No.	Name of objector
1	Federation of Industries and Commerce of North Eastern Region (FINER)
2.	Assam Branch of Indian Tea Association (ABITA)
3.	Bidyut Grahak Mancha (BGM)

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

3.1.3 The Commission considered the objections /suggestions received and notified the objectors to take part in the Hearing process by presenting their views in person before the Commission, if they so desired.

3.1.4 The Commission held Hearing at the Assam Administrative Staff College, Guwahati on February 12, 2019.

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

3.1.6 The objections/ suggestions made by the objectors 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.

3.1.7 While all the objections /suggestions have been given due consideration by the Commission, only, major responses/ objections received on the Petitions and also those raised during the course of Hearing have been grouped and addressed issue wise, in order to avoid repetition.

## **Issue 1: Operation and Maintenance (O&M) Expenses**

### **Objections:**

FINER submitted that, AEGCL has not provided relevant data to substantiate its estimated additional O&M expense of Rs 11.57 Cr (an increase of 6.30%) in FY 2018-19, over the approved O&M expenses of Rs 183.79 Cr.

FINER further submitted that AEGCL's estimated Employee Cost of Rs 170.94 Cr is 7.58% higher than the approved cost of Rs 158.89 amounting to an additional expenditure of Rs 12.05 Cr. AEGCL has not provided any data to substantiate its claim of additional cost. Similarly, the estimated A&G expenses for FY 2018-19 are also Rs 3.09 Cr higher than the sum previously allowed by the Commission. FINER therefore, requested the Commission not to allow the same unless the additional claims are substantiated with data.

Similar observations have been made by ABITA stating that the projected employee cost is substantially higher than the actual expense for FY 2017-18. AEGCL has considered a growth rate of 3% for number of employees for each year of the MYT period from FY2019-20 to FY2021-22. ABITA submitted that in absence of any details regarding increase in the number of employees in the past years, a growth rate of 1 % p.a. may be considered for the MYT period.

ABITA further submitted that while estimating the R&M expenses, ABITA has assumed k factor to be constant at 1.01% as per past Tariff orders with WPI inflation being 0.33% and requested that similar methodology may be approved by the Commission for the calculations of A&G expenses.

### **Response of AEGCL**

AEGCL, in justification of the increase in submitted figures, submitted that the additional expenditures in employee cost is due to the Revision of Pay (ROP) along with arrear on account of ROP with effect from 01.04.2016. However, the same was not included in the approved cost of Rs 158.89 Crs.

AEGCL submitted that the understaffed utility has already initiated the recruitment process and has large scale recruitment plans for the upcoming years; totaling 400 additional employees in a phased manner within the Control Period.

AEGCL submitted that 'k' factor has been determined realistically after including the expenses of R&M works, which were not undertaken on account of unavailability of funds.



AEGCL further submitted that the information justifying the additional A&G expenses has been furnished.

### **Commission's View**

The Commission has allowed the O&M expenses for the MYT Control Period in accordance with the MYT Regulations, 2018.

## **Issue 2: Capital Expenditure and Investment**

### **Objections**

ABITA submitted that the proposed capital expenditure of Rs 2662.22 Cr, Rs 3183.29 Cr and Rs 3685.45 Cr by AEGCL under various schemes and programs from FY 2019-20 to FY 2020-21 are overstated, considering their performance in the past years. Therefore, ABITA proposed an annual capex of Rs. 500 Cr for each year of the control period as well as for FY 2018-19 with funding of 90% in the form of grant and remaining from debt and assumed fresh capital investment undertaken in the 1st year, 2nd and 3rd year in the ratio of 30%, 40% and 30% respectively. ABITA requested the Commission to analyse the details of capital expenditure as it observed that the claims of AEGCL are generally high at the beginning of the year while the actual expenditure/capitalization is very low.

FINER requested the Commission to disapprove the additional claim of AEGCL under a new category of 'Other Civil Works' amounting to Rs 5.03 Cr, as the claim is not supported by any document.

FINER submitted that AEGCL may be directed to produce the updated Fixed Assets Register along with the Physical Completion Certificate (PCC) and Financial Completion Certificate (FCC), to show whether the capital expenditure has actually been put to proper use or not.

FINER observed that allowing Depreciation in true-up, without having an updated Fixed Assets register, shall put an unnecessary burden on the consumers.

ABITA submitted that the CWIP of AEGCL has been increasing over the past years and efforts as well as funds should be channelized towards completion of the ongoing works instead of initiation of new works. ABITA requested the Commission to direct AEGCL for prioritizing its various ongoing schemes which may yield the desired benefits as opposed to increasing the CWIP.

BGM submitted that the capital investments proposed to be undertaken through funds from ADB would boost the efficiency of AEGCL, resulting in reduction of transmission cost.

### **Response of AEGCL**

AEGCL submitted that the capital expenditure and capitalisation is projected on a practical scenario basis. AEGCL further submitted that the projected capitalisation will be achieved within the upcoming control period.

AEGCL submitted that Fixed Asset Register of AEGCL as on 31.03.14 has been updated and a Third party was deployed for physical verification. However, discrepancy was found between the data provided by the Third Party and the actual field data. AEGCL informed that a Committee has been formed to review the same and cross-verification of the same is being carried out.

AEGCL submitted that with new investments and capital expenditure, the CWIP tends to go up. AEGCL further submitted that the utility has been trying to complete the ongoing works on priority basis and the same has progressed extensively.

### **Commission's View**

The Commission has approved the CAPEX and Capitalisation for the MYT Control Period, as elaborated in Chapter 6 of this Order. AEGCL has been directed to prepare & maintain updated Fixed Assets Registers duly certified by Chartered Accountants so that these can be submitted to the Commission as and when asked during tariff proceedings.

### **Issue 3: Depreciation**

#### **Objection**

ABITA submitted that AEGCL has proposed very high capital expenditure as well as capitalization resulting in large amount of addition in GFA. ABITA observed that this has been done for claiming higher ARR parameters which are linked to addition of GFA i.e. depreciation, return on equity and interest on loans. ABITA requested the Commission to analyse the details of various schemes and approve CAPEX and Capitalization judiciously.

### **Response of AEGCL**

AEGCL noted that ABITA's computed depreciation for FY 2018-19 is higher than the depreciation submitted in Tariff Petition. AEGCL submitted that the capital investment plan covers the upcoming projects extensively with practical and realistic projection of capitalisation. AEGCL further submitted that the current projections are in line with the anticipated deadlines of project commissioning.

### **Commission's View**

The Commission has allowed depreciation in accordance with the MYT Regulations.

### **Issue 4: Interest and Finance Charges**

#### **Objections**

ABITA submitted that the higher Interest and Finance Charges proposed for FY 2018-19 are on the total loan balances, which is not in line with the provisions of the Tariff Regulations. The projections of interest and finance charges for subsequent Control Period are also overstated due to high capitalization projected by the Petitioner.

FINER submitted that the proposed Interest and Finance charges is higher than the amount approved for FY 2018-19, due to addition of normative loans since FY 2017-18, which has not been approved by the Commission. FINER requested the Commission to disallow any additional claim on account of Interest and Finance Charges.

#### **Response of AEGCL**

Replying to the submissions of FINER and ABITA, AEGCL submitted that the Interest and Finance charges for FY 2018-19 have been computed on normative basis. AEGCL highlighted that the Net normative opening loan computation in AEGCL tariff order dated 19.03.18 had certain gaps which have been rectified in this tariff petition. Hence, the resultant net normative opening loan for FY 2018-19 is Rs 232.13 Cr against Rs 71.08 Cr as approved in Tariff order dated 19.03.18.

#### **Commission's View**

The Commission has allowed the interest expenses in accordance with the MYT Regulations as discussed in the relevant Chapters of this order.

### **Issue 5: Interest on Working Capital**

#### **Objection:**

ABITA proposed revised interest on Working Capital of Rs 21.94 Cr, Rs 12.83 Cr, Rs 13.60 Cr and Rs 14.67 Cr for FY 2018-19, FY 2019-20, FY 2020-21 and FY 2021-22 respectively based on the revised estimates, against AEGCL's figures of Rs 28.82 Cr, Rs 15.40Cr, Rs 17.45 Cr and Rs 20.31 Cr respectively.

#### **Response of AEGCL**

AEGCL submitted that ABITA's comments on the above financial parameters are not in consonance with actual figures and should be overlooked.

#### **Commission's View**

The Commission has approved the IWC in accordance with the MYT Regulations, 2015 while truing up for FY 2017-18 & APR for FY 2018-19, and in accordance with the AERC MYT Regulations, 2018 for the MYT Control Period.

### **Issue 6: BST for Pension Trust Fund**

#### **Objections**

ABITA submitted that the consumer sales projected by APDCL is increasing at a rate of only 4% for FY 2018-19 and 6% from 2019-20 to FY 2021-22. However, the escalation rate used by AEGCL for projecting BST expenses is approximately 10%, which is substantially high.

#### **Response of AEGCL**

AEGCL disagreed with ABITA's comment pertaining to BST projection. AEGCL submitted that the BST projected is in-line with APDCL's consumer sales projection. Moreover, the revenue from BST is directly proportional to the consumer sales and shall be subjected to truing-up.

#### **Commission's views**

The Commission has noted the submissions.

## **Issue 7: Transmission Loss**

### **Objections:**

ABITA submitted that AEGCL has proposed a constant Transmission loss of 3.44% for the control period from FY 2019-20 to FY 2021-22, the same as approved by the Commission for FY 2018-19. The Transmission losses of various STUs are in the range of 2-3% while that of AEGCL would be amongst the highest in the country.

ABITA proposed a revised transmission loss trajectory for FY 2019-20 to FY 2021-22 with annual reduction of 0.10% in each year of the subsequent Control Period. ABITA requested the Commission to maintain the loss target for FY 2018-19 and approve further reduction in loss during the next Control Period. ABITA further requested that any incentive on account of achievement of transmission availability may be allowed only subject to achievement of transmission loss target in the future years.

FINER submitted that the estimated Transmission loss for FY 2018-19 is 3.55%, which is 0.11% higher than that approved by the Commission, despite adequate R&M expenses approved for the year. This increased estimated loss will result in supplementary 3 MU loss of energy in the system and should not be allowed.

FINER also submitted that AEGCL be directed to carry out system studies and energy audit for estimating the actual transmission loss level. FINER submitted that once the actual losses at 33 KV voltage and above are known, the Commission will also be able to fix a proper trajectory and consequences of non-fulfilment of the same.

### **Reply of AEGCL**

AEGCL submitted that the transmission loss of 3.54% in FY 2017-18 is at par with loss levels of other Utilities across India like MEPTCL (Meghalaya) - 4.67% , MSETCL (MH) -3.30% , RVPN (Rajasthan) - 3.37% , GETCO (Gujarat) - 3.85% , TS Transco (Telangana) -3.25% to 3.44% .

AEGCL further submitted that with ongoing schemes under "Saubhagya" scheme, there has been large scale increase in load in rural areas of the State, which has resulted in the consequent increase of reactive load leading to greater loss and low voltage profile. AEGCL submitted that capacitive compensation at 33 kV bus of the Grid Sub Station may not be possible immediately due to involvement of high expenditure.

AEGCL submitted that the pilot project for energy audit of AEGCL system has been initiated to determine the transmission loss. However, such an exercise of audit shall be more effective only when the SAMAST scheme is implemented.

AEGCL submitted that the incentive on account of achievement of transmission availability is based on the MYT Regulations, 2015. AEGCL further submitted that it is in the process of undertaking different schemes necessary to reduce the transmission loss in upcoming years.

#### **Commission's views**

The Commission noted the submissions made and have considered these while approving the transmission loss trajectory. AEGCL is being directed to take steps to carry out the Energy Audit during FY 2019-20 and submit the report with details of Transmission Losses along with the next Tariff Petition.

#### **Issue 8: Auditor's Report**

##### **Objection**

FINER requested that variations in some expenses and income of AEGCL and other issues like non-updating of asset registers, noted in the Independent auditors report for FY 2017-18, may be duly considered by the Commission while allowing true-up expenses.

##### **Response of AEGCL**

AEGCL submitted that Fixed Asset Register as on 31.03.14 has been updated and a Third party has been deployed for physical verification. However, discrepancy was found between the data provided by the Third Party and the actual field data. A Committee has been formed by AEGCL to review the same and cross-verification of the same is being carried out. AEGCL further submitted that action has already been taken to rectify the variations noted in Auditor's Report in the annual accounts of FY 2018-19.

##### **Commission's views**

The Commission has considered all the issues noted in the Auditor's Report.

### **Issue 9: Income Tax**

#### **Objection**

ABITA submitted that the claim of actual Income Tax amounting to Rs. 8.80 Cr. paid in FY 2017-18 on account of profit booked for the year is on account of higher ARR approved by the Commission for FY 2017-18 based on the submissions of AEGCL. ABITA requested the Commission to undertake prudence check of the ARR submissions and not to allow any excess Tariff to AEGCL.

#### **Response of AEGCL**

AEGCL submitted that it has not claimed any excess Tariff on account of Income Tax. AEGCL has claimed Rs. 8.80 Cr only on account of Income Tax which is actually paid by the company based on Audited Annual accounts.

#### **Commission's view**

The Commission has allowed Income tax in True-up in accordance with the MYT Regulations, 2015.

### **Issue 10: Incentives**

#### **Objection**

ABITA submitted that the proposed incentive of Rs 12 Cr. on Transmission Availability higher than 98.25% during FY 2017-18 should be disallowed, on account of the high transmission loss of 3.55% as against the approved loss of 3.48%. ABITA submitted that higher transmission loss results in higher power purchase requirement which ultimately is recovered from the consumers. ABITA, therefore, requested the Commission to disallow any incentive towards transmission availability in case AEGCL is unable to meet the transmission loss target.

#### **Response of AEGCL**

AEGCL submitted that it has claimed Incentive on Transmission Availability as per AERC MYT Regulations.

#### **Commission's view**

The Commission has allowed incentive in True-up in accordance with the MYT Regulations, 2015. The detailed ruling of the Commission is elaborated in Chapter 4.

## **Issue 11: Transmission Cost**

### **Objection**

BGM submitted that one of the primary reasons for high transmission tariff in the State is the high cost of transmission charges payable to PGCIL. BGM requested AERC to issue necessary advisories to the State Government to consider the points raised by them in their earlier petition 17/2017.

### **Reply of AEGCL (During Public Hearing)**

The matter regarding high PGCIL (POC) charges have been discussed extensively in different forums of the Commission in presence of representatives from the Power Department, Government of Assam. The Central Government has also displayed concern regarding high POC charges for few states and a Committee has been constituted to study the matter afresh. AEGCL and APDCL have also participated in the deliberations of the Committee and expressed their views.

### **Commission's view**

The Commission has already sent an advisory to the State Government in pursuance of the Order of the Commission in petition NO. 17/2017 of BGM. The response of the State Government is awaited.



## 4 Review of True-Up for FY 2016-17

### 4.1 Interest and Finance Charges for FY 2016-17

4.1.1 AEGCL submitted that the Commission had trued-up the Interest and Finance charges for FY 2016-17 in the Tariff Order dated March 19, 2018. AEGCL submitted that while doing so, the Commission had calculated the Normative Loan Outstanding as on April 1, 2016 by reducing the cumulative repayment as admitted by the Commission up to March 31, 2016 from the Gross Normative Loan. Consequently, the Commission had arrived at a negative net normative loan, leading to 'nil' Interest and Finance charges for FY2016-17.

4.1.2 However, AEGCL while carrying out the computations observed that the cumulative repayment, i.e., (net depreciation, excluding the depreciation for assets funded through grants, approved by the Commission in True-up Orders) is not Rs.603.30 Crore. AEGCL submitted that cumulative repayment for FY 2016-17 is Rs.225.03 crore, hence, the resulting Net Normative loan for FY 2016-17 is Rs. 255.57crore, as shown in the Table below:

**Table 5: Net Normative Loan for FY 2016-17 as submitted by AEGCL (Rs. Crore)**

Particulars	Order	AEGCL Submission
Gross Fixed Assets (a)	1544.59	1544.57
Gross Fixed Assets excluding Land (b)	1515.46	1515.45
Opening CWIP (c)	921.72	921.72
Grant (CWIP + Assets) (d)	1550.39	1550.39
Grant towards GFA (e=d*b/(b+c))	964.05	964.04
Equity (f)	99.93	99.93
Gross Normative Loan (g=a-e-f)	480.61	480.60
Less: Cumulative repayment (net depreciation, excluding the depreciation for assets funded through grants, approved by the Commission in True-up Orders) (h)	603.30	225.03
<b>Net Normative loan (i=g-h)</b>	<b>(122.69)</b>	<b>255.57</b>
Net Normative loan considered for FY 2016-17	0.00	255.57

4.1.3 AEGCL submitted that since, the actual Net Normative loan should be Rs. 255.57 crores as against 'Nil' approved in True-up of FY 2016-17, the Interest and Finance

charges for FY 2016-17 should have been allowed as Rs. 25.95 Crores as against 'Nil' approved by the Commission in the Tariff Order dated March 19, 2018, as shown in the Table below:

**Table 6: Interest and Finance Charges for FY 2016-17 as submitted by AEGCL (Rs. Crore)**

<b>Particulars</b>	<b>Order</b>	<b>AEGCL Submission</b>
Net Normative Opening Loan	-	255.57
Addition of Normative Loan during the Year	17.91	17.91
Normative Repayment during the Year	19.64	19.64
<b>Net Normative Closing Loan</b>	-	<b>253.84</b>
<b>Interest Rate</b>	<b>10.19%</b>	<b>10.19%</b>
<b>Interest Expenses on Loan</b>	-	<b>25.95</b>

4.1.4 AEGCL requested the Commission to admit and allow the Interest and Finance Charges of Rs.25.95 Crore in the consolidated ARR of FY 2019-20.

#### **Commission's Analysis**

4.1.5 The Commission sought clarification from AEGCL regarding the provisions of the Regulations under which AEGCL was seeking to review the Interest and Finance Charges allowed in the true-up for FY 2016-17, at this stage. In reply, AEGCL submitted that it was seeking relief under the inherent powers of the Commission as it was seeking to rectify an error in the earlier Order.

4.1.6 The Commission is of the view that, in case AEGCL felt that there was an error apparent in the Order, AEGCL should have approached the Commission for necessary relief through a Review Petition, within the prescribed timelines. The present Prayer of AEGCL appears to be an afterthought.

4.1.7 In spite of the above delay on the side of AEGCL, the Commission has analysed the submissions of AEGCL in this regard. The Commission is of the view that AEGCL is mixing up the issue. In the AERC Tariff Regulations, 2006, neither was there any linkage between depreciation and repayment of loans, nor was the interest expenses being allowed on a normative basis. The actual interest expenses were being allowed to be recovered after prudence check, and based on the actual repayment of loans as submitted by AEGCL and as reflected in the Audited Accounts.

4.1.8 As per the AERC MYT Regulations, 2015, Depreciation was considered as normative repayment of loans, and interest expenses were allowed on a normative basis only

from the Years starting from FY 2016-17.

4.1.9 Hence, in the true-up for FY 2016-17, the Commission considered the cumulative repayment already allowed by the Commission in the Orders for previous Years and did not consider the same as equivalent to the depreciation allowed in previous Years. As a result, the net normative opening loan for FY 2016-17 was negative, and was considered as 'Nil'. Thus, there is no error in the Interest and Finance Charges allowed in the true-up for FY 2016-17.

4.1.10 Accordingly, AEGCL's prayer in this regard is dismissed.

## 5 Truing up for FY 2017-18

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### 5.1 Methodology for Truing Up

- 5.1.1 The Commission had approved the ARR for the Control Period from FY 2016-17 to FY 2018-19 and Tariff for FY 2017-18 in the MYT Order dated March 31, 2017.
- 5.1.2 AEGCL submitted the Truing-up Petition for FY 2017-18 based on audited annual accounts and provisions of MYT Regulations, 2015, wherever applicable. AEGCL has sought true-up for FY 2017-18, with the Revenue Gap/(Surplus) to be recovered/adjusted during FY 2019-20.
- 5.1.3 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. The projections might vary over the course of the year.
- 5.1.4 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.
- 5.1.5 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.
- 5.1.6 In the present Chapter, the Commission has carried out the Truing up for FY 2017-18 based on the submissions of AEGCL, audited annual accounts for FY 2017-18 and provisions of MYT Regulations, 2015.
- 5.1.7 In this Chapter, the Commission has analyzed all the elements of actual expenditure and revenue of AEGCL for FY 2017-18, and undertaken the truing-up of expenses and revenue in accordance with 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.

## 5.2 Transmission Loss

5.2.1 AEGCL submitted the Transmission Loss of 3.55% for FY 2017-18 for the purpose the Truing up, as shown in the following Table:

**Table 7: Transmission Loss for FY 2017-18 as submitted by AEGCL**

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	Energy Injected (MU)	11395.00	8921.27
2	Energy Sent Out to APDCL & OA Consumers (MU)	10998.00	8318.43
3	Energy Sent Out to OA Consumers (MU)		286.44
4	Total Energy Sent Out	10998.00	8604.87
4	Transmission Loss (MU)	397.00	316.40
5	Transmission Loss (%)	3.49%	3.55%

### Commission's Analysis

5.2.2 The Commission has verified the Transmission loss through documentary evidences submitted by AEGCL. It is noted that the actual Transmission loss for FY 2017-18 is higher than the Transmission Losses approved by the Commission in the MYT Order dated March 31, 2017.

5.2.3 For the true-up, the Commission has considered the actual Transmission Loss of 3.55% for FY 2017-18, for the purpose of Energy Balance for APDCL. AEGCL is directed to maintain the transmission loss within the approved levels, in light of the significant capital expenditure proposed by AEGCL towards system strengthening.

## 5.3 Revenue from Operations

5.3.1 AEGCL has claimed Revenue of Rs. 1194.99 Crore for FY 2017-18 for Truing up purpose.

### Commission's Analysis

5.3.2 The Commission had approved net ARR of Rs. 1197.32 Crore for AEGCL and Rs. 2.60 crore for SLDC, for FY 2017-18 in the MYT Order dated March 31, 2017. During FY 2017-18, AEGCL billed APDCL based on the MYT Order dated March 31,

2017. The audited accounts for FY 2017-18 reflect the actual revenue of Rs. 1194.99 Crore.

**5.3.3 In view of the above, the Commission approves the actual revenue of Rs. 1194.99 Crore as per the audited accounts, for the Truing up for FY 2017-18.**

## **5.4 Non-Tariff Income**

5.4.1 The Commission had approved the Non-Tariff Income of Rs. 85.99 Crore for FY 2017-18 in the MYT Order dated March 31, 2017. Against this, AEGCL has claimed Non-Tariff Income of Rs. 195.76 Crore for FY 2017-18, after excluding the incentive component.

### **Commission's Analysis**

5.4.2 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. The incentive has not been considered as part of Non-Tariff Income, so that AEGCL is able to retain the incentive.

**5.4.3 In view of the above, the Commission approves the Non-Tariff Income at Rs. 193.63 Crore for FY 2017-18 as per the Audited Annual Accounts, for the purpose of truing up.**

## **5.5 PGCIL Charges**

5.5.1 AEGCL has claimed actual PGCIL Charges of Rs. 509.29 Crore for FY 2017-18, against PGCIL Charges of Rs. 534.55 Crore approved in the MYT Order dated March 31, 2017.

### **Commission's Analysis**

5.5.2 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 has 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. 509.29 Crore for FY 2017-18.

**5.5.3 Therefore, the Commission approves PGCIL Charges of Rs. 509.29 Crore for FY 2017-18 after truing up.**

## **5.6 O&M Expenses**

5.6.1 AEGCL submitted the O&M expenses for FY 2017-18 comprising 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:

### **5.6.2 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. 142.33 Crore towards employee expenses for FY 2017-18.

### **5.6.3 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 R&M expenses of Rs. 18.94 Crore for FY 2017-18.

### **5.6.4 Administrative and General (A&G) expenses**

A&G expenses comprise rents, telephone and other communication expenses, professional charges, conveyance and traveling allowances, other debits. AEGCL has claimed A&G expenses of Rs. 8.92 Crore for FY 2017-18.

## Commission's Analysis

- 5.6.5 The O&M Expenses for the Control Period for FY 2016-17 to FY 2018-19, was allowed in accordance with Regulation 68.9 of the MYT Regulations, 2015.
- 5.6.6 In accordance with the above Regulations, the Commission in the 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 8: Normative O&M Expenses for FY 2017-18 as submitted by AEGCL**

SI.No.	Particulars	Approved in MYT Order	AEGCL Submission
	<b>O&amp;M Expenses</b>	<b>175.96</b>	<b>170.20</b>
A	Employee Cost	152.25	142.33
B	R&M Expenses	16.26	18.94
C	A&G Expenses	7.45	8.92

- 5.6.7 While computing the normative R&M expenses for FY 2017-18, AEGCL has considered the 'k' factor as 1.20% based on the 'k' factor computed by AEGCL for the Control Period from FY 2019-20 to FY 2021-22, after factoring in the estimated cost to accomplish the unfinished R&M tasks for FY 2017-18.
- 5.6.8 For the purpose of truing up for FY 2017-18, the Commission has computed the O&M Expenses on normative basis as per Regulation 68 of the MYT Regulations, 2015. The 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.
- 5.6.9 For computation of normative employee expenses for FY 2017-18, the Commission has adopted the following approach:
- The employee expenses approved after True-up for FY 2016-17 have been considered as base expenses.
  - 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%
  - The 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 have been derived after deducting the employee expenses for SLDC from normative employee expenses.

5.6.10 The normative employee expenses approved in the true-up for FY 2017-18 are shown in the following Table:

**Table 9: Approved Employee Expenses for FY 2017-18 (Rs. Crore)**

Particulars		FY 2017-18
Actual Employee Expenses for the previous year	EMP <sub>n-1</sub>	140.73
Growth factor	G <sub>n</sub>	1.00%
CPI Inflation	CPI	5.35%
Employee expenses (excluding RoP)		149.74
Revision of Pay		15.49
<b>Normative Employee Expenses (excluding RoP)</b>		<b>149.74</b>
Employee expenses -Transmission		147.64
Employee expenses -SLDC		2.10

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

- a) WPI inflation has been computed as average increase of WPI index for period from FY 2014-15 to FY 2016-17, after excluding the negative WPI of FY 2015-16, which works out to 1.50%.
- 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 2017-18. 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 years has been considered. The Commission does not find merit in AEGCL's proposal of considering the 'k' factor computed on the basis of proposed works not taken up in the true-up for FY 2017-18.
- 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.

5.6.12 The normative R&M expenses approved for FY 2017-18 are shown in the following

Table:

**Table 10: 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 <sub>n-1</sub>	1,586.64
K Factor	K	1.01%
WPI Inflation	WPI	1.50%
R&M Expenses		16.24
AMC Cost for SCADA/EMS		
<b>Net Normative R&amp;M Expenses</b>		<b>16.24</b>
R&M Expenses - Transmission		16.19
R&M Expenses - SLDC		0.05

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

- The A&G expenses approved after True-up for FY 2016-17 have been considered as base expenses.
- WPI inflation has been computed as average increase of WPI index for period from FY 2014-15 to FY 2016-17, after excluding the negative WPI of FY 2015-16, which works out to 1.50%.
- 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.

5.6.14 The normative A&G expenses for FY 2017-18 are shown in the following Table:

**Table 11: Approved A&G Expenses for FY 2017-18 (Rs. Crore)**

Particulars		FY 2017-18
A&G Expenses for Previous Year	A&G <sub>n-1</sub>	9.35
WPI Inflation	WPI	1.50%
Provision	Provision	0.00%
<b>A&amp;G Expenses</b>		<b>9.49</b>
<b>Normative A&amp;G Expenses for the year</b>		<b>9.49</b>
A&G Expenses-Transmission		9.08
A&G Expenses-SLDC		0.41

5.6.15 The normative O&M expenses approved by the Commission for FY 2017-18 are shown in the following Table:

**Table 12: Normative O&M Expenses approved by Commission for FY 2017-18 (Rs. Crore)**

Sl. No.	Particulars	MYT Order	AEGCL	Approved after Truing up
1	Employee Expenses	154.58	142.33	147.64
2	Repairs and Maintenance Expenses	16.26	18.94	16.19
3	Administrative & General Expenses	7.45	8.92	9.08
<b>Total</b>		<b>178.29</b>	<b>170.20</b>	<b>172.91</b>

5.6.16 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.

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

**Table 13: Sharing of (gains)/losses for O&M Expenses for FY 2017-18 (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	147.31			-
2	Less: Terminal Benefits	24.29			-
3	Less: ROP Arrears	15.49			
4	Employee Cost excl. Terminal benefits & ROP Arrears	107.53	120.66	(13.14)	(4.38)
5	Repair & Maintenance	15.10	16.19	(1.09)	(0.36)
	Administrative & General Expenses	6.57	9.08	(2.51)	(0.84)
	SLDC Charges	2.56	2.56	-	-
6	<b>Total</b>	<b>131.75</b>	<b>148.49</b>	<b>(16.74)</b>	<b>(5.58)</b>

Note – \* - As per audited accounts

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

5.6.18 Since, normative O&M expenses are higher than actual expenses, the gain of Rs. 5.58

Crore has been shared and passed on through ARR.

## 5.7 SLDC Charges

5.7.1 AEGCL submitted the SLDC Charges of Rs. 2.56 Crore for FY 2017-18 against the approved charges of Rs. 2.60 Crore in the MYT Order. The SLDC Charges mainly comprise Employee expenses, R&M expenses and A&G Expenses.

### Commission's Analysis

5.7.2 The Commission approves the SLDC Charges of Rs. 2.56 Crore for FY 2017-18 as submitted by AEGCL, after truing up.

## 5.8 Capital Expenditure and Capitalisation

5.8.1 AEGCL submitted actual Capital Expenditure and Capitalisation for FY 2017-18 as shown in the following Table:

**Table 14: Actual Capital Expenditure and Capitalisation as submitted by AEGCL (Rs. Crore)**

Sl. No.	Particulars	Approved in MYT Order	Actual
1	Capital Expenditure	292.56	165.07
2	Capitalisation	303.79	55.93

5.8.2 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. 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 15: Funding of Capitalisation for FY 2017-18 as submitted by AEGCL (Rs. Crore)**

Sl. No.	Particulars	Approved in MYT Order	AEGCL Submission
1	Grant	201.44	55.93
2	Equity	6.74	-
3	Debt	95.61	-
4	<b>Total Capitalisation</b>	<b>303.79</b>	<b>55.93</b>

## Commission's Analysis

- 5.8.3 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 notes that the actual capital expenditure and capitalisation incurred in FY 2017-18 are much lower than the values approved in MYT Order dated March 31, 2017. The Commission sought the details of project-wise actual capital expenditure and capitalisation for FY 2017-18, which has not been submitted by AEGCL.
- 5.8.4 For the purpose of truing up, the Commission has considered the actual capital expenditure and capitalisation for FY 2017-18 based on the audited accounts. As regards the funding of capitalisation, the Commission has considered the actual funding as submitted by AEGCL.
- 5.8.5 In view of the above, the Capital Expenditure, capitalisation and its funding as approved by the Commission in the true-up for FY 2017-18 is shown in the following Table:

**Table 16: Capital Expenditure and Capitalisation for FY 2017-18 approved by Commission (Rs. Crore)**

Sr. No.	Particulars	MYT Order	AEGCL	Approved after Truing up
1	Capital Expenditure	185.16	165.07	165.07
2	Capitalisation	303.79	55.93	55.93
	<b>Funding of Capitalisation</b>			
3	Equity	6.74	0.00	0.00
4	Grant	201.44	55.93	55.93
5	Loan	95.61	0.00	0.00
6	<b>Total</b>	<b>303.79</b>	<b>55.93</b>	<b>55.93</b>

## 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 has claimed depreciation of Rs. 21.71 Crore for FY 2017-18 for the purpose of True-up.

## Commission's Analysis

- 5.9.2 The Commission has considered the opening GFA for FY 2017-18 as per the closing GFA value approved in True up of FY 2016-17 vide the Tariff Order dated March 19, 2018. The Commission has computed depreciation as per scheduled rates specified in the Tariff Regulations, 2015.
- 5.9.3 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.
- 5.9.4 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 2017-18.
- 5.9.5 The depreciation approved in the truing up for FY 2017-18 is given in the Table below:

**Table 17: Depreciation approved for FY 2017-18 (Rs. Crore)**

Sr. No.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation as per MYT Regulations, 2015
1	Land owned under full ownership	28.87	8.80	-	-
	Land under lease	0.30	-	3.34%	0.00
2	Building	30.52	3.68	3.34%	0.52
3	Hydraulic	2.64	-	5.28%	0.03
4	Other Civil Works	69.47	1.48	3.34%	2.34
5	Plant & Machinery	758.66	30.48	5.28%	36.88
6	Lines & Cable Net work	727.23	7.64	5.28%	17.49
7	Vehicles	4.68	0.22	9.50%	0.09
8	Furniture & Fixtures	3.82	0.26	6.33%	0.14
9	Office Equipment	2.49	0.58	6.33%	0.13
10	Grand Total	1,628.68	55.93		57.63
14	Less: Depreciation for Grants/ Consumer Contribution				37.79
15	<b>Net Total</b>				<b>19.84</b>

**5.9.6 The Commission accordingly approves Depreciation of Rs. 19.84 Crore for FY 2017-18 after truing up.**

## **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. 25.02 Crore for FY 2017-18 based on Audited Accounts.

### **Commission's Analysis**

5.10.2 The Commission has approved Interest on loan capital for FY 2017-18 on normative basis as per Regulation 35 of MYT Regulations, 2015. As per the above said Regulation, the Normative Loan Outstanding as on April 1,2017 is derived after reducing the cumulative repayment as admitted by the Commission up to March 31, 2017 from the Goss Normative Loan. Accordingly, the Commission has computed the net normative loan outstanding as on April 1, 2017.

5.10.3 The Commission has considered the opening 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 by the Commission in this Order. The loan repayment has been considered equivalent to depreciation approved in this Order.

5.10.4 As per MYT Regulations, 2015, weighted average rate of interest shall be computed based on 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. 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, 2017. Accordingly, weighted average interest rate has been computed as 10.19% for computation of interest on loan capital.

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

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

<b>Particulars</b>	<b>Approved after Truing up</b>
Net Normative Opening Loan	-
Addition of normative loan during the year	-
Normative Repayment during the year	19.84
Net Normative Closing Loan	-
Interest Rate	10.19%
Interest Expenses on Loan	-
Finance Charges	
<b>Total Interest and Finance Charges</b>	-

**5.10.6 The Commission considers Interest on loan Capital as NIL in the truing up for FY 2017-18.**

### **5.11 Return on Equity**

5.11.1 AEGCL has claimed the Return on Equity of Rs. 15.49 Crore for FY 2017-18 as compared to the RoE of Rs. 16.01 crore approved by the Commission in the MYT Order. AEGCL has considered no equity addition during FY 2017-18.

#### **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, which is Nil. Therefore, the approved Return on Equity at 15.50% is shown in the Table below:

**Table 19: Return on Equity approved by the Commission for FY 2017-18 (Rs. Crore)**

<b>Sr. No</b>	<b>Particulars</b>	<b>Approved after Truing up</b>
.		
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	<b>Return on Equity</b>	<b>15.49</b>

**5.11.3 The Commission approves the Return on Equity of Rs. 15.49 Crore for FY 2017-18 after Truing up.**



## 5.12 Interest on Working Capital (IoWC)

5.12.1 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. 27.52 Crore for FY 2017-18 for Truing up.

### 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 1<sup>st</sup>April of FY 2017-18 plus 350 basis points, i.e., 12.60%

5.12.3 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 2017-18 is shown in the following Table:

**Table 20: Interest on Working Capital for FY 2017-18 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	14.66	14.18	14.41
2	Maintenance spares @ 15% of O&M Expenses	26.40	25.53	25.94
3	Receivables for two months	145.87	178.68	199.17
4	Total Working Capital requirement	186.93	218.39	239.51
5	Rate of Interest	12.80%	12.60%	12.60%
6	<b>Interest on Working Capital</b>	<b>23.93</b>	<b>27.52</b>	<b>30.18</b>

5.12.4 Accordingly, the Commission approves Interest on Working Capital of Rs. 30.18 Crore for FY 2017-18 for the truing up.

## 5.13 Other Debits

5.13.1 AEGCL has claimed Other Debits of Rs.0.90 Crore for FY 2017-18 based on the Audited Accounts as against NIL approved in the MYT Order dated March 31, 2017.

### Commission's Analysis

5.13.2 The Commission has analysed the details and justification submitted by AEGCL for Other Debits for FY 2017-18. The Commission notes that Other Debits includes the expenses towards loss on obsolescence of stores, compensation for injuries, deaths

and damages to outsiders. The Commission is of view that these expenses are well within the control of AEGCL. Hence, the Commission has allowed only decommissioning cost under Other Debits for FY 2017-18.

5.13.3 Accordingly, the Commission considers Other Debits as Rs.0.01 Crore for FY 2017-18.

#### **5.14 BST for Pension Fund (Special Charges for Terminal Benefits)**

5.14.1 In the MYT Order dated March 31, 2017, the Commission had approved special charges on Bulk Supply Tariff at 20 paise per unit amounting to Rs. 181.52 Crore for FY 2017-18. AEGCL has claimed Rs. 172.10 Crore as BST for Pension Fund as per the audited annual accounts for FY 2017-18.

##### **Commission's Analysis**

5.14.2 The Commission approves the BST for Pension Fund (Special Charges for Terminal Benefits) of Rs. 172.10 Crore for FY 2017-18 as claimed by AEGCL based on audited accounts.

#### **5.15 Net Prior Period Expenses/(income)**

5.15.1 AEGCL has claimed net prior period expenses of Rs. 5.68 Crore for FY 2017-18, based on the Audited Accounts.

##### **Commission's Analysis**

5.15.2 The Commission has analysed the component-wise details and justification for Net Prior period expenses/(income) for FY 2017-18 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 for the year to which the expenses/(income) pertain.

5.15.3 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. Further, for controllable expenses such as R&M, A&G, etc, 1/3<sup>rd</sup> of AEGCL claim under prior period is considered as in earlier years, sharing of the gains/losses has been allowed, and for uncontrollable items such as Income Tax/refund of Income Tax, full prior period expense/income is considered.

5.15.4 The Net prior period expenses/(income) submitted by AEGCL and approved by the Commission for FY 2017-18, are shown in the following Table:

**Table 21: Net Prior Period expenses/(income) approved for FY 2017-18 (Rs. Crore)**

Sr. No.	Particulars	AEGCL's Submission (as per Accounts)	Approved after Truing up
	<b>Prior Period Expenses</b>		
1	Depreciation under provided in prior period	1.37	0.00
2	Other Expenses relating to prior period	8.14	3.09
	<i>Adjustment of excess Transmission Incentive bill relating to FY17</i>	5.05	0.00
	<i>Refund of penalties recovered from contractors during earlier years</i>	0.15	0.15
	<i>Adjustment of Income Tax bill for PGCIL related to FY17</i>	1.90	1.90
	<i>Adjustment of double credit of refund received from truing up of NERLDC during FY17</i>	1.01	1.01
	<i>Electricity charges paid to APDCL by Salakati GSS wrongly debited against "payable to APDCL" instead of "Expense Head" in FY16</i>	0.02	0.02
	<i>Refund of penalties recovered from contractors during FY17</i>	0.01	0.01
3	Interest & Other finance charges related to prior periods	0.08	0.00
4	Materials related expenses related to prior periods	0.11	0.00
	<b>Sub-total</b>	<b>9.70</b>	<b>3.09</b>
	<b>Prior Period Income</b>		
5	Excess provision for depreciation in prior period	0.01	0.00
6	Other Income relating to prior period	15.38	13.98
7	<b>Sub-total</b>	<b>15.39</b>	<b>13.98</b>
	<b>Net Prior Period Expenses/(Income)</b>	<b>(5.69)</b>	<b>(10.89)</b>

5.15.5 Accordingly, the Commission approves the Net Prior Period Income of Rs. 10.89 Crore for FY 2017-18 after Truing-up.

## 5.16 Income Tax

5.16.1 AEGCL has claimed an amount of Rs. 8.80 Crore towards Income Tax as per the

audited accounts for FY 2017-18.

### Commission's Analysis

5.16.2 The Commission has verified the actual Income Tax paid on the basis of Tax paid challans submitted by AEGCL and has hence, considered the Income Tax of Rs. 8.80 Crore for FY 2017-18.

### 5.17 Incentive for Transmission Availability

5.17.1 AEGCL has billed the amount of Rs12.10 Crore towards incentive for Transmission Availability higher than normative Availability as per MYT Regulations, 2015. AEGCL clarified that subsequently, based on Audit observations, a credit bill of Rs. 6.39 Crore has been issued to APDCL on this account.

### Commission's Analysis

5.17.2 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.

5.17.3 The actual Transmission Availability for AEGCL for FY 2017-18 is 99.75% 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 22: Incentive on Transmission Availability for FY 2017-18 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-17	30	61.00	97.77%	60.86	(0.14)
2	May-17	31	63.03	99.54%	63.70	0.67
3	Jun-17	30	61.00	99.71%	61.75	0.75
4	Jul-17	31	63.03	99.15%	63.45	0.42
5	Aug-17	31	63.03	99.15%	63.45	0.42
6	Sep-17	30	61.00	98.65%	61.09	0.09

Sr. No.	Month	No. of Days in Month	Monthly Transmission Charges	Actual Availability (%)	Transmission Charges inclusive of incentive	Incentive
7	Oct-17	31	63.03	99.00%	63.35	0.32
8	Nov-17	30	61.00	99.79%	61.77	0.77
9	Dec-17	31	63.03	99.86%	63.83	0.80
10	Jan-18	31	63.03	98.36%	63.03	-
11	Feb-18	28	56.93	97.40%	56.58	(0.35)
12	Mar-18	31	63.03	97.70%	62.84	(0.19)
	<b>Total</b>	<b>365</b>	<b>742.15</b>	<b>98.85%</b>	<b>745.70</b>	<b>3.55</b>

5.17.4 As regards the credit bill of Rs. 6.39 Crore issued by AEGCL to APDCL on this account, the Commission has not considered the incentive of Rs. 12.10 crore billed by AEGCL as income and hence, not considered the credit bill as a reduction in income.

**5.17.5 The Commission approves the Incentive of Rs. 3.55 Crore on account of higher Transmission Availability, which has been added to the ARR.**

## 5.18 ARR after Truing Up of FY 2017-18

5.18.1 Considering the above heads of expense and revenue as per the Audited Accounts for FY 2017-18 and after due prudence check, the net ARR and Revenue Gap/(Surplus) approved after true-up for FY 2017-18 is shown in the following Table:

**Table 23: ARR approved after Truing up for FY 2017-18 (Rs. Crore)**

Sl. No.	Particulars	Tariff Order	Proposed by AEGCL	Approved after truing up
1	PGCIL Charges	534.55	509.29	509.29
2	O&M Expenses	178.29	170.20	172.91
a	Employee Cost	154.58	142.33	147.64
b	R&M Expenses	16.26	18.94	16.19
c	A&G Expenses	7.45	8.92	9.08
4	SLDC Charges	2.60	2.56	2.56
5	Arrears of Revision of Pay			15.49
6	Depreciation	17.07	21.71	19.84
7	Interest & Finance Charges	9.41	25.02	-
8	Interest on Working Capital	23.93	27.52	30.18
9	BST for Pension Trust Fund	181.52	172.10	172.10
10	Return on Equity	16.01	15.49	15.49

Sl. No.	Particulars	Tariff Order	Proposed by AEGCL	Approved after truing up
11	Income Tax	-	8.80	8.80
12	Other debits (Excl. related to Int, Dep and O&M)	-	0.90	0.01
13	Net Prior period Charges/(Credits)	-	(5.68)	(10.89)
<b>14</b>	<b>Sub Total</b>	<b>963.38</b>	<b>947.90</b>	<b>935.78</b>
15	Less: Non-Tariff Income/ Other Income	85.99	195.76	193.63
16	Less: Expenses Capitalised	-	-	-
<b>17</b>	<b>Sub Total</b>	<b>877.39</b>	<b>752.14</b>	<b>742.15</b>
18	Incentive on Higher Availability		12.10	3.55
19	Sharing of (Gains)/Losses		(1.50)	(5.58)
<b>20</b>	<b>Aggregate Revenue Requirement</b>	<b>877.39</b>	<b>762.74</b>	<b>740.12</b>
21	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
22	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
23	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
24	Less: Transmission incentive credit bill raised to APDCL as per observation of AG Audit for the FY 2017-18		6.39	-
25	Add: Credit bill raised to APDCL for excess amount of Transmission surcharge billed to APDCL during FY 2017-18, as per observation of AG Audit for the FY 2017-18		37.31	37.31
26	Carrying Cost			
<b>27</b>	<b>Net Aggregate Revenue Requirement</b>	<b>1,197.32</b>	<b>1,113.59</b>	<b>1,097.36</b>
<b>28</b>	<b>Revenue with Approved Tariff</b>	<b>1,197.32</b>	<b>1,194.99</b>	<b>1,194.99</b>
<b>29</b>	<b>Revenue Gap /(Surplus) for FY 17-18</b>	<b>-</b>	<b>(81.40)</b>	<b>(97.63)</b>

**The Revenue Surplus of Rs. 97.63 Crore approved after truing up for FY 2017-18, with associated holding cost, has been considered for adjustment in the net ARR of APDCL during FY 2019-20.**

## 6 Annual Performance Review for FY 2018-19

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### 6.1 Methodology for Annual Performance Review

6.1.1 The Commission had approved the ARR for FY 2018-19 vide the Tariff Order dated March 19, 2018.

6.1.2 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)**

6.1.3 AEGCL submitted the Annual Performance Review (APR) Petition for FY 2018-19, supported by actual information available till September 2018 and estimated values for the next six months. AEGCL has sought APR for FY 2018-19, with the estimated Revenue Gap/(Surplus), to be recovered from APDCL.

6.1.4 However, from the above said Regulation, as amended in November 2017, it is clear that the main objective of APR is to compare the estimated performance for FY 2018-19 vis-à-vis approved forecast in the Tariff Order dated March 19, 2018. The Revenue Gap/(Surplus) arising out of APR for FY 2018-19 shall not be passed on to the beneficiaries, and the same shall be considered at the time of Truing-up only.

6.1.5 In the present Chapter, the Commission has analysed the submission of all the elements of ARR vis-à-vis approved values in the Tariff Order for FY 2018-19. The Commission has computed the Revenue Gap/(Surplus) as an indication of the

performance in FY 2018-19. 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 2018-19.

## 6.2 Transmission Loss

6.2.1 AEGCL submitted the Transmission Loss of 3.55% for FY 2018-19, as shown in the following Table:

**Table 24: Transmission Loss for FY 2018-19as submitted by AEGCL**

Sl.No.	Particulars	Approved in T.O. dtd 19.03.18	AEGCL Estimation
1	Energy Injected (MU)	10380.31	10167.60
2	Energy Sent Out to APDCL (MU)	9705.55	9490.00
3	Energy Sent Out to OA Consumers (MU)	317.67	317.00
4	Total Energy Sent Out	10023.22	9807.00
4	Transmission Loss (MU)	357.09	360.60
5	Transmission Loss (%)	3.44%	3.55%

### Commission's Analysis

6.2.2 It appears that the energy injected into the network is less than the energy injection approved in the Tariff Order dated March 19, 2018. The Commission observes that the Transmission Loss submitted by AEGCL is higher than the targeted losses approved in the Tariff Order dated March 19, 2018.

6.2.3 The Commission approves the Transmission Loss of 3.44% for FY 2018-19 in line with the Tariff Order, subject to prudence check at the time of Truing up.

## 6.3 Transmission Availability

6.3.1 AEGCL has submitted Transmission Availability for FY 2018-19 as 99.03%. Accordingly, AEGCL has also claimed Incentive of Rs. 5.67 Cr for FY 2018-19.

### Commission's Analysis

6.3.2 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.

- 6.3.3 AEGCL should strive for maintaining and improving its 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 Non-Tariff Income**

- 6.4.1 The Commission had approved the Non-Tariff Income at Rs. 100.17 Crore for FY 2018-19 in the Tariff Order dated March 19, 2018. As against this, AEGCL has submitted Non-Tariff Income of Rs. 99.41 Crore for FY 2018-19.

##### **Commission's Analysis**

- 6.4.2 The Commission provisionally considers Non-Tariff Income of Rs. 99.41 Crore, as submitted by AEGCL. The actual Non-Tariff income will be allowed at the time of truing up, subject to prudence check.

#### **6.5 PGCIL Charges**

- 6.5.1 AEGCL has submitted PGCIL Charges of Rs. 511.64 Crore for FY 2018-19, as against PGCIL charges of Rs. 526.33 Crore approved for FY 2018-19 in the Tariff Order dated March 19, 2018. AEGCL has projected the PGCIL charges for FY 2018-19, considering the actual bills received up to September, 2018, and projected the bills to be received against PGCIL Charges from October, 2018 to March, 2019.

##### **Commission's Analysis**

- 6.5.2 The Commission has considered the PGCIL charges for FY 2018-19 based on the actual bills received up to September, 2018, and projected the bills from October, 2018 to March, 2019 based on the average monthly PGCIL charges. However, the Commission will allow PGCIL Charges on actual basis based on the prudence check at the time of true up.
- 6.5.3 Therefore, the Commission provisionally considers PGCIL Charges of Rs.511.60 Crore for APR of FY 2018-19.

## **6.6 Operation and Maintenance Expenses**

6.6.1 AEGCL submitted that O&M expenses for FY 2018-19 have been computed on the basis of revised estimates for FY 2018-19 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:

### **6.6.2 Employee Expenses**

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 2018-19 based on actual salaries paid during first six months. For the next six months, it has been estimated based on the 2% increase on account of increase in DA from the month of Jan, 2019 onwards. The estimates include Rs. 22.45 crore being actual payment made on account of arrears due to ROP, 2017 for 18 months and Rs. 2.35 crore being the provision for arrear due to ROP, 2017 for remaining 2 months assumed to be paid in the month of Jan, 2019.

AEGCL has estimated the Employee Expenses of Rs. 170.94 Crore for FY 2018-19, including SLDC employee expenses of Rs. 2.74 crore.

### **6.6.3 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. The current infrastructure of transmission system is old and the majority of the assets has already lapsed their life. To maintain the assets in a more efficient way, AEGCL has been carrying out the repair and maintenance activities. Considering past trends, the expenditure for FY 2018-19 will increase due to presence of vintage assets, which require periodical and higher repairs. AEGCL has considered the actual R&M expenses incurred during first 6 months plus estimate for the next 6 months. AEGCL submitted that the R&M works on assets during H1 is minimal on account of monsoon.

AEGCL has estimated R&M expenses of Rs. 15.26 Crore for FY 2018-19, as against the R&M Expenses of Rs. 18.00 Crore approved in the Tariff Order dated March 19, 2018 including SLDC charges of Rs. 0.12 crore.

#### 6.6.4 A&G Expenses

AEGCL has considered the actual expenses incurred during 6 months plus estimated for 6 months. AEGCL has projected the A&G Expenses of Rs. 9.92 Crore for FY 2018-19, as against the A&G Expenses of Rs. 6.90 Crore for FY 2018-19 approved in the Tariff Order dated March 19, 2018, including SLDC Charges of Rs. 0.63 crore.

#### Commission's Analysis

6.6.5 The Commission has approved the O&M Expenses on normative basis in the Tariff Order 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.

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

- e) The normative employee expenses approved for FY 2017-18 have been considered as base expenses for FY 2018-19.
- f) CPI inflation has been computed as average increase of CPI for the period from FY 2015-16 to FY 2017-18, which works out to 4.28%.
- 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 have been derived after deducting the employee expenses for SLDC from normative employee expenses.

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

**Table 25: Approved Employee Expenses for FY 2018-19 (Rs. Crore)**

Particulars		APR FY 2018-19
Actual Employee Expenses for the previous year	$EMP_{n-1}$	149.74
Growth factor	$G_n$	1.00%
CPI Inflation	CPI	4.28%
Employee expenses (excluding RoP)		157.67
Revision of Pay		24.80
Normative Employee Expenses (excluding RoP)		157.67
Employee expenses -Transmission		155.48
Employee expenses -SLDC		2.19

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

- d) WPI inflation for computation of R&M Expenses works out to be 2.33% as per MYT Regulations, 2015, based on average increase of WPI for the period from FY 2016-17 to FY 2017-18, after excluding the negative WPI of FY 2015-16.
- 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 2018-19, 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 have been derived after deducting R&M expenses for SLDC from normative R&M expenses.

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

**Table 26: Approved R&M Expenses for FY 2018-19 (Rs. Crore)**

Particulars		APR FY 2018-19
Opening GFA for previous year		1,628.68
Closing GFA for previous year		1,681.83
Average GFA for previous year	GFA <sub>n-1</sub>	1,655.26
K Factor	K	1.01%
WPI Inflation	WPI	2.33%
<b>R&amp;M Expenses</b>		<b>17.08</b>
AMC Cost for SCADA/EMS		
<b>Net Normative R&amp;M Expenses</b>		<b>17.08</b>
R&M Expenses - Transmission		16.96
R&M Expenses - SLDC		0.12

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

- d) The normative A&G expenses approved for FY 2017-18 have been considered as base expenses for computation of normative A&G expenses for FY 2018-19.
- e) As discussed in earlier para, the Commission has considered the WPI inflation of 2.33%.
- 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.

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

Table:

**Table 27: Approved A&G Expenses for FY 2018-19 (Rs. Crore)**

Particulars		APR FY 2018-19
A&G Expenses for Previous Year	A&G <sub>n-1</sub>	9.49
WPI Inflation	WPI	2.33%
Provision	Provision	0.00%
A&G Expenses		9.71
Additional Expenses for the Control Period		-
Normative A&G Expenses for the year		9.71
A&G Expenses-Transmission		9.08
A&G Expenses-SLDC		0.63

6.6.12 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 time of Truing up.

6.6.13 In view of the above, the Commission provisionally considers the O&M expenses as shown in the following Table in the APR for FY 2018-19:

**Table 28: Approved O&M Expenses for FY 2018-19 (Rs. Crore)**

Particulars	Proposed by AEGCL	Approved for APR
<b>Total O&amp;M Expenses</b>	<b>195.36</b>	<b>181.52</b>
Employee Expenses	170.94	155.48
R&M Expenses	15.13	16.96
A&G Expenses	9.29	9.08

## 6.7 SLDC Charges

6.7.1 AEGCL submitted the SLDC Charges of Rs. 3.49 Crore for FY 2018-19 against the approved charges of Rs. 3.61 Crore.

### Commission's Analysis

6.7.2 The Commission provisionally considers the SLDC Charges of Rs. 2.94 Crore for APR of FY 2018-19 based on the O&M expenses of SLDC as included in the projected O&M expenses of the Transmission Business.

## 6.8 Capital Expenditure and Capitalisation

6.8.1 AEGCL submitted that the capitalisation for FY 2018-19 has been estimated as Rs. 140.67 crore based on 6 months actual addition of assets and estimated asset addition for the next 6 months. No infusion of equity has been considered other than equity capital allocated in the Opening Balance Sheets (OBS) of AEGCL. The funding of capitalisation has been considered as Rs. 61.46 crore and Rs. 79.21 crore of Grants and Loan, respectively.

### Commission's Analysis

6.8.2 The scheme-wise capital expenditure was approved by the Commission in the Tariff Order dated March 19, 2018. In the Tariff 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.

6.8.3 The Commission in Tariff Order dated March 19, 2018 had approved capitalisation of Rs. 135.09 Crore for FY 2018-19, against which AEGCL has proposed capitalisation of Rs. 140.67 Crore. As FY 2018-19 is almost completed, the Commission provisionally considers the Capitalisation submitted by AEGCL for APR of FY 2018-19.

6.8.4 The Commission has accepted the funding of capitalized works, as proposed by AEGCL, as shown in the following Table:

**Table 29: Funding of capitalised works for FY 2018-19 as considered by the Commission (Rs. Crore)**

Particulars	Approved for APR
Grant	61.46
Equity	0.00
Debt	79.21
<b>Total Capitalisation</b>	<b>140.67</b>

## 6.9 Depreciation

6.9.1 The Commission had approved the Depreciation of Rs. 26.29 Crore for FY 2018-19 in the Tariff Order dated March 19, 2018. As against this, AEGCL has claimed depreciation of Rs. 19.79 Crore for FY 2018-19 for APR.

6.9.2 AEGCL submitted that it has calculated Depreciation taking into consideration of

opening balance of assets and provisional capitalisation during FY 2018-19. AEGCL has not considered depreciation on assets created out of Grants.

### Commission's Analysis

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

6.9.4 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. The Commission has not considered the depreciation on assets funded through grants, consumer contribution or capital subsidy, for FY 2018-19.

6.9.5 The depreciation provisionally approved for FY 2018-19 in APR is given in the Table below:

**Table 30: 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 owned under full ownership	37.67	0.02	-	-
2	Land under lease	0.30	-	3.34%	0.00
3	Building	34.20	3.94	3.34%	0.64
4	Hydraulic	2.64	-	5.28%	-
5	Other Civil Works	70.95	10.90	3.34%	2.55
6	Plant & Machinery	789.14	64.07	5.28%	39.38
7	Lines & Cable Network	734.87	61.42	5.28%	19.31
8	Vehicles	4.90	-	9.50%	0.10
9	Furniture & Fixtures	4.08	0.11	6.33%	0.15
10	Office Equipment	3.07	0.21	6.33%	0.16
11	<b>Grand Total</b>	<b>1,681.83</b>	<b>140.67</b>		<b>62.29</b>
15	Less: Depreciation for Grants/ Consumer Contribution				40.96
	<b>Net Total</b>				<b>21.33</b>

6.9.6 The Commission provisionally approves Depreciation of Rs. 21.33 Crore in the APR for FY 2018-19.

## 6.10 Interest and Finance Charges

6.10.1 The Commission had approved Interest and Finance Charges of Rs. 7.01 crore for FY 2018-19 in the Tariff Order dated March 19, 2018. As against this, AEGCL has claimed Interest and finance Charges of Rs. 26.57 Crore for FY 2018-19.

### Commission's Analysis

6.10.2 The Commission in the Tariff Order dated March 19, 2018 had approved the Interest and Finance Charges of Rs. 7.01 Cr, on normative basis for FY 2018-19 as per Regulation 35 of MYT Regulations, 2015. The closing net normative loan for FY 2017-18 is considered as NIL as discussed in the earlier Chapter. Hence, the Commission has considered the net normative loan as on April 1, 2018 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.

6.10.3 As per MYT Regulations, 2015, weighted average rate of interest shall be computed based on actual outstanding loan as on April 1, 2018. The Commission sought details of outstanding loan as on April 1, 2018 along with documentary evidences. Accordingly, weighted average interest rate has been computed as 9.87% for computation of interest on loan capital.

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

**Table 31: Approved Interest on loan Capital for FY 2018-19 (Rs. Crore)**

Sr. No.	Particulars	Approved in T.O. dtd 19.03.18	AEGCL Submission	APR FY 2018-19
1	Net Normative Opening Loan	71.08	232.13	-
2	Addition of normative loan during the year	21.85	79.21	79.21
3	Normative Repayment during the year	26.29	19.79	21.33
4	Net Normative Closing Loan	66.64	291.55	57.87
5	Interest Rate	<b>10.18%</b>	<b>9.87%</b>	9.87%
<b>6</b>	<b>Interest Expenses</b>	7.01	26.02	<b>2.86</b>
7	Finance Charges		0.55	-
<b>8</b>	<b>Total Interest and Finance Charges</b>	<b>7.01</b>	<b>26.57</b>	<b>2.86</b>

6.10.5 The Commission provisionally considers Interest on loan Capital of Rs. 2.86 Crore in APR for FY 2018-19.



## 6.11 Return on Equity

6.11.1 The Commission approved the RoE of Rs. 16.86 Crore for FY 2018-19 in the Tariff Order dated March 19, 2018. As against this, AEGCL has claimed RoE of Rs. 15.49 Crore for FY 2018-19, calculated at 15.5% as specified in Regulation 34 of MYT Regulations 2015.

### Commission's Analysis

6.11.2 The Commission considers the Return on Equity in accordance with Regulation 34 of the MYT Regulations, 2015. As stated earlier, the Commission has considered zero addition of equity against capitalisation during FY 2018-19. Therefore, the approved RoE at 15.50% is shown in the Table below:

**Table 32: Return on Equity for FY 2018-19 approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	Approved for APR
1	Opening Equity Capital	99.93
2	Equity addition during the year	0.00
3	Closing Equity	99.93
5	Rate of Return on equity	15.50%
6	<b>Return on Equity</b>	<b>15.49</b>

6.11.3 Accordingly, the Commission considers RoE of Rs15.49 Crore in APR for FY 2018-19.

## 6.12 Interest on Working Capital (IoWC)

6.12.1 The Commission approved IoWC of Rs. 30.63 Crore for FY 2018-19 in the Tariff Order dated March 19, 2018. As against this, AEGCL has claimed IoWC of Rs. 28.82 Crore for FY 2018-19, calculated as specified in Regulation 37.2 of MYT Regulations 2015.

### Commission's Analysis

6.12.2 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 1<sup>st</sup> April, 2018 plus 350 basis points, i.e., 12.20%. For computation of working capital requirement, normative O&M expenses including ROP have been considered. Further, receivables have been considered equal to the revenue approved for FY 2018-19 in MYT Order. IoWC approved by the Commission for FY 2018-19 is shown in the following Table:

**Table 33: Interest on Working Capital for FY 2018-19 as approved by the Commission  
(Rs. Crore)**

<b>Sr. No</b>	<b>Particulars</b>	<b>AEGCL Submission</b>	<b>APR FY 2018-19</b>
1	O&M expenses for 1 month	16.28	15.13
2	Maintenance spares @ 15% of O&M Expenses	29.30	27.23
3	Receivables for two months	190.67	193.45
4	<b>Total Working Capital</b>	<b>236.25</b>	<b>235.80</b>
5	Rate of Interest	12.20%	12.20%
6	<b>Interest on Working Capital</b>	<b>28.82</b>	<b>28.77</b>

6.12.3 Accordingly, the Commission provisionally approves IoWC of Rs. 28.77 Crore in the APR for FY 2018-19.

### **6.13 BST for Pension Fund**

6.13.1 The Commission had approved BST for Pension fund at 20 paise per unit amounting to Rs. 187.22 Crore for FY 2018-19 in the MYT Order. AEGCL has claimed BST for Pension Fund of Rs. 189.80 Crore as per the estimated energy supplied to APDCL for FY 2018-19.

#### **Commission's Analysis**

6.13.2 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 34: Approved BST for Pension Fund for FY 2018-19 (Rs. Crore)**

<b>Particulars</b>	<b>FY 2018-19</b>
Energy transmitted to APDCL (MU)	9490
<b>BST for Pension Fund at 20 paise per unit</b>	<b>189.80</b>

### **6.14 Income Tax**

6.14.1 AEGCL has not claimed any amount towards Income Tax for FY 2018-19.

#### **Commission's Analysis**

6.14.2 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 2018-19, subject to prudence check.

## 6.15 Other Debits, Prior Period Expenses/(Income), and Incentive

6.15.1 AEGCL has considered Other Debits of Rs. 0.01 crore and Prior Period Income of Rs. 1.31 crore for FY 2018-19. AEGCL has also claimed incentive of Rs. 5.67 crore on projected higher Availability than normative Availability during FY 2018-19.

### Commission's Analysis

6.15.2 AEGCL has not provided any explanation for the Other Debits projected for FY 2018-19. Further, the Prior Period entries will get crystallised only after finalisation of Accounts for FY 2018-19, and cannot be considered at the time of APR. Also, the incentive on Transmission Availability can be computed only after the year is completed and needs to be certified by the SLDC, in order to be considered for incentive.

6.15.3 Hence, the Commission has not considered any Other Debits, Prior Period Expenses/(Income), and Incentive on Transmission Availability in the APR for FY 2018-19. The actual Other Debits, Prior Period Expenses/(Income), and Incentive on Transmission Availability, if any, shall be considered based on the documentary evidence submitted at the time of truing up of FY 2018-19, subject to prudence check.

## 6.16 ARR after Annual Performance Review of FY 2018-19

6.16.1 Considering the above heads of expense and revenue, the net ARR approved after APR for FY 2018-19 is shown in the following Table:

**Table 35: ARR approved after APR for FY 2018-19 (Rs. Crore)**

Sl. No	Particulars	Tariff Order dt. March 19, 2018	Proposed by AEGCL	Approved after APR
1	PGCIL Charges	526.33	511.64	511.60
2	O&M Expenses	183.79	195.36	181.52
a	Employee Cost	158.89	170.94	155.48
b	R&M Expenses	18.00	15.13	16.96

Sl. No	Particulars	Tariff Order dt. March 19, 2018	Proposed by AEGCL	Approved after APR
c	A&G Expenses	6.90	9.29	9.08
3	SLDC Charges	3.61	3.49	2.94
4	Arrears of Revision of Pay	25.30	-	24.80
5	Depreciation	26.29	19.79	21.33
6	Interest & Finance Charges	7.01	26.57	2.86
7	Interest on Working Capital	30.63	28.82	28.77
8	BST for Pension Trust Fund	187.22	189.80	189.80
9	Return on Equity	16.86	15.49	15.49
10	Income Tax	-	-	-
11	Other Debits	-	0.01	-
12	Net Prior period Charges/(Credits)	-	(1.31)	-
13	Less: Non-Tariff Income	100.17	99.41	99.41
14	Less: Expenses Capitalised	-	-	-
<b>15</b>	<b>Sub Total</b>	<b>906.86</b>	<b>890.24</b>	<b>879.69</b>
16	Incentive on Higher Availability		5.67	-
17	Aggregate Revenue Requirement	<b>906.86</b>	<b>895.91</b>	<b>879.69</b>
18	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	188.00	188.00	188.00
<b>19</b>	<b>Carrying Cost</b>	<b>65.77</b>	<b>65.77</b>	<b>65.77</b>
20	Net Aggregate Revenue Requirement	1,160.63	1,149.68	1,133.46
<b>21</b>	<b>Revenue with Approved Tariff</b>	<b>1,160.64</b>	<b>1,160.70</b>	<b>1,160.70</b>
<b>22</b>	<b>Revenue Gap /(Surplus) for FY 2018-19</b>	<b>(0.00)</b>	<b>(11.02)</b>	<b>(27.24)</b>

## 6.17 Revenue Gap/(Surplus) for FY 2018-19

6.17.1 AEGCL has claimed Revenue Surplus of Rs. 11.02 Crore after APR for FY 2018-19.

## Commission's Analysis

6.17.2 The Commission has computed the Revenue Gap/(Surplus) arising out of APR for FY 2018-19 as shown in the following Table:

**Table 36: Revenue Gap/(Surplus) after APR for FY 2018-19 (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Proposed by AEGCL</b>	<b>Approved after APR</b>
1	Net ARR	<b>1,149.68</b>	<b>1,133.46</b>
2	Revenue with Approved Tariff	1,160.70	1,160.70
3	Revenue Gap/(Surplus)	(11.02)	(27.24)

6.17.3 The APR reveals a surplus of Rs. 27.24 crore for FY 2018-19. It is only indicative, in the absence of Audited Annual Accounts for FY 2018-19. It will be considered during the Truing up process for FY 2018-19, after the Audited Annual Accounts are made available.

# 7 CAPITAL INVESTMENT PLAN OF AEGCL FOR FY 2019-20 TO FY 2021-22

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## 7.1 Capital Investment Plan of AEGCL

7.1.1 AEGCL has submitted the Capital Investment Plan (CIP) for the Control Period from FY 2019-20 to FY 2021-22 against various Projects grouped under the following major Schemes, viz.,

- a) ADB
- b) NERPSIP
- c) Annual Plan
- d) PSDF
- e) TDF
- f) NEC
- g) NLCPR
- h) Other Works

7.1.2 The Scheme Wise projects, year-wise capital expenditure and capitalization, mode of funding, and requirement of the project, as submitted by AEGCL are discussed in the following Sections, along with the Commission's analysis and approval.

## 7.2 Asian Development Bank (ADB) Scheme

7.2.1 AEGCL has proposed the following works under Assam Power Development Program, Phase -III with financial assistance from ADB to meet the demand under 24x7 Power for All:

- a) Capacity addition in transmission by construction of new transmission lines of voltage class 400kV, 220 kV and 132 kV;
- b) Evacuation of Power from State owned Generator, i.e., Lower Kopili Hydro Electric Project (120 MW), by upgradation of the nearest 132/33kV Shankardeb Nagar substation to 220kV with associated transmission lines from LKHEP;
- c) Communication System (Optical Ground Wire);
- d) Augmentation of Switching Scheme by converting existing Air Insulated Substation (AIS) to Gas Insulated Substations (GIS);
- e) Capacity augmentation of old and critical Transmission lines by High Temperature Low Sag (HTLS) conductors;
- f) 23 New Substations;

- g) New Transmission Lines to feed the 23 New Substations;
- h) Augmentation and Extension of existing substations to meet the projected peak demand and limit the transformer loading;
- i) Ongoing Project to convert Gohpur 132/33 kV Air Insulated Substation (AIS) to GIS
- j) Upcoming Projects under ADB

**Table 37: Summary of Capital Expenditure and Capitalisation projected by AEGCL against ADB Projects (Rs. Crore)**

Particulars	Project Cost	Capital Expenditure			Capitalisation		
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
New Substations	2627.12	1204.96	1096.36	325.80	-	-	1420.34
New Transmission Lines	1230.89	492.36	369.27	369.27	-	-	-
New Transmission lines (Missing Links)	43.45	13.04	13.04	17.38	-	-	37.78
Augmentation & Reconductoring	609.09	274.71	228.52	105.86	0.40	198.84	230.21
<b>Total</b>	<b>4510.56</b>	<b>1985.06</b>	<b>1707.19</b>	<b>818.31</b>	<b>0.40</b>	<b>198.84</b>	<b>1688.33</b>

**Table 38: Funding of ADB Projects as Proposed by AEGCL**

Particulars	Funding Pattern	Control Period			
		FY 2019-20	FY 2020-21	FY 2021-22	Total
<b>Capital Expenditure</b>					
Counterpart Funding	20%	400.30	341.40	163.70	905.40
<u>Remaining Part</u>					
Grant (ADB)	90%	1441.20	1229.20	589.20	3259.60
Debt (ADB)	10%	160.10	136.60	65.50	362.20
<b>Total Capex</b>		<b>2001.60</b>	<b>1707.20</b>	<b>818.40</b>	<b>4527.20</b>
<b>Capitalisation</b>					
Counterpart Funding	20%	22.20	39.80	337.70	399.70
<u>Remaining Part</u>					
Grant (ADB)	90%	80.00	143.20	1215.60	1438.70
Debt (ADB)	10%	8.90	15.90	135.10	159.90
<b>Total Capitalisation</b>		<b>111.10</b>	<b>198.90</b>	<b>1688.40</b>	<b>1998.30</b>

### 7.3 Power System Development Fund (PSDF)

7.3.1 The Ministry of Power (MoP) Government of India (GoI) sought project proposals from all the State Utilities and Central Utilities for Renovation and Up-gradation of the protection systems of their grid. Accordingly, AEGCL proposed and submitted a Detailed Project Report (DPR) to the GoI, which accorded sanction as grant under Power System Development Fund (PSDF).

**Table 39: Summary of PSDF Projects and Capitalization as projected by APDCL (Rs. Crore)**

Particulars	Capital Expenditure			Capitalisation		
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
R&U	79.00	-	-	73.40	15.80	-
R&U-BCU	1.00	-	-	4.50	0.20	-
<b>Total</b>	<b>80.00</b>	<b>-</b>	<b>-</b>	<b>77.90</b>	<b>16.00</b>	<b>-</b>

**Table 40: Funding of PSDF Projects as projected by APDCL (Rs. Crore)**

Capital Expenditure	Funding	FY 2019-20	FY 2020-21	FY 2021-22
GoI – PSDF	100%	80.0	-	-

### 7.4 Trade Development Fund (TDF)

7.4.1 AEGCL proposed the construction of 132/33 kV Barpeta substation with 132 kV S/C line on D/C tower from Barnagar, which also includes installation of PLCC equipment at both ends of the line for smooth operation and proper monitoring of the system. AEGCL also proposed the construction of the 132/33 kV Hatsingimari substation with 116 km of 132 kV S/C line on D/C tower from Agia.

**Table 41: Summary of TDF Projects and Capitalisation as projected by AEGCL (Rs. Crore)**

Particulars	Capital Expenditure			Capitalisation		
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
Barpeta SS	79.00	-	-	73.40	15.80	-
Hatsingimari SS	1.00	-	-	4.50	0.20	-
<b>Sub-Station Total</b>	<b>80.00</b>	<b>-</b>	<b>-</b>	<b>77.90</b>	<b>16.00</b>	<b>-</b>
Construction of 132 kV	7.82	-	-	21	-	-



Particulars	Capital Expenditure			Capitalisation		
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
S/C line on D/C tower from Salakati to APM						
Construction of 132 kV LILO from Dhaligaon Barnagar line	3.29	-	-	14.38	-	-
Construction of 132 kV S/C line on D/C tower from Agia to Hatsingimari (Package_A)	3.89	-	-	22.52	-	-
Construction of 132 kV S/C line on D/C tower from Agia to Hatsingimari (Package-B)	2.52	-	-	24.33	-	-
Construction of 132 kV S/C line on D/C tower from Hailakandi to Karimganj	5.25	3.15	-	-	12.34	-
<b>Transmission Lines Total</b>	<b>7.82</b>	<b>3.15</b>	<b>-</b>	<b>82.23</b>	<b>12.34</b>	<b>-</b>

**Table 42: Funding of TDF Projects as projected by AEGCL (Rs. Crore)**

Particulars	Funding	FY 2019-20	FY 2020-21	FY 2021-22
<b>Capital Expenditure</b>				
GoA- Grant	100%	41.80	3.20	-
<b>Capitalisation</b>				
GoA- Grant	100%	101.2	12.3	-

## 7.5 Annual Plan

7.5.1 AEGCL has proposed the following works under Annual Plan:

- Augmentation of 132 kV and 33 kV Buses of 132/33 kV Depota, Rowta, Barnagar and Chandrapur sub-stations from Strung Bus to Aluminium Tube Bus
- Augmentation of transformer capacity of 132/33 kV Dhemaji sub-station from 1x16 MVA + 1x10 MVA to 2x50 MVA.
- Augmentation of transformer capacity of 132/33 kV Rowta sub-station from 2x25 MVA to 2x50 MVA
- Augmentation of transformer capacity of 132/33 kV Sipajhar sub-station from 2x16 MVA to 2x50 MVA.

- e) 2nd Circuit stringing of 132kV, 10.268 KM long BTPS – Kokrajhar line on D/C tower with HTLS conductor.
- f) 2nd Circuit stringing of 132kV, 24.201 KM long Kokrajhar - Bilasipara line on D/C tower.
- g) 2nd Circuit Stringing of 132kV, 41.923 km long Samaguri – Khalaigaon (Nagaon) line on D/C tower
- h) 132/33 kV, 1x50 MVA transformer with switchyard equipment, etc., for Ghoramari sub-station.
- i) State support to execute the project under PSDF of the Govt. of India.
- j) State Govt support to execute the project under PSDF of the Govt. of India amounting to Rs. 13.08 Crore.
- k) Projects executed through Annual Plan Budgetary allocation for FY 2019-20
- l) Implementation of Integrated Information System in the form of Enterprise Resource Planning (ERP) system across the organization to ensure smooth operation through deployment of various resources (Man, Material, Machine, etc.) in effective manner under the funding mode of Annual Plan.

Estimated Project Cost:

- Project Management Consultant: Rs. 2.00 Crore
- ERP Implementation Cost: Rs. 30.00 Crore.

7.5.2 Projects proposed under Annual Plan for FY 2020-21 to FY 2021-22:

- a) Stringing of 2nd circuit of 132 kV Bilasipara and Gauripur.
- b) Conversion of ACSR conductor of 132 kV Nalkata - Dhemaji line by HTLS.
- c) Procurement of ERS (4 Nos.)
- d) Construction of 132 kV single circuit Hazo - Sualkuchi line.
- e) Construction of 132 kV Sualkuchi substations.
- f) Construction of 132 kV single circuit Teok – Gaurisagar line.

7.5.3 Currently, following projects of AEGCL are ongoing under Annual Plan:

- a) Augmentation of transformer capacity of 132/33 kV Silchar (Srikona) sub-station from 2x25 MVA to 2x40 MVA
- b) Augmentation of transformer capacity of 220/132 kV Sarusajai sub-station from 3x100 MVA to 2x200 MVA + 1x100 MVA.
- c) Procurement of two number 132/33 kV, 40 MVA transformers, fire fitting system and DG set for 132/33 kV on-going Azara sub-station with erection, testing & commissioning of the same as well as construction of fire protection wall.

- d) 132 kV line termination bays at BTPS and APM sub-stations for termination of 132 kV S/C BTPS – APM line on D/C tower.

**Table 43: Funding of Annual Plan Projects as projected by AEGCL (Rs. Crore)**

Particulars	Funding	FY 2019-20	FY 2020-21	FY 2021-22
<b>Capital Expenditure</b>				
GoA- Debt	100%	53.70	63.10	70.40
<b>Capitalisation</b>				
GoA- Debt	100%	27.80	83.20	62.20

## 7.6 NERPSIP

7.6.1 GOI sanctioned the “North Eastern Region Power System Improvement Project” (NERPSIP) on 01.12.2014 for six North Eastern Region States (Assam, Meghalaya, Manipur, Tripura, Nagaland and Mizoram) for strengthening of Intra-State Transmission and Distribution System. The Scheme is implemented as Central Sector Scheme through POWERGRID with completion schedule of 48 months from the date of release of 1st instalment of funds to PGCIL. The Implementation/Participation Agreement between Assam (AEGCL/APDCL) and PGCIL was signed on 29<sup>th</sup> May, 2015. The project is funded 50% through World Bank funds and 50% by Gol through MoP budget.

7.6.2 In the scope of NERPSIP-Assam, the following are being done by POWERGRID:

- a) Eleven (11) nos. of new EHV Sub stations of which three (3) will be GIS and rest will be AIS.
- b) Bay extension of Six (6) nos. of Substations at Dhemaji, Sonabil, Tinsukia, Rupai, Kahilipara and Kamakhya.
- c) Augmentation of two (2) existing sub stations at Samaguri and Dhaligaon.
- d) The scheme also involves Turnkey Tower Package at various locations.
- e) Approximately 740 km of OPGW including existing and new Transmission lines (216 km).
- f) Capacity Building and Institutional Strengthening of Assam electricity transmission and distribution scenario has been taken up.

**Table 44: Funding of NERPSIP Projects as projected by AEGCL (Rs. Crore)**

Particulars	Funding Pattern	FY 2019-20	FY 2020-21	FY 2021-22
<b>Capital Expenditure</b>				
Gol- Grant	50%	127.50	59.20	-
World Bank- Grant	50%	127.50	59.20	-
<b>Total</b>		<b>255.00</b>	<b>118.40</b>	<b>-</b>
<b>Capitalisation</b>				
Gol- Grant	50%	253.40	83.90	-
World Bank- Grant	50%	253.40	83.90	-
<b>Total</b>		<b>506.80</b>	<b>167.7-</b>	<b>-</b>

## 7.7 NEC

7.7.1 AEGCL has proposed the following works under NEC:

- a) Construction of 132 kV S/C North Lakhimpur – Silapather line on D/C tower (121 km long) with line terminal bays at North Lakhimpur and Silapather sub-stations.
- b) 132/33 KV, 1x50 MVA Mobile sub-station

**Table 45: Summary of Capital Expenditure and Capitalisation under NEC Projects as projected by AEGCL (Rs. Crore)**

Particulars	Capital Expenditure			Capitalisation		
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
Construction of 132 kV S/C North Lakhimpur – Silapather line on D/C tower	15.00	30.00	35.00	-	-	-
132/33 kV, 1x50 MVA Mobile Substation	8.00	15.07	-	-	23.07	-

**Table 46: Funding of NEC Projects as projected by AEGCL (Rs. Crore)**

Particulars	Funding	FY 2019-20	FY 2020-21	FY 2021-22
<b>Capital Expenditure</b>				
Gol- Grant	90%	20.70	40.60	31.50
GoA- Debt	10%	2.30	4.50	3.50

Particulars	Funding	FY 2019-20	FY 2020-21	FY 2021-22
<b>Total</b>		<b>23.00</b>	<b>45.10</b>	<b>35.00</b>
<b>Capitalisation</b>				
Gol- Grant	90%	-	20.80	-
GoA- Debt	10%	-	2.30	-
<b>Total</b>		<b>-</b>	<b>23.10</b>	<b>-</b>

## 7.8 Other Capital Projects

- Renovation of AEGCL Quarters for employees at a cost of Rs. 5.67 crore each in FY 2019-20 and FY 2020-21 at a debt:equity ratio of 70:30.
- Provision for Compound Wall at Sub-station and colony to prevent encroachment and theft of equipment at a cost of Rs. 5.10 crore each in FY 2019-20 and FY 2020-21, and Rs. 6.80 crore in FY 2021-22 at a debt:equity ratio of 70:30
- Provision for New Guest Houses at Substation locations at a cost of Rs. 2.40 crore each in FY 2019-20 and FY 2020-21, and Rs. 3.20 crore in FY 2021-22 at a debt:equity ratio of 70:30
- Provision for Colony Roads at a cost of Rs. 4.80 crore each in FY 2019-20 and FY 2020-21, and Rs. 6.40 crore in FY 2021-22 at a debt:equity ratio of 70:30
- Provision for Vehicles at Various Sites at a cost of Rs. 1.00 crore each in FY 2019-20 and FY 2020-21 at a debt:equity ratio of 70:30

## 7.9 Summary of Capital Expenditure and Capitalisation

7.9.1 The summary of scheme-wise Capital Expenditure and Capitalization projected by AEGCL for the Control Period is summarized in the Tables below:

**Table 47: Summary of Capital Expenditure and Capitalisation projected by AEGCL for Control Period (Rs. Crore)**

Scheme Name	FY 2019-20	FY 2020-21	FY 2021-22	Total
<b>Capital Expenditure</b>				
<b>ADB</b>	2001.69	1707.19	818.31	<b>4527.19</b>
<b>NERPSIP</b>	254.94	118.42	-	<b>373.37</b>
<b>Annual Plan</b>	53.65	63.10	70.40	<b>187.15</b>
<b>PSDF</b>	80.00	-	-	<b>80.00</b>
<b>TDF</b>	41.77	3.15	-	<b>44.92</b>
<b>NEC</b>	23.00	45.07	35.00	<b>103.07</b>

<b>Scheme Name</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>	<b>Total</b>
NLCPR	-	-	-	-
<b>Sub-total Projects</b>	2455.06	1936.93	923.71	<b>5315.70</b>
<b>Other Works</b>	19.92	19.92	17.00	<b>56.84</b>
<b>TOTAL AEGCL</b>	<b>2474.98</b>	<b>1956.85</b>	<b>940.71</b>	<b>5372.54</b>
<b>Capitalisation</b>				
ADB	111.09	198.84	1688.33	<b>1998.26</b>
NERPSIP	506.76	167.74	-	<b>674.49</b>
Annual Plan	27.83	83.16	62.21	<b>*173.20</b>
PSDF	77.90	16.00	-	<b>*93.90</b>
TDF	101.23	12.34	-	<b>113.57</b>
NEC		23.07	-	<b>*23.07</b>
NLCPR	-	-	-	<b>*0.00</b>
<b>Sub-total Projects</b>	824.81	501.15	1750.54	<b>*3076.50</b>
<b>Other Works</b>	19.92	19.92	17.00	<b>56.84</b>
<b>TOTAL AEGCL</b>	<b>844.73</b>	<b>521.07</b>	<b>1767.54</b>	<b>*3133.34</b>

**Note:** \* - Summation errors in AEGCL's Petition have been corrected

## **7.10 Capital Investment Plan approved by the Commission for FY 2019-20 to FY 2021-22**

7.10.1 The Commission while approving the capital expenditure and capitalization for FY 2017-18 and FY 2018-19 in the MYT Order dated March 31, 2017, had directed AEGCL to submit the scheme-wise/project-wise capital expenditure and capitalisation, along with funding details based on latest status of implementation of schemes, approvals received, funds arranged, orders placed, work commencement, timelines committed by contractor, etc., as compared to the schemes approved in the Business Plan for the Control Period from FY 2016-17 to FY 2018-19. However, such detailed scheme-wise information has not been submitted to the Commission.

7.10.2 The Commission also asked AEGCL to submit the Cost-Benefit-Analysis (CBA) of the Schemes/Projects proposed for the Control Period, so that a considered view could be taken on approving the Schemes. AEGCL submitted the following CBA for Projects under ADB Scheme:

**Table 48: Cost Benefit Analysis for ADB Schemes submitted by AEGCL**

<b>Particulars</b>	<b>Units</b>	<b>Amount</b>
Additional Energy handled per year at end of FY 2021-22	MU	4867
Peak Load Loss Reduction	MW	115.81
Energy Loss Reduction per year (at 0.56 Load Factor)	MU	568
O&M Charges	%	1
Salvage Value	%	10
Investment & Gross Return		
Total Project Cost	Rs. Crore	3977.07
Total benefit due to additional sale of energy	Rs. Crore	316.36
Total benefit due to reduction of technical losses	Rs. Crore	369.20
Gross Return per year after implementation	Rs. Crore	685.56
Internal Rate of Return (IRR)	%	15.48%

7.10.3 The Commission has not attempted to verify the computations submitted by AEGCL as regards additional energy handled and annual loss reduction. However, it is noted that AEGCL has provided the CBA for all ADB Schemes as a group. In other words, the above-stated benefits will be achieved as per AEGCL, only if all the Projects proposed under ADB Scheme are approved and taken up, and if some Projects are not approved/taken up, then the benefits may not be achieved. The Commission is of the view that such presentation of CBA cannot be used, as a decision has to be taken on the need and benefit of each and every Project, rather than the Scheme as a whole.

7.10.4 The Commission has analysed the details of different Schemes proposed by AEGCL for the Control Period from FY 2019-20 to FY 201-22, and observes as under:

- a) Some of the Schemes proposed by APDCL are ongoing Schemes;
- b) Most of the Schemes are Central Government Schemes, viz., NERPSIP, PSDF, TDF, and NEC, or State Government Schemes, viz., State Annual Plan;
- c) All the above Schemes are intended to strengthening the transmission network, facilitate evacuation of power, improvement of the quality of supply, etc.;
- d) Most of the Schemes are either 100% Grant funded or 90% Grant funded, and the funds have been tied-up for all the ongoing Schemes;
- e) The ADB Scheme is the largest Scheme, but the DPR is yet to be even forwarded to ADB for approval, and thus, the funds tie-up will take significant amount of time.

7.10.5 In view of the above, the Commission provisionally approves the Scheme-wise Capital Investment Plan as proposed by AEGCL, and summarised in the Table below:

**Table 49: Capital Investment Plan provisionally approved by the Commission for the Control Period for AEGCL (Rs Crore)**

<b>Scheme Name</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>	<b>Total</b>
<b>Capital Expenditure</b>				
ADB	2001.69	1707.19	818.31	<b>4527.19</b>
NERPSIP	254.94	118.42	-	<b>373.37</b>
Annual Plan	53.65	63.10	70.40	<b>187.15</b>
PSDF	80.00	-	-	<b>80.00</b>
TDF	41.77	3.15	-	<b>44.92</b>
NEC	23.00	45.07	35.00	<b>103.07</b>
NLCPR	-	-	-	-
<b>Sub-total Projects</b>	<b>2455.06</b>	<b>1936.93</b>	<b>923.71</b>	<b>5315.70</b>
<b>Other Works</b>	<b>19.92</b>	<b>19.92</b>	<b>17.00</b>	<b>56.84</b>
<b>TOTAL AEGCL</b>	<b>2474.98</b>	<b>1956.85</b>	<b>940.71</b>	<b>5372.54</b>

7.10.6 AEGCL is directed to maintain database on the individual Projects under each Scheme with the following details:

- a) Details/Scope of Project including activities, area covered, etc.;
- b) Start date of Project;
- c) Scheduled completion date of Project;
- d) Funding Plan;
- e) Cost-Benefit-Analysis of the Project
- f) Present Status of Project, indicating physical progress in percentage terms and in monetary terms;
- g) Status of Capitalisation as per Field Reports and as per Accounts;
- h) Whether the intended benefits of the Project have been achieved, etc.

7.10.7 Maintenance of such project-wise database will help AEGCL track the progress of the Project during execution as well as ensure that the Capitalisation as per Accounts tallies with the asset being physically put to use. AEGCL should submit such Project-wise data to the Commission at the time of true-up for each Year, for the Projects that have been capitalised during that Year. AEGCL should also justify the Projects proposed to be capitalised in the ensuing Year based on the above database.



## 7.11 Capitalisation approved by the Commission for FY 2019-20 to FY 2021-22

7.11.1 During the TVS, the Commission asked AEGCL to submit the latest status of implementation of projects/schemes, approvals received, funds arranged, orders placed, work commencement, timelines committed by contractor, etc. However, AEGCL has not been able to substantiate the significantly high Capital Expenditure and Capitalisation projected for the Control Period based on latest status.

7.11.2 It is noted that however, the actual capital expenditure and capitalisation are both significantly lower than that originally proposed by AEGCL in its respective Business Plan/Tariff Petitions. This shows that AEGCL has been generally projecting much higher capital expenditure and capitalisation than that actually achieved/achievable, which needs to be borne in mind, while approving the capital expenditure and capitalisation for the Control Period from FY 2019-20 to FY 2021-22.

7.11.3 The comparison of proposed vs. approved vs. actual capital expenditure and capitalisation over the period from FY 2012-13 to FY 2017-18 is shown in the Table below:

**Table 50: Actual Capital Expenditure and Capitalisation achieved by AEGCL from FY 2012-13 to FY 2017-18 (Rs. Crore)**

Particulars	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
<b>Capital Expenditure</b>						
Proposed by AEGCL in Business Plan/ Tariff Petition	255.96	272.30	1248.60	429.83	371.72	376.87
Approved in respective Order	255.96	272.30	263.57	429.83	65.75	165.07
Actual						
<b>Capitalisation</b>						
Proposed by AEGCL in Business Plan/ Tariff Petition	103.42	278.14	291.80	429.83	388.47	307.50
Approved in respective Order	103.42	60.26	84.11	198.79	82.36	303.79
Actual	21.22	60.26	83.86	191.09	84.09	55.93

7.11.4 From the above Table, it is seen that the average Capitalisation achieved over this period is Rs. 95 crore, with the maximum capitalisation of Rs. 191 crore being achieved in FY 2015-16, and a minimum capitalisation of Rs. 55.93 crore. The average Capitalisation over the recent three-year period from FY 2015-16 to FY 2017-18 amounts to Rs. 110 crore. The average Capital Expenditure over the same period

works out to Rs. 177 crore.

7.11.5 The Commission observes that there appears to be a disconnect in the Accounting of the capital expenditure and capitalisation, as many times, the asset may be physically completed and electrically charged, but due to some minor accounting related issues, the asset is unable to be capitalised in the Accounts of APDCL. As a result, the tariff recovery for such assets is delayed, even though the asset is functional and has been put to use for the benefit of the consumers.

7.11.6 AEGCL should seriously investigate this matter and initiate measures to complete the capitalisation as per accounts at the earliest, for schemes that have commenced quite some time ago. If this is done, the amount of CWIP is likely to reduce significantly and the amount of GFA shall increase correspondingly.

7.11.7 Against the above background, the capital expenditure proposed by AEGCL for each year of the Control Period at Rs. 2475 crore, Rs. 1957 crore, and Rs. 941 crore, and proposed capitalisation of Rs. 845 crore, Rs. 521 crore, and Rs. 1768 crore appear unrealistic.

7.11.8 The Commission has hence, approved Capital Expenditure and Capitalisation for the Control Period, for the purpose of approval of ARR and Transmission Tariff, based on information regarding latest status of works and past trends of capital expenditure of AEGCL.

7.11.9 Accordingly, the Commission has considered average annual Capital Expenditure of Rs. 175 crore and average annual Capitalisation of Rs. 140 crore, for the purpose of determination of ARR and Transmission Tariff, as shown in the Table below:

**Table 51: Capital Expenditure and capitalisation approved by the Commission for the Control Period (Rs. Crore)**

<b>Particulars</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Capital Expenditure	175.00	175.00	175.00
<b>Capitalisation</b>	<b>140.00</b>	<b>140.00</b>	<b>140.00</b>

7.11.10 The Commission clarifies that the approach adopted by the Commission does not bar AEGCL from implementing the schemes as approved in the Capital Investment Plan for the Control Period from FY 2019-20 to FY 2021-22. In case AEGCL achieves higher Capital Expenditure and Capitalisation, the same may be submitted at the time

of truing up for the respective year.

7.11.11 The Commission has considered the funding of capitalisation in the same ratio as proposed by AEGCL, i.e., Grant funding has been considered as 79%, 67%, and 69% of the assets added in FY 2019-20, FY 2020-21, and FY 2021-22, respectively. The balance has been considered to be funded by loans, and no equity addition has been considered.

7.11.12 The funding of capitalised works as approved by the Commission is shown in the following Table:

**Table 52: Funding of Capitalisation approved by the Commission for the Control Period (Rs. Crore)**

<b>Particulars</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Grant/Consumer Contribution	110.15	93.41	96.28
Equity	0.00	0.00	0.00
Debt	29.85	46.59	43.72
<b>Total Capitalisation</b>	<b>140.00</b>	<b>140.00</b>	<b>140.00</b>

Therefore, the Commission approves Capitalisation of Rs. 140 crore for each Year of the Control Period.

AEGCL is directed to submit the necessary detail as identified in para 7.11.6 above for all ongoing projects at the time of true-up and Tariff for ensuing year. Further, for all Projects that have not commenced by March 31, 2019, AEGCL shall obtain the Commission's prior approval based on the necessary detail as identified in para 7.11.6, even if in-principle approval has been received.

## 8 ARR for AEGCL for the MYT Control Period from FY 2019-20 to FY 2021-22

### 8.1 Introduction

8.1.1 This Chapter deals with the approval of ARR of AEGCL for the MYT Control Period from FY 2019-20 to FY 2021-22 in accordance with the provisions of MYT Regulations, 2018.

### 8.2 Transmission Loss

8.2.1 AEGCL has projected the Transmission Loss for FY 2019-20 to FY 2021-22, as detailed in the Table below:

**Table 53: Transmission Losses Projected by AEGCL for FY 2019-20 to 2021-22**

Sl.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Energy Injected (MU)	10772.58	11438.49	12158.25
2	Energy Sent Out to APDCL (MU)	10069.00	10695.00	11372.00
3	Energy Sent Out to OA Consumers (MU)	333.00	350.00	368.00
4	Total Energy Sent Out (MU)	10402.00	11045.00	11740.00
4	Transmission Loss (MU)	370.58	393.49	418.25
5	Transmission Loss (%)	3.44%	3.44%	3.44%

#### Commission's Analysis

8.2.2 The Commission in the MYT Order dated March 31, 2017, had approved the Transmission Loss trajectory after considering reduction of 0.05% each year. AEGCL has planned several Capital Projects towards system strengthening and loss reduction, etc., which have been approved by the Commission. Hence, the Commission while approving the Transmission Loss trajectory for the Control Period from FY 2019-20 to FY2021-22, has adopted the same principle of reduction of 0.05% in each year, over the Transmission Loss level approved for FY 2018-19 in the Tariff Order dated March 19, 2018.

8.2.3 Accordingly, the Commission has approved the loss trajectory below:

**Table 54: Transmission Losses Approved for FY 2019-20 to 2021-22**

<b>Sl.</b>	<b>Particulars</b>	<b>FY 19-20</b>	<b>FY 20-21</b>	<b>FY 21-22</b>
1	<b>Transmission Loss</b>	3.39%	3.34%	3.29%

### **8.3 Transmission Availability**

8.3.1 AEGCL has projected the Transmission Availability of 99.50% for the Control Period from FY 2019-20 to FY 2021-22.

#### **Commission's Analysis**

8.3.2 Regulation 65 of the MYT Regulations, 2018 specifies the 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 69 of the MYT Regulations, 2018.

8.3.3 The Commission notes that AEGCL has projected the trajectory of Transmission Availability higher than Normative Transmission Availability as specified in MYT Regulations, 2018. The computation of incentive/disincentive on account of Transmission Availability shall be undertaken at the time of truing up for each year of the Control Period in line with the MYT Regulations, 2018.

### **8.4 Operation and Maintenance Expenses**

8.4.1 AEGCL submitted that O&M expenses for FY 2019-20 to FY 2021-22 have been computed on the basis of revised estimates for FY 2018-19 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:

#### **8.4.2 Inflation Indices**

8.4.3 AEGCL submitted that the average increase in the WPI for the immediately preceding three years gives the WPI for the Base year. Since the WPI data is currently available

till FY 2017-18, the Inflation factor could be computed till FY 2018-19. Hence, the resulting average WPI of 0.33% has been considered for projecting the O&M expenses for the Control Period.

- 8.4.4 AEGCL submitted that the average increase in the CPI for the immediately preceding three years gives the CPI for the base year. Since the CPI data is currently available till FY 2017-18, the Inflation factor could be computed till FY 2018-19. Hence the resulting average CPI of 4.28% has been considered for projecting the O&M expenses for the Control Period.

#### **Employee Expenses**

- 8.4.5 AEGCL submitted that the base employee cost of FY 2018-19 has been computed after considering the impact of ROP. AEGCL submitted that it has been facing acute shortage of manpower in H.O. as well as field offices. AEGCL identified the Technical Department and Finance & Accounts Department as having a shortage of manpower. AEGCL submitted that the working strength at the beginning of FY 2018-19 was only 1649 employees as against total sanctioned strength of 3230 employees, i.e., around 50% employee strength. In order to mitigate the difficulties arising out of insufficient number of employees, AEGCL has initiated the process of recruitment to fill the vacant positions, and shall be incurring additional cost on account of the rapid recruitment which has been initiated. AEGCL projected the phased recruitment of around two hundred employees spread through the Control Period, resulting in an employee strength of 1,855 employees at the end of FY 2021-22, which translates into an annual Growth Factor 'G<sub>n</sub>' of 2.99%. AEGCL has considered this Growth Factor to project the employee expenses for the Control Period.
- 8.4.6 AEGCL has accordingly projected the normative employee expenses for the Control Period as Rs. 181.18 crore, Rs. 194.58 crore, and Rs. 208.98 crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively.

#### **R&M Expenses**

- 8.4.7 AEGCL submitted that R&M expenses are directly related to number of the substation and lines, age of the assets, its wear and tear during the period.
- 8.4.8 AEGCL submitted that the approved and actual R&M expenses for FY 2017-18 are Rs. 16.26 crore and Rs. 15.15 crore, respectively. However, several maintenance works were not undertaken on account of shortage of funds. Impending Civil Works constitute a major part of unfinished R&M tasks. AEGCL submitted that had the funds been available without financial constraints, all the necessary R&M tasks would have

been accomplished at an additional expense of Rs. 4.35 crore. Hence, considering the ground realities and operational issues faced by AEGCL pertaining to R&M of its assets, AEGCL proposed a 'k' factor of 1.2 for the Control Period.

- 8.4.9 AEGCL has accordingly projected the normative R&M expenses for the Control Period as Rs. 20.77 crore, Rs. 26.67 crore, and Rs. 34.86 crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively.

#### **A&G Expenses**

- 8.4.10 AEGCL submitted that the upcoming Control Period shall witness additional A&G expenses under new heads of expenses, viz., SBI CPPC Charges for handling the Pension Fund, Pilot Project expenses for carrying out Energy Audit, and Consultancy Charges for Tariff-Regulatory and other matters. AEGCL projected additional A&G expenses on these heads as Rs. 1.97 crore, Rs. 1.52 crore, and Rs. 1.57 crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively. AEGCL added that, considering the projected future expansion of the network, servicing new areas and offices to cater to the new areas and Investment in up gradation of technology, various components of A&G expenses such as insurance, technical fees, license and Registration fees, vehicle expenses, electricity and water charges to office and various other incidental and miscellaneous expenses shall increase accordingly.

- 8.4.11 AEGCL has accordingly projected the normative A&G expenses for the Control Period as Rs. 10.90 crore, Rs. 10.94 crore, and Rs. 10.97 crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively.

#### **Expenses towards Training and Capacity Building**

- 8.4.12 AEGCL submitted that training of manpower is required in order to achieve operational effectiveness along with accident free workplace, given the technological changes. AEGCL proposes to conduct technology and safety training workshops at regular intervals.

- 8.4.13 AEGCL estimated the cost of the Training Workshops as Rs. 2 crore, and requested the Commission to allow the Training and Capacity Building expenses under a separate head in the Tariff Order.

#### **Commission's Analysis**

- 8.4.14 The Commission has computed the O&M Expenses for the Control Period on normative basis as per Regulation 66.6 of MYT Regulations, 2018. 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 10 of MYT Regulations, 2018 at the time of truing up for respective year.

8.4.15 For computation of employee expenses for Control Period, the Commission has adopted the following approach:

- a) The actual employee expenses for FY 2017-18 have been considered as base expenses, after deducting the ROP arrears of previous years paid out in FY 2017-18, and after factoring in the impact of ROP on base salary.
- b) CPI inflation has been computed as average increase of CPI for the period from FY 2016-17 to to FY 2018-19 (upto December, 2018),, which works out to 3.77%.
- c) Considering the projected expansion of transmission network and projected increase in number of employees over the Control Period, growth factor of 1% has been considered.

8.4.16 The normative employee expenses approved for the Control Period are shown in the following Table:

**Table 55: Approved Employee Expenses for Control Period (Rs. Crore)**

Particulars		FY 2019-20	FY 2020-21	FY 2021-22
Actual Employee Expenses for the previous year	EMP <sub>n-1</sub>	155.48	162.96	170.81
Growth factor	G <sub>n</sub>	1.00%	1.00%	1.00%
CPI Inflation	CPI	3.77%	3.77%	3.77%
<b>Normative Employee Expenses</b>		<b>162.96</b>	<b>170.81</b>	<b>179.02</b>

8.4.17 For computation of R&M Expenses for the Control Period, the Commission has considered the following approach:

- a) WPI inflation has been computed as average increase of WPI for the period from FY 2016-17 to FY 2018-19 (upto December, 2018), which works out to 3.00%
- 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 2016-17 to FY 2018-19. It is to be noted that, K-factor cannot be computed based on anticipated expenditure, as proposed by AEGCL. The K-factor for the Control Period has been considered as average of K-factor computed for FY 2016-17 to FY 2018-19,as shown in the following Table:



**Table 56: Computation of K-factor for Control Period (Rs. Crore)**

Sr. No.	Particular	FY 2016-17	FY 2017-18	FY 2018-19
1	R&M Expenses	14.71	16.24	17.08
2	Opening GFA	1,544.59	1,628.68	1,681.83
3	Closing GFA	1,628.68	1,681.83	1,822.50
4	Average GFA	1,586.64	1,655.26	1,752.16
5	k-Factor	0.93%	0.98%	0.97%
6	K-Factor for Control Period	0.96%		

- c) Since, K-factor has been computed on the basis of average GFA, for projection of R&M expenses for the Control Period, average GFA for previous years has been considered.

8.4.18 The normative R&M expenses approved for the Control Period are shown in the following Table:

**Table 57: Approved R&M Expenses for Control Period (Rs. Crore)**

Particulars		FY 2019-20	FY 2020-21	FY 2021-22
Opening GFA for previous year		1,676.82	1,817.49	1,957.49
Closing GFA for previous year		1,817.49	1,957.49	2,097.49
Average GFA for previous year	$GFA_{n-1}$	1,747.16	1,887.49	2,027.49
K Factor	K	0.96%	0.96%	0.96%
WPI Inflation	WPI	3.00%	3.00%	3.00%
<b>R&amp;M Expenses</b>		<b>17.29</b>	<b>18.68</b>	<b>20.07</b>

8.4.19 For computation of A&G expenses for the Control Period, the Commission has adopted the following approach:

- a) The A&G expenses approved after APR for FY 2018-19 have been considered as base expenses.
- b) WPI inflation has been computed as average increase of WPI for period from FY 2016-17 to FY 2018-19 (upto December, 2018), which works out to 3.00%.

8.4.20 The approved A&G expenses for the Control Period are shown in the following Table:

**Table 58: Approved A&G Expenses for Control Period (Rs. Crore)**

Particulars		FY 2019-20	FY 2020-21	FY 2021-22
A&G Expenses for Previous Year	A&G <sub>n-1</sub>	9.08	9.35	9.63
WPI Inflation	WPI	3.00%	3.00%	3.00%
Provision	Provision	0.00%	0.00%	0.00%
<b>A&amp;G Expenses –Transmission</b>		<b>9.35</b>	<b>9.63</b>	<b>9.92</b>

8.4.21 The SBI CPPC Charges for handling the Pension Fund, as proposed by AEGCL, cannot be considered as part of A & G Expenses. The same should be charged to the Pension Fund.

8.4.22 Additional expenses of Rs. 1 crore have been allowed over the Control Period for training and Capacity Building, spread as Rs. 0.30 crore, Rs. 0.30 crore and Rs. 0.40 crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively. These additional expenses have been allowed separately in the ARR, and have not been combined with the A&G expenses. AEGCL is hereby directed for submission of the expenses separately at the time of truing up.

## 8.5 Capital Expenditure and Capitalisation

8.5.1 The Capital Investment Plan projected by AEGCL has been elaborated in the previous Chapter.

8.5.2 AEGCL submitted that the funding of Capital Expenditure is envisaged through Grants, Equity, and Loans, as per funding pattern of the respective Schemes, as shown in the following Table:

**Table 59: Capital Expenditure and Capitalisation submitted by AEGCL (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Capital Expenditure	2474.98	1956.85	940.71
Capitalisation	844.73	521.07	1767.54
<b>Funding of Capitalisation</b>			
Grant	664.64	347.67	1,215.60
Equity	54.03	52.02	165.58
Debt	126.06	121.38	386.36

### Commission's Analysis

8.5.3 The Commission has approved the Scheme-wise Capital Expenditure and

Capitalisation as elaborated in Chapter 7 of this Order.

- 8.5.4 Accordingly, the Commission has considered average annual Capital Expenditure of Rs. 175 crore and average annual Capitalisation of Rs. 140 crore, for the purpose of determination of ARR and Transmission Tariff, as shown in the Table below:

**Table 60: Capital Expenditure and capitalisation approved by the Commission for the Control Period (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Capital Expenditure	175.00	175.00	175.00
<b>Capitalisation</b>	<b>140.00</b>	<b>140.00</b>	<b>140.00</b>

- 8.5.5 The Commission clarifies that the approach adopted by the Commission does not bar AEGCL from implementing the schemes as approved in the Capital Investment Plan for the Control Period from FY 2019-20 to FY 2021-22. In case AEGCL achieves higher Capital Expenditure and Capitalisation, the same may be submitted at the time of truing up for the respective year.

- 8.5.6 The Commission has considered the funding of capitalisation in the same ratio as proposed by AEGCL, i.e., Grant funding has been considered as 79%, 67%, and 69% of the assets added in FY 2019-20, FY 2020-21, and FY 2021-22, respectively. The balance has been considered to be funded by loans, and no equity addition has been considered.

- 8.5.7 The funding of capitalised works as approved by the Commission is shown in the following Table:

**Table 61: Funding of Capitalisation approved by the Commission for the Control Period (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Grant/Consumer Contribution	110.15	93.41	96.28
Equity	0.00	0.00	0.00
Debt	29.85	46.59	43.72
<b>Total Capitalisation</b>	<b>140.00</b>	<b>140.00</b>	<b>140.00</b>

## 8.6 Depreciation

- 8.6.1 AEGCL submitted that depreciation has been computed as per MYT Regulations, 2018

for the Control Period. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the provisional capitalization. The Closing Gross Block of Fixed Assets for FY 2018-19 has been considered as the opening balance of assets for FY 2019-20. As specified in Regulation 33 of MYT Regulations, 2018, depreciation is calculated as per SLM considering depreciation on opening Fixed Asset to the extent of 90% of the Asset Value. The Depreciation of assets created through Grant has been reduced before arriving at Net depreciation.

- 8.6.2 AEGCL submitted that the GFA of SLDC has been segregated from AEGCL GFA and is filed separately under SLDC's Tariff Petition for the Control Period. AEGCL claimed the depreciation of Rs. 43.34 Crore, Rs. 80.95 Crore, and Rs. 128.91 Crore for FY 2019-20, FY 2020-21, and FY 2021-22, respectively.

### Commission's Analysis

- 8.6.3 For computation of depreciation, the Commission has considered the closing GFA for FY 2018-19 as approved in this Order as the Opening GFA for FY 2019-20. The capitalisation approved for the respective years of the Control Period has been considered as asset addition during the year. The Commission has considered the scheduled depreciation rates as specified in MYT Regulations, 2018.
- 8.6.4 As per Regulation 32.1 of the MYT Regulations, 2018, the total depreciation during the life of the asset shall not exceed 90% of the original cost of GFA. The Commission has computed the depreciation separately for assets added under each asset head in each year. The Commission has disallowed the depreciation on assets where depreciation is in excess of 90% of the original cost of asset under different asset heads.
- 8.6.5 In view of the above, the Commission has approved depreciation for the period from FY 2019-20 to FY 2021-22 as per MYT Regulations, 2018, as given in the Tables below:

**Table 62: Depreciation approved for FY 2019-20 (Rs. Crore)**

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation Approved
1	Land & Rights	37.69	-		-
	Land under lease	0.30	-		-
2	Building	37.80	1.34	3.34%	0.73
3	Hydraulic	2.64	-	5.28%	-
4	Other Civil Works	81.85	1.64	3.34%	2.76

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation Approved
5	Plant & Machinery	848.62	103.70	5.28%	43.80
6	Lines & Cable Network	796.29	33.00	5.28%	21.80
7	Vehicles	4.90	0.17	9.50%	0.08
8	Furniture& Fixtures	4.17	0.07	6.33%	0.16
9	Office Equipment	3.24	0.08	6.33%	0.17
10	<b>Grand Total</b>	<b>1,817.49</b>	<b>140.00</b>		<b>69.50</b>
11	Asset excluding Land	<b>1,779.50</b>	<b>140.00</b>	<b>3.76%</b>	
12	Less: Depreciation for Grants/ Consumer Contribution				45.58
13	<b>Net Depreciation</b>				<b>23.92</b>

**Table 63: Depreciation approved for FY 2020-21 (Rs. Crore)**

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation Approved
1	Land & Rights	37.69	-		-
	Land under lease	0.30	-		-
2	Building	39.14	2.17	3.34%	0.79
3	Hydraulic	2.64	-	5.28%	-
4	Other Civil Works	83.49	13.13	3.34%	3.01
5	Plant & Machinery	952.31	65.73	5.28%	48.28
6	Lines & Cable Net work	829.29	50.39	5.28%	24.01
7	Vehicles	5.06	0.27	9.50%	0.10
8	Furniture& Fixtures	4.24	0.12	6.33%	0.16
9	Office Equipment	3.32	0.13	6.33%	0.43
10	Any other assets		8.06		
11	<b>Grand Total</b>	<b>1,957.49</b>	<b>140.00</b>		<b>76.77</b>
12	Asset excluding Land	<b>1,919.50</b>	<b>140.00</b>	<b>3.86%</b>	
13	Less: Depreciation for Grants/Consumer Contribution				50.73
14	<b>Net Depreciation</b>				<b>26.04</b>

**Table 64: Depreciation approved for FY 2021-22 (Rs. Crore)**

Sl.	Particulars	Opening GFA	Addition during the year	Rate of depreciation	Depreciation Approved
1	Land & Rights	37.69	-		-
	Land under lease	0.30	-		-
2	Building	41.31	0.25	3.34%	0.83
3	Hydraulic	2.64	-	5.28%	-
4	Other Civil Works	96.62	1.05	3.34%	3.24
5	Plant & Machinery	1,018.04	125.75	5.28%	53.33
6	Lines & Cable Net work	879.68	12.90	5.28%	25.68
7	Vehicles	5.33	-	9.50%	0.11
8	Furniture & Fixtures	4.36	0.05	6.33%	0.17
9	Office Equipment	3.45	-	6.33%	0.68
10	Any other assets	8.06	-		
11	<b>Grand Total</b>	<b>2,097.49</b>	<b>140.00</b>		<b>84.04</b>
12	Asset excluding Land	<b>2,059.50</b>	<b>140.00</b>	<b>3.95%</b>	
13	Less: Depreciation for Grants/Consumer Contribution				55.63
14	<b>Net Depreciation</b>				<b>28.41</b>

## 8.7 Interest on Loan Capital

8.7.1 AEGCL has considered the closing net normative loan for FY 2018-19 as per its submissions, as the opening net normative loan for FY 2019-20. AEGCL submitted that the loan addition during FY 2019-20, FY 2020-21 and FY 2021-22 has been considered as per the CAPEX funding plan. The normative repayment has been considered equal to the depreciation. The weighted average interest rate on the actual loan portfolio works out to be 9.90%, 9.91% and 9.94% for the respective years of the Control Period.

8.7.2 Accordingly, AEGCL has projected the Interest and Finance Charges for FY 2019-20, FY 2020-21 and FY 2021-22 as Rs. 33.48 crore, Rs. 39.67 crore, and Rs. 54.59 crore, respectively.

### Commission's Analysis

8.7.3 The Commission has considered the opening net normative loan as on April 1, 2019 as Rs 57.36 Crore, based on the closing net normative loan of FY 2018-19 and after segregating the loan for SLDC. The addition of loan has been considered equal to debt

portion of capitalized works as approved by the Commission in this Order. The loan repayment has been considered equivalent to depreciation approved in this Order.

- 8.7.4 The weighted average rate of Interest of 9.87% applicable for FY 2018-19 has been considered for computing the normative interest for each year of the Control Period. The interest on loan capital as approved by the Commission for the Control Period is shown in the following Table:

**Table 65: Approved Interest on Loan for the Control Period (Rs. Crore)**

<b>Particulars</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Net Normative Opening Loan	57.36	63.28	83.84
Addition of normative loan during the year	29.85	46.59	43.72
Normative Repayment during the year	23.92	26.04	28.41
Net Normative Closing Loan	63.28	83.84	99.14
Interest Rate	9.87%	9.87%	9.87%
<b>Interest Expenses</b>	<b>5.95</b>	<b>7.26</b>	<b>9.03</b>

## **8.8 Return on Equity**

- 8.8.1 AEGCL submitted that RoE has been computed at the rate of 15.50% as specified in Regulation 33 of MYT Regulations, 2018, on the opening equity and 50% of equity addition during the year. Accordingly, AEGCL has projected the RoE as Rs. 19.68 crore, Rs. 27.89 crore, and Rs. 44.76 crore for FY 2019-20, FY 2020-21 and FY 2021-22, respectively.

### **Commission's Analysis**

- 8.8.2 The Commission has approved the RoE in accordance with Regulation 33 of the MYT Regulations, 2018. As discussed earlier, the Commission has not considered any addition of equity during the Control Period from FY 2019-20 to FY 2021-22. Therefore, the approved RoE at 15.50% is shown in the Table below:

**Table 66: Return on Equity approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Equity Capital	99.93	99.93	99.93
2	Equity addition during the year	-	-	-
3	Closing Equity	99.93	99.93	99.93
5	Rate of Return on equity	15.50%	15.50%	15.50%
<b>6</b>	<b>Return on Equity</b>	<b>15.49</b>	<b>15.49</b>	<b>15.49</b>

## 8.9 Interest on Working Capital

8.9.1 AEGCL submitted that the normative interest on working capital (IoWC) has been computed in accordance with the MYT Regulations, 2018. The rate of interest provided on the working capital is the normative interest rate of 300 basis points above the average State Bank of India MCLR (one-year tenor) prevalent during last available six months. Accordingly, AEGCL has projected the IoWC as Rs. 15.40 crore, Rs. 17.45 crore, and Rs. 20.31 crore for FY 2019-20, FY 2020-21 and FY 2021-22, respectively.

### Commission's Analysis

8.9.2 The Commission has computed normative IoWC in accordance with the MYT Regulations, 2018. The rate of Interest has been considered equal to State Bank of India MCLR (One Year Tenor) prevalent during last 6 months as on 1<sup>st</sup> April of the respective year plus 300 basis points i.e., 11.47%. IoWC approved by the Commission for the Control Period is shown in the following Table:

**Table 67: IoWC approved by the Commission for the Control Period (Rs. Crore)**

Sr. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	O&M expenses for 1 month	15.83	16.62	17.45
2	Maintenance spares @ 15% of O&M Expenses	28.49	29.91	31.41
3	Receivables for two months	60.14	63.50	67.15
4	Total Working Capital	104.45	110.03	116.02
5	Rate of Interest	11.47%	11.47%	11.47%
<b>6</b>	<b>Interest on Working Capital</b>	<b>11.98</b>	<b>12.62</b>	<b>13.30</b>

## 8.10 PGCIL Charges

8.10.1 AEGCL submitted that in compliance with the Commission's directives in the Tariff



Order dated 19 March 2018, the transmission charges to PGCIL shall henceforth be paid by APDCL.

**Commission's Analysis**

8.10.2 The Commission has not considered PGCIL Charges as part of AEGCL's ARR for this Control Period, and the same has been considered in the ARR of APDCL.

**8.11 Income Tax**

8.11.1 AEGCL submitted that as per MYT Regulations, 2018, Income Tax shall be reimbursed to the transmission licenses as per actual Income Tax paid, based on the documentary evidence submitted at the time of truing up of each year.

**Commission's Analysis**

8.11.2 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 each year of the Control Period, subject to prudence check.

**8.12 Other Debits**

8.12.1 AEGCL submitted that other costs and bad debts had not been considered in the estimated ARR and it may claim the same at the time of true-up of the respective FY.

**Commission's Analysis**

8.12.2 The Commission, at this stage, has not considered any other Debits. The Commission may take an appropriate view on AEGCL's claim, if any, at the time of truing up for each year of the Control Period after prudence check.

**8.13 BST for Pension Fund**

8.13.1 AEGCL submitted that the special charges on account of Bulk Supply Tariff have been computed considering the prevailing Bulk Supply Tariff of 20 paise per unit of energy. Accordingly, the Special Charges for the Control Period are tabulated below:

**Table 68: Special charges - BST for Control Period as projected by AEGCL**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Special Charges on Bulk Supply Tariff	201.38	213.90	227.44

### **Commission's Analysis**

8.13.2 The Government of Assam has recently increased the Electricity Duty on sale of electricity from 20 paise/kwh to 5% of the electricity charges, which goes as a contribution to the Pension Fund of the Employees of the successor Companies of the erstwhile ASEB. A provision in the State Budget for FY 2019-20 was also made, for a lump sum grant of Rs. 500 Cr to the Pension Fund. The Commission have been receiving objections from the consumers regarding charging BST of 20 paise/kwh for the Pension Fund, on the ground that, contribution to the Pension Fund should be made by the State Govt and the consumers should not be burdened with the same.

8.13.3 In the light of the above development, the Commission is of the view that it would be fair to reduce the BST rate in a phased manner. Accordingly, for the Control Period of FY 2019-20 to FY 2021-22, BST charge has been reduced from 20 paise/unit to 15 paise/unit.

8.13.4 Accordingly, the Commission approves BST for Pension Fund at 15 Paise per unit on the energy transmitted to APDCL, as approved in MYT Order of APDCL, as shown in the following Table:

**Table 69: BST for Pension Fund as approved by the Commission (Rs. Crore)**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Energy transmitted to APDCL (MU)	9,440.01	9,972.47	10,543.70
<b>BST for Pension Fund at 15 paise per unit</b>	<b>141.60</b>	<b>149.59</b>	<b>158.16</b>

### **8.14 Non-Tariff Income**

8.14.1 AEGCL has projected the Non-Tariff income for the Control Period as Rs. 25.31 crore, Rs. 26.57 crore, and Rs. 27.89 crore for FY 2019-20, FY 2020-21 and FY 2021-22, respectively, by considering a 5% escalation over estimated values for FY 2018-19. AEGCL submitted that since, the transmission charges to PGCIL shall henceforth be

paid by APDCL, no PGCIL rebate has been considered under Non-Tariff Income for the upcoming Control Period.

### **Commission's Analysis**

8.14.2 The Commission approves the Non-Tariff Income of Rs. 28.01 Crore for FY 2019-20, Rs. 29.41 Crore for FY 2020-21 and Rs. 30.88 Crore for FY2021-22 of the Control Period, by considering a 5% escalation over each head of estimated Non-Tariff Income for FY 2018-19. The actual Non-Tariff income shall be considered at the time of truing up for each year of the Control Period, after prudence check.

## **8.15 Summary of ARR for Control Period from FY 2019-20 to FY 2021-22**

8.15.1 The summary of ARR as submitted by AEGCL and as approved by the Commission for the Control Period is given in the Table below:

**Table 70: ARR for Control Period from FY 2019-20 to FY 2021-22 as approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Proposed by AEGCL	Approved	Proposed by AEGCL	Approved	Proposed by AEGCL	Approved
1	PGCIL Charges	-	-	-	-	-	-
2	O&M Expenses	214.79	189.91	232.16	199.42	254.81	209.42
2.1	Employee Cost	181.18	162.96	194.58	170.81	208.98	179.02
2.2	R&M Expenses	20.71	17.29	26.64	18.68	34.86	20.07
2.3	A&G Expenses	10.90	9.35	10.94	9.63	10.97	9.92
3	Training Expenses	2.00	0.30	-	0.30	-	0.40
4	Depreciation	43.34	23.92	80.95	26.04	128.91	28.41
5	Interest & Finance Charges	33.48	5.95	39.67	7.26	54.59	9.03
6	Interest on Working Capital	15.40	11.98	17.45	12.62	20.31	13.30
7	BST for Pension Trust Fund	201.38	141.60	213.90	149.59	227.44	158.16
8	Return on Equity	19.68	15.49	27.89	15.49	44.76	15.49
9	Income Tax	-	-	-	-	-	-
10	<b>Sub Total</b>	<b>528.06</b>	<b>388.85</b>	<b>612.02</b>	<b>410.41</b>	<b>730.83</b>	<b>433.81</b>
11	Less: Non-Tariff Income/ Other Income	25.31	28.01	26.57	29.41	27.89	30.88
12	Less: Expenses Capitalised	-	-	-	-	-	-
13	<b>Aggregate Revenue Requirement</b>	<b>502.75</b>	<b>360.84</b>	<b>585.45</b>	<b>381.00</b>	<b>702.93</b>	<b>402.93</b>

## 9 ARR for SLDC for MYT Control Period from FY 2019-20 to FY 2021-22

### 9.1 Introduction

- 9.1.1 This Chapter deals with the determination of Aggregate Revenue Requirement for SLDC for the MYT Control Period from FY 2019-20 to FY 2021-22 in accordance with the provisions of MYT Regulations, 2018.
- 9.1.2 AEGCL submitted that the Commission vide Order dated 19 March 2018 had directed AEGCL to file separate ARR Petition for SLDC from the next Control Period onwards. Hence, in accordance with the aforesaid directive, a separate ARR Petition has been filed for SLDC for the Control Period from FY 2019-20 to FY 2021-22.
- 9.1.3 AEGCL added that the annual accounts of SLDC are included in annual accounts of AEGCL till FY 2017-18, hence, the projection for the MYT Control Period has been carried out with the limited available data from audited accounts of AEGCL and certain assumptions.

### 9.2 Multi Year Tariff Determination for FY 2019-20 to FY 2021-22

- 9.2.1 SLDC has projected the ARR for FY 2019-20 to FY 2021-22, in accordance with the MYT Regulations, 2018, as shown in the Table below:

**Table 71: Summary of ARR of SLDC for FY 2019-20 to FY 2021-22 as submitted by AEGCL**

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
O&M Expenses	6.33	7.61	9.16
Employee Cost	4.64	5.92	7.55
Repair and Maintenance Expenses	0.48	0.48	0.49
Administrative and General Expenses	1.21	1.22	1.12
Training Expenses	0.25		
Depreciation	0.03	0.12	0.16
Interest & Finance Charges	0.09	0.13	0.25
Interest on Working Capital	0.29	0.35	0.42
Return on Equity	0.01	0.05	0.14
Less: Non-Tariff Income	0.85	0.89	0.93
<b>ARR of SLDC</b>	<b>6.15</b>	<b>7.37</b>	<b>9.20</b>

- 9.2.2 SLDC has projected each head of expenses in accordance with the MYT Regulations, 2018 and after adopting the same principles as adopted for AEGCL's Transmission Business, hence, the same have not been repeated in this Chapter. Only the issues specific to SLDC have been elaborated in the following paragraphs along with the Commission's analysis of the same.
- 9.2.3 SLDC submitted that, at present, the employee's strength is 21. As per the Commission's directions regarding segregation and strengthening of SLDC, SLDC proposes to hire 26 new employees for technical, accounts and HR department during the control period. Accordingly, SLDC has proposed Growth Factor 'G<sub>n</sub>' of 22.31% for projecting the Employee Expenses for the Control Period.
- 9.2.4 SLDC submitted the funding of proposed Capitalisation based on the normative debt equity ratio of 70:30, as shown in the following Table:

**Table 72: Capitalisation and Funding as submitted by SLDC (Rs. Crore)**

<b>Particulars</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Capitalisation	0.606	0.870	3.020
<b>Funding of Capitalisation</b>			
Grant	-	-	-
Equity	0.182	0.261	0.906
Debt	0.424	0.609	2.114

### **Commission's Analysis**

- 9.2.5 As regards the growth in the number of employees of SLDC, the Commission has considered that annually, around 8 employees would be added from FY 2019-20 to FY 2021-22, thereby resulting in employee strength of 47 at the end of FY 2021-22. For meeting the increased employee expenses on this account, the Commission has allowed additional employee expense of Rs. 1.00 crore for each Year of the Control Period, which also gets escalated by the CPI for FY 2020-21 and FY 2021-22, as it becomes part of the base employee expenses for FY 2019-20. However, these additions of Employees should be completed within the Control Period.
- 9.2.6 The funding of capitalisation has been considered based on the normative debt: equity ratio of 70:30, as proposed by SLDC.
- 9.2.7 The Commission has approved the expenses based on the principles specified in MYT

Regulations, 2018 and after adopting the same principles as adopted for AEGCL's Transmission Business. The summary of ARR as submitted by SLDC and as approved by the Commission for the Control Period from FY 2019-20 to FY 2021-22 is given in the Table below:

Table 73: ARR of SLDC for FY 2019-20 to FY 2021-22 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
		Proposed by AEGCL	Approved	Proposed by AEGCL	Approved	Proposed by AEGCL	Approved
1	O&M Expenses	6.33	4.36	7.61	5.28	9.16	6.51
2.1	<i>Employee Cost</i>	4.64	3.29	5.92	4.45	7.55	5.66
2.2	<i>R&amp;M Expenses</i>	0.48	0.38	0.48	0.38	0.49	0.39
2.3	<i>A&amp;G Expenses</i>	1.21	0.44	1.22	0.46	1.12	0.47
2.4	<i>Training Expenses</i>	0.25	0.25				
3	Depreciation	0.03	0.07	0.12	0.13	0.16	0.22
4	Interest & Finance Charges	0.09	0.08	0.13	0.14	0.25	0.31
5	Interest on Working Capital	0.29	0.19	0.35	0.23	0.42	0.30
6	Return on Equity	0.01	-	0.05	-	0.14	-
7	Sub Total	7.00	4.70	8.26	5.79	10.13	7.34
8	Less: Non-Tariff Income/ Other Income	0.85	0.85	0.89	0.89	0.93	0.93
9	<b>Aggregate Revenue Requirement</b>	<b>6.15</b>	<b>3.85</b>	<b>7.37</b>	<b>4.90</b>	<b>9.20</b>	<b>6.41</b>



## 10 Transmission Tariff for FY 2019-20

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

10.1.1 AEGCL has submitted the cumulative Revenue Gap/(Surplus) after Truing up of FY 2017-18 and APR of FY 2018-19 and based on the ARR of Control Period as shown in the Table below:

**Table 74: Cumulative Revenue Gap/(Surplus) (Rs. Crore)**

Particulars	Amount
Revenue Gap/(Surplus) on account of Interest & Finance Charges for FY 2016-17	25.95
Revenue Gap/(Surplus) for FY 2017-18	(81.39)
Provisional Revenue Gap/(Surplus) for FY 2018-19	(11.02)
Carrying/(Holding) cost on Revenue Gap/(Surplus) for FY 2017-18	(9.93)
Carrying/(Holding) cost on Revenue Gap/(Surplus) for FY 2018-19	(0.67)
<b>Total Gap / (Surplus)</b>	<b>(77.07)</b>

### Commission's Analysis

10.1.2 For computation of cumulative Revenue Gap/(Surplus), the Commission has considered the Revenue Gap/(Surplus) after truing up of FY 2017-18 as approved in this Order along with Carrying/(Holding)Cost. No Revenue Gap/(Surplus) has been proposed to be recovered through tariff in FY 2019-20 arising out of APR of FY 2018-19, in accordance with the MYT Regulations, 2018.

**Table 75: Revenue Gap/(Surplus) for FY 2017-18 approved for recovery/adjustment in FY 2019-20 (Rs. Crore)**

Sr. No.	Particulars	MYT Order	AEGCL	Approved in this Order
1	Net ARR	1,197.32	1,113.59	1,097.36
2	Revenue from Transmission Charges	1,197.32	1,194.99	1,194.99
3	Gap/(surplus)	-	(81.40)	(97.63)
4	Carrying/(Holding) cost		(9.93)	(23.66)

10.1.3 The Commission has computed the carrying/ (Holding) cost as shown in the following Table:

**Table 76: Carrying/ (Holding) Cost for Revenue Gap/(Surplus) for FY 2017-18 approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Opening Balance	-	(97.63)	(97.63)
2	Recovery /(Addition) during year	97.63	-	(97.63)
3	Closing balance	(97.63)	(97.63)	-
4	Rate of Interest (%)	12.60%	12.20%	11.47%
5	Carrying /(holding) Cost	(6.15)	(11.91)	(5.60)
	<b>Total Holding Cost</b>		<b>(23.66)</b>	

10.1.4 The Commission has considered the recovery of total Holding cost, i.e., Rs. 23.66 crore on Revenue Surplus for FY 2017-18. The total Surplus including Holding cost is calculated as Rs 121.29 Crore.

10.1.5 The Commission approves the cumulative Revenue Surplus of AEGCL as Rs 121.29 Crore. This Surplus is to be refunded to APDCL in twelve monthly equal instalments of Rs 10.107 Crore in FY 2019-20 as adjustment to the monthly bills.

## 10.2 Transmission tariff for FY 2019-20

10.2.1 AEGCL has proposed the Transmission Tariff for the Control Period based on the cumulative Revenue Gap/(Surplus) after Truing up of FY 2017-18 and APR of FY 2018-19 and based on the ARR of the Control Period, as shown in the Table below:

**Table 77: Transmission Tariff Proposed by AEGCL (Rs. Crore)**

Particulars	FY 19-20	FY 20-21	FY 21-22
Stand-alone ARR	502.75	585.45	702.93
Previous Revenue Gap/(Surplus) with Carrying/(Holding) cost	(77.07)		
<b>Net Annual Revenue Requirement</b>	<b>425.68</b>	<b>585.45</b>	<b>702.93</b>
<b>Transmission Charge (Rs. / kWh)</b>	<b>0.42</b>	<b>0.55</b>	<b>0.62</b>

### Commission's Analysis

10.2.2 In accordance with MYT Regulations, 2018 the Commission has determined the Annual Transmission Charges and Transmission System Access Charges for FY 2019-20. 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.

### **Annual Transmission Charges for APDCL**

**10.2.3 The Annual Transmission Charges for FY 2019-20 shall be equal to Net ARR approved for recovery for FY 2019-20, i.e., Rs. 360.84 Crore.**

10.2.4 The Commission has 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 and Open Access consumers as 9,773 MU as approved in Tariff Order of APDCL for FY 2019-20.

10.2.5 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.

10.2.6 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 MYT Regulations, 2018. 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.

10.2.7 The approved Transmission System Access Charges works out to Rs. 0.37/kWh for FY 2019-20, as shown in the Table below:

**Table 78: Transmission Access Charges approved by the Commission for FY 2019-20**

<b>Sr. No.</b>	<b>Particulars</b>	<b>FY 2019-20</b>
1	Net ARR for Transmission (Rs Crore)	360.84
2	Energy transmitted to APDCL (MU)	9,773.01
3	Transmission Access Charges (Rs./kWh)	0.37
4	Transmission Charges for LTOA/ MTOA (Rs./MW/day)	4,685.34

**For short-term Open Access customers, the Transmission Charges shall be:  
Rs. 0.37/kWh.**

**Note:**

- 1) The Commission has considered Annual Maximum Peak for FY 2019-20 as 2110 MW.
- 2) Any recovery on account of short-term open access charges shall be considered as Non-Tariff Income.

## 11 Annual SLDC Charges for FY 2019-20

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11.1.1 SLDC Charges approved for FY 2019-20 are Rs. 3.85 Crore, which are allocated to APDCL as single user.

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

Sr. No.	Particulars	UoM	Amount
1	Net ARR – SLDC	Rs. Crore	3.85
2	Maximum Contracted Capacity	MW	2,110.00
3	SLDC Charges for LTOA/MTOA Consumers	Rs. ./MW/day	49.99

**Approved SLDC charges to be recovered from APDCL for 2019-20 is Rs. 3.85 Crore.**

**The approved SLDC charges for Long-term/Medium-term Users of Transmission System for FY 2019-20 are Rs. 49.99 per MW per day.**

11.1.3 The annual SLDC charges as determined by the Commission shall be recovered from APDCL. The SLDC shall furnish necessary monthly bills at the rate of one twelfth of the annual charges as approved by the Commission, to APDCL for each billing month within seven days after the last day of the preceding month. APDCL shall make payment to the SLDC, within one month of the date of receipt of the bill.

11.1.4 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 in accordance with AERC (Terms and Conditions for Open Access) Regulations 2018

### 11.2 Applicability of Tariff

11.2.1 The approved Transmission tariff and SLDC Charges for FY 2019-20 shall be effective from April 1, 2019 and shall continue until replaced/modified by Order of the Commission.

Sd/-

**(D. Chakravarty)**  
Member, AERC

Sd/-

**(S. C. Das)**  
Chairperson, AERC

## 12 Directives

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The Commission has 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 in the Tariff Order dated March 19, 2018, AEGCL has submitted the report to the Commission on compliance. The Commission has reviewed the compliance of directives submitted by AEGCL, and the status is as follows:

### **Status of compliance of directives in the Tariff Order dated March 19, 2018.**

#### **Directive 1: Funding from the 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.

#### **Status:**

AEGCL is pursuing the matter with Government of Assam .

#### **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.

#### **Status:**

AEGCL has submitted separate MYT Petition for SLDC for FY 2019-20 to FY 2021-22. It was informed by AEGCL that regarding segregation of SLDC, the process for studying the All India scenario has been initiated. The functional processes and Organogram of SLDC is under review by AEGCL.

**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.

**Status:** Complied with.

**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.

**Status:** Complied with.

**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.

**Status:**

Report on Energy Audit for FY 2018-19 was not submitted. It was informed by AEGCL that the SAMAST scheme is proposed to be implemented comprehensively in-coordination with NERLDC. The necessary hardware and software are expected to be procured through tendering process; the specification for which are under preparation by NERLDC. AEGCL's board has already approved the required amount towards this.

**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.

**Status:** Complied with.

**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.

**Status:** Complied with.

**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.

**Status:** Complied with.

**New Directives:**

The Commission hereby issues the following directives 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 pursue 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 – Energy Audit and Implementation of SAMAST**

The Commission directs AEGCL to carry out the Energy Audit during FY 2019-20 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 earnestly pursue the implementation of SAMAST.

### **Directive 3 - Employee's Provident Fund**

The Commission directs AEGCL to complete the formalities of forming the Trust for Employee's Provident Fund as early as possible.

### **Directive 4 – Submission of Updated Fixed Assets Register**

The Fixed Asset Register should be prepared and updated every year by AEGCL, duly certified by Chartered Accountant. AEGCL is directed to maintain Fixed Asset Register at their end and submit to the Commission as and when asked for during tariff proceedings.

### **Directive 5 – Capitalisation of Completed Projects**

It is observed by the Commission that AEGCL is not capitalizing the expenses on account of new projects even after many years of completion. AEGCL is directed to take measures for capitalisation of the expenses soon after projects are completed.

### **Directive 6 – Ongoing projects**

It is observed that, there are number of ongoing Projects, which are continuing for more than four to five years. The Commission directs AEGCL to complete the Ongoing Projects as per schedule. Efforts and funds should be channelized towards completion of the ongoing projects on priority.

### **Directive 7 - Segregation & Strengthening of SLDC**

The Commission directs AEGCL to expedite the process of Segregation & Strengthening of SLDC. The new recruitments planned for the MYT period should be carried out as per plan.

The Commission further directs that, AEGCL should maintain separate accounts of the expenses/income pertaining to SLDC.

#### **Directive 8 – Capacity Building**

The Commission approved Rs 1 Cr for training and capacity building of employees in AEGCL for the MYT control period. The Commission directs APGCL to submit the detailed expenditure on account of capacity building, separately to the Commission, at the time of true up.

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

#### **Directive 9 – Maintenance of Project-wise Database**

**AEGCL is directed to maintain database on the individual Projects under each Scheme with the following details and submit the following details for all ongoing projects at the time of true-up and Tariff for ensuing year. Further, for all Projects that have not commenced by March 31, 2019, AEGCL shall obtain the Commission’s prior approval based on the necessary details as identified below, even if in-principle approval has been received:**

- a) Details/Scope of Project including activities, area covered, etc.;
- b) Start date of Project;
- c) Scheduled completion date of Project;
- d) Funding Plan;
- e) Cost-Benefit-Analysis of the Project
- f) Present Status of Project, indicating physical progress in percentage terms and in monetary terms;
- g) Status of Capitalisation as per Field Reports and as per Accounts;
- h) Whether the intended benefits of the Project have been achieved, etc.

Sd/-

**(D. Chakravarty)**

**Member, AERC**

Sd/-

**(S. C. Das)**

**Chairperson, AERC**

# Annexure-1

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## **24th Meeting of the State Advisory Committee**

**VENUE :** ASSAM ADMINISTRATIVE STAFF COLLEGE, GUWAHATI – 22.

**DAY / DATE :** TUESDAY, 5<sup>th</sup> February, 2019.

**LIST OF MEMBERS / SPECIAL INVITEES:** AT ANNEXURE-I (ENCLOSED)

The 24<sup>th</sup> Meeting of State Advisory Committee (SAC) was chaired by the Hon'ble Chairperson, AERC, Shri S.C. Das IAS, (Retd.). At the onset, the Chairperson welcomed all members and invitees to the meeting. He briefed the participants that the meeting was convened, primarily, to discuss the Multi Year Tariff (MYT) Petitions for FY 2019-20 to FY2021-22, which were filed by the State Power Utilities in December 2018. The Chairperson informed that the utilities would make short PowerPoint presentations on the important features of their respective petitions during the meeting. He further informed the participants that a Public Hearing is also scheduled to be held on 12<sup>th</sup> February 2019 on these petitions.

The Chairperson stated that as stipulated by Section 87 of the Electricity Act 2003, the Commission has made it a point to approach the SAC for advice in all important matters of policy, including Regulations and Tariff making. He requested the members to offer their valuable advice on the petitions and in particular, on the following aspects:

- a) The Discom has claimed increase in fixed charges stating that these charges accounted for only 14% of the electricity tariff as on date, while fixed cost constituted 60% of the total cost. The Commission increased fixed charges last year by Rs 5 and Rs 10 across different categories of consumers.
- b) The High Tension (HT) consumers have been claiming that cross subsidy surcharge be reduced further and tariff be based on voltage wise cost of supply.
- c) APDCL have signed the UDAY scheme and as per the MoU, the Company has to restrict the distribution loss to 15% or below in 2019-20. The distribution loss achieved by APDCL in FY 2018-19 is 17.64 %.Whether the Distribution loss

trajectory for the MYT period is to be determined keeping in view the MOU under the UDAY scheme.

The Chairperson observed that the State Power Companies have been making huge capital investments and most of these are funded under different schemes of the State & Central Governments and loans from ADB and the World Bank. With capitalization of these projects, electricity tariff is likely to be affected over the next couple of years. The Chairperson further observed that there is a possibility of decrease in POC charges with increase in State generation in the coming years and concern displayed by the Central Government regarding high POC charges for few states and constitution of a Committee to study the matter afresh.

The Welcome address 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: Confirm the Minutes of the 23rd meeting of SAC held on 15.06.2018**

The Minutes of the 23<sup>rd</sup> Meeting of the Committee were circulated among the Members and Special Invitees. The following comments were received on the above:

- a) Shri A.K. Baruah, Adviser AASIA brought to the notice of the Commission that point No.VI of Agenda No. 5 regarding the status of reconstitution of the Consumer Grievance Redressal Forums was raised by him and not by the member mentioned in the minutes.
- b) Shri Baruah stated that one of his observations regarding non-payment of load security interest to LT consumers by APDCL was also not recorded in the minutes.

The Chairperson, AERC directed that necessary modifications be made to the minutes.

It is regretted that there was an inadvertent mistake in the name of the member. As directed by the Commission, rectification has been made and point No.VI of Agenda No. 5 of the minutes of the 23<sup>rd</sup> meeting of SAC held on 15.06.2018 shall henceforth be read as under:

*“Shri A. K. Baruah, Adviser, AASSIA enquired regarding the status of the re-constituted Consumer Grievance Redressal Forums. Chairperson AERC remarked*

*that the Commission had written to the Discom to reconstitute 3 CGRFs in Jorhat, Guwahati and Silchar as per the AERC Regulations and the process is underway.”*

Chairperson AERC remarked that at present there are eight (8) CGRFs across the State and the Commission has directed only three to be reconstituted with independent members according to the AERC Regulations, 2016. This was because the total number of cases recorded in the 8 CGRFs annually was not more than 20-25. He observed that most of the grievances, more than 95%, were sorted out at the sub-divisional level. The Chairperson further observed that APDCL should improve record keeping of the grievances attended at sub-divisional and divisional levels.

Regarding the point of non-payment of load security interest to LT consumers, an addition has been made to the minutes in Agenda No 5 as Point No. viii as under:

*“Shri A.K. Baruah, Adviser AASSIA stated that although, APDCL is paying load security interests to HT consumers, no payment is being made to the LT consumers. He observed that this is a contravention to the provisions of the Electricity Act 2003 as the Act advocates interest payment to all consumers irrespective of the category to which the consumers belong”.*

The Commission directed APDCL to devise a means to pay interest on load security to the LT consumers as well, as has been specified in the AERC Regulations & the Electricity Act, and furnish an action taken report in the next SAC meeting.

Shri Champak Baruah, Member stated that he mentioned about the introduction of merit cum seniority in promotion of Engineers of the three Companies but there are no records of the same in the minutes.

The Chairperson clarified that as the matter relates to internal administration of the utilities over which the Commission has no jurisdiction, it was not recorded.

**Agenda: Action Taken on the minutes of the 23<sup>rd</sup> Meeting of SAC.**

A power-point presentation was made by Assistant Director (Engineering) AERC, Shri J. Bezbaruah 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 AERC asked the respective utilities to respond to any query from the SAC Members. The important points of discussion are noted below:

- i. Shri Subodh Sharma, President, Bidyut Grahak Manch stated that solid steps need to be taken by the State Generating Sector to improve own generation capacity. He observed that more State generation would help reduce the POC charges. He further observed that performance of the state generation sector has a direct bearing on the health of the State Transmission and Distribution utilities.
- ii. Shri Dilip Kumar Sarma, Sr. Consultant, NETC stressed that all efforts should be made to establish large sized generation plant inside the State of Assam either in State or Central sector which will contribute towards moderating the existing POC charges and in turn the domestic tariff.
- iii. Regarding action taken by the Generation Company following decision of construction of the National Gas Grid in the State, MD APGCL, Ms Kalyani Baruah informed that APGCL has submitted a proposal to both MOPNG and GAIL for 9.75 MMSCMD of gas to set up power plants at various locations of Assam. Out of the 9.75 MMSCMD of gas, 6.60 MMSCMD is for the proposed 250 MW Chandrapur Thermal Power Project and 1450 MW (2X725 MW) Thermal Power Project at Lower Assam. The balance 3.15 MMSCMD gas is proposed to be utilized by the 725 MW Amguri Thermal Power Project and 100 MW Ph-II Namrup Replacement Power Project. MD, APGCL further informed that the price of gas available would be high and APDCL is considering appointing consultants to conduct a feasibility study for the proposed projects.

Chairperson AERC observed that APGCL should accept the gas available even if price may be high, keeping in mind the future energy security of the State.

Shri V.K. Pipersenia, IAS (Retd), Chairman APDCL/AEGCL /APGCL informed that they would soon initiate the process to appoint consultants to conduct a feasibility study regarding the viability of the proposed gas projects vis-à-vis the cost of gas available.

Shri D. Chakravarty, Member AERC, suggested that gas available should be a mixture of both domestic and RLNG to reduce cost. MD, APGCL informed that MOPNG has given assurance that the gas made available would be a mixture of both domestic and RLNG and likely to be priced between \$8- \$12 per MMBTU.

Shri Subodh Sharma suggested that since the National Gas Grid is likely to be completed by 2020, therefore, the viability study needs to be completed at an early date so that these projects come into existence before gas becomes available. He informed the house that M/s GAIL had proposed uniform pricing of gas throughout the country; however, the outcome of the proposal is unknown.

Shri Dilip Kumar Sarma stressed that APGCL through the Govt. of Assam should vigorously pursue the proposal of M/s GAIL to the Ministry of Petroleum for uniform pricing of gas through out the country irrespective of distance or direction. At the same time, commitment from GAIL should also be obtained for minimum quantum of gas required for economic operation of gas based plants to be established by APGCL

Shri Dilip Kumar Sarma also observed that, given the present energy scenario, the gas that would be available in the country for the next 50 years would meet only 15-20% of the total requirement. Therefore, gas that would be supplied to Assam would be imported gas and likely to be priced at \$8-\$9 per MMBTU.

- iv. Shri K. Medhi, Secretary, NESSIA opined that there have been discussions regarding setting up of power projects in Chandrapur since a long time, however, nothing concrete has been achieved so far.

MD, APGCL replied that different kinds of projects were proposed in the past. She stated that as suggested by Advisory Committee Members, a pumped storage project was proposed to be set up at Chandrapur. It was informed that although some investors had shown interest in the project initially, they failed to bid when tenders were floated for the same, even after repeated extensions.

- v. Shri A.K Baruah, Adviser, AASSIA suggested that APGCL should ensure adherence to the timelines for completing their projects.
- vi. Shri Subodh Sharma enquired regarding the new timelines for completion of the NRPP project.

MD, APGCL informed that gas turbine (Open Cycle) project of NRPP is likely to be commissioned in April, 2019 and the combined cycle project by December, 2019.

- vii. He further enquired as to why same generation output was shown throughout the MYT period for NRPP. It was informed that APDCL has committed gas of 0.66 mmscmd from M/s GAIL of which 0.49 will be utilized in NRPP and with the remaining gas, APGCL proposes to run few units of NTPS.

Shri Sharma observed that APGCL should make efforts to actually achieve the proposed generation or else power procurement planning of APDCL gets affected and the consumers may end up paying higher electricity price. He suggested that the quantum of generation shown by APDCL and APGCL should match.

- viii. Shri Champak Baruah enquired as to the status of the 70 MW Amguri Solar Power Project. He emphasized the fact that while the last date for bidding of the project was shown as 29.05.2019 in the last meeting, now the same is shown as 06.02.2019.

It was informed by the MD, APGCL that as suggested by SAC Members in the last meeting, APGCL decided to implement the project on its own through EPC contractors as project implementation through SECI was getting delayed. Therefore new tenders were floated and it is expected to receive a number of bids by 06.02.2019.

It was emphasized from the Chair that APGCL should take steps for timely completion of their projects such as NRPP, 120 MW Lower Kopili Hydrel project, 24 MW Borpani Middle-II SHEP , etc

- ix. Shri K. Medhi, General Secretary, NESSIA suggested that since APGCL has not succeeded in adding sizeable new generation capacity, perhaps, APGCL may not undertake any new project and instead, APDCL may be asked to procure power from outside sources through different modes.

Chairperson, AERC agreed that APGCL had not achieved much success with new projects in recent years except for 70 MW Lakwa Replacement Power Project (LRPP), which was commissioned in time, and reiterated that the Company must make ardent efforts to increase generation. He observed that the power generated by APGCL is one of the cheapest powers available to the Discom. The Chairperson further observed that emphasis must also be laid for fast completion of the Central Sector Generation projects in Assam as the State receives 50% allocated power from these projects.



- x. Regarding (2x800) MW Coal based Margherita Project, it was informed by MD, APGCL that although the matter has been pursued with the Central Government several times, no progress has been made in getting coal linkage for the project, so far.
- xi. There was a suggestion in the last meeting that newly recruited engineers of the State distribution company may be trained on the technical aspects of electricity by their deputation to generation/ transmission Company and similar measure may be adopted for engineers of the generation / transmission sector so that these new recruits get a good idea of the overall power sector. Shri V.K. Pipersenia, Chairman, APGCL/AEGCL/APDCL commented that although it's a good suggestion, the three power Companies must devise their own HR policies. Shri Pipersenia informed that at present, the Discom has a shortage of manpower and therefore, they are not in a position to depute any Engineer to other utilities. The three companies have to together decide on the matter.

Regarding the Development of 100 MW (25x4) Solar Power Plant within the State by APDCL it was informed by Shri R. Agarwal, IAS, MD, APDCL that Azure Power India Pvt. Ltd, New Delhi and Maheshwari Mining and Energy Pvt. Ltd, Telengana were the successful bidders for 90 MW and 10 MW respectively. It was informed that the timeline for implementation of the projects will be 18 months from the date of signing the PPA. It was further informed that the bidders have identified the land for the projects. The land in Udalguri area which was identified for one project has already been transferred to the developer by the BTC administration while land acquisition is under process for the rest of the projects.

Shri Subodh Sharma suggested that as agricultural land cannot be used for power projects, the low lying lands of Brahmaputra river valley may be used for the purpose.

MD, APDCL informed that the land identified for the projects were lying vacant and as such, there was some relaxation in norms and conversion of the land allowed for the purpose of setting solar plants.

- xii. It was further informed by MD, APDCL that as suggested in the last meeting, APDCL is carrying out energy audit of the 33/11 KV Jalukbari sub-station under PAT scheme. Based on its output, it was informed that, similar audit may also be carried out in near future for other sub-stations.

Chairperson AERC stated that as was informed in the last meeting, energy audit study has been taken up by the Commission in three circles of APDCL namely Guwahati Circle II, Jorhat and Cachar. Two Consultants were engaged through open bidding but the work was delayed due to absence of transformer meters and 33 KV & 11 KV line meters. He informed that meetings with concerned APDCL officers was held from time to time and metering works are likely to be completed shortly. The audit works will start immediately when the necessary infrastructure is in place.

Shri Subodh Sharma observed that the meters installed should have provisions for IT connectivity in future.

MD, APDCL responded positively stating that the meters installed have the provision for IT connectivity.

- xiii. On safety related aspects, MD, APDCL informed that the Company have taken a slew of measures to ensure safety of the consumers. APDCL have started replacing the bare conductors for LT consumers with AB conductors, all transformers under Saubhagya scheme are fenced and whenever cases of unfenced transformers are reported, the Company immediately takes necessary action for fencing.

Shri Subodh Sharma suggested that many electrical accidents can be avoided if emphasis is laid on proper earthing of the conductors.

MD, APDCL agreed to the suggestion and assured that action would be taken in this regard. He requested the members to offer suggestions to APDCL regarding these issues so that appropriate action can be initiated. He stated that there is shortage of manpower to maintain the lines and recently a number of recruitments have taken place in this regard which is expected to help the Company considerably.

Shri Champak Baruah commented that accidents also take place due to non adherence to safety procedures by the linemen and officers of APDCL. Instances

have come to his notice where linemen are taking shutdown instead of JEs, which is not as per safety protocol. He observed that prior information of shutdown to the local people while working on the electric lines /poles/ transformers is essential.

Chairperson AERC observed that APDCL must ensure that the safety protocols are being followed and continue with their safety initiatives for the consumers.

- xiv. Shri Saurav Agarwal, FINER informed that as requested in the last meeting, APDCL circulated an advisory to the field offices regarding the new provision that the requirement for declaring minimum 65% of the contracted demand no longer exist. However, APDCL is not allowing a consumer to reduce the contract demand after the month of September.

It was clarified by APDCL that it is sticking to the month of September as tariff petitions, showing the load, is to be submitted by the month of November each year.

Chairperson AERC informed that as per the Supply Code Regulations, a consumer can reduce the contract demand only once in a year, but as this was the first year of the new Supply Code Regulations, he asked APDCL to look into the matter to consider some relaxation, if feasible.

#### **Agenda: Presentation on MYT Petitions for FY 2019-20 to FY 2021-22 by AEGCL**

There was a brief power point presentation on the MYT petitions for FY 2019-20 to FY 2021-22 along with true up for FY 2017-18 and Annual Performance Review for FY 2018-19. The presentation of AEGCL is enclosed as Annexure I. The following discussions took place during the course of the presentation.

- i. It was informed that from FY 2019-20, the transmission charges on account of PGCIL shall be reflected in the tariff of APDCL.
- ii. Shri Subodh Sharma commented that APDCL must correctly ascertain the PGCIL charges and may seek help of AEGCL in this regard.

Chairperson AERC observed that PGCIL charges are basically the POC charges and the actual amount can be ascertained through SLDC. He opined that APDCL

shall acquire the expertise in calculating these charges over a period of time and until then, may seek assistance from AEGCL.

- iii. Shri Subodh Sharma pointed out that while the cost of AEGCL should have been around 30-40 paise/unit for the MYT period of FY 2019-20 to FY 2021-22, AEGCL was asking a tariff of 51- 62 paise/unit.

MD, AEGCL explained that the tariff included the BST charges of 20 paise per unit.

- iv. Shri Subodh Sharma stated that Generators like Kathalguri Power Station, being a central sector generator, despite having the AEGCL network at their bays, have to evacuate their power through PGCIL network. Therefore, the consumers of Assam have to bear high POC charges. These issues need to be taken up by the Assam Government with the Central Government and Shri Sharma requested AERC to bring the matter to the notice of the State Government.

Chairperson AERC observed that many States are facing similar issues and these matters are being examined in the Central Government. However, he noted the suggestion of Shri Sharma.

- v. Shri Subodh Sharma opined that AEGCL is the best performing company among the three power utilities of the State and it is important that policy decisions should not cause any harm to the Company.
- vi. Shri Sharma again pointed out the issue regarding Tariff Based Competitive Bidding (TBCB) which has been made compulsory for setting up new intrastate transmission projects as per the Tariff Policy, 2016. He expressed concern that the State Transmission Company may suffer if TBCB is accepted.

Chairperson, AERC stated that it is a policy decision of the Government of India that any intra state transmission project, which cost above a threshold limit, shall be developed by the State Government through competitive bidding process and the limit is to be decided by the State Electricity Regulatory Commissions. The Chairperson informed that AERC, in consultation with the State Government and AEGCL, has specified a threshold limit through a draft notification in January 2019. He further informed that comments on the draft notification may be submitted within 31<sup>st</sup> March, 2019.

- vii. Shri S.N. Kalita MD, AEGCL informed that as directed by the Commission, the Company has taken initiative to restructure and strengthen SLDC.

**Agenda: Presentation on MYT Petitions for FY 2019-20 to FY 2021-22 by APGCL**

APGCL made a brief power point presentation on MYT petitions for FY 2019-20 to FY 2021-22 along with true up for FY 2017-18 and Annual Performance Review for FY 2018-19. The presentation of AEGCL is enclosed as Annexure II. 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 tariff proposed for Lakwa Thermal Power Station (LTPS) for the MYT period starting with FY 2019-20 are Rs 5.31/unit, Rs 5.66/unit and Rs 5.62/unit respectively. The proposed tariffs are the highest among the APGCL power stations as special R&M has been proposed for the Station which will require major overhauling.
- ii) It was further informed by MD, APGCL that the new projects are being financed from ADB as 90 % Grant and 10% loan while R&M of old plants are being financed with State Government assistance. On a query from Shri Subodh Sharma, it was further informed by Ms Baruah that APGCL may restructure the Company and convert the capital grants to equity.
- iii) The members expressed concern that the thermal stations of APGCL were unable to generate to their installed capacity due to inadequate availability of gas and important projects like Margherita Coal based project is yet to receive coal linkage. Besides, commissioning of most of the ongoing projects of APGCL has been delayed due to various reasons. They observed that if APGCL did not improve its performance, the performance of AEGCL will suffer too. And the consumers also have to bear greater cost of power through POC charges for power purchased from outside the State.

Given the above scenario, all members agreed that the State Government has to play a pivotal role in ensuring adequate gas availability and coal linkage for the projects of APGCL, at the earliest.

**Agenda: Presentation on MYT Petitions for FY 2019-20 to FY 2021-22 by APDCL**

There was a short Power Point presentation from APDCL on the MYT petitions for FY 2019-20 to FY 2021-22 along with true up for FY 2017-18 and Annual Performance Review for FY 2018-19. The presentation of AEGCL is enclosed as Annexure III. The following discussions took place during the course of the presentation:

- i. APDCL informed that due to repeated persuasions against the POC charges by six States including Assam, the Ministry of Power called a meeting to hear their grievances. It was further informed that APDCL submitted their viewpoints on the matter and requested that 80% of the fixed cost may be socialized instead of 20% as is done now.

MD, AEGCL observed that only 26% of the PGCIL transmission capacity is being utilised and the rest 74% stands for reliability of the system and future use. He therefore, suggested that 74% may be proposed as reliability cost of the network to be equally shared by all users.

Chairperson AERC observed that if 50% of the charges are socialized and 50% charged through POC, even then there will be some considerable reduction in the transmission charges. .

- ii. It was informed that for the first time Assam is receiving 50 MW RTC Wind Power from projects in Tamil Nadu. APDCL has signed agreement with SECI and PTC and Assam is receiving the power from 4<sup>th</sup> February, 2019. It was further informed that APDCL would receive another 50 MW of wind power within this year. It was also informed that the 3<sup>rd</sup> unit of NTPC Bongaigaon Thermal Power Station will be commissioned shortly. Although, the price of this thermal power is high, APDCL will procure the power as per PPA. APDCL informed that Assam will soon also receive around 200 MW power from Mangdechhu Hydro Electric project in Bhutan.
- iii. The Discom informed that APDCL has been chosen the ADB Best Performing Utility award for timely implementation of its projects under 2017 ADB loan 3200 IND. The award would be given in October this year

## **Agenda: Comment and suggestion of the Members**

- i. Shri Subodh Sharma offered the following suggestions –
  - a) Due to SAUBHAGYA, DDUGJY and other such schemes of the Government of India, the domestic consumers are increasing at a faster pace than any other consumer category. As such, increased sale to such consumers also increases the distribution losses of the Company and affecting its revenue. APDCL is expected to function as a commercial entity; however, the peculiar consumer mix is preventing it from doing so. As such, adequate subsidy from the State Government is essential.
  - b) Although, first financial restructuring of the distribution Company was carried out years back and with signing of the UDAY scheme, another restructuring is underway, APDCL is yet to draw up a master plan to bring a commercial turnaround. The loss making utility must try to chalk out a master plan as to what should be the tariff at which it can achieve a financial turnaround, considering all the regulatory provisions and subsidies of the State Government that is likely to be available. They must also consider the investments required to bring the losses to the required level.
  - c) The three State Power Companies are symbiotically interconnected and in the long run, success of one would depend not only on its own performance but on the performance of the other two as well. Therefore, each Company must try to build itself as a robust commercial organization.

Chairperson AERC stated that in every Tariff Order, the Commission sets some parameters for achievement by the Companies. APDCL should make all efforts to achieve the targets set in tariff orders like distribution loss, collection efficiency, etc; so as to achieve a financial turnaround. The Chairperson observed that technical loss in the system may be higher than what is envisaged, in addition to commercial losses. A lot of investment in distribution infrastructure is required to reduce technical loss and to have an idea of these losses, the Commission is conducting the energy audit in three Electrical Circles. The final report of this audit is likely to be submitted

by the end of this year and then the Commission would be in a better position to issue directions.

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

- a) The proposed increase in fixed charges is very high while improved power scenario is a matter of opinion and usually differs from place to place. Instead of enhancing fixed charges, APDCL may conduct actual load survey sub-division wise. This would help increase the connected load and increase in fixed charges may not be necessary.

He requested the Commission to look into the above aspects before allowing any enhancement.

- b) Due to programmes such as SAUBHAGYA and DDUGJY, the performance of APDCL is dwindling. He stated that AT&C losses have increased substantially, collection efficiency has gone down even when the number of connections have increased; and arrears increased compared to earlier years. In view of the above scenario Shri Medhi suggested that

1. APDCL should try to enhance alternate and effective time tested methods for revenue realization.
2. Adopt energy efficient technologies & equipments and encourage consumers to do the same.

- c) APDCL should encourage use of solar rooftops in the State and try to draw the benefits of Central Government sponsored schemes for solar rooftops.

- d) There are many ghost (non-existent) electricity consumers and if the arrear of these ghost consumers are taken out, the balance sheet will be cleaner. Shri Medhi opined that there is a presumption that 40% of the total arrear is due to non-existent consumers.

Chairperson AERC assured that the suggestions would be considered while taking any decision.



iii. Shri Abhijit Sharma, Secretary, ABITA made the following submissions –

- a) He enquired regarding the status of providing dedicated feeders to the tea gardens.

Shri Rakesh Agarwal, MD APDCL stated that an amount of Rs 20 Crores were earmarked in the budget for installation of 11 numbers of dedicated feeders. However, tendering for the purpose is in process.

He informed that from FY 2018-19, the process of financing of the State government has undergone a massive change. Initially, whenever, funds were allocated by the State Government, the entire fund was released to APDCL and the money could be utilized. However, now, the State Government gives an allocation in the budget, a DPR/ proposal has to be submitted from APDCL, then administrative approval is received, then tendering/ allotment of works have to be done, then it has to be uploaded for financial sanction, and once the work is partially executed, only then the finance is released just like a State Government Department. He observed that due to this change in the process of release of funds, works are getting delayed.

MD, APDCL informed that during the last year 14,000 smart meters were installed in Guwahati as a pilot project and in January this year the Company was able to generate bills for 11000 meters without any kind of human intervention. He stated that technological interventions would make services convenient for the consumers; however, this would not only require the support of consumers but also massive investments. He informed that APDCL is trying to bring investments through IPDS, ADB Financing and the State Government.

- b) While appreciating the endeavors of APDCL, Secretary, ABITA stated that the tea sector contributed around 8% of the total revenue of the Company amounting to approximately Rs 800 Cr. He explained that unless the supply to rural consumers and the tea gardens are separated, power position in

the tea estates is unlikely to improve as the quality of power available may not be good enough for use in the tea gardens. As a result, the tea gardens have to utilize their generators and power produced is costlier than the power from APDCL. While APDCL loses revenue, the tea gardens have to pay greater cost of production.

- c) Secretary, ABITA also observed that as directed by the Commission in the last meeting, the Company can introduce Voluntary Disclosure of load program from time to time where consumers can be asked to disclose their loads. The Company may allow consumer to enhance their loads in a hassle free way with very few documentation requirements.

MD APDCL informed that this is being done and about Rs 25 Cr additional fixed charges are collected after the VDL scheme in October last year.

Chairman APDCL suggested that online facility for enhancement of load should be made available.

- d) Secretary, ABITA stated that with the ongoing works of SAUBHAGYA, all the development works of APDCL has taken a backseat.

MD APDCL informed that some of the contractors involved in the development schemes like ADB, IPDS were also chosen for implementing the SAUBHAGYA scheme and since it is a time bound program, the development works were somewhat delayed. However, he assured that he and Chairman APDCL are personally reviewing the progress of every work under the schemes, and lots of advancement in the works is expected in the next couple of weeks.

It was informed from APDCL that online facilities were launched for new LT connections, however, applications received through online facility are very few. Therefore, as directed by Chairman, APDCL, the Company is planning to facilitate only online applications for new connection for LT consumers so that they get acquainted with the new systems. It was further informed that online facility for new HT connections will be launched too, shortly.

Shri Subodh Sharma observed that the electronic meters are equipped with facilities to capture the maximum demand during the month and APDCL can check if the contracted demand has been exceeded by any consumer.

Chairperson, AERC agreed to the suggestion and observed that the meter readers are not taking such readings and may be asked to do so by the concerned authorities. He noted that for HT consumers, it is being done because if these consumers exceeded contract demand they were penalized but for LT consumers, the same was not practiced. He further observed that this practice will do away with the necessity for conducting internal load survey by the Company, as has been proposed.

iv. Shri Saurav Agarwal, Chairperson, Power, FINER made the following observations:

a) As load enhancement is to be allowed online, load reduction should also be allowed online once a year.

Chairperson AERC directed APDCL to look into the matter.

b) Cost of power is one of the highest. One of the factors contributing to this is costly power from NTPC Bongaigaon Station. APDCL and the consumers must raise their voice against such tariffs when the petitions are filed for tariff determination in the Central Electricity Regulatory Commission. APDCL may consider opening a separate Cell or assign competent officers with the responsibility to voice these concerns in CERC. Recently, the draft MYT Regulations has been notified and there was no representation from Assam. APDCL can have a dedicated Cell to voice the concerns of the people of Assam in appropriate Forums like CERC, whenever necessary.

It was clarified from APDCL that the Company has been submitting response petitions before the CERC against NTPC tariff petitions and also contesting these in the Appellate Tribunal. APDCL cited an example where the Kathalguri station of NEEPCO had filed a petition before CERC requesting for reduction in PLF stating non availability of fuel. NEEPCO stated the example of APGCL

gas stations whose PLF were low due to non availability of gas. This is a recent case where APDCL managed to win the case against NEEPCO.

Chairperson AERC observed that the consumers like FINER and ABITA may also file petitions before the concerned forum.

Shri Subodh Sharma stated that an individual consumer residing in Delhi have made representations to CERC against the NTPC petitions. However, he also observed that this is a costly affair and large consumers like FINER and ABITA should come forward.

c) In the last budget, the Government of Assam has announced 5% electricity duty ad valorem on the total consumption which has increased the electricity duty substantially for the industrial consumers.

Chairperson AERC opined that it is the policy decision of the State Government.

d) A number of points have been raised by the Statutory Auditors on the financial Statements of APDCL and requested the Commission to consider those while determining tariff.

The Commission assured that all the points which are likely to impact the tariff will be scrutinized before making a decision.

The Chairperson, AERC thanked the members for their suggestions.

#### **Agenda: Discussions on Draft Regulations notified by AERC**

Two draft Regulations namely Draft AERC (Electricity Supply Code) (First Amendment) Regulations, 2018 and Draft AERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2018 were notified as previous publications as per Section 181 (3) of the Electricity Act 2003 and public hearings were also held. These Regulations were circulated among the Advisory Committee members. Chairperson, AERC requested the Members to submit their comments on the Regulations, if any.

There was no comment from any member.

**Agenda: Any Other matter.**

No other matter came up for discussion.

Chairperson, AERC assured the members that the MYT 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 2019-20 and Annual Revenue Requirement for FY 2020-21 and FY2021-22.

The meeting ended with vote of thanks from the Chair.

Sd/-

Secretary,

Assam Electricity Regulatory Commission.

## **ANNEXURE –A**

### **24<sup>th</sup> Meeting of SAC - LIST OF MEMBERS & SPECIAL INVITEES PRESENT**

#### **MEMBERS**

1. Shri Subhash Chandra Das, IAS (Retd), Chairperson, AERC.
2. Shri Dipak Chakravarty, Member, AERC
3. Smt. Utpala Saikia, Joint Secretary, Power Deptt., Government of Assam
4. Shri G.A Nayyar, Deputy Secretary, Finance Department, Government of Assam.
5. Shri Subodh Sharma, Consumer Activist
6. Shri Dilip Kumar Sarma, Sr. Consultant, NETC
7. Shri Abhijit Sharma, Secretary. ABITA
8. Shri Abhijit Kakati, MRK, ABITA
9. Shri Niladri Roy, Advocate, Silchar Bar Council
10. Shri A.K. Baruah, Advisor, AASSIA
11. Shri Sailen Baruah, President, NESSIA
12. Shri Kumud Medhi, Secretary, NESSIA
13. Shri P.K. Goswami, Former Director, Technical Education and Retd. VC, Assam Science and Technology University
14. Shri Saurav Agarwal, Chairperson, Power, FINER
15. Shri Rajeev Goswami, DDG, FINER
16. Shri Champak Baruah, Ex- Member (Technical), APDCL.
17. Shri Arup Kr Mishra, Director, AEDA
18. Shri Pronip Kr. Barthakur, Ex Director, ONGC
19. Shri Birendra Kr. Das, President, Grahak Surakha Sanstha

#### **SPECIAL INVITEES**

1. Shri V.K. Pipersenia, IAS (Retd), Chairman, APDCL/AEGCL/APGCL
2. Shri Rakesh Agarwal, IAS, Managing Director, APDCL
3. Ms. Kalyani Baruah, Managing Director, APGCL
4. Shri Satyendra Nath Kalita, Managing Director, AEGCL