

Before
Assam Electricity Regulatory Commission

**Petition for
Truing Up for FY 2017-18,
Annual Performance Review for FY 2018-19 &
Multi Year Tariff for FY 2019-20 to FY 2021-22
for AEGCL**

And

**Petition for Multi Year Tariff for FY 2019-20 to
FY 2021-22 for SLDC**



Assam Electricity Grid Corporation Limited
Bijulee Bhawan, Paltanbazar Guwahati – 781 001



Assam Electricity Grid Corporation Limited
Regd. Office: 1st Floor, Bijulee Bhawan, Paltanbazar, Guwahati -781001
CIN: U40101AS2003SGC007238
Phone: 0361- 2739520/Fax: 0361-2739513 Web:www.aegcl.co.in.

No. AEGCL/HQ/ACCTTS/2007/9(Part II)/08

Date: 15-12-2018

To,

**The Secretary,
Assam Electricity Regulatory Commission,
ASEB Campus, Dwarandhar,
G.S.Road, Sixth Mile,
Guwahati- 781022.**

Sub.- Submission of Revised Tariff Petition for True Up FY 2017-18, Annual Performance Review for FY 2018-19 & Multi Year Tariff for the Control Period FY 2019-20 to FY 2021-22 of AEGCL.

Sir,

Reference to the subject cited above, I am furnishing herewith the Revised Tariff Petition for True Up FY 2017-18, Annual Performance Review for FY 2018-19 & Multi Year Tariff for the Control Period FY 2019-20 to FY 2021-22 of Assam Electricity Grid Corporation Limited (AEGCL) after incorporating all the requirements specified by the Hon'ble Commission in the Technical Validation Session dated 10-12-2018.

Encl.- As above.

Yours faithfully,

**General Manager (HQ),
AEGCL, Bijulee Bhawan,
Paltanbazar, Guwahati-781001.**

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

Petition No. _____

Case No. _____

(to be filed by the Office)

IN THE MATTER OF

Revised Petition for Truing up of FY 2017-18, Annual Performance Review for FY 2018-19 & Multi Year Tariff for the Control Period FY 2019-20 to FY 2021-22 alongwith separate Multi Year Tariff petition of State Load Despatch Centre for the Control Period FY 2019-20 to FY 2021-22.

IN THE MATTER OF

Assam Electricity Grid Corporation Limited
Bijulee Bhawan, Paltanbazar,
Guwahati – 781 001.

Petitioner

I, Sri Amitabh Choudhury, son of Late Rajendra Kumar Choudhury, aged 59 years residing at Guwahati do solemnly affirm and say as follows:

I am the General Manager (HQ) of Assam Electricity Grid Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Electricity Grid Corporation Limited.

The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 15th day of December, 2018 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati
Date 15-12-2018



Deponent

By order of the Commission
Secretary of the Commission

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILING NO.

CASE NO.

IN THE MATTER OF: Revised Petition for Truing up of FY 2017-18, Annual Performance Review for FY 2018-19 & Multi Year Tariff for the Control Period FY 2019-20 to FY 2021-22 alongwith separate Multi Year Tariff petition of State Load Despatch Centre for the Control Period FY 2019-20 to FY 2021-22.

AND

IN THE MATTER OF: Assam Electricity Grid Corporation Limited incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam.

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SUBMITS:

1. That the Assam Electricity Grid Corporation Limited, hereinafter named as AEGCL, is a successor corporate entity, formed in 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 the successor corporate entities.
2. That the Assam Electricity Grid Corporation Limited is a company incorporated with the main object of undertaking electricity transmission in the state of Assam as State Transmission Utility (STU).
3. That the Assam Electricity Grid Corporation Limited is a deemed licensee under the provisions laid down in Section 14 Proviso 5, read with Section 131 (2) of the Electricity Act 2003.
4. That the licensee is now filing the revised petition for the approval of its Truing up for the FY 2017-18, Annual Performance Review for FY 2018-19 & Multi Year Tariff Petition for the Control Period FY 2019-20 to FY 2021-22 alongwith separate Multi Year Tariff petition of State Load Despatch Centre for the Control Period FY 2019-20 to FY 2021-22.



(PETITIONER)



You are here: Reports > Query By Account

29-Nov-2018 [02:40 PM IST]

- Query By Account
- Query by eCheque
- TDS Enquiry
- Report in Excel
- State Bank Collect
- Pending Transactions
- Dealer Finance
- Print/Reprint Forms
- Reprint Challan
- Download Beneficiary List
- Account Based MIS
- Failed Credits
- VAN Based MIS
- Reprint GSTIN Invoice

e-PayOrder Details

e-PayOrder Number	CTE5121111	
Debit Status	Success	
		29-Nov-2018
AERC		
	One Crore Fifty Two Lakhs Twenty Seven Thousand Eighty One only	1,52,27,081.00
	00000030019619154	
A T ROAD, GUWAHATI	SURESH KAIMAL Maker	KASHI NATH BAISHYA Authorizer 1
	"CTE5121111"	
Counterfoill Description	AERC Tariff filling fee and APR fee	
Transaction Type	Third Party Transfer	
Debit Account Details		
Account No.	Branch	Amount
00000030019619154	A T ROAD, GUWAHATI	1,52,27,081.00
Credit Account Details		
Account No. / Nickname	Amount	Credit Status
00000010821417121 / AERC	1,52,27,081.00	Success

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9. Multi Year Tariff Petition of SLDC for FY 2019-20 to FY 2021-22

Before
Assam Electricity Regulatory Commission

**Petition for
Truing Up for FY 2017-18,
Annual Performance Review for FY
2018-19 and
Multi Year Tariff for FY 2019-20 to FY
2021-22**



Assam Electricity Grid Corporation Limited
Bijulee Bhawan, Paltanbazar Guwahati – 781 001



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1 EXECUTIVE SUMMARY

1.1 Preamble

This section summarizes the petition for True-up of FY 2017-18, Annual Performance Review of FY 2018-19 and Multi Year Tariff Determination of FY 2019-20 to FY 2021 22 of Assam Electricity Grid Corporation Ltd. (AEGCL).

1.2 True Up for FY 2017-18

AEGCL has calculated its ARR for FY 2017-18 as part of True Up for FY 2017-18. AEGCL has presented the actual cost based on audited annual accounts for FY 2017-18 and applied norms wherever applicable as per Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2015. The detailed comparison of various cost components has been presented in Chapter for True Up for FY 2017-18. A summary of the proposed True Up of FY 2017-18 with the approved ARR for FY 2017-18 is presented below:

Table 1: Comparison of MYT Order & Audited Accounts for FY 2017 – 18

(Rs.Crs.)			
S.N.	Particulars	Approved in Order dtd 31.03.17	AEGCL Submission
1	PGCIL Charges	534.55	509.29
2	O&M Expenses	175.96	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
5	Interest & Finance Charges	9.41	25.02
6	Interest on Working Capital	23.93	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 (Excl. related to Int, Dep and O&M)	-	0.90
11	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)	-	(5.68)
12	Less: Non-Tariff Income/ Other Income	85.99	195.76



13	Aggregate Revenue Requirement	875.06	752.14
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	Carrying Cost	-	-
20	Net Aggregate Revenue Requirement	1,194.99	1,102.99
21	Incentive on Transmission Availability	-	12.10
22	Add: Sharing of (Gains)/Loss	-	(1.50)
23	ARR after Sharing (Gains)/Losses and Incentive	1,194.99	1,113.59
24	Revenue with Approved Tariff for FY 2017-18	1,194.99	1,194.99
25	Revenue Gap /(Surplus) for FY 17-18	(0.00)	(81.39)



1.3 Annual Performance Review of FY 2018-19

As per AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2015, provisional true up of FY 2018-19 is based on the approved forecast in the MYT order and half yearly results. Summary as follows:

Table 2: Annual Performance Review for FY 2018-19

(Rs. Crs.)					
S.N.	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 (Excl.Int, Dep and O&M)	-	0.00	0.00	0.01
12	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)	-	(1.31)	-	(1.31)
13	Less: Non-Tariff Income/ Income	100.17	53.12	46.30	99.41
14	Aggregate Revenue Requirement	906.87	442.78	447.46	890.24
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	Net Aggregate Revenue Requirement	1,160.64	569.66	574.34	1,144.01
18	Incentive on Trans. Availability	-	2.83	2.83	5.67
19	Add: Sharing of (Gains)/Loss	-	-	-	-
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)



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

As per AERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018, AEGCL has presented Multi Year Tariff Determination for FY 2019-20 to FY 2021-22. The summary of Projected ARR for first control period is shown in the table below:

Table 3: Summary of Projected ARR for FY 2019-20 to FY 2021-22

(Rs. Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
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	Income Tax	0.00	0.00	0.00
10	Other debits (Excl. related to Int, Dep and O&M)	0.00	0.00	0.00
11	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)	0.00	0.00	0.00
12	Less: Non-Tariff Income/ Other Income	25.31	26.57	27.89
13	Aggregate Revenue Requirement	502.75	585.45	702.93



2 INTRODUCTION

2.1 AEGCL

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

AEGCL has been developing, operating and maintaining transmission system consisting of total line length of 5366.93 Ckt. km and sixty-five grid substations at different voltage levels along with associated equipment and terminal bays, etc.

Table 4: Transmission Line Length of AEGCL

Sr. No.	Voltage Level	Length in Ckt. Km		
		2018-19*	2017-18	2016-17
1.	400 kV	7.2	7.2	7.2
2.	220 kV	1723.96	1723.96	1697.34
3.	132 kV	3022.77	3022.77	2989.01
4.	32 kV	613.00	613.00	613
	Total	5366.93	5366.93	5306.55

**As on 01.11.2018*

Table 5: No of Grid Substation of AEGCL

Sr. No	Voltage Level	Nos of GSS		
		2018-19*	2017-18	2016-17
1	400/220/132/33 kV	1	1	1
2	220/132 kV	1	1	1
3	220/132/66/33 kV	3	3	3
4	220/132/33 kV	6	5	5
5	220/33 kV	1	1	1
6	132/66/33 kV	2	2	2
7	132/33 kV	50	50	48
8	132/11 kV	1	1	1
	Total	65	64	62



2.2 Approach for filing the petition

- a) The Hon'ble Commission notified the AERC (Terms and Conditions for determination of MYT) Regulations, 2015 (*hereinafter to be referred as MYT Regulations 2015*) which were applicable for tariff period upto 31st March 2019. As per the provisions of these MYT Regulations, 2015, AEGCL is filing the true up petition for FY 2017-18 based on Audited Accounts for consideration of the Hon'ble Commission along with the specified formats providing information on various operational and performance parameters.
- b) The Hon'ble Commission vide order dated 31st March 2017 in Case No. 35 of 2017 had approved the ARR for FY 2017-18. Thereafter the Hon'ble Commission approved the provisional true up for FY 2017-18 vide order dated 19th March 2018 in Case No. 28 of 2018.
- c) Since FY 2017-18 is completed and annual audited accounts for said year are now available, hence AEGCL is filing the true up petition for FY 2017-18 along with audited accounts as per the provisions of MYT Regulations, 2015.
- d) Thereafter, Hon'ble Commission vide Order dated 19th March 2018 approved the ARR for FY 2018-19. As per the provisions of the MYT Regulations 2015, AEGCL is filing Annual Performance Review petition of FY 2018-19.
- e) Further on 17th July 2018, the Hon'ble Commission notified AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 (*hereinafter to be referred as MYT Regulations 2018*) which are applicable for the tariff period from 1st April 2019 to 31st March 2022.
- f) As per the provisions of the MYT Regulations, 2018, AEGCL is filing the Multi Year Petition for the first control period i.e. FY 2019-20 to FY 2021-22.

2.3 Provision of Law

- a) The Hon'ble Commission has notified the MYT Regulations, 2015. The scope of this regulation included tariff determination for transmission licensee under Multi Year Tariff principle. From FY 2016-17 onwards, MYT Regulations, 2015 are applicable, hence True Up Petition for FY 2017-18 and APR for FY 2018-19 are prepared as per the provisions of MYT Regulations, 2015. The relevant extract of the MYT Regulations 2015 is reproduced below for ready reference.
-



3. Object, Scope of Regulations and Extent of Application

3.1. The object of these Regulations is to specify the terms and conditions for the determination of tariffs by the Assam Electricity Regulatory Commission for the supply of electricity by a generating company to a distribution licensee, for transmission of electricity, for wheeling of electricity and for retail sale of electricity, and SLDC.

3.2 The Commission in specifying these Regulations is guided by the principles contained in Sections 61 and 62 of the Act, the National Electricity Policy, 2005 and the Tariff Policy, 2006 notified by the Central Government under Section 3 of the Act.

3.3 The Commission shall determine tariff, including terms and conditions thereof, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:-

(i) Supply of electricity by a Generating Company to a Distribution Licensee:

(ii) Intra-State transmission of electricity;

(iii) Wheeling Business for Distribution of electricity;

(iv) Retail Supply Business of electricity;

(v) State Load Dispatch Centre;

Provided that the Commission shall determine such tariff, having regard to the terms and conditions contained in Chapter 6, 7, 8, 9 & 10 of these Regulations for applications under this Regulation for determination of tariff, for generation, transmission, distribution Wheeling Business and retail supply business and SLDC:

Provided further that the Commission, while determining tariff upon an application made to it under this Regulation, shall also have regard to the terms and conditions of tariff as may be specified by the State Commission of such other State and/or the terms and conditions of tariff as may be specified by the Central



Commission where any of the Parties to such transaction come under the jurisdiction of such State Commission or of the Central Commission.

3.4 *Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government.*

- b) The provisions for filing Multi Year Tariff petitions during the control period from FY 2019-20 to FY 2021-22 are defined in the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018. The relevant para of the regulation is reproduced below:

3 Object, Scope of Regulations and Extent of Application

3.1 *The objective of these Regulations is to specify the terms and conditions for the determination of tariffs by the Assam Electricity Regulatory Commission for the supply of electricity by a generating company to a distribution licensee, for transmission of electricity, for wheeling of electricity and for retail sale of electricity, and SLDC.*

3.2 *The Commission in specifying these Regulations is guided by the principles contained in Sections 61 and 62 of the Act, the National Electricity Policy, 2005 and the Tariff Policy, 2016 notified by the Central Government under Section 3 of the Act.*

3.3 *The Commission shall determine tariff, including terms and conditions thereof, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:-*

(i) Supply of electricity by a Generating Company to a Distribution Licensee:

(ii) Intra-State transmission of electricity;

(iii) Wheeling Business for Distribution of electricity;

(iv) Retail Supply Business of electricity;



(v) State Load Dispatch Centre;

Provided that the Commission shall determine such tariff, having regard to the terms and conditions contained in Chapter 6,7, 8, 9 & 10 of these Regulations for applications under this Regulation for determination of tariff, for generation, transmission, distribution Wheeling Business and retail supply business and SLDC:

Provided further that the Commission, while determining tariff upon an application made to it under this Regulation, shall also have regard to the terms and conditions of tariff as may be specified by the State Commission of such other State and/or the terms and conditions of tariff as may be specified by the Central Commission where any of the Parties to such transaction come under the jurisdiction of such State Commission or of the Central Commission.

3.4 Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government.

- c) Accordingly, as per the provisions of AERC (MYT) Regulations, 2015, AEGCL has prepared the True-up petition for FY 2017-18 based on the audited accounts and Annual Performance Review of FY 2018-19. Further, as per the provisions of AERC (MYT) Regulations, 2018, AEGCL has prepared the Multi Year Tariff Petition for FY 2019-20 to FY 2021-22. AEGCL is submitting the above petition along with specified data formats as provided in Annexure: I for approval of Hon'ble Commission.

2.4 Petition Structure

The True Up, APR and MYT Tariff Petition included the following Chapters:

Sr. No.	Section	Contents
1	Section 1	Executive summary of Petition
2	Section 2	Introduction and overall approach to filling the Petition
3	Section 3	Interest & Finance Charges of FY 2016-17
4	Section 4	True Up of FY 2017 – 18



Sr. No.	Section	Contents
5	Section 5	Annual Performance Review of FY 2018 – 19
6	Section 6	Multi Year Tariff Petition for FY 2019 – 20 to FY 2021 – 22
7	Section 7	Prayers to the Hon'ble Commission



3 INTEREST AND FINANCE CHARGES FY 2016-17

3.1 Interest and Finance Charges for FY 2016-17

Regulations 35 of AERC MYT Regulations, 2015 provides methodology for computation of Interest on Loan Capital. Relevant excerpts of regulations are reproduced below for ready reference

35 Interest on loan capital

35.1 The loans arrived at in the manner indicated in Regulation 32 shall be considered as gross normative loan for calculation of interest on loan.

35.2 The normative loan outstanding as on April 1, 2016, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2016, from the gross normative loan.

35.3 The repayment for each year of the Control period shall be deemed to be equal to the depreciation allowed for that year:

35.4 Notwithstanding any moratorium period availed by the Generating Company or the Transmission Licensee or the Distribution Licensee or the SLDC, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

Accordingly, while carrying out the true-up exercise of FY 2016-17, AERC 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. Table 4-12 of AEGCL Tariff Order dated 19.03.18 illustrates the aforesaid computation. Consequently, AERC had arrived at a negative net normative loan, leading to nil Interest and Finance charges for FY 2016-17.

However, AEGCL while carrying out the computations observe out 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 Crores. AEGCL submits that cumulative repayment for FY 2016-17 is Rs. 225.03 crores, hence the resulting Net Normative loan for FY 2016-17 is Rs. 255.57 crores. The tabulations are illustrated in the below table.



Table 6: Net Normative Loan for FY 2016-17

(Rs.Crs.)

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
Net Normative loan (i=g-h)	-122.69	255.57
Net Normative loan considered for FY 2016-17	0.00	255.57

Since, the actual Net Normative loan should be Rs. 255.57 crores as against approved nil in True-up of FY 2016-17, AEGCL submits that the Interest and finance charges for FY 2016-17 are Rs. 25.95 Crores as against approved. Calculations as follows:

Table 7: Interest and Finance Charges for FY 2016-17

(Rs.Crs.)

Particulars	Order	AEGCL Submission
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
Net Normative Closing Loan	-	253.84
Interest Rate	10.19%	10.19%
Interest Expenses on Loan	-	25.95

AEGCL humbly request the Hon'ble commission to admit and allow the same in a coherent manner possible. AEGCL further submits that a similar case regarding to 'Opening GFA' of MSEDCL, which was not accounted in the previous tariff order was later reconciled by MERC in its order dated 195 of 2017. In similar lines AEGCL request the Hon'ble Commission to allow the Interest and Finance Charges of Rs.25.95 crores. in the consolidated ARR of FY 2019-20.



4 TRUE UP OF ARR FOR FY 2017-18

4.1 Preamble

This section outlines performance of AEGCL for FY 2017-18 based on the Annual Accounts. In line with the provisions of MYT Regulations, 2015, AEGCL hereby submits the True Up Petition comparing the actual performance during FY 2017-18 with the approved by the Hon'ble Commission for FY 2017-18 vide tariff order dated 31.03.2017.

4.2 Principles of Truing Up for FY 2017-18

AEGCL submits the actual performance based on the audited accounts for true up for FY 2017-18. This chapter summarizes each of the components of Annual Transmission Charges for FY 2017-18 and requests the Hon'ble Commission to approve the true up for FY 2017-18.

Following sections outline the deviations in actual expenses and revenue for FY 2017-18 based on the Audited Accounts of AEGCL in comparison with that approved by the Hon'ble Commission vide Order dated 31st March 2017.

4.3 Transmission Loss for FY 2017-18

AEGCL has achieved a significant reduction in transmission losses in recent years. In FY 2017-18, the actual transmission loss is 3.55%, which is at the same loss level of preceding year. The table below highlights the actual transmission loss achieved by AEGCL.

Table 8: 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%

As per Table above, AEGCL requests Hon'ble Commission to approve the Transmission loss of 3.55 % for FY 2017-18.



4.4 **Fixed Cost for FY 2017-18**

4.4.1 Based on the Capital Cost and the consequent Capitalized Expenditure, Equity Component and Normative Debt, the fixed cost of AEGCL for FY 2017-18 have been determined in accordance with the MYT Regulations, 2015 outlined thereof. The fixed cost for AEGCL has been determined under the following major heads:

- PGCIL Charges
- Operation and Maintenance Expenses
- Depreciation
- Interest and Finance Charges
- Interest on Working Capital
- Return on Equity
- Bulk Supply Tariff (BST)

4.4.2 For the purpose of truing up, all the heads mentioned above has been categorized into Controllable or Uncontrollable factors. A head wise comparison has been made between the values approved by the Hon'ble Commission vide Tariff Order dated 31.03.2017 and the actual expenditure incurred by the AEGCL in FY 2017-18 based on the audited accounts.

4.5 **Categorization of Heads of Expenses**

4.5.1 As per provisions of MYT Regulations, 2015, all the expenditure heads need to be categorized into Controllable (under control of the Petitioner) and Uncontrollable (not under control of the Petitioner).

Regulations 11 of MYT Regulations, 2015, provide for categorization of expense heads. Based on the above classification, AEGCL has computed the Gains/ Losses attributed to such controllable & uncontrollable factors for FY 2017-18.

4.6 **PGCIL Charges for FY 2017-18**

PGCIL charges are paid by AEGCL as per the actual bills submitted by PGCIL. Month wise details of transmission charge to PGCIL (Incl. charges paid to POSOCO NERLDC) are tabulated in the table below. AEGCL adds that the PGCIL Charges claimed are gross billed amount, however, the rebate received from PGCIL has been shown separately under Non-Tariff Income. Following table provides the details of the monthly PGCIL Charges for FY 2017-18.



Table 9: PGCIL Charges for the FY 2017-18
(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL submission
1	April	534.55	41.34
2	May		43.70
3	June		40.82
4	July		39.71
5	August		48.61
6	September		36.75
7	October		37.07
8	November		57.55
9	December		36.54
10	January		40.79
11	February		48.44
12	March		37.98
13	Total	534.55	509.29

AEGCL requests the Hon'ble Commission to approve the actual PGCIL Charges as shown in above table.

4.7 SLDC Charges for FY 2017-18

In FY 2017-18, the SLDC charges is Rs. 2.56 crores. as compared to Rs. 2.60 crores approved by the Hon'ble AERC. The SLDC Charges comprises of Employee, R&M and A&G expenses. The table below highlights the SLDC charges for FY 2017-18.

Table 10: SLDC Charges for the FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL submission
1	Employee Cost	2.60	2.10
2	Repair & Maintenance		0.05
3	Administrative & General Expenses		0.41
4	Total	2.60	2.56

4.7.1 AEGCL requests the Hon'ble Commission to approve the actual SLDC Charges as shown in above table.



4.8 Operation and Maintenance Expenses for FY 2017-18

4.8.1 The Regulation 68.9 and 68.10 of the AERC (MYT) Regulations, 2015 specifies the normative Operation and Maintenance (O&M) expenses allowed for new Transmission Licensee for the said control period. The relevant provision is as follows:

“Regulation 68.9 (Operation and Maintenance Expenses): The O&M expenses for the nth year and also for the year immediately preceding the Control Period shall be approved based on the formula given below:-

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

Where -

O&M_n – Operation and Maintenance expense for the nth year;

EMP_n – Employee Costs for the nth year;

R&M_n – Repair and Maintenance Costs for the nth year;

A&G_n – Administrative and General Costs for the nth year;

Regulation 68.10 (Operation and Maintenance Expenses): The above components shall be computed in the manner specified below:

$$EMP_n = (EMP_{n-1}) \times (1 + G_n) \times (CPI \text{ inflation})$$

$$R\&M_n = K \times (GFA_{n-1}) \times (WPI \text{ inflation}) \text{ and}$$

$$A\&G_n = (A\&G_{n-1}) \times (WPI \text{ inflation}) + Provision$$

Where -

EMP_{n-1} – Employee Costs for the (n-1)th year;

A&G_{n-1} – Administrative and General Costs for the (n-1)th year;

Provision: Cost for initiatives or other one-time expenses as proposed by the Licensee and validated by the Commission.

‘K’ is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee’s filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-a-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;

WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;



*GFA_{n-1} --- Gross Fixed Asset of the transmission licensee for the n-1th year;
G_n is a growth factor for the nth year. Value of G_n shall be determined by the
Commission in the MYT tariff order for meeting the additional manpower
requirement based on licensee's filings, benchmarking, and any other factor that the
Commission feels appropriate"*

4.8.2 During FY 2017-18, based on methodology specified by the MYT Regulations, 2015, the Normative O&M expenses of AEGCL works out to be Rs. 170.26 crores which is inclusive of Employee cost, Repair & Maintenance charges and Administration & General expenses. Following table provides the summary of Normative O&M Expenses for FY 2017-18.

Table 11: Operation and Maintenance Expenses for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
	O&M Expenses	175.96	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

4.8.3 WPI & CPI Inflation Index

WPI Inflation computation for FY 2017-18

The average increase in the Wholesale Price Index (WPI) for immediately preceding three years gives the WPI Inflation for FY 2017-18. Hence the WPI Index from FY 2013-14 to FY 2016-17 is considered for computation purpose. Tabulations as follows:

Fiscal	WPI Index	YOY Change %
FY 2016-17	111.60	1.73%
FY 2015-16	109.70	-3.69%
FY 2014-15	113.90	1.24%
FY 2013-14	112.50	-
Average WPI Inflation (Last 3 Yrs)		-0.24%



CPI Inflation computation for FY 2017-18

The average increase in the Consumer Price Index (CPI) for immediately preceding three years gives the CPI Inflation for FY 2017-18. Hence the CPI Index from FY 2013-14 to FY 2016-17 is considered for computation purpose. Tabulations as follows:

Fiscal	CPI Index	YOY Change %
FY 2016-17	275.92	4.12%
FY 2015-16	265.00	5.65%
FY 2014-15	250.83	6.28%
FY 2013-14	236.00	
Average CPI Inflation (Last 3 Yrs)		5.35%

4.8.4 Normative Calculation of R&M expense for FY 2017-18

Regulation 68.10 provides the manner in which components of O&M expenses shall be computed. The methodology for R&M expense is as follows:

$$R\&M_n = K \times (GFA_{n-1}) \times (WPI_{inflation})$$

Normative R&M Expense for FY 2017-18		(Rs. Crs.)
1	Opening GFA for previous year	1,544.59
2	Closing GFA for previous year	1,628.68
3	Average GFA for previous year	1,586.64
4	K Factor	1.20%
5	WPI Inflation	-0.24%
4	Normative R&M Expense	18.99

The “K” factor of AEGCL has been arrived at 1.20%. The computation details are provided in para 6.11.2.

4.8.5 Normative Calculation of Employee expense for FY 2017-18

Regulation 68.10 provides the manner in which components of O&M expenses shall be computed. The methodology for Employee expense is as follows:

$$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI_{inflation})$$



Normative Employee Expense for FY 2017-18		(Rs. Crs.)
1	Base Employee Cost (n-1)	133.12
2	CPI Inflation	5.35%
3	Gn (Growth Factor for nth Year)	2.99%
4	Normative Employee Cost for FY 17-18 (Excl. ROP)	144.43
5	Revision of Pay	15.49
	Normative Employee Cost for the year (Incl. Revision of Pay)	159.93

The Gn (Growth Factor) of AEGCL has been arrived at 2.99%. The computation details are provided in para 6.11.3.

4.8.6 Normative Calculation of Administrative and General Expenses for FY 2017-18

Regulation 68.10 provides the manner in which components of O&M expenses shall be computed. The methodology for Administrative and General Expenses is as follows:

$$(A \& G_{n-1}) \times (WPI \text{ inflation}) + \text{Provision}$$

Normative A&G Expense for FY 2017-18		(Rs. Crs.)
1	A&G Expense for Previous year	9.35
2	WPI Inflation	-0.24%
3	Provision	0
4	Normative A&G Expense for the year	9.33

4.8.7 AEGCL requests the Hon'ble Commission to approve the normative O&M expenses as shown in above table.

4.8.8 Following Sections provide the details of O&M expenses as provided in the Audited Accounts for FY 2017-18.

4.8.9 Repair and Maintenance Expenses for FY 2017-18

Repairs and Maintenance expenses go towards 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.



To maintain the assets in a more efficient way, AEGCL has been carrying out the repair and maintenance activities. The actual R&M expense for the year FY 2017-18 is indicated below.

Table 12: Repair and Maintenance Expenses of FY 2017-18
(Rs.Crs.)

S.N.	Particulars	Actual R&M Expense
1	Plant & Machinery	10.43
2	Buildings	0.98
3	Civil works	0.99
4	Hydraulic Works	-
5	Lines, Cable Networks etc.	2.19
6	Vehicles	0.16
7	Furniture & Fixtures	0.06
8	Office Equipment	0.33
9	Total R&M Expenses	15.15
	AEGCL R&M Expenses	15.10
	SLDC R&M Expenses	0.05

4.8.10 Employee Expenses for FY 2017-18

Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity funding, leave encashment and staff welfare expenses. The actual employee expenses for the year FY 2017-18 is as follows:

Table 13: Employee Expenses for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Actual Employee Cost
1	Salaries	123.07
2	Bonus/ Exgratia To Employees	0.01
3	Payment Under Workman's Compensation and Gratuity	4.70
4	Any Other Item	1.75
5	Staff Welfare Expenses	0.31
6	Provident Fund Contribution	19.58
7	Total Employee Costs	149.41
	AEGCL Employee Expenses	147.31
	SLDC Employee Expenses	2.10



4.8.11 Administrative and General Expenses for FY 2017-18

Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and traveling allowances, other debits. The actual Administrative and General expenses for the year FY 2017-18 is as follows:

Table 14: Administrative and General Expenses for FY 2017-18

		(Rs.Crs.)
S.N.	Particulars	Actual A&G
1	Lease/ Rent/Rates and taxes	0.23
2	Insurance	0.09
3	Telephone, Postage, Telegram & Telex Charges	0.26
4	Consultancy Charges	0.00
5	Other Professional Charges	0.07
6	Conveyance and Travelling	1.18
7	Fee and Subscriptions Books and Periodicals	1.71
8	Printing and Stationery	0.29
9	Advertisement Expenses	0.27
10	Electricity Charges to Offices	1.17
11	Water Charges	0.00
12	Entertainment Charges	0.06
13	Miscellaneous Expenses	0.17
14	Legal Charges	0.03
15	Auditor's Fee	0.06
16	Vehicle Running Expenses Truck / Delivery Van	0.05
17	Vehicle Hiring Expenses Truck / Delivery Van	1.33
18	Total A&G Expenses	6.98
	AEGCL A&G Expenses	6.57
	SLDC A&G Expenses	0.41

4.9 Sharing of Gains & Losses for FY 2017-18

Based on the methodology prescribed in the MYT Regulations 2015, AEGCL has classified various heads of expenses under Controllable & Uncontrollable factors. 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. The sharing of gains or (losses) on account of O&M expenses is shown in the following Table.

Table 15: Sharing of Gain / (Losses) -O&M expenses

(Rs.Crs.)

S.N.	Particulars	Actual	Normative	Gain/ (Losses)	Gains/(Losses) to be shared with APDCL
		A	B	c=b-a	d=c x 1/3
1	Employee Cost	149.41	144.43	-4.97	-
2	Less: Terminal Liabilities	24.28	21.00	-3.27	-3.27
3	Employee Cost excl. Terminal Liabilities	125.13	123.43	-1.70	-0.57
4	Repair & Maintenance	15.15	18.99	3.85	1.28
5	Administrative & General Expenses	6.98	9.33	2.35	0.78
6	Total	147.26	151.76	4.50	1.50

AEGCL submits that since actual O&M Expenses is higher than normative with respect to controllable factors, the gain of Rs. 1.50 crores shall be shared and passed on through ARR. AEGCL requests the Hon'ble Commission to approve the sharing of gain as shown in the above table.

4.10 Capital Expenditure and Capitalization for FY 2017-18

The funding of Capital Expenditure is done through various sources namely Loans, Grants, Equity and Debt. Although capital expenditure should be funded by normative debt and equity, no infusion of equity has been made other than equity capital allocated to the companies in the Opening Balance Sheets (OBS) of the Companies in the Reorganization. The funding of capitalisation as submitted by AEGCL is shown in the following Table:

Table 16: Funding for Capitalisation for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	Grant	201.44	55.93
2	Equity	6.74	-
3	Debt	95.61	-
4	Total Capitalisation	303.79	55.93



4.10.1 AEGCL requests the Hon'ble Commission to approve the capitalisation as shown in the above table.

4.10.2 The interest and finance charges incurred for the debt funding portion have been discussed in the paragraph no 4.12 and the Return on the Equity under paragraph no 4.14 of the petition. Moreover, since the Capitalisation for FY 2017-18 is Rs. 55.93 crores which as per normative methodology occurs to be totally funded by Grant Mechanism (Total Grant Rs. 66.20 crores). Hence the actual debt (Rs. 74.86 crores) shall not reflect in the above funding pattern.

4.11 Depreciation for FY 2017-18

As per the Audited Accounts for FY 2017-18, the Opening Gross Block of Fixed Assets and the opening depreciation for FY 2017-18 is Rs. 1628.68 crores and Rs. 1014 crores respectively. The amount of depreciation for FY 2017-18 is 60.92 crores. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the capitalization as shown in the Table 17.

Table 17: Depreciation for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Depreciation Rate	Accumulated depreciation - beginning of the year	Additions during the year
1	Land owned under full ownership	0.00%	-	-
2	Land under lease	3.34%	0.01	0.01
3	Building	3.34%	17.46	1.26
4	Hydraulic	5.28%	2.51	-
5	Other Civil Works	3.34%	5.80	2.42
6	Plant & Machinery	5.28%	338.98	42.49
7	Lines & Cable Network	5.28%	640.95	13.94
8	Vehicles	9.50%	4.00	0.22
9	Furniture & Fixtures	6.33%	2.84	0.25
10	Office Equipment	6.33%	1.93	0.33
	Total		1,014	60.92
(a)	Total Depreciation			60.92
(b)	Gross Fixed Assets excluding Land			1,599.81
(c)	Grant towards GFA			1,029.67
(d)	Less: Dep towards assets through Grant/Consumer cont (d= c/b x a)			39.21
(e)	Depreciation for the year (excl. assets funded through Grant) (a-d)			21.71



4.11.1 AEGCL requests the Hon'ble Commission to approve the depreciation as shown in above table.

4.12 Interest and Finance Charges for FY 2017-18

The normative Interest & Finance charges for FY 2017-18 are as follows.

**Table 18: Normative Interest and Finance Charges for FY 2017-18
(Rs. Crs.)**

Particulars	Order	AEGCL Submission
Net Normative Opening Loan	53.05	253.84
Addition of normative loan during the year	95.61	-
Normative Repayment during the year	17.07	21.71
Net Normative Closing Loan	131.59	232.13
Interest Rate	10.19%	10.19%
Interest Expenses on Loan	9.41	24.76
Finance Charges		0.26
Total Interest and Finance Charges	9.41	25.02

4.12.1 AEGCL requests the Hon'ble Commission to approve the normative Interest and finance charges as shown in above table.

4.13 Interest on Working Capital for FY 2017-18

AERC (MYT Regulations), 2015 provides for the interest on working capital. AEGCL computed the working capital based on the normative formula prescribed in the MYT Regulations, 2015.

AECL submits that the working capital requirements of the company to finance the business cycle is generally financed through internal mobilization of funds that remains in the hand of the company such as GPF contributions, pension fund, etc. The funds are liable to receive adequate return for the application of fund.

The interest on working capital for FY 2017-18 computed by AEGCL against that approved by the Hon'ble Commission is as shown in Table below.



Table 19: Interest on Working Capital for FY 2017-18

S.N.	Particulars	Unit	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	O&M expenses for 1 month	Rs. Crs.	14.66	14.18
2	Maintenance spares @ 15% of O&M	Rs. Crs.	26.40	25.53
3	Receivables for two months	Rs. Crs.	145.87	178.68
4	Total Working Capital	Rs. Crs.	186.93	218.39
5	Rate of Interest	%	12.80%	12.60%
6	Interest on Working Capital	Rs. Crs.	23.93	27.52

4.13.1 AEGCL requests the Hon'ble Commission to approve the Interest on Working Capital as shown in above table.

4.14 Return on Equity for FY 2017-18

As per the MYT Regulations 2015 issued by the Hon'ble Commission, a return @ 15.5% on the equity base is considered as reasonable and hence liable to be recovered through retail Tariff. The AEGCL has shown signs of recovery in the recent years by improving its operational performance and speedy implementation of different schemes. Accordingly, AEGCL has computed the return on equity considering a rate of return @ 15.50% for FY 2017-18 as shown below.

Table 20: Return on Equity for FY 2017-18

S.N.	Particulars	Units	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	Equity (Opening Balance)	Rs. Crs.	99.93	99.93
2	Net additions during the year	Rs. Crs.	6.74	0
3	Less: Reduction during the year	Rs. Crs.	0	0.00
4	Equity (Closing Balance)	Rs. Crs.	106.67	99.93
5	Average Equity	Rs. Crs.	103.30	99.93
6	Rate of Return on Equity	%	15.50%	15.50%
7	Return on Equity	Rs. Crs.	16.01	15.49

4.14.1 AEGCL requests the Hon'ble Commission to approve the return on equity as shown in above table.



4.15 Other Debit and Net Prior Period Expenses for FY 2017-18

AEGCL submits that Other Debit and Net Prior Period Expenses/Income figures have been claimed as per the annual accounts of FY 2017-18. The other debits is primarily on account of expenses towards loss on obsolescence of stores.

Table 21: Other Debit and Net Prior Period Expenses for FY 2017-18
(Rs. Crs.)

S. N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	Other debits	0	0.90
2	Net Prior period charges/ (Credits)	0	-5.68
	Total	0	-4.78

4.15.1 AEGCL requests the Hon'ble Commission to approve the Other Debit and Net Prior Period Expenses/Income as shown in above table.

4.16 Taxes for FY 2017-18

AEGCL submits that the Income Tax is claimed as per the audited accounts for FY 2017-18.

Table 22: Income Tax for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	Income Tax Payable	0	8.80

4.16.1 AEGCL requests the Hon'ble Commission to approve the Income Tax as shown in above table.

4.17 Bulk Supply Tariff (BST) – Terminal Benefits for FY 2017-18

AEGCL submits that the BST as per Audited accounts is Rs. 172.10 crores. The same is claimed for Pension Fund (special charges for Terminal Benefits.)



Table 23: Bulk Supply Tariff (BST) – Terminal Benefits for FY 2017-18
(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	Special Charges on Bulk Supply Tariff	181.52	172.10
	Total	181.52	172.10

4.17.1 AEGCL requests the Hon'ble Commission to approve the special charges on BST as shown in above table.

4.18 Non-Tariff Income for FY 2017-18

The amount of Non-Tariff Income mostly comprising of income from investments and misc. receipts, receivable from CTU for utilization of its network for wheeling CSGS energy to some states of the region. The actual amount received during FY 2017-18 is considered in the truing up claim.

Table 24: Non-Tariff Income for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
A	Income from Investment, Fixed & Call Deposits		
	Income from Investments		14.58
	Interest on fixed deposits		-
	Income on other investments (Dividend)		2.14
	Interest from Banks		1.42
	Sub Total		18.14
B	Other Non-Tariff Income		
	Miscellaneous Receipts		174.81
	Penalty for contractor/supplier for delay, etc.		-
	Rebate received from PGCIL		2.47
	Rentals from staff quarters		0.34
Sub-Total		177.62	
Total		85.99	195.76

The Misc. receipts include Transmission surcharge bill of Rs. 55.95 crores.



4.18.1 AEGCL requests the Hon'ble Commission to approve the Non-Tariff income as shown in above table.

Observation of AG Audit

- Transmission Incentive Credit bill amounting to Rs. 6.39 crore was raised to APDCL, because there was a mistake in computation of Transmission Incentive bill amounting to Rs. 12.10 crore. This has been pointed out by the AG Audit for the FY 2017-18, vide POS No. 4.
- Hon'ble AERC to take into account that a credit bill amounting to Rs. 9.42 crore has been raised to APDCL because the approved BST (amounting to Rs. 181.52 crore) was higher by Rs. 9.42 crore than the actual BST (amounting to Rs. 172.10 crore). This has been pointed out by the AG Audit for the FY 2017-18 vide POS No. 5.
- Transmission Surcharge Credit bill amounting to Rs. 37.31 crore was raised to APDCL because AEGCL had wrongly calculated Transmission Surcharge bill as it had calculated surcharge on transmission bill for the month of January, February and March, 2018, which were not due for surcharge as on 31.03.2018. This has been pointed out by AG Audit for the FY 2017-18 vide POS No. 11.



4.19 Truing Up for FY 2017-18 after Sharing of Gains & Losses for FY 2017-18

Table 25: Truing Up for FY 2017-18

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 31.03.17	AEGCL Submission
1	PGCIL Charges	534.55	509.29
2	O&M Expenses	175.96	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
5	Interest & Finance Charges	9.41	25.02
6	Interest on Working Capital	23.93	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 (Excl. related to Int, Dep and O&M)	-	0.90
11	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)	-	(5.68)
12	Less: Non-Tariff Income/ Other Income	85.99	195.76
13	Aggregate Revenue Requirement	875.06	752.14
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		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		37.31
19	Carrying Cost	-	-
20	Net Aggregate Revenue Requirement	1,194.99	1,102.99
21	Incentive on Transmission Availability	-	12.10
22	Add: Sharing of (Gains)/Loss	-	(1.50)
23	ARR after Sharing (Gains)/Losses and Incentive	1,194.99	1,113.59



24	Revenue with Approved Tariff for FY 2017-18	1,194.99	1,194.99
25	Revenue Gap /(Surplus) for FY 17-18	(0.00)	(81.40)

The Hon'ble Commission is requested to approve the above True Up and allow AEGCL to pass on the revised revenue Surplus computed after sharing the gains for FY 2017-18.



5 ANNUAL PERFORMANCE REVIEW OF FY 2018-19

5.1 Preamble

This section outlines the Annual Performance Review of FY 2018-19 whereby it highlights the performance of AEGCL for FY 2018 -19 based on half yearly results.

As per the provisions of MYT Regulations, 2015, AEGCL hereby submits the Annual Performance Review for FY 2018-19 comparing actual performance during April to September (H1) and revised estimates for October to March (H2) of FY 2018-19 with approved figures for FY 2017-18 by Hon'ble Commission vide Tariff Order dated 19.03.2018.

5.2 Transmission Loss for FY 2018-19

AEGCL has achieved a significant reduction in Transmission losses, during recent years. These efforts shall continue and will be enhanced. However, loss reduction is a slow process and becomes increasingly difficult. Projected transmission loss for FY 2018-19 is shown below.

Table 26: Transmission Loss for FY 2018-19

S.N.	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%

As per Table above, AEGCL requests Hon'ble Commission to approve the Transmission loss 3.55% for FY 2018-19.

5.3 Estimation of Expenses for the FY 2018-19

5.3.1 The components for the calculation of total expenses for FY 2018-19 are as follow:

- PGCIL Charges
- Operation and Maintenance Expenses



- Depreciation
- Interest and Finance Charges
- Interest on Working Capital
- Return on Equity
- Bulk Supply Tariff (BST)
- Provision for tax
- Other Debits

5.4 PGCIL Charges for FY 2018-19

Transmission charges to PGCIL, for the FY 2018-19 has been projected by considering actual bills received up to September 2018 and projection for expected bills against the wheeling charges of PGCIL for the month of October 2018 to March 2019 as shown in the table below.

Table 27: PGCIL Charges for the FY 2018-19
(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	AEGCL Estimation
1	April	526.33	37.98
2	May		39.95
3	June		41.97
4	July		40.73
5	August		46.70
6	September		48.47
7	October		42.64
8	November		42.64
9	December		42.64
10	January		42.64
11	February		42.64
12	March		42.64
13	Total		526.33

5.5 SLDC Charges for FY 2018-19

SLDC charges for FY 2018-19 has been projected by considering actual SLDC charges up to September 2018. The table below highlights the SLDC charges.



Table 28 : SLDC Charges for the FY 2018-19

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	Employee Cost	3.61	1.36	1.38	2.74
2	Repair & Maintenance		0.03	0.09	0.12
3	Administrative & General Expenses		0.16	0.47	0.63
4	Total	3.61	1.54	1.95	3.49

5.6 Operation and Maintenance Expenses for FY 2018-19

Operations and Maintenance (O&M) expenses consists of Employee expenses, Repairs and Maintenance expenses and Administrative and General expenses. The O&M expenses for FY 2018-19 are as below along with the value approved by the Hon'ble Commission vide Tariff Order dated 31.03.2017.

Table 29: Operation and Maintenance Expenses for FY 2018-19

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Submission
1	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	5.05	10.08	15.13
C	A&G Expenses	6.9	3.87	5.42	9.29

5.6.1 Repair and Maintenance Expenses for FY 2018-19

R&M Expenses are generally incurred on maintaining the transmission assets in order to ensure uninterrupted operations. AEGCL would like to submit that 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.

While arriving R&M expenses for the FY 2018-19, actual R&M expenses incurred during first 6 months plus estimate for the next 6 months has been considered. The amount of R&M expenses for FY 2018-19 is shown below. It is pertinent to note that the R&M works of assets during the H1 is minimal on account of



monsoon. Assam receives abundant rainfall in the monsoon. The rain season starts off with the month of June and lasts till October. Hence the R&M works are carried out post monsoon and hence H2 expenses are usually twice as the H1 expenses.

Table 30: Repair and Maintenance Expenses of FY 2018-19

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	Plant & Machinery	18.00	3.99	7.98	11.98
2	Buildings		0.39	0.78	1.16
3	Civil works		0.12	0.25	0.37
4	Hydraulic Works		-	-	-
5	Lines, Cable Networks etc.		0.35	0.70	1.04
6	Vehicles		0.07	0.14	0.21
7	Furniture & Fixtures		0.02	0.04	0.07
8	Office Equipment		0.14	0.28	0.43
9	Total			5.09	10.17
	AEGCL		5.05	10.08	15.13
	SLDC		0.03	0.09	0.12

AEGCL requests the Hon'ble Commission to approve the proposed expenses under R&M for the FY 2018-19 as proposed by AEGCL.

5.6.2 Employee Expenses for FY 2018-19

Employee expenses include salaries, bonus, other benefits like medical expense reimbursement, LTA, etc. and terminal benefits in the form of pension, gratuity, leave encashment, staff welfare etc. AEGCL submits that the employee cost has been estimated considering trend of past year's employee cost, increase in dearness allowance, and its impact on other allowances such as HRA, field allowances, PF, etc. While arriving Employee Cost for the FY 2018-19, actual salaries paid during first 6 months plus estimate for the next 6 months has been considered.

AEGCL submits that the employee costs for the FY 2018-19 has been estimated based on 6 months actual data and projections for the next 6 months. Projections for the next 6 months has been made considering the following. Actual salary paid



for the month of Oct, 2018 has been considered as the salaries for the month of Nov, 2018 to March, 2019, 2% increase has been considered on account of increase in DA from the month of Jan, 2019 onwards. The above estimation includes Rs. 22.45 crore being actual payment made on account of arrear due to ROP, 2017 for 18 months and Rs. 2.35 crores being the provision for arrear due to ROP, 2017 for remaining 2 months assumed to be paid in the month of Jan, 2019.

Table 31: Employee Expenses of FY 2018-19

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	Salaries	158.89	74.07	65.61	139.68
2	Bonus/ Exgratia To Employees		0.00	0.06	0.06
3	Payment Under Workman's Compensation and Gratuity		1.18	1.18	2.35
4	Any Other Item		5.86	4.09	9.95
5	Staff Welfare Expenses		0.28	0.11	0.40
6	Provident Fund Contribution		11.37	9.87	21.24
7	Total Employee Costs		92.77	80.91	173.68
	AEGCL		91.41	79.53	170.94
	SLDC		1.36	1.38	2.74

AEGCL requests the Hon'ble Commission to approve the proposed expenses of Rs. 173.68 crores. under employee cost for the FY 2018-19 as proposed by AEGCL.

5.6.3 Administrative and General Expenses for FY 2018-19

Administrative expenses include rents, telephone and other communication expenses, professional charges, conveyance and traveling allowances, etc. While arriving A&G expenses for the FY 2018-19, actual A&G expenses incurred during first 6 months plus estimate for the next 6 months has been considered. Expenses for H2 are usually in line to the expenses of H1 and hence the same is considered for H2. Estimated A&G Expense for the FY 2018-19 is as shown below.



Table 32: Administrative and General Expenses for FY 2018-19

(Rs. Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	Lease/ Rent/Rates and taxes	6.90	0.12	0.12	0.23
2	Insurance		0.04	0.04	0.08
3	Revenue Stamp Expenses Account		0.02	0.02	0.04
4	Telephone, Postage, Telegram & Telex Charges		0.11	0.11	0.23
5	Consultancy Charges		0.01	0.33	0.33
6	Technical Fees		0.06	0.06	0.13
7	Other Professional Charges		-	1.09	1.09
8	Conveyance and Travelling		0.65	0.65	1.29
9	License and Registration Fees		0.00	0.00	0.01
10	Fee and Subscriptions Books and Periodicals		1.06	1.52	2.58
11	Printing and Stationery		0.11	0.11	0.23
12	Advertisement Expenses		0.17	0.17	0.34
13	Electricity Charges to Offices		0.60	0.60	1.20
14	Water Charges		0.00	0.00	0.00
15	Entertainment Charges		0.05	0.05	0.10
16	Miscellaneous Expenses		0.18	0.18	0.35
17	Legal Charges		0.02	0.02	0.05
18	Vehicle Running Expenses Truck / Delivery Van		0.03	0.03	0.05
19	Vehicle Hiring Expenses Truck / Delivery Van		0.80	0.80	1.60
20	Other Freight		-	-	-
21	Total A&G Expenses		6.90	4.03	5.89
	AEGCL		3.87	5.42	9.29
	SLDC		0.16	0.47	0.63

AEGCL requests the Hon'ble Commission to approve the proposed expenses under A&G for the FY 2018-19 as proposed by AEGCL.

5.7 Capital Expenditure and Capitalization for FY 2018-19

AEGCL submits that the capitalisation for FY 2018-19 has been estimated based on 6 months actual addition of assets and estimation of asset addition for the next 6 months. Estimation for the next 6 months has been made based on the P&M.



Lines & Cable Networks and Office Equipment additions approved by the Hon'ble AERC in the Tariff order dated 19.03.2018.

The funding of Capital Expenditure is envisaged through various sources namely Loans, Grants, Equity and Debt. Although capital expenditure should be funded by normative debt and equity, no infusion of equity has been made other than equity capital allocated to the companies in the Opening Balance Sheets (OBS) of the Companies in the Reorganization. The detailed breakup of funding of capitalization during FY 2018-19 are mentioned below.

Table 33: Capitalization for FY 2018-19 and its Funding

(Rs. Crs)

Assets Blocks	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
Land & Rights	0.00	0.02	0.00	0.02
Building	2.58	3.94	0.00	3.94
Hydraulic	0.22	0.00	0.00	0.00
Other Civil Works	5.87	10.90	0.00	10.90
Plant & Machinery	64.07	50.02	14.05	64.07
Lines & Cable Network	61.42	11.69	49.73	61.42
Vehicles	0.40	0.00	0.00	0.00
Furniture & Fixtures	0.32	0.11	0.00	0.11
Office Equipment	0.21	0.09	0.12	0.21
Total	135.09	76.77	63.90	140.67

S.N.	Particulars	AEGCL Estimation (Rs. Crs.)
1	Grant	61.46
2	Equity	-
3	Debt	79.21
4	Total Capitalisation	140.67

AEGCL requests the Hon'ble Commission to approve the proposed capitalisation for the FY 2018-19 as proposed by AEGCL.

5.8 Depreciation for FY 2018-19

Depreciation has been calculated considering the opening balance of assets in the beginning of the year and the capitalization as shown in the below table. AEGCL submits that the Depreciation is computed for assets excluding those funded through grant mechanism.



Table 34: Depreciation for FY 2018-19

(Rs.Crs.)

S.N.	Particulars	Depreciation Rate	Accumulated depreciation - beginning of the year	Additions during the year
1	Land owned under full ownership	0.00%	-	
2	Land under lease	3.34%	0.02	0.01
3	Building	3.34%	18.71	1.21
4	Hydraulic	5.28%	2.51	-
5	Other Civil Works	3.34%	8.22	2.55
6	Plant & Machinery	5.28%	381.48	43.36
7	Lines & Cable Network	5.28%	654.89	6.49
8	Vehicles	9.50%	4.22	0.19
9	Furniture & Fixtures	6.33%	3.10	0.26
10	Office Equipment	6.33%	2.26	0.20
	Total		1,075	54.27
(a)	Total Depreciation			54.27
(b)	Gross Fixed Assets excluding Land			1,644.16
(c)	Grant towards GFA			1,044.74
(d)	Less: Dep towards assets through Grant/Consumer cont (d= c/b x a)			34.49
(e)	Depreciation for the year (excl. assets funded through Grant) (a-d)			19.79

AEGCL requests the Hon'ble Commission to approve the proposed depreciation for the FY 2018-19 as proposed by AEGCL.

5.9 Interest and Finance Charges for FY 2018-19

The normative Interest & Finance charges for FY 2018-19 has been tabulated in table below.

Table 35: Normative Interest and Finance Charges for FY 2018-19

(Rs. Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	AEGCL Submission
1	Net Normative Opening Loan	71.08	232.13
2	Addition of normative loan during the year	21.85	79.21
3	Normative Repayment during the year	26.29	19.79



4	Net Normative Closing Loan	66.64	291.55
5	Interest Rate	10.18%	9.87%
6	Interest Expenses on Loan	7.01	26.02
7	Finance Charges		0.55
8	Total Interest and Finance Charges	7.01	26.57

The Interest Rate has been arrived as per the methodology prescribed in Regulations 35.5 of AERC (MYT Regulations) 2015. The actual loan portfolio and the Interest due are tabulated in the below tables. The resultant Interest Rate for FY 2018-19 is 9.87%

“Regulations 35.5: The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating company or the Transmission Licensee or the Distribution Licensee or SLDC”

Table 36: Actual Interest and Finance Charges for FY 2018-19

(Rs.Crs)

S.N.	Loan Details	AEGCL Estimation						
		Loan Tenure	Rate of Interest	Opening Balance	Amount Received	Principal Repayment	Interest Due	Closing Balance
A	Interest charges on State Govt. Loans, Bonds and Advances							
1	State Government Loans			473.10	58.99	-	48.81	532.09
2	ADB Loan			94.28	1.40	-	10.01	95.68
3	Central Government Loans			-	-	-	-	0.00
4	General Provident Fund			59.20	10.45	10.58	4.61	59.08
	Sub-total			626.58	70.85	10.58	63.43	686.85
	Interest on Long Term Loans/Credits from the FIs/banks/organisations approved by the State Govt.							
A	Secured Loans			0	0	0.00	0	0.00
B	Unsecured Loans			0	0	0.00	0	0.00
C	Other Interest & Finance Charges			0	0	0.00	0	0.00
	<i>Cost of raising Finance/Bank Charges</i>			-	-	0.00	0.55	0.00
	<i>Penal Interest Charges</i>			-	-	0.00	0	0.00



	Sub-total			626.58	70.85	10.58	63.98	686.85
D	Grand Total of Interest & Finance Charges (A+B+C)			-	-	-	-	0.00
E	Less: Interest & Finance Charges Capitalised			-	-	-	-	0.00
	Net Total of Interest Finance Charges (D-E)			626.58	70.85	10.58	63.98	686.85

5.10 Interest on Working Capital for FY 2018-19

The interest on working capital has been calculated based on the normative formula by the Hon'ble Commission in its Terms and Conditions of Tariff Regulations.

The rate of Interest on working capital has been considered equal to State Bank of India Base Rate as on 01.04.2018 plus 350 basis points i.e., 12.20% (8.7% plus 350 basis points) as per AERC (MYT Regulations), 2015. Interest on working capital for FY 2018-19 has been computed as shown below.

Table 37: Interest on Working Capital for FY 2018-19

S.N.	Particulars	Units	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	O&M expenses for 1 month	Rs. Crs.	17.72	8.36	7.92	16.28
2	Maintenance spares @ 15% of O&M	Rs. Crs.	31.90	15.05	14.25	29.30
3	Receivables for two months	Rs. Crs.	193.44	94.94	95.72	190.67
4	Total Working Capital	Rs. Crs.	243.06	118.36	117.90	236.25
5	Rate of Interest	%	12.60%	12.20%	12.20%	12.20%
6	Interest on Working Capital	Rs. Crs.	30.63	14.44	14.38	28.82

AEGCL requests the Hon'ble Commission to approve the proposed interest on working capital for the FY 2018-19 as proposed by AEGCL.



5.11 Return on Equity for FY 2018-19

Return on Equity has been computed at the rate of 15.50% as specified in Regulation 34 of the MYT Regulations, 2015. Return on Equity has been computed @ 15.50% on closing balance of equity based upon the opening balance of equity and normative additions during the FY 2018-19 as shown in table below.

Table 38: Return on Equity for FY 2018-19

S.N.	Particulars	Units	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	Equity (Opening Balance)	Rs. Crs.	106.67	99.93	99.93	99.93
2	Net additions during the year	Rs. Crs.	4.21	0.00	0.00	0.00
3	Less: Reduction during the year	Rs. Crs.	0.00	0.00	0.00	0.00
4	Equity (Closing Balance)	Rs. Crs.	110.88	99.93	99.93	99.93
5	Average Equity	Rs. Crs.	108.78	99.93	99.93	99.93
6	Rate of Return on Equity	%	15.50%	15.50%	15.50%	15.50%
7	Return on Equity	Rs. Crs.	16.86	7.74	7.74	15.49

AEGCL requests the Hon'ble Commission to approve the proposed return on equity for the FY 2018-19 as proposed by AEGCL.

5.12 Other Debit and Net Prior Period Expenses for FY 2018-19

Other Debit and Net Prior Period Expenses for FY 2018-19 has been tabulated in the Table below.

Table 39: Other Debit and Net Prior Period Expenses for FY 2018-19

(Rs.Crs)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
1	Other debits	0	0.003	0.003	0.005
2	Net Prior period Charges/(Credits)	0	-1.313	-	-1.313
3	Total	0	-1.311	0.003	-1.308

AEGCL requests the Hon'ble Commission to approve the proposed Other Debit and Net Prior Period Expenses for the FY 2018-19 as proposed by AEGCL.

5.13 Bulk Supply Tariff (BST) – Terminal Benefits for FY 2018-19

AEGCL submits that the BST is calculated as per the estimated MUs of FY 2018-19.



Table 40: Special Charges - Bulk Supply Tariff (BST)

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	AEGCL Estimation
1	Special Charges on Bulk Supply Tariff	187.22	189.80
	Total	187.22	189.80

AEGCL requests the Hon'ble Commission to approve the proposed special charges on BST for the FY 2018-19 as proposed by AEGCL.

5.14 Non-Tariff Income for FY 2018-19

The amount of Non-Tariff Income mostly comprising of income from investments and misc. receipts and receivables from CTU. The estimation of NTI for FY 2018-19 is tabulated in the Table below.

Table 41: Non-Tariff Income for FY 2018-19

(Rs.Crs.)

S.N.	Particulars	Approved in T.O. dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	AEGCL Estimation
A	Income from Investment, Fixed & Call Deposits	100.17			
	Income from Investments		0.58	0.58	1.16
	Interest on fixed deposits		1.39	14.10	15.49
	Income on other investments (Dividend)		-	-	-
	Interest from Banks		1.70	1.11	2.81
	Sub Total		3.67	15.79	19.46
B	Other Non-Tariff Income				
	Miscellaneous Receipts		43.50	27.12	70.62
	Penalty for contractor/supplier for delay, etc.		2.56	-	2.56
	Rebate received from PGCIL		3.31	3.31	6.62
	Rentals from staff quarters		0.08	0.08	0.15
	Sub-Total		49.45	30.51	79.95
C	Total	100.17	53.12	46.30	99.41

AEGCL requests the Hon'ble Commission to approve the Non-Tariff Income for the FY 2018-19 as proposed by AEGCL.



5.15 Annual Performance Review for FY 2018-19

Based on the Annual Performance Review, AEGCL prays before the Hon'ble Commission to allow ARR of Rs. 1149.68 crores as proposed by AEGCL.

Table 42: Annual Performance Review for FY 2018-19

(Rs. Crs)

S.N.	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 (Excl. related to Int, Dep and O&M)	-	0.00	0.00	0.01
12	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)	-	(1.31)	-	(1.31)
13	Less: Non-Tariff Income/ Other Income	100.17	53.12	46.30	99.41
14	Aggregate Revenue Requirement	906.87	442.78	447.46	890.24
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	Net Aggregate Revenue Requirement	1,160.64	569.66	574.34	1,144.01
18	Incentive on Transmission Availability	-	2.83	2.83	5.67
19	Add: Sharing of (Gains)/Loss	-	-	-	-
20	ARR after Sharing (Gains)/Losses and Incentive	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 18-19	-	(7.85)	(3.17)	(11.02)



6 AGGREGATE REVENUE REQUIREMENT FOR FY 2019-20 TO FY 2021-22

6.1 Preamble

This section deals with the determination of Aggregate Revenue Requirement of AEGCL for the FY 2019-20 to 2021-22 based on the projections made for the current year over the previous year i.e. FY 2018-19.

6.2 Aggregate Revenue Requirement for FY 2019-20 to FY 2021-22

Aggregate Revenue Requirement shall comprise of following components:

- a) Return on Equity Capital;
- b) Interest on Loan Capital;
- c) Depreciation;
- d) Operation and Maintenance expenses;
- e) Interest on working capital.

Less:

- g) Non-tariff income;

6.3 Principles of ARR for FY 2019-20 to FY 2021-22

It is essential that all the costs are allowed so as to ensure the financial viability of AEGCL. It requires generating adequate amount of profit from its operations so that it can maintain the system properly and simultaneously it can take up R&M projects to upgrade its transmission system. Also needs to incur capital expenditure to cater to the future needs of the system.

In the circumstances and conditions mentioned above, the Aggregate Revenue Requirement as proposed by AEGCL in this petition shall be allowed.

6.4 Trajectory of Transmission Losses for FY 2019-20 to FY 2021-22

As stated in regulation 71 of AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018, "*The energy losses in the transmission system of the Transmission Licensee, as determined by the State Load Despatch Centre and approved by the Commission, shall be borne by the Transmission System Users pro-rata to their usage of the intra-State transmission system.*

Provided that the Commission may stipulate a trajectory for reduction of transmission losses as a part of Multi Year Tariff framework applicable to the Transmission Licensee.



Provided that for difference between the actual level of transmission losses, as determined by the State Load Despatch Centre and the approved level, the transmission ARR shall be adjusted proportionately.”

The company has achieved a significant reduction in Transmission losses, during recent years. These efforts shall continue and will be enhanced. Projected transmission losses for FY 2019-20 to 2021-22 are as shown below:

Table 43: Transmission Losses for the FY 2019-20 to 2021-22

S.N.	Particulars	Projection		
		FY 19-20	FY 20-21	FY 21-22
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	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%

6.5 Trajectory of Transmission Availability for FY 2019-20 to FY 2021-22

The Transmission availability factor is considered at 99.50% for the control period.

Table 44: Transmission Availability Factor for the FY 2019-20 to 2021-22

S.N.	Particulars	Unit	Projection		
			FY 19-20	FY 20-21	FY 21-22
1	Transmission Availability Factor	%	99.50%	99.50%	99.50%

6.6 Capital Expenditure and Capitalization for FY 2019-20 to FY 2021-22

As per Regulation 6 of AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018, AEGCL shall submit a Capital Investment Plan for the entire Control Period, as part of the MYT Petition.

The scheme-wise capital expenditure along with funding pattern of AEGCL for the Control Period FY 2019-20 to 2021-22 and the Year wise details of expenses capitalized are shown in Annexure II titled “Capital Investment Plan”



6.7 Funding of Capitalization for FY 2019-20 to FY 2021-22

6.7.1 The funding of above mentioned capitalization is envisaged through various sources categorized under headings Equity, Grant, and Loan. The expenditure projected for FY 2019-20 to 2021-22 are proposed to be funded through equity, loan and grant as per funding patterns of the schemes. The detailed breakup of funding of capitalization during FY 2019-20 to 2021-22 as provisionally approved by the Hon'ble AERC is shown in below Table.

Table 45: Funding of Capitalisation for FY 2019-20 to FY 2021-22

(Rs.Crs.)

S.N.	Particulars	Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Grant	664.6	347.7	1,215.6
2	Equity	54.0	52.0	165.6
3	Debt	126.1	121.4	386.4
4	Total Capitalisation	844.7	521.1	1,767.5

6.7.2 The details of the Interest and finance charges based on the above funding plan have been discussed in details under clause no 6.13 of the petition.

6.8 Fixed Cost for FY 2019-20 to FY 2021-22

6.8.1 Based on the Capital Cost and the consequent Capitalized Expenditure, Equity Component and Normative Debt, the fixed cost of AEGCL for control period have been determined in accordance with the MYT Regulations, 2018 outlined thereof. The fixed cost for AEGCL has been determined under the following major heads:

- PGCIL Charges
- Operation and Maintenance Expenses
- Depreciation
- Interest and Finance Charges
- Interest on Working Capital
- Return on Equity
- Bulk Supply Tariff (BST)

6.9 PGCIL Charges for FY 2019-20 to FY 2021-22

AEGCL submits that, in compliance with the directives of AERC in Tariff Order dated 19th March 2018, the transmission charges to PGCIL shall henceforth be paid by APDCL. The above said directive of Tariff Order dated 19th March 2018 reproduced below for ready reference.



“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”.

6.10 SLDC Charges for FY 2019-20 to FY 2021-22

AEGCL submits that AERC directives of Tariff Order dated 19th March 2018 states that separate Aggregate Revenue Requirement petition for SLDC shall be filed from the next Control Period onwards. Hence in accordance to the aforesaid directive, a separate ARR petition is being filed for SLDC. Excerpts of AERC directives are reproduced below for ready reference

“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.”

6.11 Operation and Maintenance Expenses for FY 2019-20 to FY 2021-22

The Operation & Maintenance (O&M) expenses consists of Repair and Maintenance expenses, Employee expenses and Administration & General expenses. AEGCL highlights that the O&M charges of SLDC has been segregated and is filed separately under SLDC Tariff Petition for MYT FY 2019-20 to FY 2021-22. Regulation 66.9 & 66.10 of AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 provides for computation of O&M norms. The relevant provisions are reproduced below:

“Regulation 68.9 (Operation and Maintenance Expenses): The O&M expenses for the nth year and also for the year immediately preceding the Control Period shall be approved based on the formula given below:-

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

Where –

O&M_n – Operation and Maintenance expense for the nth year;

EMP_n – Employee Costs for the nth year;

R&M_n – Repair and Maintenance Costs for the nth year;

A&G_n – Administrative and General Costs for the nth year;



Regulation 68.10 (Operation and Maintenance Expenses): The above components shall be computed in the manner specified below:

$$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI \text{ inflation})$$

$$R\&M_n = K \times (GFA_{n-1}) \times (WPI \text{ inflation}) \text{ and}$$

$$A\&G_n = (A\&G_{n-1}) \times (WPI \text{ inflation}) + \text{Provision}$$

Where -

EMP_{n-1} – Employee Costs for the (n-1)th year;

A&G_{n-1} – Administrative and General Costs for the (n-1)th year;

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission.

'K' is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-a-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;

WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;

GFA_{n-1} --- Gross Fixed Asset of the transmission licensee for the n-1th year;

G_n is a growth factor for the nth year. Value of G_n shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking, and any other factor that the Commission feels appropriate"

6.11.1 WPI & CPI Inflation for the Control Period

WPI Inflation computation for Control Period (FY 2019-20 to FY 2021-22)

The average increase in the Wholesale Price Index (WPI) for immediately preceding three years gives the WPI Inflation 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 WPI Inflation is considered for computational purpose throughout the control period. Tabulations as follows:



Table 46 : WPI Inflation for Control Period

Fiscal	WPI Index	YOY Change %
FY 2017-18	114.90	2.96%
FY 2016-17	111.60	1.73%
FY 2015-16	109.70	-3.69%
FY 2014-15	113.90	
Average WPI Inflation (Last 3 Yrs)		0.33%

CPI Inflation computation for Control Period (FY 2019-20 to FY 2021-22)

The average increase in the Consumer Price Index (CPI) for immediately preceding three years gives the CPI Inflation for 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 CPI Inflation is considered for computational purpose throughout the control period. Tabulations as follows:

Table 47: CPI Inflation for Control Period

Fiscal	CPI Index	YOY Change %
FY 2017-18	284.42	3.08%
FY 2016-17	275.92	4.12%
FY 2015-16	265.00	5.65%
FY 2014-15	250.83	
Average CPI Inflation (Last 3 Yrs)		4.28%

6.11.2 Normative Calculation of R&M expense for the control period

Repairs & maintenance expenses are directly related to number of the substation and lines, age of the assets, its wear and tear during the period. R&M expenses are generally incurred in order to ensure the maintenance of the transmission lines/systems.

Regulation 66.10 of AERC (MYT Regulations), 2018 provides the manner in which components of O&M expenses shall be computed. The methodology for R&M expense is as follows:

$$R\&M_n = K \times (GFA_{n-1}) \times (WPI_{inflation})$$

Normative R&M Expense (Rs. Cr.)	FY 2019-20	FY 2020-21	FY 2021-22
1 Opening GFA for previous year	1,676.82	1,817.49	2,662.22
2 Closing GFA for previous year	1,817.49	2,662.22	3,183.29



3	Average GFA for previous year	1,747.16	2,239.85	2,922.76
4	K Factor	1.20%	1.20%	1.20%
5	WPI Inflation	0.33%	0.33%	0.33%
6	Normative R&M Expense	21.04	26.97	35.19
7	AMC Cost of SCADA/EMS	0.326	0.326	0.326
8	Net Normative R&M Expense	20.71	26.64	34.86

K Factor for Control Period

AEGCL submits that the approved and actual R&M expenses of FY 2017-18 are Rs. 16.26 crores and Rs. 15.15 crores. However, it is pertinent to note that several maintenance works were not undertaken on account of shortage of funds. Impending Civil Works constitute a major part of unfinished R&M tasks for the fiscal. Hence had there been availability of funds without financial constraints, all the necessary R&M tasks would have been accomplished which would have incurred an additional Rs. 4.35 crores. (approx.)

AERC (MYT Regulations), 2018 provides for computation of K factor:

“K” is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee’s filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission”

As per the above quoted computation methodology of AERC (MYT Regulations), 2018, K factor shall be determined through the approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past. AEGCL submits that the approved R&M costs are on the basis on the historical R&M expenses submitted by the licensee, which were not sufficient to meet the total R&M works of the respective years.

Hence AEGCL firmly believes that ‘k’ factor needs to be determined realistically after including the expenses of R&M works, which were not undertaken on account of unavailability of funds. ‘k’ factor computation details as follows

S.N.	K factor Computation		Rs. Crs.
1	Actual R&M Expenses for FY 2017-18	(a)	15.15
2	Estimated cost to accomplish the unfinished R&M Task for FY 2017-18	(b)	4.35
3	Total R&M Expenses for FY 2017-18	(c=a+b)	19.50



4	Opening GFA of FY 2017-18	(d)	1628.68
5	K Factor	(c/d)	1.20%

Hence, considering the ground realities and operational issues faced by AEGCL pertaining to repair and maintenance of its assets, AEGCL submits a 'k' factor of 1.2 for the Control Period under consideration.

Table 48 : Repair and Maintenance Expenses for FY 2019-20 to FY 2021-22 (Rs. Crs.)

S.N.	Particulars	Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Plant & Machinery	16.30	20.94	27.37
2	Buildings	1.58	2.03	2.66
3	Civil works	0.51	0.65	0.85
4	Hydraulic Works	-	-	-
5	Lines, Cable Networks etc.	1.42	1.83	2.39
6	Vehicles	0.28	0.36	0.47
7	Furniture & Fixtures	0.09	0.12	0.15
8	Office Equipment	0.58	0.74	0.97
9	Total	-	-	-
10	Any other items (Capitalisation)	-	-	-
11	Total	20.77	26.67	34.86

AEGCL requests the Hon'ble Commission to approve the proposed Repair and Maintenance expenses for FY 2019-20 to 2021-22 without any disallowance.

6.11.3 Normative Calculation of Employee expense for Control Period (FY 2019-20 to FY 2021-22)

Regulation 66.10 of AERC (MYT Regulations), 2018 provides the manner in which components of O&M expenses shall be computed. The methodology for Employee expense is as follows:

$$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI \text{ inflation})$$

Normative Employee Expense (Rs. Cr.)		FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
1	Base Employee Cost (n-1)	133.12	157.08	168.70	181.18	194.58
2	CPI Inflation	5.35%	4.28%	4.28%	4.28%	4.28%



3	Gn (Growth Factor for nth Year)	2.99%	2.99%	2.99%	2.99%	2.99%
4	Normative Employee Cost for FY 17-18 (Excl. ROP)	144.43				
5.	Impact of Revision of Pay	15.49				
6.	Normative Employee Cost for the year (Incl. Revision of Pay)	159.93	168.70	181.18	194.58	208.98

The Base employee cost of FY 2018-19 has been computed considering the employee cost on account of Revision of Pay. The same is highlighted in the above projection table.

Gn Factor for Control Period

It is pertinent to mention that AEGCL has been facing acute shortage of manpower in H.O. as well as field offices. AEGCL highlights that in technical department, the utility requires more number of Assistant Managers and Junior Managers to run its operations. In similar lines, Finance & Accounts department is also functioning with a shortage of manpower. The Table below depicts the sanctioned strength for the Sanctioned number of post and the present working strength.

Table 49 : AEGCL Sanctioned Strength and Working Strength

S.N.	Particulars	Working Strength at the Beginning of FY 17-18	Sanctioned Strength
1	Board of Directors	5+1	6+1
2	Support Staff to Board of Director		
	Technical	267	377
	Administrative	3	8
	Accounts & Finance	11	21
3	All Other Staff		
	Technical		
	Officers	276	336
	Staff	687	1365
	Non-Technical		
	Administrative		
	Officers		
	Staff	398	1034
	Accounts & Finance		
	Officers	71	82
	Staff		
	Others		
	Total	1713	3230



From the above table, it is evident that AEGCL is operating with a minimal ~50% of employees. Moreover, the alarming situation is that the working strength has further reduced to 1649 Nos at the beginning of FY 2018-19. Hence to mitigate the difficulties arising out of insufficient number of employees, AEGCL has initiated the process of recruitment to fill the vacant positions. AEGCL shall be incurring additional cost on account of the rapid recruitment which has been initiated.

AEGCL submits that as discussed and decided in the 71st Board Meeting held on 22.11.2017, the initial phase of recruitment shall be around two hundred manpower, with the phased recruitment of around two hundred manpower spread through the upcoming control period (FY 2019-20 to FY 2021-22).

In line, AEGCL submits that the recruitment process has been initiated with the ongoing recruitment process to fill up vacancies of 38 Assistant Managers, 20 Junior Managers and 1 Medical Officers. The impending recruitment process for which applications has been received is for fill up vacancies of 15 Assistant Accounts officer, 21 office cum field assistant and Sahayaks.

AEGCL has large scale recruitment plans in pipeline to bridge the gap between sanctioned employee strength and working strength. Considering the on-going recruitment process and the process in pipeline, addition of 400 number of employees shall be accomplished in a phased manner within three years (Control Period). However, for computation purpose, taking into considering the retirements, an employee strength of 1,855 Nos is considered at the end of FY 2021-22. The growth factor is computed through CAGR methodology

	End of FY 17-18	End of FY 21-22
Employee Strength	1,649	1,855
Gn (Growth Factor)		2.99%

AEGCL firmly submits that by taking Gn factor (2.99%) into cognizance, the projected employee expenses shall be credible in reflecting the employee cost of AEGCL for the control period.



Table 50: Employee Expenses for FY 2019-20 to FY 2021-22

(Rs.Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Salaries	145.71	156.49	168.07
2	Bonus/ Exgratia To Employees	0.06	0.06	0.07
3	Payment Under Workman's Compensation and Gratuity	2.46	2.64	2.83
4	Any Other Item	10.38	11.14	11.97
5	Staff Welfare Expenses	0.41	0.44	0.48
6	Provident Fund Contribution	22.16	23.80	25.56
7	Total Employee Costs	181.18	194.58	208.98
8	Less: Employee expenses capitalised			
9	Net Employee expenses	181.18	194.58	208.98

Employee expenses include salaries, bonus, other benefits like medical expense reimbursement, LTA, etc. and terminal benefits in the form of pension, gratuity, leave encashment, staff welfare etc. The Petitioner humbly requests the Hon'ble Commission to approve the proposed employee expenses for FY 2019-20 to 2021-22 without any disallowance.

6.11.4 Normative Calculation of Administrative and General Expenses for Control Period (FY 2019-20 to FY 2021-22)

Regulation 66.10 of AERC (MYT Regulations), 2018 provides the manner in which components of O&M expenses shall be computed. The methodology for Administrative and General Expenses is as follows:

$$(A\&G_{n-1}) \times (WPI \text{ inflation}) + Provision$$

Normative A&G Expense (Rs. Crs.)		FY 18-19	FY 19-20	FY 20-21	FY 21-22
1	A&G Expense for Previous year	8.92	10.86	10.90	10.94
2	WPI Inflation	0.33%	0.33%	0.33%	0.33%
3	Provision	0	0	0	0
4	Normative A&G Expense for the year	8.95			
5	Additional Expenses for the Control Period	1.91			
	Normative A&G Expense for the year	10.86	10.90	10.94	10.97



AEGCL humbly submits that the upcoming control period shall witness additional A&G expenses under new heads of expenses. The same is being incorporated as 'new additional expenses for the control period', prior carrying out the projection.

The new additional expenses for the control period include:

- SBI CPPC Charges: AEGCL submits that currently, the pension is being handled by ASEB Employees pension fund investment trust. However, it is proposed that the pension shall henceforth be managed by SBI from H2 of FY 18-19 or FY 19-20 onwards. Hence the charges for handling the pension fund is considered for the upcoming control period.
- 'Pilot Project expenses for carrying out the Energy Audit'. In regard to the Energy Audit, AERC has directed AEGCL to evaluate the Transmission losses of IntraState Nodes. So that the remedial measures can be taken by AEGCL to minimize the transmission loss. The Pilot Project shall be carried out on 10% of Total Transmission Lines.
- Consultancy Charges (Tariff – Regulatory and other matters)

The Summary of additional A&G expenses for upcoming control period are as follows:

New Expenses under A&G for Control Period (Rs. Crs.)	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Consultancy Charges	0.32	0.32	0.32	0.32
SBI CPPC Charges	1.09	1.15	1.20	1.25
Energy Audit Expenses (Pilot Project)	0.50	0.50		
Total (Rs. Crs.)	1.91	1.97	1.52	1.57

Kindly note that the additional A&G expenses is estimated for a year prior to control period at Rs. 1.91 crores and is included in Base figure before carrying out the A&G expense projection for the control period.



Table 51: Administration & General Expenses for FY 2019-20 to FY 2021-22

(Rs. Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Lease/ Rent/Rates and taxes	0.25	0.26	0.26
2	Insurance	0.08	0.08	0.08
3	Revenue Stamp Expenses Account	0.04	0.04	0.04
4	Telephone, Postage, Telegram & Telex Charges	0.25	0.25	0.25
5	Consultancy Charges	0.37	0.37	0.37
6	Technical Fees	0.14	0.14	0.14
7	Other Professional Charges	1.20	1.20	1.21
8	Conveyance and Travelling	1.42	1.43	1.43
9	License and Registration Fees	0.01	0.01	0.01
10	Fee and Subscriptions Books and Periodicals	2.84	2.85	2.86
11	Printing and Stationery	0.25	0.25	0.25
12	Advertisement Expenses	0.37	0.37	0.37
13	Electricity Charges to Offices	1.32	1.33	1.33
14	Water Charges	0.00	0.00	0.00
15	Entertainment Charges	0.11	0.11	0.11
16	Miscellaneous Expenses	0.38	0.39	0.39
17	Legal Charges	0.05	0.05	0.05
18	Vehicle Running Expenses Truck / Delivery Van	0.06	0.06	0.06
19	Vehicle Hiring Expenses Truck / Delivery Van	1.76	1.76	1.77
20	Total A&G Expenses	10.90	10.94	10.97
21	Less: A&G Expenses Capitalised			
22	Net A&G Expenses	10.90	10.94	10.97

Moreover, AEGCL submits that considering the current and futuristic development plans and expansionary situation of AEGCL, the A&G expenses is expected to increase manifold in ensuing years due to various proposed activities which are outlined below.

As the AEGCL is presently on expansionary mode - Asset base of AEGCL is expected to increase manifold in next 3 years with the increase in transmission lines and establishment of many substations as compared to current situation.



With various future expansion of network, servicing new areas and offices to cater to the new areas, Investment in upgradation of technology various components of A&G expenses such as insurance, technical fees, license & Registration fees, vehicle expenses, electricity & water charges to office and various other incidental and miscellaneous expenses shall increase accordingly.

Thus, AEGCL requests the Hon'ble Commission to approve the proposed A&G expenses for the FY 2019-20 to 2021-22 without any disallowance.

6.11.5 Training and Capacity Building of AEGCL Employees

AEGCL states that the power sector is undergoing a paradigm shift and new technologies with updates are being adopted on continuous basis to improve operational efficiency. These technologies are posing different challenges for power sector, which need to overcome well within time so as to have effective operational benefits.

AEGCL submits that on account of technological changes, training of manpower is required in order to achieve operational effectiveness along with the accident free workplace. It is pertinent to mention that for awareness of new technology and adapting better working condition to reduce accident and mis happening, AEGCL proposes to conduct technology and safety training workshops at regular intervals.

It can be seen that rigorous training at different transmission company carried out in regular interval, which is effective and necessary for the employees. Technical training on "Operation, Maintenance and Testing for Transformer", "Energy Efficiency in Electrical Utilities", "Power System Protection", etc. are being carried out by TICI (Mumbai), PSTI (Bangalore), AIPM (CESC-Kolkata) and others. The training on different aspects of regulatory affairs and current regulation of CERC/SERC are being provided by NTPC.

AEGCL firmly believes that training is a major tool in reducing the number of workplace related issues, therefore, training such as "Asset Management in Power Sector", "Leadership Programme in Power Business" by AIPM (CESC-Kolkata) and "Managerial Leadership and Conflict Resolution" by IIM Calcutta are essential for Human Resource and Senior Management people in order to maintain the effectiveness of the work place. Also, training on "Financial Accounting & SAP



FICO Implementation” by ESCI (Hyderabad) is required for enhancement of financial skills related to new technologies for finance and account employees.

Therefore, AEGCL would like to invest in educating and enhancing the employees through various workshops and for conducting workshops activities, estimated cost shall be approx. 2 (two) Crores.

In view of the above, AEGCL prays that AERC should allow the Training and Capacity Building under a separate head in the Tariff Order. This is inevitably required for conducting frequent technical, managerial and financial training, hence enabling AEGCL to smoothly function in a safe and efficient manner.

AEGCL prays to approve the projected cost of Rs. 2 crores to be incurred on account the training / awareness and capacity building.

The Summary of projected O&M Expense for the control period is as follows

Table 52: Operation and Maintenance Expenses - FY 2019-20 to FY 2021-22

(Rs.Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Employee Cost	181.2	194.6	209.0
2	Repair & Maintenance	20.7	26.6	34.9
3	Administrative & General Expenses	10.9	10.9	11.0
	Total	212.8	232.2	254.8

6.11.6 AEGCL requests the Hon’ble Commission to approve the normative O&M Expenses as shown in the above table.

6.12 Depreciation for FY 2019-20 to FY 2021-22

Depreciation has been computed as per AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2018 for the FYs 2019-20, 2020-21 & 2021-22. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the provisional capitalization. The addition of assets during the FYs 2019-20, 2020-21 & 2021-22 have been projected considering capital expenditure plan for FYs 2019-20 to 2021-22. The Closing Gross Block of Fixed Assets for the FY 2018-19 has been considered as the opening balance of assets in the beginning of the FY 2019-20. As specified in Regulation 33 [(33.2) & (33.4)] of AERC (terms & conditions for



determination of Multi Year Tariff) Regulations, 2015, depreciation is calculated as per SLM considering depreciation on opening Fixed Asset to the extent of 90% of the Asset Value. Depreciation on the Assets added during the FYs has been calculated for 180 days assuming the date of commission of the Assets as middle of the Financial Year. Depreciation has been provided at the rates specified in the AERC's Depreciation Rate Schedule. The Depreciation of assets created through Grant has been reduced before arriving at Net depreciation.

Grants received from GoA in the upcoming control period towards total investment of the project is being accounted for in compliance with Accounting Standard (AS) 12 notified by Ministry of Corporate Affairs (MCA) and accordingly depreciation has been provided on those assets at the rates prescribed by the Regulation of AERC.

Moreover, it is pertinent to mention here that AEGCL in its Letter dated 13th August 2018 to Additional Chief Secretary, GoA has requested to raise the Authorized Share Capital of the Company, following the approval of Board of Directors of company vide 67th Board Meeting held on 27th July 2018. Hence on approval by GoA, the grants and subsidies towards creation of capital assets funded by GoA to the company shall be treated as Promoter's Contribution.

In addition, AEGCL highlights that the GFA of SLDC has been segregated from AEGCL GFA and is filed separately under SLDC's Tariff Petition for MYT FY 2019-20 to FY 2021-22. The GFA and depreciation shown/computed for the control period in the following tables corresponds to AEGCL (exclusive of SLDC)

Year wise details of Fixed Assets and Depreciation are tabulated in the table below.

Table 53: Depreciation for FY 2019-20

(Rs.Crs.)				
S.N.	Particulars	Depreciation Rate	Accumulated depreciation - beginning of the year	Additions during the year
1	Land owned under full ownership	0.00%	-	-
2	Land under lease	3.34%	0.0	0.0
3	Building	3.34%	19.9	1.4
4	Hydraulic	5.28%	2.5	-
5	Other Civil Works	3.34%	10.8	2.9
6	Plant & Machinery	5.28%	424.5	61.3



7	Lines & Cable Network	5.28%	661.4	47.3
8	Vehicles	9.50%	4.4	-
9	Furniture & Fixtures	6.33%	0.8	0.3
10	Office Equipment	6.33%	2.5	0.2
11	Any other assets	5.28%	-	-
(a)	Total Depreciation			113.43
(b)	Gross Fixed Assets excluding Land			1,817.49
(c)	Grant towards GFA			1,099.81
(d)	Less: Dep towards assets through Grant/Consumer cont (d= c/b x a)			70.09
(e)	Depreciation for the year (excluding assets funded through Grant) (a-d)			43.34

Table 54: Depreciation for FY 2020-21

(Rs.Crs.)

S.N.	Particulars	Depreciation Rate	Accumulated depreciation - beginning of the year	Additions during the year
1	Land owned under full ownership	0.00%	-	-
2	Land under lease	3.34%	0.0	0.0
3	Building	3.34%	21.3	1.7
4	Hydraulic	5.28%	2.5	-
5	Other Civil Works	3.34%	13.7	3.9
6	Plant & Machinery	5.28%	486.1	84.3
7	Lines & Cable Network	5.28%	708.7	57.5
8	Vehicles	9.50%	4.4	0.6
9	Furniture & Fixtures	6.33%	0.8	0.3
10	Office Equipment	6.33%	2.7	0.3
11	Any other assets	5.28%	-	0.8
(a)	Total Depreciation			149.33
(b)	Gross Fixed Assets excluding Land			2,662.22
(c)	Grant towards GFA			1,201.79
(d)	Less: Dep towards assets through Grant/Consumer cont (d= c/b x a)			68.38
(e)	Depreciation for the year (excluding assets funded through Grant) (a-d)			80.95



Table 55: Depreciation for FY 2021-22

(Rs.Crs.)

S.N.	Particulars	Depreciation Rate	Accumulated depreciation - beginning of the year	Additions during the year
1	Land owned under full ownership	0.00%	-	-
2	Land under lease	3.34%	0.1	0.0
3	Building	3.34%	23.0	1.9
4	Hydraulic	5.28%	2.5	-
5	Other Civil Works	3.34%	17.6	4.9
6	Plant & Machinery	5.28%	570.6	128.0
7	Lines & Cable Network	5.28%	766.2	66.8
8	Vehicles	9.50%	5.0	0.7
9	Furniture & Fixtures	6.33%	0.8	0.3
10	Office Equipment	6.33%	2.9	0.3
11	Any other assets	5.28%	0.8	-
(a)	Total Depreciation			207.48
(b)	Gross Fixed Assets excluding Land			3,183.29
(c)	Grant towards GFA			1,206.02
(d)	Less: Dep towards assets through Grant/Consumer cont (d= c/b x a)			80.15
(e)	Depreciation for the year (excluding assets funded through Grant) (a-d)			128.91

6.13 Normative Interest and Finance Charges for FY 2019-20 to FY 2021-22

The normative Interest & Finance charges for FY 2019-20 to FY 2021-22 are as follows.

Table 56 : Normative Interest and Finance Charges for FY 2019-20 to FY 2021-22

(Rs.Crs.)

S.N.	Particulars	FY 19-20	FY 20-21	FY 21-22
1	Net Normative Opening Loan	291.03	373.76	414.19
2	Addition of normative loan during the year	126.06	121.38	386.36
3	Normative Repayment during the year	43.34	80.95	128.91
4	Net Normative Closing Loan	373.76	414.19	671.64
5	Interest Rate	0.10	0.10	0.10
6	Interest Expenses on Loan	32.90	39.06	53.95
7	Finance Charges	0.58	0.61	0.64
8	Total Interest and Finance Charges	33.48	39.67	54.59



6.14 Interest Rate Computation FY 2019-20 to FY 2021-22

6.14.1 Interest on Loan

The interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. Further, the projected capital expenditure and the funding of the same also have a major bearing on the long-term interest expenditure.

The Opening balance of GoA Loan for FY 2019-20 amounts to 531.43 Crore (after segregation of loan component for SLDC from the statutory audited Annual Accounts of AEGCL for the FY 2018-19). The loan addition during the FYs 2019-20, 2020-21 & 2021-22 is computed as per the Capex funding plan.

The interest on the loans has been computed @10.00% on the Govt. Loans, 10.50% on Govt. Loans taken from Financial Institutions. The Interest and Finance Charges for FYs 2019-20 to 2021-22 are tabulated in Table below.

Table 57: Actual Interest and Finance Charges for FY 2019-20

(Rs.Crs)

S.N.	Loan Details	FY 19-20						
		Loan Tenure	Rate of Interest	Opening Balance	Amount Received	Principal Repayment	Interest Due	Closing Balance
A	Interest charges on State Govt. Loans, Bonds and Advances							
1	State Government Loans	-	10.00%	531.43	63.99	-	56.34	595.42
2	ADB Loan	-	10.50%	95.24	8.89	-	10.47	104.13
3	Central Government Loans	-	0.00%	-	-	-	-	-
4	General Provident Fund	-	8.00%	58.56	5.18	5.24	4.68	58.50
	Sub-total			685.23	78.06	5.24	71.49	758.05
B	Interest on Long Term Loans / Credits from the Fis / banks / organisations approved by the State Govt.							
	Secured Loans						0.00	0
	Unsecured Loans						0.00	0
C	Other Interest &						0.00	0



	Finance Charges							
	Cost of raising Finance/Bank Charges						0.58	0
	Penal Interest Charges						0.00	0
	Sub-total			685.23	78.06	5.24	72.07	758.05
D	Total of Interest & Finance Charges (A+B+C)							
E	Less: Interest & Finance Charges Capitalised							0
	Net Total of Interest Finance Charges (D-E)			685.23	78.06	5.24	72.07	758.05

Table 58: Interest and Finance Charges for FY 2020-21

(Rs.Crs.)

S.N.	Loan Details	FY 20-21						
		Loan Tenure	Rate of Interest	Opening Balance	Amount Received	Principal Repayment	Interest Due	Closing Balance
A	Interest charges on State Govt. Loans, Bonds and Advances							
1	State Government Loans		10.00%	595.42	139.18	-	66.50	734.60
2	ADB Loan		10.50%	104.13	15.91	-	11.77	120.04
3	Central Government Loans		0.00%	-	-	-	-	-
4	General Provident Fund		8.00%	58.50	5.23	5.29	4.68	58.44
	Sub-total			758.05	160.32	5.29	82.95	913.08
B	Interest on Long Term Loans / Credits from the Fis / banks / organisations approved by the State Govt.							
	Secured Loans						0.00	0
	Unsecured Loans						0.00	0



C	Other Interest & Finance Charges						0.00	0
	Cost of raising Finance/Bank Charges						0.61	0
	Penal Interest Charges						0.00	0
	Sub-total			758.05	160.32	5.29	83.56	913.08
D	Total of Interest & Finance Charges (A+B+C)							
E	Less: Interest & Finance Charges Capitalised							0
	Net Total of Interest Finance Charges (D-E)			758.05	160.32	5.29	83.56	913.08

Table 59: Interest and Finance Charges for FY 2021-22

(Rs.Crs)

S.N	Loan Details	FY 21-22						
		Loan Tenure	Rate of Interest	Opening Balance	Amount Received	Principal Repayment	Interest Due	Closing Balance
A	Interest charges on State Govt. Loans, Bonds and Advances							
1	State Government Loans		10.00%	734.60	411.78	-	94.05	1,146.38
2	ADB Loan		10.50%	120.04	135.07	-	19.69	255.10
3	Central Government Loans		0.00%	-	-	-	-	-
4	General Provident Fund		8.00%	58.44	5.23	5.29	4.67	58.38
	Sub-total			913.08	552.07	5.29	118.42	1,459.86
B	Interest on Long Term Loans / Credits from the Fis / banks / organisations approved by the State Govt.							
	Secured Loans						0.00	0
	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges						0.00	0



	Cost of raising Finance/Bank Charges						0.64	0
	Penal Interest Charges						0.00	0
	Sub-total			913.08	552.07	5.29	119.06	1459.86
D	Total of Interest & Finance Charges (A+B+C)							
E	Less: Interest & Finance Charges Capitalised							0
	Net Total of Interest Finance Charges (D-E)			913.08	552.07	5.29	119.06	1459.86

As per Regulation 34.5 of AERC (MYT Regulations), 2018 “The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating Company or the Transmission Licensee or the Distribution Licensee or SLDC”

Accordingly, the Rate of Interest computed based on the actual loan portfolio as shown in the above tabulations of respective years are as follows:

- FY 2019-20: 9.899%
- FY 2020-21: 9.900%
- FY 2021-22: 9.902%

6.15 Interest on Working Capital for FY 2019-20 to FY 2021-22

The interest on working capital has been calculated based on the normative working formula by the Hon’ble Commission in its Terms & Conditions for determination of Multi Year Tariff Regulations, 2018.

The rate of interest provided on the working capital is the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (one-year tenor) prevalent during last available six months for the determination of tariff.

In line with norms, interest on working capital is calculated as shown below:



Table 60 : Interest on working capital for FY 2019-20 to FY 2021-22

S.N.	Particulars	Units	MYT Projection		
			FY 19-20	FY 20-21	FY 21-22
1	O&M expenses for 1 month	Rs. Crs.	17.90	19.35	21.23
2	Maintenance spares @ 15% of O&M	Rs. Crs.	32.22	34.82	38.22
3	Receivables for two months	Rs. Crs.	83.79	97.58	117.16
4	Total Working Capital	Rs. Crs.	133.91	151.75	176.61
5	Rate of Interest	%	11.50%	11.50%	11.50%
6	Interest on Working Capital	Rs. Crs.	15.40	17.45	20.31

6.16 Return on Equity for FY 2019-20 to FY 2021-22

As specified in Regulation 33 of AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2018, Return on Equity is calculated @ 15.50 %.

The Return on Equity has been computed @15.5% on closing balance of equity based upon the opening balance of equity and normative additions during the years. Return on Equity is computed as shown in the table below:

Table 61: Return on Equity for FY 2019-20 to FY 2021-22

(Rs. Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Equity (Opening Balance)	99.93	153.96	205.98
2	Net additions during the year	54.03	52.02	165.58
3	Less: Reduction during the year	-	-	-
4	Equity (Closing Balance)	153.96	205.98	371.56
5	Average Equity	126.94	179.97	288.77
6	Rate of Return on Equity	15.50%	15.50%	15.50%
7	Return on Equity	19.68	27.89	44.76

AEGCL submits that it is pertinent to mention here that the utility in its Letter dated 13th August 2018 to Additional Chief Secretary, GoA has requested to raise the Authorized Share Capital of the Company, following the approval of Board of Directors of AEGCL vide 67th Board Meeting held on 27th July 2018. Hence on approval by GoA, the grants and subsidies towards creation of capital assets funded by GoA to the company shall be treated as Promoter's Contribution.



AEGCL requests the Hon'ble Commission to approve the return on Equity for FY 2019-20 to FY 2021-22.

6.17 Other Costs and Bad Debts for FY 2019-20 to FY 2021-22

AEGCL submits that other costs and bad debts has not been considered in estimated ARR and reserves the right to claim the same at the time of true-up of the respective financial year in the next petition.

6.18 Taxes for FY 2019-20 to FY 2021-22

As per AERC (terms & conditions for determination of Multi Year Tariff) 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.

6.19 Bulk Supply Tariff (BST) – Terminal Benefits for FY 2019-20 to FY 2021-22

AEGCL submits the special charges on account of Bulk Supply tariff has 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 62 : Special charges - BST for Control period

(Rs. Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Special Charges on Bulk Supply Tariff	201.38	213.90	227.44
2	Total	201.38	213.90	227.44

AEGCL submits to the Honorable Commission to consider the above charges and approve it without any disallowance.

6.20 Non-Tariff Income for FY 2019-20 to FY 2021-22

As per the AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2018, the amount of non-tariff income as approved by the Commission shall be deducted from the aggregate revenue requirement in determining annual transmission charges of the Transmission Licensee.

The income in this category comprises of income from investments with Banks & miscellaneous receipts. Year wise details of Non-tariff Income are shown in the



table below. Since the transmission charges to PGCIL shall henceforth be paid by APDCL, no PGCIL rebate is considered for the upcoming Control period.

Table 63: Non-Tariff Income for FY 2019-20 to 2021-22

(Rs. Crs.)

S.N.	Particulars	FY 19-20	FY 20-21	FY 21-22
A	Income from Investment, Fixed & Call Deposits			
	Income from Investments	1.22	1.28	1.34
	Interest on fixed deposits	16.26	17.08	17.93
	Income on other investments (Dividend)	-	-	-
	Interest from Banks	2.95	3.10	3.25
	Sub Total	20.43	21.45	22.53
B	Other Non-Tariff Income			
	Miscellaneous Receipts	4.73	4.97	5.21
	Penalty for contractor/supplier for delay, etc.	-	-	-
	Rebate received from PGCIL	-	-	-
	Rentals from staff quarters	0.15	0.15	0.15
	Sub-Total	4.88	5.12	5.37
C	Total	25.31	26.57	27.89

Income from future business

AEGCL submits that after establishing a reputation and an excelling performance in the transmission business, the utility has envisaged its outgrowth on building a reliable OPGW Communication Network on its existing Transmission Network and venture into Dark fiber lease business.

So far, AEGCL has successfully completed an OPGW network for a route length of 614 Km and is in process of executing another route of 759 Km. AEGCL owns a total of 24 fibres deployed on its OPGW network. Presently, AEGCL operates on only 2 (two) nos. of fibre pairs of OPGW for electricity management and has kept 1 (one) no. fibre pair as a spare for emergency purposes.

For optimum utilization of remaining 09 (nine) dark fibre-pairs and to generate an additional revenue out of it, AEGCL decides to commercialize those dark fibres on lease basis to the licensed Telecomm. Service providers/ dark fibre capacity



providers/ other operators having a valid license from Dept. of Telecomm, Govt. of India.

In line with this leasing business, AEGCL has been registered as Infrastructure Provider category- I (IP- I) company from Dept. of Telecomm, Govt. of India on 26.03.2018. Thereon, AEGCL has invited the interested bidders to participate in this lease dark fibre business through Expression of Interest (EoI). However, AEGCL plans to initiate this dark fibre business by leasing out maximum of 09 (nine) fibre pairs on its existing OPGW route length of 614 Km for a lease period of 10 (ten) years.

AEGCL submits that the actual Income from the Lease business shall be submitted at the time of truing up of each year.



6.21 Aggregate Revenue Requirement for FY 2019-20 to FY 2021-22

Based on the category-wise expense as described above, the Aggregate Revenue Requirement during FY 2019-20 to 2021-22 for AEGCL has been determined as Rs. 502.75 crores, Rs.585.45 crores and Rs.702.93 crores. respectively as shown in the table below.

Table 64: Aggregate Revenue Requirement for FY 2019-20 to FY 2021-22

(Rs.Crs.)

S. No.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
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	Income Tax	0.00	0.00	0.00
10	Other debits (Excl. related to Int, Dep and O&M)	0.00	0.00	0.00
11	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)	0.00	0.00	0.00
12	Less: Non-Tariff Income/ Other Income	25.31	26.57	27.89
13	Aggregate Revenue Requirement	502.75	585.45	702.93

AEGCL requests the Hon'ble Commission to approve the Aggregate Revenue Requirement for FY 2019-20 to 2021-22 without any disallowances.



6.22 Tariff Computation for Control Period

AEGCL summarizes the Truing up exercise of FY 2017-18, APR of FY 2018-19 and the ARR of Control period and submits the following Tariff computation.

Particulars (A)	Approved in T.O. dtd 30.03.17	AEGCL Submission	Gap/(Surplus) for FY 16-17
Interest & Finance Charges for FY 16-17	-	25.95	25.95

Revenue surplus / gap with carrying cost of Truing up & APR

Particulars (B)	True-up of FY 17-18	APR of FY 18-19
Carrying Cost (%)	12.20%	12.20%
Revenue Gap /(Surplus)	(81.39)	(11.02)
Time Period for Carrying / Holding Cost (months)	12	6
Carrying / Holding Cost	(9.93)	(0.67)

Particulars (A): AEGCL submits to allow the Gap of Rs. 25.95 crores on account of Interest & Finance Charges for FY 16-17.

Particulars (B): The Surplus on account of True-up of FY 2017-18 and APR of FY 2018-19 along with the holding Cost. The Interest rate has been considered equal to State Bank of India Base Rate as on 01.04.2018 plus 350 basis points i.e., 12.20% (8.7% plus 350 basis points) as per AERC (MYT Regulations) 2015.

Table 65 : Tariff Computation for Control Period

Particulars	Rs. Crs.
Revenue gap on account of Interest & Finance Charges for FY 16-17	25.95
Revenue Surplus for FY 17-18	81.39
Provisional Revenue surplus for FY 18-19	11.02
Holding cost on Revenue Surplus for FY 17-18	9.93
Holding cost on Revenue Surplus for FY 18-19	0.67
Total Gap / (Surplus)	(77.07)

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



AEGCL requests the Hon'ble Commission to approve the Net Annual Revenue Requirement and the Transmission Charge in Rs. /kWh for the control Period.



7 PRAYERS TO THE HON'BLE COMMISSION

1. The present petition provides, AEGCL's approach for formulating the proposed tariff for ensuing year, the broad basis for projections used, summary of the proposals being made to the Hon'ble Commission.
2. In order to align the thoughts and principles behind the Tariff Proposal and the ARR, AEGCL respectfully seeks an opportunity to present their case prior to the finalization of the Tariff Order. AEGCL believes that such an approach would go a long way towards providing a fair opportunity to all the stakeholders including AEGCL and may eliminate the need for a review or clarification.
3. AEGCL may also be permitted to propose suitable changes to the ARR and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission.
4. In view of the above, the Petitioner respectfully prays that Hon'ble Commission may:
 - Accept the Annual Revenue Requirements and Tariff proposal for Transmission Business respectively in accordance with:
 - The guidelines outlined in previous AERC Orders passed in various matters relating to AEGCL; and
 - The principles contained in AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations 2018;
 - To admit the MYT Petition as per the provisions of the AERC (MYT) Regulations 2018 and consider present Petition for further proceedings before Hon'ble Commission;
 - To approve the total recovery of Aggregate Revenue Requirement and revenue gap for FY 2017-18 to FY 2021-22 along with other claims as proposed by AEGCL;
 - To grant any other relief as the Hon'ble Commission may consider appropriate;
 - To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;
 - To condone any error/omission and to give opportunity to rectify the same;
 - To permit AEGCL to make further submissions, addition and alteration to this Petition as may be necessary from time to time;



8 COMPLIANCE OF DIRECTIVES

In reference to the directives issued by the Commission to AEGCL in the Tariff Order dated 19th March 2018, AEGCL hereby submit the replies to the Compliance of Directives to the Commission as under:

Sl. No.	Directives	Reply of AEGCL
1	Directive 1: Funding from the Government of Assam for employer's contribution to Terminal Liabilities based on Actuarial valuation	For transfer of terminal liabilities of AEGCL's employees is to be decided by the Govt. of Assam. GoA has already been informed by AEGCL on this issue.
2	Directive 2: Segregation of SLDC from AEGCL	Regarding segregation of SLDC from AEGCL, the process for studying the All India scenario has been initiated. The functional processes and Organogram of SLDC is under preparation.
3	Directive 3: Approval for deviation in Capital Expenditure scheme approved in Business Plan Order dated September 1, 2016	Prior Approval from Commission has been sought.
4	Directive 4: Change in beneficiary of PGCIL	On the issue of change in beneficiary for interstate transmission charges, APDCL has already been requested to initiate the needful action so that the PGCIL bills are raised to APDCL directly and not to AEGCL.
5	Directive 5: Energy Audit and Implementation of SAMAST	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.



6	Directive 6: Claim of Depreciation	As per MYT Regulation, 2015 the claim of Depreciation will comply as per the Regulation.
7	Directive 7: Revision of Pay	Applicability of Revision of Pay has been provided in the Annexure-III.
8	Directive 8: Compliance of Audit Observations	Complied

REGULATORY

FORMATS

AEGCL

S. No.	Particulars	Form No.
1	Profit and Loss Account	
2	Balance Sheet	
3	Cash flow Statement	
4	Aggregate Revenue Requirement Summary	F1
5	Transmission Losses	F2a
6	Transmission Availability	F2b
7	PGCIL Charges	F29
8	Repair & Maintenance Expenses	F18
9	Employee Expenses	F19
10	Employee Strength	F19a
11	Administration and General Expenses	F20
12	Bulk Supply Tariff (BST)	
13	Fixed Assets & Depreciation	F21
14	Interest & Finance Charges	F22
15	Working Capital Requirements	F25
16	Income Tax Provision	F28
17	Other Debits	
18	Statement of Equity	F23
19	Details of Non-Tariff Income	F26
20	Details of Expenses Capitalised	F24
21	Consumer Contributions & Grants towards cost of capital Assets	F21a
22	Statement of Work in progress	F17
23	Investment Plan	F4
24	Actual Transmission Works	F4a
25	Breakup of Construction/Supply/Service Packages	F9
26	Details of element wise cost of the project	F9a
27	Calculation of weighted average rate of interest on actual loan	F12a
28	Calculation of normative loans	F12b

Balance Sheet

Particulars	Previous Year		True Up
	Change in FY 17-18	FY 16-17	FY 17-18
SOURCES OF FUNDS:			
SHAREHOLDER'S FUNDS:			
SHARE CAPITAL	-	99.93	99.93
RESERVES & SURPLUS	14.30	86.41	100.71
TOTAL	14.30	186.34	200.65
LOAN FUNDS:	-		
LOANS FROM STATE GOVT	74.86	398.24	473.10
LOANS FROM OTHERS- SECURED	-		-
LOANS FROM OTHERS- UNSECURED	-1.55	155.03	153.48
TOTAL	73.31	553.27	626.58
Contribution and Grants	-		
GRANT FROM GoA	-	678.59	678.59
GRANT FROM ADB	11.13	943.13	954.26
GRANT FROM GoI	55.07	60.27	115.34
TOTAL	66.20	1,681.99	1,748.19
NON CURRENT LIABILITIES:	-		
Liability towards Pension Trust	-147.99	199.35	51.36
TOTAL	-147.99	199.35	51.36
GRAND TOTAL	5.82	2,620.95	2,626.77
	-		
APPLICATION OF FUNDS:	-		
NET FIXED ASSETS:	-		
a) GROSS BLOCK	53.15	1,628.68	1,681.83
b) LESS:ACCUMULATED DEPRECIATION	60.92	1,014.49	1,075.41
c) NET FIXED ASSETS	-7.77	614.19	606.43
d) CAPITAL WORK IN PROGRESS	165.06	1,013.50	1,178.57
e) ASSETS NOT IN USE	-		-
f) DEFERRED COSTS	-		-
g) INTANGIBLE ASSETS	-		-
GRAND TOTAL	157.30	1,627.69	1,784.99
INVESTMENTS	-		
NON CURRENT INVESTMENT	-	53.48	53.48
NET CURRENT ASSETS:	-		
A. CURRENT ASSETS, LOANS & ADVANCES	-		
a) INVENTORIES	-0.95	23.94	22.99
b) RECEIVABLES AGAINST TRANSMISSION SERVICE	81.17	409.90	491.07
c) CASH & BANK BALANCES	218.58	296.72	515.30
d) LOANS & ADVANCES	0.17	27.92	28.09
e) SUNDRY RECEIVABLES	23.90	272.82	296.72
TOTAL of A	322.88	1,031.29	1,354.17
B. CURRENT LIABILITIES AND PROVISIONS:	-		
a) SECURITY DEPOSIT FROM CONSUMERS	-		
b) BORROWINGS FOR WORKING CAPITAL	0.00	0.00	0.00
c) TRADE PAYABLES	-83.90	308.17	224.28
d) OTHER CURRENT LIABILITIES	99.38	567.62	667.00
e) SHORT TERM PROVISIONS	101.48	37.18	138.67
TOTAL of B	116.97	912.97	1,029.94
NET CURRENT ASSETS: (A-B)	205.91	118.32	324.23
OTHER NON-CURRENT ASSETS	-	0.03	0.03
MISCELLANEOUS EXPENDITURE	-		
PROFIT AND LOSS ACCOUNT	-357.39	821.42	464.04
GRAND TOTAL	5.82	2,620.95	2,626.77
	-0.00	0.00	0.00

Profit and Loss Statement

Particulars	Previous Year	True Up
	FY 16-17	FY 17-18
ENERGY INJECTED (MU)		
ENERGY SEND OUT (MU)		
Tr LOSS (%)		
INCOME		
REVENUE FROM TRANSMISION SERVICE	537.92	1,194.99
REV SUBSIDIES & GRANTS		
OTHER INCOME	90.86	205.72
TOTAL	628.78	1,400.71
EXPENDITURE		
TRANSMISSION CHARGES TO PGCIL	590.45	509.29
REPAIRS & MAINTENANCE	14.34	15.15
EMPLOYEE COSTS	133.12	149.41
ADM & GENERAL EXPENSES	9.36	6.98
DEPRECIATION AND RELATED DEBITS	60.33	59.54
INTEREST & FINANCE CHARGES	36.43	40.84
SUB-TOTAL	844.03	781.21
LESS: EXPENSES CAPITALISED:		
<i>INTEREST & FINANCE CHARGES CAPITALISED</i>		
<i>OTHER EXPENSES CAPITALISED</i>		
SUB-TOTAL	-	-
OTHER DEBITS	0.27	0.90
BULK SUPPLY TARIFF	158.96	172.10
TOTAL EXPENDITURE	1,003.26	954.21
PROFIT (LOSS) BEFORE TAX	-374.48	446.50
PROVISION FOR INCOME TAX	-	94.80
PROFIT (LOSS) AFTER TAX	-374.48	351.70
NET PRIOR PERIOD CREDITS	4.74	-5.68
PROFIT/(LOSS) AVAILABLE FOR APPROPRIATION		
LOSS BROUGHT FORWARD FROM PREVIOUS YEAR		
SURPLUS/DEFICIT(-)	-379.23	357.39

Cash flow Statement

		Year ended 31st March,2018
A	Cash Flow from Operating Activities	
	Net Profit (loss) before Tax	452.19
	Add:-	
	Misc. Expenditure written off	
	Depreciation including adjustment	60.92
	Other income	-205.72
	Interest & Finance Charges	40.84
	Provision for Income Tax	-94.80
	Operating Profit(loss) before Working Capital changes	253.42
	Adjusted for:	
	Changes in Inventories	0.95
	Changes in Sundry Debtors	-81.17
	Changes in Other Current Assets	-23.90
	Changes in Loans and Advances	-0.17
	Changes in Other Current Liabilities	99.38
	Changes in Short Term Provisions	101.48
	Changes in Trade Payable	-83.90
	Changes in Short Term Borrowings	0.00
	Changes in Long Term Provisions	-147.99
	Other income from PGCIL, sale of Fixed Assets, etc	189.72
	Operating Profit(loss) after Working Capital changes	307.83
	Net Cash flow from Operating Activities	307.83
B	Cash Flow from Investment Activities	
	Changes in Fixed assets	-53.15
	Changes in CWIP	-165.06
	Changes in Investments	-
	Other Income from FD with Banks, Interest from Banks, etc.	16.00
	Net Cash Flow from Investing Activities	-202.21
C	Cash Flow from Financing Activities	
	Changes in Share Capital	-
	Changes in Secured Loan	-
	Changes in Unsecured Loan	76.10
	Changes in GOA Grant	-
	Changes in ADB Grant	11.13
	Change in Grant from Central Government	55.07
	Change in GPF	-2.79
	Changes in Other Reserves	14.30
	Interest and Other Charges	-40.84
	Net Cash Flow from Financing Activities	112.97
	Net Changes in Cash and Cash equivalents (A+B+C)	218.58
	Opening Balance of Cash and cash equivalents	296.72
	Closing Balance of Cash and Cash Equivalents	515.30

True-up, APR and ARR for AEGCL for Control Period FY 19-20 to FY 21-22

Form - F1

S. No.	Particulars	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22	
		True up		APR			ARR			
		Approved in Order dtd 30.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	Projected	Projected	Projected
1	PGCIL Charges	534.55	509.29	526.33	255.80	255.84	511.64	0.00	0.00	0.00
2	O&M Expenses	175.96	170.20	183.79	100.33	95.02	195.36	214.79	232.16	254.81
a	Employee Cost	152.25	142.33	158.89	91.41	79.53	170.94	181.18	194.58	208.98
b	R&M Expenses	16.26	18.94	18.00	5.05	10.08	15.13	20.71	26.64	34.86
c	A&G Expenses	7.45	8.92	6.90	3.87	5.42	9.29	10.90	10.94	10.97
d	Training Expenses							2.00	0.00	0.00
3	SLDC Charges	2.60	2.56	3.61	1.54	1.95	3.49	0.00	0.00	0.00
4	Impact of Revision of Pay			25.30			-			
5	Depreciation	17.07	21.71	26.29	9.89	9.89	19.79	43.34	80.95	128.91
6	Interest & Finance Charges	9.41	25.02	7.01	12.55	14.02	26.57	33.48	39.67	54.59
7	Interest on Working Capital	23.93	27.52	30.63	14.44	14.38	28.82	15.40	17.45	20.31
8	BST for Pension Trust Fund	181.52	172.10	187.22	94.90	94.90	189.80	201.38	213.90	227.44
9	Return on Equity	16.01	15.49	16.86	7.74	7.74	15.49	19.68	27.89	44.76
10	Income Tax	-	8.80	-	-	-	-	-	-	-
11	Other debits (Excl. related to Int, Dep and O&M)	-	0.90		0.00	0.00	0.01	-	-	-
12	Net Prior period Charges/(Credits) (Excl. related to Int, Dep and O&M)		(5.68)		(1.31)	-	(1.31)	-	-	-
13	Less: Non-Tariff Income/ Other Income	85.99	195.76	100.17	53.12	46.30	99.41	25.31	26.57	27.89
14	Aggregate Revenue Requirement	875.06	752.14	906.87	442.78	447.46	890.24	502.75	585.45	702.93
15	Add: Revenue Gap/(Surplus) after Truing up for FY 2014-15 along with carrying cost approved in MYT Order	7.43	7.43				-			
16	Add: Revenue Gap/(Surplus) after Truing up for FY 2015-16 along with carrying cost approved in MYT Order	169.15	169.15				-			
17	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	188.00	94.00	94.00	188.00			
18	Less : Transmission incentive credit bill raised to APDCL as per observation of AG Audit for the FY 2017-18	0	6.39							
19	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							
20	Carrying Cost	-	-	65.77	32.89	32.89	65.77			
21	Net Aggregate Revenue Requirement	1,194.99	1,102.99	1,160.64	569.66	574.34	1,144.01	502.75	585.45	702.93
22	Incentive on Transmission Availability	-	12.10		2.83	2.83	5.67			
23	Add: Sharing of (Gains)/Loss	-	(1.50)				-			
24	ARR after Sharing (Gains)/Losses and Incentive	1,194.99	1,113.59	1,160.64	572.50	577.18	1,149.68	502.75	585.45	702.93
25	Revenue with Approved Tariff for FY 2017-18	1,194.99	1,194.99	1,160.64	580.35	580.35	1,160.70			
26	Revenue Gap / (Surplus) for FY 17-18	(0.00)	(81.40)	-	(7.85)	(3.17)	(11.02)	502.75	585.45	702.93

Transmission Loss

Form - 2a

S.No.	Particulars	Approved in Order dtd 30.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	AEGCL Estimation	MYT Submission		
		FY 17-18 True Up		FY 18-19 APR		FY 19-20	FY 20-21	FY 21-22
1	Energy Injected (MU)	11395.00	8921.27	10380.31	10167.60	10772.58	11438.49	12158.25
2	Energy Sent Out to APDCL (MU)	10998.00	8318.43	9705.55	9490.00	10069.00	10695.00	11372.00
3	Energy Sent Out to OA Consumers (MU)		286.44	317.67	317.00	333.00	350.00	368.00
4	Total Energy Sent Out	10998.00	8604.87	10023.22	9807.00	10402.00	11045.00	11740.00
4	Transmission Loss (MU)	397.00	316.40	357.09	360.60	370.58	393.49	418.25
5	Transmission Loss (%)	3.48%	3.55%	3.44%	3.55%	3.44%	3.44%	3.44%

Transmission Availability

Form - 2b

S.No.	Particulars	Approved in Order dtd 19.03.18	AEGCL Submission	Approved in Order dtd 19.03.18	Total AEGCL Submission	MYT Submission		
		FY 17-18 True Up		FY 18-19 APR		FY 18-19	FY 20-21	FY 21-22
1	Apr-17	98.50%	97.77%	98.50%	99.42%	99.50%	99.50%	99.50%
2	May-17		99.54%		98.88%	99.50%	99.50%	99.50%
3	Jun-17		99.71%		97.90%	99.50%	99.50%	99.50%
4	Jul-17		99.15%		98.83%	99.50%	99.50%	99.50%
5	Aug-17		99.15%		99.22%	99.50%	99.50%	99.50%
6	Sep-17		98.65%		99.16%	99.50%	99.50%	99.50%
7	Oct-17		99.00%		99.16%	99.50%	99.50%	99.50%
8	Nov-17		99.79%		99.16%	99.50%	99.50%	99.50%
9	Dec-17		99.86%		99.16%	99.50%	99.50%	99.50%
10	Jan-18		98.36%		99.16%	99.50%	99.50%	99.50%
11	Feb-18		97.40%		99.16%	99.50%	99.50%	99.50%
12	Mar-18		97.70%		99.16%	99.50%	99.50%	99.50%

Special Charges on Bulk Supply Tariff

S.No.	Particulars	FY 17-18		FY 18-19		FY 19-20	FY 20-21	FY 21-22
						Ensuing Year		
		Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Special Charges on Bulk Supply Tariff	181.52	172.10	187.22	189.8	201.38	213.90	227.44
	Total	181.52	172.10	187.22	189.80	201.38	213.90	227.44

S.No.	Particulars	Units	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22	
			True up		APR			Ensuing Year			
			Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission
1	O&M expenses for 1 month	Rs. Crore	14.66	14.18	17.72	8.36	7.92	16.28	17.90	19.35	21.23
2	Maintenance spares @ 15% of O&M	Rs. Crore	26.4	25.53	31.9	15.05	14.25	29.30	32.22	34.82	38.22
3	Receivables for two months	Rs. Crore	145.87	178.68	193.44	94.94	95.72	190.67	83.79	97.58	117.16
	Total Working Capital	Rs. Crore	186.93	218.39	243.06	118.36	117.90	236.25	133.91	151.75	176.61
	Rate of Interest	%	12.80%	12.60%	12.60%	12.20%	12.20%	12.20%	11.50%	11.50%	11.50%
	Interest on Working Capital	Rs. Crore	23.93	27.52	30.63	14.44	14.38	28.82	15.40	17.45	20.31

Break-Up of SLDC Charges

SI No.	Particulars	True up		APR			Ensuing Year			
		FY 17-18		FY 18-19	FY 18-19	FY 18-19	FY 18-19	FY 19-20	FY 20-21	FY 21-22
		Approved in Order dtd 19.03.18	AEGCL submission	Approved in Order dtd 19.03.18	H1	H2	Total			
1	Employee Cost		2.10		1.36	1.38	2.74			
2	Repair & Maintenance	2.60	0.05	3.61	0.03	0.09	0.12			
3	Administrative & General Expenses		0.41		0.16	0.47	0.63			
	Total	2.60	2.56	3.61	1.54	1.95	3.49	0	0	0

S.No.	Particulars	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22	
		True up		APR			Ensuing Year			
		Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Salaries		123.07		74	66	139.68	145.71	156.49	168.07
2	Additional Pay									
3	Dearness Allowance (DA)									
4	Other Allowances & Relief									
5	Addl. Pay & C.Off Encashment									
6	Interim Relief / Wage Revision									
7	Honorarium/Overtime									
8	Bonus/ Exgratia To Employees		0.009		0.002	0.055	0.06	0.06	0.06	0.07
9	Medical Expenses Reimbursement									
10	Travelling Allowance(Conveyance Allowance)									
11	Leave Travel Assistance									
12	Earned Leave Encashment									
13	Payment Under Workman's Compensation And Gratuity		4.70		1.18	1.18	2.35	2.46	2.64	2.83
14	Subsidised Electricity To Employees									
15	Any Other Item		1.75		5.86	4.09	9.95	10.38	11.14	11.97
16	Staff Welfare Expenses		0.31		0.28	0.11	0.40	0.41	0.44	0.48
17	Apprentice And Other Training Expenses									
18	Contribution To Terminal Benefits									
19	Provident Fund Contribution		19.58		11.37	9.87	21.24	22.16	23.80	25.56
20	Provision for PF Fund									
21	Any Other Items									
22	Total Employee Costs		149.41		92.77	80.91	173.68	181.18	194.58	208.98
23	Less: Employee expenses capitalised									
24	Net Employee expenses	152.25	149.41	158.89	92.77	80.91	173.68	181.18	194.58	208.98
	AEGCL Employee expenses		147.31		91.41	79.53	170.94			
	SLDC Employee expenses		2.10		1.36	1.38	2.74			

S.No.	Particulars	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22		
		True up		APR			Ensuing Year				
		Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission	
1	Plant & Machinery	16.26	10.43	18.00	3.99	7.98	11.98	16.26	20.91	27.37	
2	Buildings		0.98		0.39	0.78	1.16	1.58	2.03	2.66	
3	Civil works		0.99		0.12	0.25	0.37	0.51	0.65	0.85	
4	Hydraulic Works		-		0.00	0.00	0.00	0.00	0.00	0.00	
5	Lines, Cable Networks etc.		2.19		0.35	0.70	1.04	1.42	1.82	2.39	
6	Vehicles		0.16		0.07	0.14	0.21	0.28	0.36	0.47	
7	Furniture & Fixtures		0.06		0.02	0.04	0.07	0.09	0.12	0.15	
8	Office Equipment		0.33		0.14	0.28	0.43	0.58	0.74	0.97	
9	Total						0.00	0.00	0.00	0.00	0.00
10	Any other items (Capitalisation)						0.00	0.00	0.00	0.00	0.00
	Total	16.26	15.15	18.00	5.086	10.17	15.26	20.71	26.64	34.86	
	AEGCL R&M		15.10		5.055	10.079	15.13				
	SLDC R&M		0.05		0.03	0.09	0.12				

S.No.	Particulars	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22	
		True up		APR			Ensuing Year			
		Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	Projected	Projected	Projected
1	Lease/ Rent/Rates and taxes		0.23		0.12	0.12	0.23	0.25	0.26	0.26
2	Insurance		0.09		0.04	0.04	0.08	0.08	0.08	0.08
3	Revenue Stamp Expenses Account				0.02	0.02	0.04	0.04	0.04	0.04
4	Telephone, Postage, Telegram & Telex Charges		0.26		0.11	0.11	0.23	0.25	0.25	0.25
5	Incentive & Award To Employees/Outsiders									
6	Consultancy Charges		0.00		0.01	0.33	0.33	0.37	0.37	0.37
7	Technical Fees				0.06	0.06	0.13	0.14	0.14	0.14
8	Other Professional Charges		0.07			1.09	1.09	1.20	1.20	1.21
9	Conveyance And Travelling		1.18		0.65	0.65	1.29	1.42	1.43	1.43
10	License and Registration Fees				0.00	0.00	0.01	0.01	0.01	0.01
11	Vehicle Expenses									
12	Security / Service Charges Paid To Outside Agenc									
13	Fee And Subscriptions Books And Periodicals		1.71		1.06	1.52	2.58	2.84	2.85	2.86
14	Printing And Stationery	7.45	0.29	6.90	0.11	0.11	0.23	0.25	0.25	0.25
15	Advertisement Expenses		0.27		0.17	0.17	0.34	0.37	0.37	0.37
16	Contributions/Donations To Outside Institutes /									
17	Electricity Charges To Offices		1.17		0.60	0.60	1.20	1.32	1.33	1.33
18	Water Charges		0.00		0.00	0.00	0.00	0.00	0.00	0.00
19	Entertainment Charges		0.06		0.05	0.05	0.10	0.11	0.11	0.11
20	Miscellaneous Expenses		0.17		0.18	0.18	0.35	0.38	0.39	0.39
21	Legal Charges		0.03		0.02	0.02	0.05	0.05	0.05	0.05
22	Auditor's Fee		0.06		0.00	0.00	0.00	-	-	-
23	Freight On Capital Equipments									
24	Purchase Related Advertisement Expenses									
25	Vehicle Running Expenses Truck / Delivery Van		0.05		0.03	0.03	0.05	0.06	0.06	0.06
26	Vehicle Hiring Expenses Truck / Delivery Van		1.33		0.80	0.80	1.60	1.76	1.76	1.77
27	Other Freight		-							
28	Total A&G Expenses	7.45	6.98	6.90	4.03	5.89	9.92	10.90	10.94	10.97
29	Less: A&G Expenses Capitalised									
30	Net A&G Expenses	7.45	6.98	6.90	4.03	5.89	9.92	10.90	10.94	10.97
	AEGCL A&G		6.57		3.87	5.42	9.29			
	SLDC A&G		0.41		0.16	0.47	0.63			

Form 5: Assets & Depreciation

(A) Gross Fixed Assets

(Rs. Crores)

Sr. No.	Particulars	FY 2017-18				FY 2018-19				FY 2019-20			
		Actual				Estimated				Projected			
		Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year
1	Land owned under full ownership	28.87	8.82	0.02	37.67	37.67	0.02	37.69	37.69	37.69	-	37.69	
2	Land under lease	0.30	-	-	0.30	0.30	-	0.30	0.30	0.30	-	0.30	
3	Building	30.52	3.68	-	34.20	34.20	3.94	38.15	37.80	8.07	-	45.87	
4	Hydraulic	2.64	-	-	2.64	2.64	-	2.64	2.64	2.64	-	2.64	
5	Other Civil Works	69.47	2.48	1.00	70.95	70.95	10.90	81.85	81.85	9.90	-	91.75	
6	Plant & Machinery	758.66	30.49	0.01	789.14	789.14	64.07	853.21	848.62	625.68	-	1,474.30	
7	Lines & Cable Network	727.23	9.39	1.75	734.87	734.87	61.42	796.29	796.29	199.13	-	995.42	
8	Vehicles	4.68	0.22	-	4.90	4.90	-	4.90	4.90	1.00	-	5.90	
9	Furniture & Fixtures	3.82	0.27	0.01	4.08	4.08	0.11	4.19	4.17	0.85	-	4.62	
10	Office Equipment	2.49	0.58	0.00	3.07	3.07	0.21	3.28	3.24	0.50	-	3.74	
11	Any other assets	-	-	-	-	-	-	-	-	-	-	-	
	Total	1,628.68	55.93	2.78	1,681.83	1,681.83	140.67	1,822.50	1,817.40	844.73	-	2,662.22	

Sr. No.	Particulars	FY 2020-21				FY 2021-22			
		Projected				Projected			
		Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year
1	Land owned under full ownership	37.69	-	-	37.69	37.69	-	37.69	
2	Land under lease	0.30	-	-	0.30	0.30	-	0.30	
3	Building	45.87	8.07	-	53.94	53.94	3.20	57.14	
4	Hydraulic	2.64	-	-	2.64	2.64	-	2.64	
5	Other Civil Works	91.75	48.87	-	140.62	140.62	13.20	153.82	
6	Plant & Machinery	1,474.30	244.65	-	1,718.94	1,718.94	1,587.68	3,306.63	
7	Lines & Cable Network	995.42	187.54	-	1,182.95	1,182.95	162.86	1,345.81	
8	Vehicles	5.90	1.00	-	6.90	6.90	-	6.90	
9	Furniture & Fixtures	4.62	0.45	-	5.07	5.07	0.60	5.67	
10	Office Equipment	3.74	0.50	-	4.24	4.24	-	4.24	
11	Any other assets	-	30.00	-	30.00	30.00	-	30.00	
	Total	2,662.22	521.07	-	3,183.29	3,183.29	1,767.54	4,950.83	

Form 5: Assets & Depreciation

(B) Depreciation

Sr. No.	Particulars	FY 2017-18				FY 2018-19			FY 2019-20		
		Depreciat on Rate	Actual		Actual		Actual		Estimated		
			Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year
1	Land owned under full ownership	0.00%	-	-	-	-	-	-	-	-	-
2	Land under lease	3.34%	0.01	0.01	0.02	0.02	0.01	0	0.010	0	
3	Building	3.34%	17.46	1.26	18.71	18.71	1.21	20	20	1.397	
4	Hydraulic	5.28%	2.51	-	2.51	2.51	-	3	3	3	
5	Other Civil Works	3.34%	5.80	2.42	8.22	8.22	2.55	11	11	2.895	
6	Plant & Machinery	5.28%	338.98	47.49	381.48	381.48	43.36	425	425	61.325	
7	Lines & Cable Network	5.28%	640.95	13.94	654.89	654.89	6.49	661	661	47.301	
8	Vehicles	8.50%	4.00	0.22	4.22	4.22	0.19	4	4	4	
9	Furniture & Fixtures	6.33%	2.84	0.25	3.10	3.10	0.26	3	1	0.278	
10	Office Equipment	6.33%	1.93	0.33	2.26	2.26	0.20	2	2	0.221	
11	Any other assets	5.28%	-	-	-	-	-	-	-	-	
	Total		1,014	60.92	1,075	1,075	54	1,130	1,127	113	1,240

Sr. No.	Particulars	FY 2020-21			FY 2021-22		
		Projected			Projected		
		Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year
1	Land owned under full ownership	0.00%	-	-	-	-	-
2	Land under lease	3.34%	0	0.01	0	0.01	0
3	Building	3.34%	21	1.67	23	23	1.86
4	Hydraulic	5.28%	3	-	3	3	3
5	Other Civil Works	3.34%	14	3.88	18	18	4.92
6	Plant & Machinery	5.28%	486	84.30	570	570	132.68
7	Lines & Cable Network	5.28%	709	57.51	766	766	66.76
8	Vehicles	8.50%	4	0.61	5	5	0.66
9	Furniture & Fixtures	6.33%	1	0.31	1	1	0.34
10	Office Equipment	6.33%	3	0.25	3	3	0.27
11	Any other assets	5.28%	-	-	-	-	-
	Total		1,240	148	1,390	1,390	209

Form 5: Assets & Depreciation

(C) Net Fixed Assets

		FY 2017-18				FY 2018-19				FY 2019-20			
Sr. No.	Particulars	Actual			Actual			Estimated					
		Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year	Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year	Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year
1	Land owned/under full ownership	28.87	8.82	0.02	37.67	37.67	0.02	-	37.69	37.69	-	-	37.69
2	Land under lease	0.29	-0.01	-	0.28	0.28	-0.01	-	0.27	0.27	-0.01	-	0.26
3	Building	13.06	2.43	-	15.49	15.49	2.73	-	18.23	18.19	6.67	-	24.86
4	Hydraulic	0.13	-	-	0.13	0.13	-	-	0.13	0.13	-	-	0.13
5	Other Civil Works	63.66	0.07	1.00	62.73	62.73	8.34	-	71.07	71.07	7.00	-	78.08
6	Plant & Machinery	419.68	-12.01	0.01	407.67	407.67	20.71	-	428.38	426.38	564.35	-	990.74
7	Lines & Cable Network	86.28	-4.50	1.75	79.98	79.98	56.93	-	136.91	136.24	151.83	-	288.74
8	Vehicles	0.68	0.00	-	0.68	0.68	-0.19	-	0.49	0.49	1.00	-	1.49
9	Furniture & Fixtures	0.98	0.01	0.01	0.98	0.98	-0.16	-	0.83	0.82	0.17	-	0.99
10	Office Equipment	0.56	0.26	0.00	0.81	0.81	0.01	-	0.82	0.80	0.28	-	1.08
11	Any other assets	-	-	-	-	-	-	-	-	-	-	-	-
	Total	614.19	-4.98	2.78	606.43	606.43	86.39	-	692.81	690.76	731.30	-	1,422.05

		FY 2020-21				FY 2021-22			
Sr. No.	Particulars	Projected			Projected				
		Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year	Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year
1	Land owned/under full ownership	37.69	-	-	37.69	37.69	-	-	37.69
2	Land under lease	0.26	-0.01	-	0.25	0.25	-0.01	-	0.24
3	Building	24.86	6.40	-	31.27	31.27	1.34	-	32.61
4	Hydraulic	0.13	-	-	0.13	0.13	-	-	0.13
5	Other Civil Works	78.08	44.99	-	123.07	123.07	8.28	-	131.35
6	Plant & Machinery	990.74	160.34	-	1,151.08	1,151.08	1,455.01	-	2,606.09
7	Lines & Cable Network	286.74	130.03	-	416.76	416.76	96.10	-	512.86
8	Vehicles	1.49	0.39	-	1.88	1.88	-0.66	-	1.23
9	Furniture & Fixtures	0.99	0.14	-	1.13	1.13	0.26	-	1.39
10	Office Equipment	1.08	0.25	-	1.33	1.33	-0.27	-	1.06
11	Any other assets	-	29.21	-	29.21	29.21	-1.58	-	27.63
	Total	1,422.05	371.75	-	1,793.80	1,793.80	1,598.48	-	3,392.28

S.No.	Particulars	Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	Total AEGCL Submission	MYT Submission		
		FY 17-18 True Up		FY 18-19 APR		FY 19-20	FY 20-21	FY 21-22
	PGCIL Charges							
1	April	534.55	41.34	526.33	37.98	PGCIL Charges shall be paid by APDCL FY 19-20 onwards		
2	May		43.70		39.95			
3	June		40.82		41.97			
4	July		39.71		40.73			
5	August		48.61		46.70			
6	September		36.75		48.47			
7	October		37.07		42.64			
8	November		57.55		42.64			
9	December		36.54		42.64			
10	January		40.79		42.64			
11	February		48.44		42.64			
12	March		37.98		42.64			
	Total	534.55	509.29	526.33	511.64	0	0	0

Form - F22

Rs. Crore

S.No.	Particulars	FY 17-18	
		Approved in Order dtd 19.03.18	AEGCL Submission
	Loan Details		
A	Interest charges on State Govt. Loans, Bonds And Advances,		
1	State Government Loans		42.05
2	ADB Loan		-
3	Central Government Loans		
4	General Provident Fund		4.53
	Sub-total		46.58
B	Interest on Long Term Loans/Credits from the Fis/banks/organisations approved by the State Govt.		
	Secured Loans		
	Unsecured Loans		
C	Other Interest & Finance Charges		
	<i>Cost of raising Finance/Bank Charges</i>		0.26
	<i>Penal Interest Charges</i>		12.35
	Sub-total		12.61
D	Grand Total Of Interest & Finance Charges (A+B+C)		59.19
E	Less : Interest & Finance Charges Capitalised		18.35
	Net Total Of Interest Finance Charges (D-E)	3.71	40.84

S.No.	Particulars	FY 18-19 (H1) Actual						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	473.10	0.43		23.67	473.53
2	ADB Loan		10.50%	94.28	1.4		4.99	95.68
3	Central Government Loans						0.00	0.00
4	General Provident Fund		7.80%	59.20	5.23	5.29	2.31	59.14
	Sub-total			626.58	7.06	5.29	30.96	628.35
	Interest on Long Term Loans/Credits from the Fls/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.28	0
	<i>Penal Interest Charges</i>							0
	Sub-total			626.58	7.06	5.29	31.24	628.35
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			626.58	7.06	5.29	31.24	628.35

S.No.	Particulars	FY 18-19 (H2) Estimated						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	473.53	58.56		25.14	532.09
2	ADB Loan		10.50%	95.68	0		5.02	95.68
3	Central Government Loans						0.00	0.00
4	General Provident Fund		7.80%	59.14	5.23	5.29	2.31	59.08
	Sub-total			628.35	63.78	5.29	32.47	686.85
	Interest on Long Term Loans/Credits from the Fls/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.28	0
	<i>Penal Interest Charges</i>							0
	Sub-total			628.35	63.78	5.29	32.75	686.85
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			628.35	63.78	5.29	32.75	686.85

S.No.	Particulars	FY 19-20 (Projection)						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	531.43	63.99		56.34	595.42
2	ADB Loan		10.50%	95.24	8.89		10.47	104.13
3	Central Government Loans						0.00	0.00
4	General Provident Fund		8%	58.56	5.18	5.24	4.68	58.50
	Sub-total			685.23	78.06	5.24	71.49	758.05
	Interest on Long Term Loans/Credits from the Fls/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.58	0
	<i>Penal Interest Charges</i>							0
	Sub-total			685.23	78.06	5.24	72.07	758.05
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			685.23	78.06	5.24	72.07	758.05

S.No.	Particulars	FY 20-21 (Projection)						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	595.42	139.18		66.50	734.60
2	ADB Loan		10.50%	104.13	15.91		11.77	120.04
3	Central Government Loans						0.00	0.00
4	General Provident Fund		8%	58.50	5.23	5.29	4.68	58.44
	Sub-total			758.05	160.32	5.29	82.95	913.08
	Interest on Long Term Loans/Credits from the Fls/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.61	0
	<i>Penal Interest Charges</i>							0
	Sub-total			758.05	160.32	5.29	83.56	913.08
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			758.05	160.32	5.29	83.56	913.08

S.No.	Particulars	FY 21-22 (Projection)						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	734.60	411.78		94.05	1146.38
2	ADB Loan		10.50%	120.04	135.07		19.69	255.10
3	Central Government Loans						0.00	0.00
4	General Provident Fund		8%	58.44	5.23	5.29	4.67	58.38
	Sub-total			913.08	552.07	5.29	118.42	1459.86
	Interest on Long Term Loans/Credits from the Fls/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.64	0
	<i>Penal Interest Charges</i>							0
	Sub-total			913.08	552.07	5.29	119.06	1459.86
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			913.08	552.07	5.29	119.06	1459.86

Funding of Capitalisation

(Rs.Crs.)

S.No.	Particulars	FY 17-18 True Up		FY 18-19 APR		FY 19-20	FY 20-21	FY 21-22
		Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	AEGCL Submission	MYT Submission		
1	Grant	201.44	55.93		61.46	664.64	347.67	1,215.60
2	Equity	6.74	-		0	54.03	52.02	165.58
3	Debt	95.61	-		79.21	126.06	121.38	386.36
	Total Capitalisation	303.79	55.93		140.67	844.73	521.07	1,767.54

Normative Loan Computation

(Rs.Crs.)

S.No.	Particulars	FY 16-17		FY 17-18		FY 18-19				FY 19-20	FY 20-21	FY 21-22	
		True up											
		Approved in Order dtd 19.03.18	AEGCL Submission	Approved in Order dtd 31.03.17	AEGCL Submission	Approved in Order dtd 19.03.18	APR			Ensuing Year			
					FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission		
1	Net Normative Opening Loan	-	255.57	53.05	253.84	71.08	232.13	265.47	232.13	291.03	373.76	414.19	
2	Addition of normative loan during the year	17.91	17.91	95.61	-	21.85	43.23	35.98	79.21	126.06	121.38	386.36	
3	Normative Repayment during the year	19.64	19.64	17.07	21.71	26.29	9.89	9.89	19.79	43.34	80.95	128.91	
4	Net Normative Closing Loan	0	253.84	131.59	232.13	66.64	265.47	291.55	291.55	373.76	414.19	671.64	
5	Interest Rate	10.19%	10.19%	10.19%	10.19%	10.18%	9.87%	9.87%	9.87%	9.90%	9.91%	9.94%	
6	Interest Expenses on Loan	-	25.95	9.41	24.76	7.01	12.28	13.74	26.02	32.90	39.06	53.95	
7	Finance Charges	-	-	-	0.26	-	0.28	0.28	0.55	0.58	0.61	0.64	
8	Total Interest and Finance Charges	-	25.95	9.41	25.02	7.01	12.55	14.02	26.57	33.48	39.67	54.59	

Work In Progress

S.No.	Particulars	FY 17-18	FY 18-19			FY 19-20	FY 20-21	FY 21-22
		True up				Ensuing Year		
		AEGCL Submission	FY 18-19 H1	FY 18-19 H2	Total	AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Opening balance	1,013.50	1,107.06	1,119.33	1,107.06	1,148.72	2,778.97	4,214.75
	Add:							
2	i) Capital expenditure	146.71	89.04	93.28	182.32	2,474.98	1,956.85	940.71
	Less :Capitalisation	53.15	76.77	63.90	140.67	844.73	521.07	1,767.54
	Closing Balance	1,107.06	1,119.33	1,148.72	1,148.72	2,778.97	4,214.75	3,387.92

S.No.	Particulars	FY 17-18			FY 18-19			FY 18-19			FY 19-20			FY 20-21			FY 21-22
		True up			H1 Actual			H2 Projection			Total Estimated			Ensuing Year			
		Balance at the beginning of the year	Addition during the year	Balance at the end of the year	Balance at the beginning of the year	Addition during the year	Balance at the end of the year	Balance at the beginning of the year	Addition during the year	Balance at the end of the year	Balance at the beginning of the year	Addition during the year	Balance at the end of the year	Addition during the year	Addition during the year	Addition during the year	
1	Consumer Contribution Towards Cost Of Capital Assets			0							0	0	0				
2	Grant Towards Cost Of Capital Assets / Promotee's Contribution*	1,681.99	66.20	1,748.19	1,748.19	48.43	1,796.62	1,796.62	13.03	1,809.65	1,748.19	61.46	1,809.65	664.64	347.67	1,215.60	
	(a) Grant From GDA	678.59	-	678.59	678.59	0	678.59	678.59	0	678.59	678.59	-	678.59	0.00	0.00	0.00	
	(b) Grant From ADB	943.13	11.13	954.26	954.26	12.60	966.86	966.86	0	966.86	954.26	12.60	966.86	79.98	143.17	1,215.60	
	(c) Grant From Central Government	60.27	55.07	115.34	115.34	35.83	151.17	151.17	13.03	164.20	115.34	48.86	164.20	584.66	204.50	0.00	
		1,681.99	66.20	1,748.19	1,748.19	48.43	1,796.62	1,796.62	13.03	1,809.65	1,748.19	61.46	1,809.65	664.64	347.67	1,215.60	

S.No.	Particulars	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22
		True up		APR			Ensuing Year		
		Approved in Order dtd 19.03.18	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Income Tax Payable	0	8.80	0			0		

S.No.	Particulars	FY 17-18		
		True up		
		Approved in Order dtd 19.03.18	AEGCL Submission	Approved in Order dtd 19.03.18
1	Other debits		0.90	
2	Net Prior period Charges/(Credits)		-5.68	
	Total	0	-4.78	0

Rs. Crore

FY 18-19			FY 19-20	FY 20-21	FY 21-22
APR			Ensuing Year		
FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission
0.003	0.003	0.005			
-1.313	0.000	-1.313			
-1.311	0.003	-1.308			

Non-Tariff Income

S.No.	Particulars	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22	
		True up		Approved in Order dtd 19.03.18	APR			Ensuing Year		
		Approved in Order dtd 19.03.18	AEGCL Submission		FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission	AEGCL Submission
A	Income from Investment, Fixed & Call Deposits									
	Income from Investments		14.58		0.58	0.58	1.16	1.22	1.28	1.34
	Interest on fixed deposits				1.39	14.10	15.49	16.26	17.08	17.93
	Income on other investments (Dividend)		2.14				-			
	Interest from Banks		1.42		1.70	1.11	2.81	2.95	3.10	3.25
	Sub Total		18.14		3.67	15.79	19.46	20.43	21.45	22.53
B	Other Non-Tariff Income									
	Miscellaneous Receipts		174.81		43.50	27.12	70.62	4.73	4.97	5.21
	Penalty for contractor/supplier for delay, etc.				2.56		2.56			
	Rebate received from PGCIL		2.47		3.31	3.31	6.62			
	Rentals from staff quarters		0.34		0.08	0.08	0.15	0.15	0.15	0.15
	Sub-Total		177.62		49.45	30.51	79.95	4.88	5.12	5.37
	Total	85.99	195.76	100.17	53.12	46.30	99.41	25.31	26.57	27.89

Return on Equity

S.No.	Particulars	Units	FY 17-18		FY 18-19			FY 19-20	FY 20-21	FY 21-22
			True up		APR			Ensuing Year		
			Approved in Order dtd 19.03.18	AEGCL Submission	Approved in Order dtd 19.03.18	FY 18-19 H1	FY 18-19 H2	Total AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Equity (Opening Balance)	Rs. Crore	99.93	99.93	106.67	99.93	99.93	99.93	153.96	205.98
2	Net additions during the year	Rs. Crore	6.74	-	4.21	0	-	54.03	52.02	165.58
3	Less : Reduction during the year	Rs. Crore	0				-	-	-	-
4	Equity (Closing Balance)	Rs. Crore	106.67	99.93	110.88	99.93	99.93	153.96	205.98	371.56
5	Average Equity	Rs. Crore	103.30	99.93	108.78	99.93	99.93	126.94	179.97	288.77
6	Rate of Return on Equity	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
7	Return on Equity	Rs. Crore	16.01	15.49	16.86	7.74	7.74	15.49	19.68	27.89

Annexure II - CAPITAL INVESTMENT PLAN OF AEGCL FOR FY 19-20 TO FY 21-22

The Scheme Wise projects are detailed with year-wise capital expenditure, year-wise capitalisation, mode of funding and write-up elaborating the requirement of project. The summary of scheme wise investments and its capitalisation is summarised below:

Projected Capital expenditure (Rs. Crs.)				
Scheme Name	FY 2019-20	FY 2020-21	FY 2021-22	Total Capex
ADB	2001.69	1707.19	818.31	4527.19
NERPSIP	254.94	118.42	0.00	373.37
Annual Plan	53.65	63.10	70.40	187.15
PSDF	80.00	0.00	0.00	80.00
TDF	41.77	3.15	0.00	44.92
NEC	23.00	45.07	35.00	103.07
NLCPR	0.00	0.00	0.00	0.00
PROJECTS	2455.06	1936.93	923.71	5315.70
Other Works	19.92	19.92	17.00	56.84
TOTAL AEGCL	2474.98	1956.85	940.71	5372.54

Projected Capitalisation (Rs. Crs.)				
Scheme Name	FY 2019-20	FY 2020-21	FY 2021-22	Total Capex
ADB	111.09	198.84	1688.33	1998.26
NERPSIP	506.76	167.74	0.00	674.49
Annual Plan	27.83	83.16	62.21	184.68
PSDF	77.90	16.00	0.00	149.50
TDF	101.23	12.34	0.00	113.57
NEC	0.00	23.07	0.00	27.30
NLCPR	0.00	0.00	0.00	10.25
PROJECTS	824.81	501.15	1750.54	2483.56
Other Works	19.92	19.92	17.00	56.84
TOTAL AEGCL	844.73	521.07	1767.54	2540.40

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1. Asian Development Bank (ADB) Scheme

At March 2018, AEGCL has transmitted 9168 MU (against requirement of 10189 MU) of energy from various sources of generations and inter-state and inter-regional import points to Distribution Network of Assam. During the same period the transmission system of AEGCL is able to meet the maximum demand of 1758 MW of the Distribution Companies of Assam against the actual maximum demand of 1850 MW. This restriction is mainly due to low generation and some bottlenecks in the transmission network have contributed to this restriction.

In the Nineteenth Electric Power Survey Report of India (conducted by Central Electricity Authority of India) the maximum electricity demand in the state of Assam will be 2713 MW in the year 2021-2022 and energy requirement of the same year is estimated at 14051 MU. As new transmission project of reasonable size usually takes three to four years to complete in this part of the country, therefore, a scheme is prepared for execution to meet the requirement of the year 2021-22.

The Government of India has already planned to make power available for all for 24x7 by 2020-21. To meet such demands, the following works are proposed by AEGCL to be executed under **Assam Power Development Program, Phase -III** with financial assistance from ADB. The salient features of the proposals are mentioned below:

- **Capacity addition in transmission:**

Capacity addition in transmission of power by construction of new transmission lines of voltage class 400kV, 220 kV and 132 kV. These transmission lines include lines to feed new substations and also includes interconnecting lines to strengthen transmission capacity of the system so as to operate the system in integrated and stable modes.

- **Capacity addition of Transformation Capacities:**

Capacity addition of Transformation Capacities in the following two areas by constructing new substations and augmenting capacities in existing substations.

- **Transformation Capacity at Distribution interface points:**

Per capita consumption of Assam is presently one third of national average, and still 36% of state population are yet get connectivity with the electricity grid. However, massive rural electrification of villages are going on under various Rural Electrification scheme and hopefully same will be completed before FY 2021-22. The main interface points with the Distribution System at present are the, 132/33, 220/33kV, 132/11kV and 66/33 kV substations and very few EHV consumers are existing. All most all these substations are mainly fed from 400/220kV or 220/132 kV substations and thus strengthen the infeed to interface substations, 220/132 kV substations are proposed. However, 220/33kV, 132/33 kV and 132/11kV substations are considered in this area by including construction of New Substations and Augmenting Existing ones.

- **Transformation Capacity at system interconnecting points:**

The transmission system of AEGCL is already having an extensive 132 kV network. Based on the current trends it is observed that more and more power will be available at voltage level of 400kV and 220 kV. It is therefore obvious that more transformation

capacities will be required to support the already existing extensive 132 kV system. At present the system has a single 400kV substation and a few 220 kV substations with limited transformation capacities. Therefore, proposals of construction of new 400/220 kV, 220/132 kV, 220/33kV substations and augmentations in few existing 220/132 kV & 132/33 kV substations are included in this Project.

- **Evacuation of Power from State owned Generators:**

- **Power evacuation system from Lower Kopili Hydro Electric Project (120 MW), which is ongoing project of Assam Power Generation Company Ltd. are proposed.**

As per Indian Electricity Act 2003, it is the responsibility of State Transmission Utility, in this case AEGCL to evacuate power from the state-owned generators. APGCL, a state-owned generating company has already completed preliminary activities for its new Hydro Electric Project i.e. Lower Kopili (LKHEP) of capacity 120 MW. The evacuation plan is already approved by CEA. As the evacuation is proposed through 220kV system, with upgradation of the nearest 132/33kV Shankardeb Nagar substation to 220kV with associated transmission lines from LKHEP.

- **Communication System (Optical Ground Wire):**

The Power Line Carrier Communication (PLCC) not only provide voice and data (such as SCADA) communication it is also a pre-requisite in EHV transmission lines considering protection of the system. PLCC equipment are provided in all 220 KV and 132kV transmission lines proposed in this Project Report.

Under ADB finance, AEGCL have already made a fibre network of 644 km, which mostly connected to 220kV system. Most of substations which are radially fed are still to come in the existing network. As PLCC system has its own limitations regarding real time operation, optical fibre network in the form of OPGW is considered for the proposed linking of new as well as all remaining existing substations

- **Augmentation of Switching Scheme by converting existing Air Insulated Substation (AIS) to Gas Insulated Substations (GIS):**

Large numbers of old substations are in operation in the transmission system of AEGCL with aged, worn-out and outdated equipment which causes frequent and prolonged outages. For augmentation of switching scheme of existing AIS, mere replacing of old & outdated equipment shall not suffice the requirement of reliable switching scheme. Thus, to enhance the reliability of existing critical AIS substations, proposal is placed to convert the AIS to GIS with redundant switching scheme.

- **Capacity Augmentation of Age old & critical Transmission lines by HTLS conductors:**

Some of the critical transmission lines get over loaded due to which large chunk of customers faces force power curtailment specially during summer. Further, the transmission system is to run without redundancy. So, AEGCL want to take advantage of new generation of high capacity conductors i.e. High Temperature Low Sag (HTLS) type which are capable of carrying current double the existing one without disturbing the most critical factor of transmission line "Sag". Some of

critical transmission lines mainly on 132kV class and few 220kV class are considered for re-conductoring by HTLS conductors.

- **New Substations**

Altogether 23 new substations are proposed under this Project. A brief introduction to these new substations is presented below:

(i) 400/220kV, 2x500 MVA GIS Substation at Rangia

It may be noted that the demand in North Bank districts of Assam are increasing because of rapid Industrial Growth, particularly in the Kamrup District. The Government of Assam has already notified as Industrial Belt from Amingaon (Kamrup Rural) to Tihu (Nalbari District), 500 meters of bothsides of NH 31, land will be reserved for industries only. In the NERPSIP, construction of one 220/132kV substation (2x160MVA) is going on, which will be radially feed from Rangia. Again, there is only one 220kV link between NTPC Bongaigaon and Rangia 220kV. As such to cater reliable power, AEGCL proposes one 400kV substation by LILO of one circuit of 400kV Balipara – Bongaigaon line, so that 220/132kV Amingaon and existing Rangia 220 kV substation can be feed from the proposed new 400kV/220kV (2x500 MVA) substation at Rangia. AEGCL requests the Standing Committee on Power System Planning for approval on LILO of one circuit of 400kV D/C (Quad Moose) line at Rangia and construction of Rangia 400/220kV substation by AEGCL.

The 5th Standing Committee on Power Planning, headed by the Central Electricity Authority, has already approved Rangia 400/220kV, 2x500 MVA substation.

(ii) 400/220kV, 2x500 MVA GIS Substation at Sonapur

Presently Guwahati City's Peak Power demand to the tune of 350 MW is fed from 400/220kV Azara (2x315 MVA) substation situated in the Western part of the City. To mitigate contingency at Azara 400kV substation, one 400kV (2x500 MVA) substation at Sonapur is proposed with a LILO of Silchar (PGCIL) – Byrnihat (Meghalaya) 400kV twin moose line. Existing Sonapur substation is well connected with 220kV and 132kV system, thus in the event of any casualty on Azara 400/220kV substation, the capital city of Assam, Guwahati City can draw power of its total requirement from the proposed Sonapur 400 kV substation.

(iii) 220/132 kV, 2x160; 132/33kV, 2x50 MVA GIS Substation at Agamoni:

Presently, the Dhuburi, Kokrajhar, Bongaigaon, Sirang, Barpeta & Nalbari Districts are fed from Salakati 220/132 kV substation and which is connected to Eastern Region through PGCIL Bongaigaon 400/220kV substation. The Salakati 220/132kV substation is connected to NTPC's BTPS (2x250 MW) through two numbers 220 kV line. PGCIL Bongaigaon substation is connected to two numbers of double circuit 400kV lines and one 220 kV Birpara (West Bengal) – Bongaigaon double circuit line. Bongaigaon PGCIL substation is well connected with rest of the large generators of NER.

In the event of any contingency at Salekathi 220/132kV substation, afore mentioned six Lower Assam districts had to face either out of power or partial power depending on nature of outage of transmission element at Salekathi.

To resolve this chronic issues, one 220/132kV substation is proposed at Agamoni with one circuit LILO of Birpara (WB) – Bongaigaon 220kV double circuit line. Further, as this

substation will be connected mainly to Eastern Region, so bus fault at Bongaigaon PGCIL's substation shall not have any impact on the presently feeding districts from Salekathi substation.

(iv) 2x160 MVA, 220/132kV; 2x50 MVA, 132/33kV Khumtai GIS S/S:

It is observed that for a single contingency of Kathalguri Generating Station - Misa (PGCIL) 220kV link or for outage of Kathalguri Generators, the entire Upper Assam shall have to face acute power shortage. Moreover, all the 220kV link lines from substations mainly Misa (PGCIL) and Samaguri substations of Central Assam are loaded to more than 100%, as such system security is at stake. Further, the entire Upper Assam will be deprived of the upcoming hydel substations in Arunachal Pradesh as the only evacuation station is Misa (PGCIL) 400/220kV substation. On the otherhand, entire Upper Assam has only four numbers of 220kV substation viz, Tinsukia, Behiating, Namrup and Mariani and these substations are taking care of eighteen numbers of 132/33kV substations, as such for a single contingency on 220kV bus, entire Upper Assam is to face severe load curtailment. Hence, at Khumtai, 220/132kV transformation system is proposed to take care of 132kV substations like Gormur, Jorhat (West), Bokakhat, Golaghat & Bokajan substation, further this substation will act as back-up to existing Mariani 220/132kV substation.

(v) 220/132 kV, 2x160 MVA Shankardebnagar GIS SS:

The location has already one 2x25MVA, 132/33kV substation, which is fed from Samaguri 220kV EHV substation through one double circuit 132kV line. Assam Power Generation Company Ltd has already finalized for setting-up of one 110 MW hydro power generating station at Lower Kopili, which is approximately 50 KM south west side. Power evacuation plan for Lower Kopili HEP is already finalized through 220kV transmission system. As per Indian Electricity Act, it is the responsibility of State Transmission Utility to evacuate power from State owned generator, accordingly AEGCL proposed to set-up 220kV system at the nearest Shankardeb Nagar EHV substation.

Further, it is proposed to extend connectivity in 220kV with CTU's from 220 kV Samaguri substation through double circuit line with a length of 61 KM. This proposal was already approved by Standing Committee as well as by North East Region Power Committee.

With 220kV system, Shankardeb Nagar will act as redundant to existing Samaguri 220/132/33 kV substation, as of now, for any contingencies at 220kV system of Samaguri substation, three important districts of Central Assam Zone, viz. Nagaon, Hojai & Karbi Along, have to face out of power state.

(vi) 220/33 kV, 2x100 MVA Boragaon GIS SS:

As stated earlier, the development of Guwahati city is moving on the fast track in all directions and rapid commercial activities and industrialization are taking place on the greater Guwahati. Presently, load of greater Guwahati or so to say Kamrup Metro District is feeding from Sarusajai 220/132kV, 3x100 MVA & Jawaharnagar 220/33kV, 2x50 MVA substation where Jawaharnagar substation is taking care of only a portion of eastern part of the City and Sarusajai is taking care of rest of the parts of Guwahati. Recent pass, the Sarusajai substation is connected with 220kV D/C lines from 400/220/132kV, 2 x 315 MVA substation.

As mentioned above, Sarusajai is the most critical substation for Guwahati City, as any type of single contingency leads to either severe load shedding of the entire city or black

out of the City in spite of having adequate capacities at 220kV level at Azara 400kV substation. To cater the rising growth one new 220/33kV, 2 x 100 MVA substation is proposed at the south-western part of the City i.e. at Boragaon, which will play most vital role for the only International Airport of the State, the famous Guwahati University and lots of others educational institutions of national repute.

(vii) 220/33 kV, 2x100 MVA Panjabari GIS SS

Panjabari is situated in North-East side of Guwahati City. Presently this part of the City is partly fed by age old Chandrapur 132/33kV substation located fifteen kilometres from this area and other one is Narengi 132/33kV substations which is also operating on above its full capacities. However, both these feeding substations are to be depend on the lone 220/132kV substation of the City i.e. Sarusajai EHV Grid substation.

The 220kV Samaguri – Jawaharnagar and Sonapur – Sarusajai 220 kV lines are enrouting in the same structures near to proposed substation location, which will eliminate the ROW issue of drawal of EHV line in such a thickly populated location. Further, the type of substation must be of GIS only because of required land scarcity. The proposed substation will be achieved more than 40% of its proposed capacities.

(viii) 220/33 kV, 2x50 MVA Jakhlabandha GIS SS

Jakhlabandha is located under Koliabar Administrative Subdivision of Nagaon District. Kaliabor Subdivision is comprising of township like Jakhlabandha, Silghat, Misa. Naltali under Koliabor is an industrial growth centre and Industry Department of Govt. of Assam has an Industrial Estate. While, Misa has large Army Base Station with its Defence Research Center. Presently, power is fed from Samaguri EHV substation through 4/5 numbers of 33kV lines of average length of more than 35 KM route length with 7/8 numbers of 33/11kV sub-transmission substations.

It is mention worthy that this was a Phase-II proposal of North East Region Power System Improvement Plan and which was supposed to start at the 11th Plan Period, but the execution of Phase-I proposal under NERPSIP was delayed for a prolonged period, nevertheless, works under Phase-I got started with target year of completion by 2018-19. Thus, funding of this project is at bleak under NERPSIP. Inordinate delay in arranging fund for this project results in unreliable power with poor quality power distribution to the entire Koliabor Sub-Divisional area, where requirement of power is more than 20 MW presently. While proposing the Jakhlabandha substation, associated transmission lines are considered by LILO to the extent of 10 KM of the existing one 220kV Samaguri – Mariani line.

(ix) 220/33 kV, 2x50 MVA Bihpuria (Narayanpur) GIS SS

Bihpuria is in west side of District Headquarter North Lakhimpur, of North Lakhimpur District. The nearest 132kV substation in east side is Nalkata 132/33kV SS at about 40 KM and Gohpur 132/33kV in west side at 38 km far.

AEGCL has planned to form a 220 kV ring network in the Brahmaputra Valley of Assam, and as a part of this AEGCL has planned to cover the North Bank of Assam by drawing one 220kV from Sonabil 220/132kV substation to extreme North i.e. Silapathar, where Silapathar will be connected to Dibrugarh (Behiating) 220/132/33kV substation. The length of 220kV line from Sonabil to Silapathar will be 255 KM, where 55kM of the line i.e. from Sonabil to Biswanath Chariali is already completed. Bihpuria will be the midpoint

of the Sonabil -Silapathar 220kV line. Again, Bihpuria and adjoining Narayanpur, Harmoti and Laluk are facing chronic irregularities in power.

Presently it is proposed to feed power to this area through 220/33kV system and later on 220/132kV system will be put to take care of the existing 132kV system. Further, upper part of North Bank is mainly dependent on 132kV system, that too radially feed from Sonapur & Biswanath Chariali substation, thus for any contingencies in Biswanath Chariali – Gohpur section, the North Lakhimpur, Dhemaji and World's largest River Island Majuli (Heritage Center of Assam) suffer total out of power state.

This substation was already been approved by the Central Electricity Authority under North East Region Power System Improvement Plan (NERPSIP) in 2008, but due to paucity of adequate fund, the same cannot be implemented.

(x) 132/33 kV, 2x50 MVA Dhing AIS Substation:

Dhing is located in the north west side of Nagaon District of Assam and it's the riverine area of Brahmaputra River, rich in paddy and jute cultivation. Dhing is the commercial hub for agro based products of Assam. Power to Dhing is fed from Nagaon 132/33kV by single 33kV line of more than 30KM of length and peak load recorded was 12 MW in last summer. Under Rural Electrification scheme, almost all the villages are in the process of electrification and expected to be completed by 2019. Presently, the Dhing area are facing acute power problems like frequent interruption, un-reliable, and above all poor voltage profile.

One 132/33kV substation is proposed by connecting one circuit from existing Nagaon substation to assure quality as well reliable power to the area covered by Dhing, Laokhowa and Rupahi town of Nagaon District.

(xi) 132/11 kV, 2x31.5 MVA Ghungur (Silchar-2)GIS SS:

Silchar city is located in South Assam and is the gateway for the North Eastern States like Manipur, Mizoram & Tripura. Silchar city is the business hub for south Assam as well as educational with Central University (Assam University), Regional Engineering College (NIT Silchar), Silchar Medical College besides various higher educational institutions. Power requirement of Silchar City is more than 70 MW and is catered through a single EHV substation, Srikona with 2x40 MVA transformer capacity. For any exigencies of the lone grid substation, Silchar has to face worse state like complete blackout.

Keeping in view of increasing load density in the Ghungur area of the Silchar City one 2x31.5 MVA, 132/11kV Gas insulated Substation with 132kV Under Ground Cable transmission line from Srikona EHV substation is proposed and is expecting the new substation will be able to cater the load growth as well as improve power quality.

(xii) 132/33 kV, 2x50 MVA TITABOR GIS SS:

Titabor is the Sub-Divisional head quarter of Jorhat District of Assam. Under Titabor Revnue Circle, there are 162 revenue villages comprising more than 2.0 lakhs of population. From district headquarter Jorhat, it 20 km and nearest EHV substation Mariani is at distance of 22 km. Though there are some Tea Gardens at Titabor, but the area is famous for quality production of rice in the state. Besides tea industries, there are some medium to small scale industries as well. Presently, power is fed from Mariani EHV substation at 33kV level. Present peak power demand of Titabor is 14 MW.

To accommodate the growth demand in power, one gas insulated 132/33kV substation is proposed with one double circuit transmission line from Mariani 220/132/66/33 kV substation.

(xiii) 132/11 kV, 2x31.5 MVA Zoo Road GIS SS:

Zoo Road area is comprising of Guwahati City's prime localities like Madgharia, Narkalbari, Ambikagirinagar, Anil Nagar, Tarun Nagar, Northern part Ganeshguri, North side of GS road stretch from Bhangagarh to Ganeshguri, where most of the large commercial building, mall, corporate office of the city are exists. For catering power Assam Distribution Company has five 33/11kV substations with transformation capacity of more than 80 MVA and required power is feeding through 33kV single circuit lines emanating from Narengi & Kahilipara 132/33kV substations.

In addition to above, there are some high value commercial connections at 33kV system. Peak demand of this area is more than 30 MW. To meet the city's growing demand of power, one 132/11kV substation with 132kV underground cable line from GMC 132kV substation is proposed which will improve reliability as well as quality power in the localities.

(xiv) 132/33 kV, 2x50 MVA Chhaygaon GIS SS:

Chhaygaon is located in the South Bank of Kamrup District (Rural) at a distance of 50 km west from Guwahati City. The Department of Industry, GoA has established three industrial sectors, where several industries have already been started production. In an around Chhaygaon area, several large industrial houses are also buying plots to set-up factories.

Presently, Chhaygaon Industrial areas are fed from Boko 220/132/33kV substation by two numbers dedicated 33kV lines and one from Kukurmara EHV substation. Load demand is recorded more than 40 MW. As the location of Chhaygaon is outskirts of the Guwahati City, it is expected that there will be massive load growth in this area, and accordingly one 132/33kV substation is proposed along with one double circuit transmission line from Boko 220/132/33kV substation.

(xv) 132/33 kV, 2x50 MVA, Kumarikata AIS Substation

Kumarikata is located in Tamulpur Revenue Circle of Baska District of Bodoland Territorial Autonomous Development Council near to Samdrup Jongkhar, Sub-Divisional Head Quarter of Bhutan. The famous Bhutan boarder commercial centre Darranga Mela is only 5.0 km from Kumarikata. It is about 35 km from Nalbari District Head Quarter, Nalbari. Demography of the area is such that majority belongs to Tea tribes, Plain tribes, Schedule cast and a few belongs to cast Hindu & Muslims. Kumarikata is the business hub, particularly for agricultural products like rice, jute, bamboo products and poultry etc. Power is fed from Rangia through one 45 km long 33kV line to meet the demand of around 8.0 MW.

Massive Rural Electrifications are going on the villages located in Kumarikata area, as such it is expected that there will be a requirement power demand more than 12.0 MW.

To facilitate reliable and quality power, 132/33kV substation along with one 132kV line from Nalbari EHV Substation to Kumarikata is proposed.

(xvi) 132/33kV, 2x50 MVA Buhrigaon GIS Substation.

Buhrigaon is under Darang District and is situated at about 23KM South East of District Head Quarter Mangaldoi. Department of Industry, Government of Assam has established one Integrated Infrastructure Development Centre for promotion of Industries, and in addition to that another Industrial Centre is developing at Buhrigaon. Buhrigaon is under Dalgaon Revenue Circle. Dalgaon Revenue Circle is famous for jute, paddy and vegetables production, besides three numbers of Tea Estates.

To enhance reliability of power and as a part of vital infrastructure to promote industrial growth as well as to meet the growth from new electrifications under Rural Electrification Scheme, AEGCL proposed to construct 132/33kV substation by making LILO of 132kV Sipajhar – Rowta line.

(xvii) 132/33kV, 2x50 MVA, Chabua AIS Substation.

Chabua is a Revenue located in Dibrugarh and bordering to Tinsukia district. Chabua is famous for tea plantation as the East India Company had started first commercial tea plantation estate in the 1840. Chabua is the second largest Air Force Base Station in NER. Dibrugarh is 20,0 KM while the distance from Tinsukia, the second largest commercial city of Assam is 22.0 KM. There are more than sixty Tea Estates in Chabua and nearby Dinjan & Panitola area. Though there is huge requirement of power by the Tea Industries, but due to lack of reliability, the Tea Estates are to depend on their captive generation only.

To bring the tea industries in to power network, one 132/33kV substation is proposed with a short LILO line by LILOfing the Tinsukia – Dibrugarh 132kV Transmission line.

(xviii) 132/33kV, 2x50 MVA Morigaon GIS Substation

Morigaon is the district head quarter of Morigaon District. Most backward district of the Country. District demography constitutes mainly Plain tribes (Tiwa, Lalung etc) and Schedule cast. Population of the district is more than 12.0 lakhs. Power requirement is 14.0 MW and is primarily fed from Baghjap (Jagiroad) 132/33kV substation, which is located in the border of Kamrup district at a distance of 15.0 KM. One more EHV substation (Khaloigaon) is again located at Nagaon district boarder that too at distance 27.0 KM. The district headquarter is getting un-reliable as well as poor quality power.

Massive village electrification is going on under Rural Electrification Scheme and it is expected that power demand of Morigaon will be 25MW by the Year 2021-22. AEGCL proposed one 132/33kV substation at Morigaon with a LILO of one circuit of proposed Jagiroad-Khaloigaon 132kV D/C line.

(xix) 132/33kV, 2x50 MVA Nagaon-2 GIS Substation.

Nagaon-2 substation is proposed at Nagaon District Headquarter, Nagaon City. Peak power demand of the Nagaon City is around 40 MW and is fed from Samaguri EHV substation at distance of 22.0 km. The other EHV substation which is known as Nagaon (Khaloigaon) 132/33kV substation is basically located at 18.0 KM west of the city.

The city is facing acute voltage problem in addition to poor reliability. The city is expanding in all directions and to cater the load growth of the city, one Gas Insulated EHV substation is proposed with a LILO of one circuit of Samaguri – Nagaon (Khaloigaon) 132kV double circuit line.

(xx) 132/33kV, 2x50 MVA Amayapur AIS Substation

Amayapur is located in west of Nalbari District. It is 12.0 km from district headquarter, Nalbari, Bogrihati and its adjoining area Chamata, Mukalmua, Marowa and Barbhag are famous for cottage industries and which brings fame to Nalbari District as Number one district of Assam for cottage industries. Power is fed to this area through the 33/11kV substations Chamata, Marowa, Mukalmua etc. and 33kV feeders from Nalbari EHV substation. Because of poor reliability and lack of quality power, the cottage industries are not able to produce products as per capacities.

To eliminate this paranoid issue of power, one 132/33kV substation is proposed with one double circuit 132kV line from ongoing Hajo 132/33 kV substation.

(xxi) 132/33kV. 2x50 MVA, Lumding GIS Substation

Lumding is located in Hojai District of Assam. Lumding is famous for NF Railway's important junction as well Divisional Headquarter. Lumding is again a commercial centre for the Karbi Along Hill Districts. Presently, power is fed from through 33kV line emanating from Shankardebnagar 132/33kV substation. Present peak demand is more than 16 MW and is expected to be more than 25 MW by the year 2021-22.

To enhance reliability as well as quality of power, one 132/33kV substation is proposed by making LILO of Shankardebnagar-Diphu 132kV S/C line.

(xxii) 132/33kV. 2x50 MVA, Dhupdhara AIS Substation

Dhupdhara, is a township of Goalpara district of Assam. It is 25 km from Boko 220/132/33kV Substation and 50 km from nearest Matia 132/33kV substation. Dhupdhara and nearby Rangjuli is famous for horticultural and paddy production, but without proper irrigation system. Presently, entire area is facing on reliable and quality power, as such, even after having enormous potential on agro based industries, no such industries are coming up due to lack of reliable power.

The Government of Assam propose one Industrial Park at Rongjuli. Peak Load of Dhupdhara by FY 2021-22 is estimated as 20 MW.

(xxiii) 132/33kV. 2x50 MVA, Serfanguri AIS Substation

Serfanguri is in the district of Kokrajhar under Bodoland Territorial Administrative Council (BTAD). Demographically, the majority of the are belongs to Plain Tribes i.e. Bodo. Livelihood is basically dependent on agriculture. The BTAD has developed one Industrial Park and load requirement will be around 40 MW. As such for the FY 2021-22, 15 MW is considered.

• **New Transmission Lines**

As mentioned above, there are 23 new substations proposed under this Project. To feed these new substations and also to provide system security following new transmission lines are proposed in this Project:

- (i) LILO of both circuit of 400kV Balipara (PGCIL) – Bongaigaon (PGCIL) line at new Rangia 400/220 kV substation.
- (ii) LILO of one circuit 400kV Silchar (PGCIL) – Byrnihat (Meghalaya) line at Sonapur 400/220 kV substation.
- (iii) Double Circuit LILO of Rangia – Amingaon 220kV D/C line at new Rangia 400/220 kV substation.

- (iv) LILO of 220 kV S/C Samaguri – Mariani – I 220 kV S/C Line at new Khumtai 220/132 kV Substation.
- (v) LILO Line of 220 kV S/C Samaguri – Mariani – II 220 kV S/C Line at new Khumtai 220/132 kV Substation.
- (vi) LILO of one circuit of Birpara (PGCIL) – Bongaigaon (PGCIL) 220kV D/C line at new Agamoni 220/132/33kV Substation.
- (vii) Azara (Kukurmara) 400/220/132 – Boragaon 220 kV S/C Transmission line (18 KM OH & 3 KM UG Cable) at new Boragaon 220/33kV Substation.
- (viii) LILO of Sonapur – Sarusajai 220 S/C line at new Panjabari 220/33 kV Substation.
- (ix) LILO Line of 220 kV S/C Samaguri– Mariani Line at new Jhakkhalabandha 220/33 kV Substation.
- (x) Sonabil - Bihpuria 220kV DC line (Actual route length is 123 km. 55km line is completed by AEGCL. Remaining 78 km is to be completed under this project)
- (xi) Nagaon (Khaloigaon) – Dhing 132 kV S/C line for new Dhing 132/33kV Substation.
- (xii) LILO of one circuit of Baghjar (Jagiroad) – Nagaon (Khaloigaon) 132kV D/C line at new Morigaon 132/33kV Substation and Baghjar – Morigaon 132 kV D/C Line.
- (xiii) GMC – Zoo Road 132 kV S/C UG Cable line for new Zoo Road 132/11kV Substation.
- (xiv) Srikona – Ghungur (Silchar) 132kV S/C UG Cable line for new Ghungur (Silchar) 132/11kV Substation.
- (xv) Hajo – Amayapur 132kV D/C line for new Amayapur 132/33kV Substation.
- (xvi) Nagaon (Khaloigaon) – Baghjar (Jagiroad) new 132kV D/C line.
- (xvii) Moran – Betbari (Sibsagar) new 132kV D/C line.
- (xviii) Khumtai 220/132/33kV – Sarupathar 132/33kV new 132kV D/C line.
- (xix) Bokajan 132/66/33kV – Diphu 132/66/33kV new 132kV S/C line on D/C tower
- (xx) LILO of Jorhat (West) – Bokakhat 132kV S/C line at new Khumtai 220/132/33kV Substation.
- (xxi) LILO of Shankardeb Nagar (Lanka) –Diphu 132 kV S/C line at new Lumding 132/33 kV Substation.
- (xxii) LILO of Tinsukia – Dibrugarh 132kV S/C line new Chabua 132/33kV Substation.
- (xxiii) LILO of Gossaigaon – Gauripur 132kV S/C line at new Agamoni 220/132/33kV Substation (HTLS)
- (xxiv) Mariani – Titabor, 132 kV D/C line for new Titabor 132/33 kV Substation.
- (xxv) Nalbari – Kumarikata 132kV S/C line on D/C tower for new Kumarkata 132/33kV Substation.
- (xxvi) LILO of one circuit of Samaguri – Nagaon (Khaloigaon) 132kV D/C line at new Nagaon-2, 132/33kV Substation and Samaguri-Nagaon-2 132 kV D/C Line
- (xxvii) LILO of Sipajhar – Rowta 132kV S/C line at ne Buhrigaon 132/33kV Substation.
- (xxviii) Boko – Dhupdhara new 132kV D/C line for new Dhupdhara 132/33kV Substation.
- (xxix) Baghjar -Nagaon (Khaloigaon) 132kV D/C line
- (xxx) 220 kV Shankardevnagar- Samaguri D/C Line

- **Augmentations and Extension of Existing Substations**

Based on peak demand of the year 2021-22 and requirement of Power for All by FY 2019-2020 and to limit the loadings of transformers in substations, transformation capacities of the following substations are proposed to be augmented by addition of new transformers or by replacing old transformers by new higher capacity transformers:

- (i) Narengi, 132/33 kV Substation:

- (ii) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Bornagar, 132/33kV Substation
- (iii) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Moran, 132/33 kV Substation:
- (iv) New 2x50 MVA 132/33 kV in place of old 2x16 MVA transformers.
Gauripur, 132/33kV Substation:
- (v) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Dibrugarh, 132/33kV Substation:
- (vi) New 2x50 MVA 132/33 kV in place of old 2x31.5 MVA transformers.
Depota, 132/33kV Substation:
- (vii) New 2x50 MVA 132/33 kV in place of old 2x31.5 MVA transformers.
Sarusajai,220/132/33kV Substation
- (viii) New 3x50 MVA 132/33 kV in place of old 3x31.5 MVA transformers.
Kahilipara, 132/33kV Substation:
- (ix) New 3x50 MVA 132/33 kV in place of old 1x31.5 + 2x30 MVA transformers.
Rangia, 132/33kV Substation:
- (x) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Sibsagar, 132/33kV Substation:
- (xi) New 2x50 MVA 132/33 kV in place of old 2x16 MVA transformers.
Golaghat, 132/33kV Substation
- (xii) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Sishugram, 132/33kV Substation
- (xiii) New 2x50 MVA 132/33 kV in place of old 2x30 MVA transformers.
Shankardebnagar, 132/33kV Substation
- (xiv) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Samaguri, 132/33kV Substation
- (xv) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Kukurmara, 132/33 kV Substation:
- (xvi) New 2x50 MVA 132/33 kV in place of old 1x25+ 1x16 MVA transformers.
Panchgram, 132/33kV Substation
- (xvii) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Kukurmara,220/132 kV Substation
- (xviii) New 2x160 MVA 220/132 kV in place of old 2x50MVA transformers.
Agia, 132/33kV Substation
- (xix) New 1x40 MVA 132/33 kV in place of old 1x12.5 MVA transformers.
Nagaon (Khaloigaon), 132/33kV Substation
- (xx) New 2x50 MVA 132/33 kV in place of old 2x25 MVA transformers.
Boko, 220/132 kV Substation:
- (xxi) New 1X100MVA+1x160 MVA 220/132 kV in place of old 1x50 MVA transformers.
Agia, 220/132 kV Substation:
- (xxi) New 1x160 MVA 220/132 kV in place of old 1x50 MVA transformers.

In addition to the above augmentations, the following existing substations are also proposed to be extended to accommodate the new transmission lines proposed under this Project. These substations are listed below:

- (i) Kukurmara (Azara), 400/220/132/33 kV Substation:
- (ii) Two numbers of 220 kV Line Bays for Kukurmara – Boragaon 220 kV D/C transmission Line.
- (iii) Mariani, 220/132/66/33 kV Substation:

- (iv) Two numbers of 132 kV Line Bays for Mariani – Titabor 132 kV D/C transmission Line.
- (v) Srikona, 132/33 kV Substation:
- (vi) One number of 132 kV Line Bay for Srikona – Ghungur 132 kV S/C transmission Line.
- (vii) Baghjap (Jagiroad), 132/33 kV Substation:
- (viii) Two numbers of 132 kV Line Bays for Baghjap – Nagaon (Khaloigaon) 132 kV D/C Transmission line.
- (ix) Nagaon (Khaloigaon), 132/33 kV Substation:
- (x) Three numbers of 132 kV Line Bays for Baghjap – 132kV D/C transmission line and Nagaon (Khaloigaon) – Dhing 132 kV S/C Transmission Line.
- (xi) Moran, 132/33 kV Substation:
- (xii) Two numbers of 132 kV Line Bay for Moran–Sibsagar 132 kV D/C Transmission Line.
- (xiii) Sibsagar, 132/33 kV Substation:
- (xiv) Two numbers of 132 kV Line Bays for Moran – Sibsagar 132 kV D/C Transmission Line.
- (xv) Sarupathar, 132/33 kV Substation:
- (xvi) One number of 132 kV Line Bays for Khumtai – Sarupathar 132 kV D/C Transmission Line.
- (xvii) GMC, 132/33 kV Substation:
- (xviii) One number of 132 kV GIS Line Bay for GMC – Zoo Road 132 kV UG Transmission Line.
- (xix) Nalbari, 132/33 kV Substation:
- (xx) One number of 132 kV Line Bays for Nalbari – Kumarikata 132 kV S/C Transmission Line.
- (xxi) Boko, 220/132/33 kV Substation:
- (xxii) Four numbers of 132 kV Line Bays for Boko – Chhaygaon 132 kV D/C Transmission Line and Boko – Dhupdhara 132kV D/C line.
- (xxiii) Bokajan, 132/33 kV Substation:
- (xxiv) One number of 132 kV Line Bay for Bokajan – Diphu 132 kV S/C Transmission Line.
- (xxv) Diphu, 132/33 kV Substation:
- (xxvi) One number of 132 kV Line Bay for Bokajan – Diphu 132 kV S/C Transmission Line.
- (xxvii) Hajo, 132/33 kV Substation:
- (xxviii) Two numbers of 132 kV Line Bay for Hajo – Bogrihati 132 kV D/C Transmission Line.
- (xxix) Kokrajhar, 132/33kV Substation
- (xxx) Two numbers of 132 kV Line Bay for Kokrajhar – Serfanguri 132 kV D/C Transmission Line.

- **Augmentation of Switching Scheme**

To augment the existing switching scheme in the critical substation, it is proposed to convert the present Air Insulated Type substation to Gas Insulated Substation for the following EHV substations.

- (i) Gohpur 132/33kV Air insulated substation with single bus switching scheme is critical to entire North Bank districts of Assam. This substation is well connected for evacuation of power from Ranganadi HEP (Arunachal Pradesh) and presently it will

again be connected directly to Biswanath Charali HVDC substation. As such to keep the switching scheme flexible, conversion is proposed from AIS to GIS.

- **Ongoing Projects under ADB**

Currently, AEGCL have following ongoing projects under ADB which is expected to get completed by FY 2018-19:

- ADB Tranche-I, Loan No: 2592-IND
- ADB Tranche-II, Loan No: 2677-IND

- **Upcoming Projects under ADB**

Following are the brief details of upcoming projects of AEGCL under ADB mentioned in the tabular form:

Summary of ADB Projects and Capitalisation is tabulated below:

S r	Particulars	Project Cost	Projected Capital Expenditure			Projected Capitalisation		
			FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	New Substations	2627.12	1204.96	1096.36	325.80	0.00	0.00	1420.34
B	New Trans. Lines	1230.89	492.36	369.27	369.27	0.00	0.00	0.00
C	New Trans. lines (Missing Links)	43.45	13.04	13.04	17.38	0.00	0.00	37.78
D	Augmentation & Reconductoring	609.09	274.71	228.52	105.86	0.40	198.84	230.21
	Total	4510.56	1985.06	1707.19	818.31	0.40	198.84	1688.33

Project Wise Details & Capitalisation are as follows:

Sr.	Project Name	Project Cost	Projected Capital Expenditure			Projected Capitalisation		
			FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	New Substations							
1	Rangia 2x500 MVA, 400/220kV	388.97	155.59	116.69	116.69	0.00	0.00	0.00
2	Sonapur 2x315MVA, 400/220kV GIS substation	316.37	126.55	94.91	94.91	0.00	0.00	0.00
3	Agamoni, 2x160 MVA GIS, 220/132kV GIS; 2x50 MVA 132/33kV	180.61	72.24	54.18	54.18	0.00	0.00	0.00
4	Khumtai 2x160 MVA GIS, 220/132 kV GIS, 2x50 MVA, 132/33kV GIS	200.05	80.02	60.01	60.01	0.00	0.00	0.00
5	Sankardeb Nagar 2x160 MVA, 220/132kV GIS	120.79	60.39	60.39	0.00	0.00	0.00	0.00
6	Panjabari 2x100 MVA, 220/33 Kv GIS	113.60	56.80	56.80	0.00	0.00	0.00	113.60
7	Boragaon 2x100 MVA, 220/33 kV	113.60	56.80	56.80	0.00	0.00	0.00	113.60
8	Jhakkhalabandha, 2x100 MVA, 220/33 Kv GIS	113.60	56.80	56.80	0.00	0.00	0.00	113.60

9	Bihpuria, 2x100 MVA, 220/33kV GIS	113.60	56.80	56.80	0.00	0.00	0.00	113.60
10	Chhaygaon, 2x50MVA GIS, 132/33kV	80.45	40.22	40.22	0.00	0.00	0.00	80.45
11	Buhrigaon, 2x50 MVA, 132/33kV GIS	80.78	40.39	40.39	0.00	0.00	0.00	80.78
12	Lumding, 2x50 MVA, 132/33kV GIS	80.78	40.39	40.39	0.00	0.00	0.00	80.78
13	Titabor, 2x50 MVA, 132/33kV GIS	80.78	40.39	40.39	0.00	0.00	0.00	80.78
14	Nagaon-2, 2x50MVA, 132/33 KV GIS	78.26	39.13	39.13	0.00	0.00	0.00	78.26
15	Chabua, 2x100 MVA, 132/33kV AIS	57.52	28.76	28.76	0.00	0.00	0.00	57.52
16	Dhing 2x 50 MVA, 132/33 KV AIS	57.18	28.59	28.59	0.00	0.00	0.00	57.18
17	Amayapur, 2x50 MVA, 132/33kV AIS	57.18	28.59	28.59	0.00	0.00	0.00	57.18
18	Kumarikata, 2x50, 132/33kV AIS	57.18	28.59	28.59	0.00	0.00	0.00	57.18
19	Morigaon, 2x50 MVA, 132/33kV GIS	80.78	40.39	40.39	0.00	0.00	0.00	80.78
20	Dhupdhara, 2x50 MVA, 132/33kV AIS	57.19	28.60	28.60	0.00	0.00	0.00	57.19
21	Serfanguri, 2x50 MVA, 132/33kV GIS	57.19	28.60	28.60	0.00	0.00	0.00	57.19
22	Zooroad, 2x31.5 MVA, 132/11kV GIS	70.34	35.17	35.17	0.00	0.00	0.00	70.34
23	Silchar-2 (Ghungur), 2x31.5 MVA, 132/11kV GIS	70.34	35.17	35.17	0.00	0.00	0.00	70.34
	Total	2627.12	1204.96	1096.36	325.80	0.00	0.00	1420.34
B	Transmission Lines							
1	LILO of both circuit of Balipara (PG) - Bongaigaon (PG) 400kV DC line with twin Moose ACSR at 400kV Rangia GIS	185.66	74.26	55.70	55.70	0.00	0.00	0.00
2	LILO of one circuit of Silchar (PG) - Byrnihat (PG) 400kV DC line with twin Moose ACSR at 400kV Sonapur GIS	110.51	44.20	33.15	33.15	0.00	0.00	0.00
3	DC LILO of 220kV Amingaon-Rangia at 400/220kV (new) Rangia SS	54.92	21.97	16.48	16.48	0.00	0.00	0.00
4	220KV LILO of Mariani-Samaguri (AEGCL-Existing) S/C Line 1 at Khumtai (AEGCL-New) - Samaguri (AEGCL-Existing) - S/C Line	8.24	3.30	2.47	2.47	0.00	0.00	0.00
5	220KV LILO of Mariani-Samaguri (AEGCL-Existing) S/C Line 2 at Khumtai (AEGCL-New) - Samaguri (AEGCL-Existing) - S/C Line	6.87	2.75	2.06	2.06	0.00	0.00	0.00
6	220KV Boragaon (Jalukbari) (AEGCL-New) - Kukurmara (AEGCL-Existing) D/C Line	24.72	9.89	7.41	7.41	0.00	0.00	0.00
7	18 km OH & 3 km UG Cable	110.55	44.22	33.17	33.17	0.00	0.00	0.00
8	LILO of 220kV Sonapur-Sarusajai (AEGCL-Existing) -S/C Line at Panjabari (AEGCL- New)	4.12	1.65	1.24	1.24	0.00	0.00	0.00
9	LILO of 220KV Samaguri-Mariani Line 1 at Jakhalabandha (AEGCL- New) S/C Line	13.73	5.49	4.12	4.12	0.00	0.00	0.00

10	220KV LILO of one ckt of Birpara (PGCIL) - Bongaigaon (PGCIL) D/C Line at Agamoni (AEGCL-New)	34.33	13.73	10.30	10.30	0.00	0.00	0.00
11	220KV Bihpuria (AEGCL-New) - Sonabil (AEGCL-Existing) D/C Line ** actual route length is 123 km. 55km line is completed by AEGCL from Sonabil end. Remaining 78 km is to be completed under this project	107.10	42.84	32.13	32.13	0.00	0.00	0.00
12	220KV Shankardevnagar (AEGCL -New) - Misa (PGCIL-Existing) D/C Line	34.33	13.73	10.30	10.30	0.00	0.00	0.00
13	132KV LILO of Jorhat (W)-Bokakhat (AEGCL-Existing) at Khumtai (AEGCL-New) S/C Line	4.83	1.93	1.45	1.45	0.00	0.00	0.00
14	Khumtai (AEGCL-New) - Sarupathar (AEGCL-Existing) S/C Line	57.94	23.17	17.38	17.38	0.00	0.00	0.00
15	132KV LILO of Gossaipur-Gauripur line (AEGCL-Existing) at Agamoni (Contracting by HTLS)	17.72	7.09	5.32	5.32	0.00	0.00	0.00
16	Boko - Chaygaon 132kV DC line for new 132kV Chaygaon SS	24.14	9.66	7.24	7.24	0.00	0.00	0.00
17	SC LILO of 132kV Sipajhar - Rowta at 132 kV New Burhigaon SS	24.14	9.66	7.24	7.24	0.00	0.00	0.00
18	SC LILO of 132kV Sankardeb Nagar - Diphu at 132 kV New Lumding SS	14.48	5.79	4.35	4.35	0.00	0.00	0.00
19	Mariani - Titabor 132kV DC Line for new Titabor 132kV substation	24.14	9.66	7.24	7.24	0.00	0.00	0.00
20	132KV S/C Samaguri- Nagaon Line on D/C Tower for new 132/33KV Nagaon 2 S/S	39.59	15.84	11.88	11.88	0.00	0.00	0.00
21	SC LILO of 132kV Tinsukia - Dibrugarh at 132 kV New Chabua SS	9.66	3.86	2.90	2.90	0.00	0.00	0.00
22	132KV Dhing (AEGCL- New) - Nagaon (AEGCL- Existing) - S/C Line	29.37	11.75	8.81	8.81	0.00	0.00	0.00
23	Hajo - Amayapur 132kV DC line for new 132kV Amayapur SS	24.14	9.66	7.24	7.24	0.00	0.00	0.00
24	Nalbari - Kumarikata SC on DC tower for new Kumarikata 132kV substation	33.57	13.43	10.07	10.07	0.00	0.00	0.00
25	Baghjap (AEGCL-Existing)-Morigaon (New) 132 KV D/C Line	19.31	7.72	5.79	5.79	0.00	0.00	0.00
26	Boko - Dhupdhara 132kV DC line for new 132kV Dhupdhara SS	24.14	9.66	7.24	7.24	0.00	0.00	0.00
27	Kokrajhar - Serfanguri 132kV DC line for new 132kV Serfanguri SS	19.31	7.72	5.79	5.79	0.00	0.00	0.00
28	GMC - Zoo Road 132kV SC UG Cable for 132kV Zoo Road SS	75.26	30.11	22.58	22.58	0.00	0.00	0.00
29	Srikona - Ghungur 132 kV SC UG Cable for 132kV Ghungur SS	94.08	37.63	28.22	28.22	0.00	0.00	0.00
	Total	1230.89	492.36	369.27	369.27	0.00	0.00	0.00

C	New Transmission lines (Missing Links)							
1	Moran - Sibsagar 132 DC line	43.45	13.04	13.04	17.38	0.00	0.00	37.78
	Total	43.45	13.04	13.04	17.38	0.00	0.00	37.78
	Augmentation							
D	Conversion of Switching Scheme, from AIS to GIS							
1	Augmentation of Gohpur 132/33kV AIS to GIS	85.79	8.58	34.32	42.89	0.00	0.00	74.60
E	Transformer Capacity Augmentation Existing Substations							
1	Narengi: 2 x 50 MVA, 132/33kV Transformer	16.54	9.93	6.62		0.00	14.38	0.00
2	Bornagar: 2x50 MVA, 132/33kV	16.54	9.93	6.62		0.00	14.38	0.00
3	Moran: 2 x 50 MVA, 132/33 kV Transformer	16.58	9.95	6.63		0.00	14.42	0.00
4	Gauripur: 2 x 50 MVA, 132/33 kV, Transformer	16.54	9.93	6.62		0.00	14.38	0.00
5	Dibrugarh: 2 x 50 MVA, 132/33 kV Transformer	16.54	9.93	6.62		0.00	14.38	0.00
6	Depota: 2 x 50 MVA, 132/33 kV, Transformer	16.54	9.93	6.62		0.00	14.38	0.00
7	Kahilipara: 3 x50 MVA, 132/33 kV, Transformers	23.80	9.52	9.52	4.76	0.00	0.00	20.70
8	Rangia: 2 x 50 MVA, 132/33 kV, Transformers	16.54	9.93	6.62		0.00	14.38	0.00
9	Golaghat: 2x50 MVA, 132/33kV	16.54	9.93	6.62		0.00	14.38	0.00
10	Sishugram: 2x50 MVA, 132/33kV	22.47	13.48	8.99		0.00	19.54	0.00
11	Shankardebnagar, 2x50MVA, 132/33kV	16.54	9.93	6.62		0.00	14.38	0.00
12	Samaguri, 2x50 MVA, 132/33kV	16.54	9.93	6.62		0.00	14.38	0.00
13	Kukurmara, 2x50 MVA, 132/33kV	16.54	9.93	6.62		0.00	14.38	0.00
14	Boko: 1x50+1x100 MVA to 1x100+1x160 MVA 220/132 kV Transformer	17.93	7.17	7.17	3.59	0.00	0.00	15.59
15	Agia, 1x50+1x100 MVA to 1x160+1x100 MVA	17.93	7.17	7.17	3.59	0.00	0.00	15.59
F	Bay Extension in Existing Substations							
1	Azara: Two 220 kV line bays for Azara-Boragaon 220 kV Line	6.59	1.65	1.98	2.96	0.00	0.00	5.73
2	Mariani: Two 132 kV Line bays for Mariani - Titabor D/C line.	4.25	1.06	1.27	1.91	0.00	0.00	3.69
3	Srikona: One 132 kV Line bay for Srikona - Ghungur S/C Cable line.	3.11	1.24	1.86		0.00	2.70	0.00
4	Baghjap (Jagiroad): Two 132 kV Line Bays for Nagaon - Baghjap D/C line	4.39	1.10	1.32	1.98	0.00	0.00	3.82
5	Nagaon: Three 132 kV Line Bays for Nagaon - Baghjap D/C line.	6.12	1.53	1.84	2.75	0.00	0.00	5.32
6	Moran: Two 132 kV Line Bays for Moran-Betbari S/C Line	3.96	0.99	1.19	1.78	0.00	0.00	3.44
7	Sibasagar: Two 132 kV Line Bays for Moran-Betbari S/C Line	3.96	0.99	1.19	1.78	0.00	0.00	3.44

8	Sarupathar: One 132 kV Line Bay for Khumtai - Sarupathar 132 kV S/C Line	4.31	1.72	2.59		0.00	3.75	0.00
9	GMC GIS: One 132kV GIS Line Bay for GMC - Zoorad UG Cable line	7.19	2.87	4.31		0.00	6.25	0.00
10	Nalbari: One 132kV line bay for Nalbari - Kumarikata 132kV line	2.72	1.09	1.63		0.00	2.37	0.00
11	BOKO: Four line bays for Boko - Chhaygaon 132kV D/C line& Boko - Dhupdhara 132kV D/C line	4.43	1.11	1.33	2.00	0.00	0.00	3.86
12	BOKAJAN: One 132kV line bay for Bokajan-Diphu 132kV S/C line	2.72	1.09	1.63		0.00	2.37	0.00
13	DIPHU: One 132kV line bay for Bokajan-Diphu 132kV S/C line	2.72	1.09	1.63		0.00	2.37	0.00
14	HAJO: Two line bays for Hajo - Bogaribari 132kV D/C line	4.44	1.11	1.33	2.00	0.00	0.00	3.86
15	Boko: Two 132 kV line bays for Boko-Dhupdhara 132 kV D/C Line	4.43	1.11	1.33	2.00	0.00	0.00	3.86
16	Kokrajhar: Two 132 kV line bays for Kokrajhar-Serfanguri 132 kV D/C Line	4.43	1.11	1.33	2.00	0.00	0.00	3.86
G	RECONDUCTORING							
1	BTPS (Salekati) - Dhaligaon 132kV D/C line	50.62	25.31	25.31		0.00	0.76	0.00
2	Kukurmara - Sarusajai 220kV D/C line	35.10	17.55	17.55		0.00	0.48	0.00
3	Gossaigaon - Gauripur 132kV S/C line	43.91	43.91			0.40	0.00	0.00
H	Fibre Optics							
1	Fiber Optics on balance transmission lines of AEGCL, 615 kms @ Rs 4.5 Lakh per km	47.69	9.54	14.31	23.85	0.00	0.00	41.47
2	Fiber Optics on Station Equipments at 18 numbers of Substation (LS).	12.08	2.42	3.62	6.04	0.00	0.00	21.39
	Total	609.09	274.71	228.52	105.86	0.40	198.84	230.21

Summary of Substation Capacity and Line Length of ADB Projects

Sr.	Project Name	Sub-Station Capacity (MVA)			Line Length (Ckt. Km)		
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
A	New Substations						
1	Rangia 2x500 MVA, 400/220kV	-	-	-	-	-	-
2	Sonapur 2x315MVA, 400/220kV GIS substation	-	-	-	-	-	-
3	Agamoni, 2x160 MVA GIS, 220/132kV GIS; 2x50 MVA 132/33kV	-	-	-	-	-	-
4	Khumtai 2x160 MVA GIS, 220/132 kV GIS, 2x50 MVA, 132/33kV GIS	-	-	-	-	-	-
5	Sankardeb Nagar 2x160 MVA, 220/132kV GIS	-	-	-	-	-	-
6	Panjabari 2x100 MVA, 220/33 Kv GIS	-	-	200	-	-	-

7	Boragaon 2x100 MVA, 220/33 kV	-	-	200	-	-	-
8	Jhakkhalabandha, 2x100 MVA, 220/33 Kv GIS	-	-	200	-	-	-
9	Bihpuria, 2x100 MVA, 220/33kV GIS	-	-	200	-	-	-
10	Chhaygaon, 2x50MVA GIS, 132/33kV	-	-	100	-	-	-
11	Buhrigaon, 2x50 MVA, 132/33kV GIS	-	-	100	-	-	-
12	Lumding, 2x50 MVA, 132/33kV GIS	-	-	100	-	-	-
13	Titabor, 2x50 MVA, 132/33kV GIS	-	-	100	-	-	-
14	Nagaon-2, 2x50MVA, 132/33 KV GIS	-	-	100	-	-	-
15	Chabua, 2x100 MVA, 132/33kV AIS	-	-	200	-	-	-
16	Dhing 2x 50 MVA, 132/33 KV AIS	-	-	100	-	-	-
17	Amayapur, 2x50 MVA, 132/33kV AIS	-	-	100	-	-	-
18	Kumarikata, 2x50, 132/33kV AIS	-	-	100	-	-	-
19	Morigaon, 2x50 MVA, 132/33kV GIS	-	-	100	-	-	-
20	Dhupdhara, 2x50 MVA, 132/33kV AIS	-	-	100	-	-	-
21	Serfanguri, 2x50 MVA, 132/33kV GIS	-	-	100	-	-	-
22	Zooroad, 2x31.5 MVA, 132/11kV GIS	-	-	63	-	-	-
23	Silchar-2 (Ghungur), 2x31.5 MVA, 132/11kV GIS	-	-	63	-	-	-
B	Transmission Lines	-	-	-	-	-	-
1	LILO of both circuit of Balipara (PG) - Bongaigaon (PG) 400kV DC line with twin Moose ACSR at 400kV Rangia GIS	-	-	-	-	-	-
2	LILO of one circuit of Silchar (PG) - Byrnihat (PG) 400kV DC line with twin Moose ACSR at 400kV Sonapur GIS	-	-	-	-	-	-
3	DC LILO of 220kV Amingaon- Rangia at 400/220kV (new) Rangia SS	-	-	-	-	-	-
4	220KV LILO of Mariani-Samaguri (AEGCL-Existing) S/C Line 1 at Khumtai (AEGCL-New) - Samaguri (AEGCL-Existing) - S/C Line	-	-	-	-	-	-
5	220KV LILO of Mariani-Samaguri (AEGCL-Existing) S/C Line 2 at Khumtai (AEGCL-New) - Samaguri (AEGCL-Existing) - S/C Line	-	-	-	-	-	-
6	220KV Boragaon (Jalukbari) (AEGCL-New) - Kukurmara (AEGCL-Existing) D/C Line	-	-	-	-	-	-
7	18 km OH & 3 km UG Cable	-	-	-	-	-	-
8	LILO of 220kV Sonapur-Sarusajai (AEGCL-Existing) -S/C Line at Panjabari (AEGCL- New)	-	-	-	-	-	-
9	LILO of 220KV Samaguri-Mariani Line 1 at Jakkhalabandha (AEGCL- New) S/C Line	-	-	-	-	-	-
10	220KV LILO of one ckt of Birpara (PGCIL) – Bongaigaon (PGCIL) D/C Line at Agamoni (AEGCL-New)	-	-	-	-	-	-
11	220KV Bihpuria (AEGCL-New) - Sonabil (AEGCL-Existing) D/C Line ** actual route length is 123 km. 55km line is completed by AEGCL from Sonabil end. Remaining 78 km is to be completed under this project	-	-	-	-	-	-
12	220KV Shankardevnagar (AEGCL -New) - Misa (PGCIL-Existing) D/C Line	-	-	-	-	-	-

13	132KV LILO of Jorhat (W)-Bokakhat (AEGCL-Existing) at Khumtai (AEGCL-New) S/C Line	-	-	-	-	-	-
14	Khumtai (AEGCL-New) - Sarupathar (AEGCL-Existing) S/C Line	-	-	-	-	-	-
15	132KV LILO of Gossapur-Gauripur line (AEGCL-Existing) at Agamoni (Conductoring by HTLS)	-	-	-	-	-	-
16	Boko - Chaygaon 132kV DC line for new 132kV Chaygaon SS	-	-	-	-	-	-
17	SC LILO of 132kV Sipajhar - Rowta at 132 kV New Burhigaon SS	-	-	-	-	-	-
18	SC LILO of 132kV Sankardeb Nagar - Diphu at 132 kV New Lumding SS	-	-	-	-	-	-
19	Mariani - Titabor 132kV DC Line for new Titabor 132kV substation	-	-	-	-	-	-
20	132KV S/C Samaguri- Nagaon Line on D/C Tower for new 132/33KV Nagaon 2 S/S	-	-	-	-	-	-
21	SC LILO of 132kV Tinsukia - Dibrugarh at 132 kV New Chabua SS	-	-	-	-	-	-
22	132KV Dhing (AEGCL- New) - Nagaon (AEGCL-Existing) - S/C Line	-	-	-	-	-	-
23	Hajo - Amayapur 132kV DC line for new 132kV Amayapur SS	-	-	-	-	-	-
24	Nalbari - Kumarikata SC on DC tower for new Kumarikata 132kV substation	-	-	-	-	-	-
25	Baghjan (AEGCL-Existing)-Morigaon (New) 132 KV D/C Line	-	-	-	-	-	-
26	Boko - Dhupdhara 132kV DC line for new 132kV Dhupdhara SS	-	-	-	-	-	-
27	Kokrajhar - Serfanguri 132kV DC line for new 132kV Serfanguri SS	-	-	-	-	-	-
28	GMC - Zoo Road 132kV SC UG Cable for 132kV Zoo Road SS	-	-	-	-	-	-
29	Srikona - Ghungur 132 kV SC UG Cable for 132kV Ghungur SS	-	-	-	-	-	-
C	New Transmission lines (Missing Links)	-	-	-	-	-	-
1	Moran - Sibsagar 132 DC line	-	-	-	-	-	-
D	Conversion of Switching Scheme, from AIS to GIS	-	-	-	-	-	-
1	Augmentation of Gohpur 132/33kV AIS to GIS	-	-	-	-	-	-
E	Transformer Capacity Augmentation Existing Substations	-	-	-	-	-	-
1	Narengi: 2 x 50 MVA, 132/33kV Transformer	-	100	-	-	-	-
2	Bornagar: 2x50 MVA, 132/33kV	-	100	-	-	-	-
3	Moran: 2 x 50 MVA, 132/33 kV Transformer	-	100	-	-	-	-
4	Gauripur: 2 x 50 MVA, 132/33 kV, Transformer	-	100	-	-	-	-
5	Dibrugarh: 2 x 50 MVA, 132/33 kV Transformer	-	100	-	-	-	-
6	Depota: 2 x 50 MVA, 132/33 kV, Transformer	-	100	-	-	-	-
7	Kahilipara: 3 x50 MVA, 132/33 kV, Transformers	-	150	-	-	-	-
8	Rangia: 2 x 50 MVA, 132/33 kV, Transformers	-	100	-	-	-	-
9	Golaghat: 2x50 MVA, 132/33kV	-	100	-	-	-	-

10	Sishugram: 2x50 MVA, 132/33kV	-	100	-	-	-	-
11	Shankardebnagar, 2x50MVA, 132/33kV	-	100	-	-	-	-
12	Samaguri, 2x50 MVA, 132/33kV	-	100	-	-	-	-
13	Kukurmara, 2x50 MVA, 132/33kV	-	100	-	-	-	-
14	Boko: 1x50+1x100 MVA to 1x100+1x160 MVA 220/132 kV Transformer	-	-	260	-	-	-
15	Agia, 1x50+1x100 MVA to 1x160+1x100 MVA	-	-	260	-	-	-
F	Bay Extension in Existing Substations	-	-	-	-	-	-
1	Azara: Two 220 kV line bays for Azara-Boragaon 220 kV Line	-	-	-	-	-	-
2	Mariani: Two 132 kV Line bays for Mariani - Titabor D/C line.	-	-	-	-	-	-
3	Srikona: One 132 kV Line bay for Srikona - Ghungur S/C Cable line.	-	-	-	-	-	-
4	Baghjap (Jagiroad): Two 132 kV Line Bays for Nagaon - Baghjap D/C line	-	-	-	-	-	-
5	Nagaon: Three 132 kV Line Bays for Nagaon - Baghjap D/C line.	-	-	-	-	-	-
6	Moran: Two 132 kV Line Bays for Moran-Betbari S/C Line	-	-	-	-	-	-
7	Sibasagar: Two 132 kV Line Bays for Moran- Betbari S/C Line	-	-	-	-	-	-
8	Sarupathar: One 132 kV Line Bay for Khumtai - Sarupathar 132 kV S/C Line	-	-	-	-	-	-
9	GMC GIS: One 132kV GIS Line Bay for GMC - Zoorad UG Cable line	-	-	-	-	-	-
10	Nalbari: One 132kV line bay for Nalbari - Kumarikata 132kV line	-	-	-	-	-	-
11	BOKO: Four line bays for Boko - Chhaygaon 132kV D/C line& Boko - Dhupdhara 132kV D/C line	-	-	-	-	-	-
12	BOKAJAN: One 132kV line bay for Bokajan-Diphu 132kV S/C line	-	-	-	-	-	-
13	DIPHU: One 132kV line bay for Bokajan-Diphu 132kV S/C line	-	-	-	-	-	-
14	HAJO: Two line bays for Hajo - Bogaribari 132kV D/C line	-	-	-	-	-	-
15	Boko: Two 132 kV line bays for Boko-Dhupdhara 132 kV D/C Line	-	-	-	-	-	-
16	Kokrajhar: Two 132 kV line bays for Kokrajhar- Serfanguri 132 kV D/C Line	-	-	-	-	-	-
G	RECONDUCTORING	-	-	-	-	-	-
1	BTPS (Salekati) - Dhaligaon 132kV D/C line	-	-	-	-	-	-
2	Kukurmara - Sarusajai 220kV D/C line	-	-	-	-	-	-
3	Gossaigaon - Gauripur 132kV S/C line	-	-	-	-	-	-
H	Fibre Optics	-	-	-	-	-	-

1	Fiber Optics on balance transmission lines of AEGCL, 615 kms @ Rs 4.5 Lakh per km	-	-	-	-	-	-
2	Fiber Optics on Station Equipment at 18 numbers of Substation (LS).	-	-	-	-	-	-

• **Funding of ADB Projects**

Sr	Capital Expenditure	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
			(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Counterpart Funding	20%	400.3	341.4	163.7	905.4
	<i>Remaining Part</i>					
B	Grant (ADB)	90%	1441.2	1229.2	589.2	3259.6
C	Debt (ADB)	10%	160.1	136.6	65.5	362.2
	Total		2001.6	1707.2	818.4	4527.2

Sr	Capitalisation	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Counterpart Funding	20%	22.2	39.8	337.7	399.7
	<i>Remaining Part</i>					
B	Grant (ADB)	90%	80.0	143.2	1215.6	1438.7
C	Debt (ADB)	10%	8.9	15.9	135.1	159.9
	Total		111.1	198.9	1688.4	1998.3

2. Power System Development Fund (PSDF)

The proposal for State support to execute the project “Power System Development Fund” of the Govt. of India has been incorporated in the priority list of transmission & transformation projects of 2018-19. The grid disturbance on 30th & 31st July 2012 in most areas of India forced the M/o Power Govt of India to address the main causes for the incident. During the grid disturbance on 31st July 2012, Assam has suffered a loss of 706 MW of power.

After analysis, the M/o Power Govt of India comes out with a proposal for “Renovation & Up-gradation of the Protection Systems” of the national grid. All the State utilities and the central utilities were asked to submit project proposal for Renovation & Up-gradation of the Protection systems of their grid. Accordingly, the Assam State Electricity Grid Corporation Ltd (AEGCL) proposed and submitted a DPR to the Govt of India (GoI). The GoI has accorded sanctioned as grant under PSDF.

- **Ongoing Projects under PSDF**

Currently, following projects of AEGCL are ongoing under PSDF:

Summary of PSDF Projects and Capitalisation is tabulated below:

Sr	Particulars	Projected Capital Expenditure			Projected Capitalisation		
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	R&U	79.00	0.00	0.00	73.40	15.80	0.00
B	R&U-BCU	1.00	0.00	0.00	4.50	0.20	0.00
	Total	80.00	0.00	0.00	77.90	16.00	0.00

- **Funding of PSDF Projects**

Sr	Capital Expenditure	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
			(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoI - PSDF	100%	80.0	0.0	0.0	80.0
	Total		80.0	0.0	0.0	80.0

Sr	Capitalisation	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoI - PSDF	100%	77.9	16.0	0.0	93.9
	Total		77.9	16.0	0.0	93.9

Kindly note that the ongoing projects were commenced in the previous/current control period and thus the capital expenditure has been incurred since the day of inception. Hence, it is likely that the capital expenditure to be incurred in the upcoming control

period (FY 2019-20 to FY 2021-22) is minimal. Hence the projects once capitalised, shall reflect higher capitalisation than the incurred capital expenditure in the control period under projection.

- **Upcoming Projects under PSDF**

Currently, there is no upcoming project envisaged under PSDF for FY 2019-20 to FY 2021-22.

3. NLCPR

The entire lower South Bank of River Brahmaputra of Assam beyond Guwahati is fed from Guwahati and Agia by 33 kV network. With increasing load demand in the area covered by 33 kV substations, the existing system was considered inadequate. Therefore, to strengthen the entire transmission system in the south bank, AEGCL had proposed a 220/132 kV substation at Azara (Kukurmara) and a 132/33 kV substation at Azara with a single circuit LILO of the 220 kV Agia-Sarusajai line and 132 kV S/C line to 132/33 kV Boko and Azara S/S. The project is expected to be commissioned in FY 2018-19.

The 132/33 kV substation was proposed to construct by using the two nos. of 16 MVA transformers which will become free on augmentation of transformer capacity from 2x16 MVA to 2X25 MVA at Rangia. This will reduce the cost of substation considerably. The project is commissioned in FY 2018-19.

With the construction of substations, the entire area will receive reliable and quality power with the improvement in voltage regulation. The proposal will strengthen the transmission network and will reduced the losses in the overloaded 33 kV lines as power could be fed from Boko and Azara substations instead of being fed from Kahilipara via Jalukbari, etc.

- **Ongoing projects under NLCPR:**

Currently, only the above-mentioned project is ongoing under NLCPR which is expected to complete in FY 2018-19.

- **Upcoming Projects under NLCPR:**

Currently, there is no upcoming project envisaged under NLCPR for FY 2019-20 to FY 2021-22.

4. Trade Development Fund (TDF)

1. Construction of 132/33 kV Barpeta substation with 132 kV S/C Barnagar – Barpeta line on D/C Tower

The voltage profile of power in and around Barpeta is poor because of feeding of power to the distribution network through long distance 33 kV lines. Barpeta and surrounding areas are suffering from severe load shedding for past several years and the situation is aggravating day by day. Since, Barpeta is important town of Assam with huge potential of industrial, agriculture & commercial growth, therefore, prolong load shedding will result a negative impact on socio-economical growth of the areas.

To boost the quality of power, AEGCL proposed the construction of 132/33 kV Barpeta substation with 132 kV S/C line on D/C tower from Barnagar. This project also includes installation of PLCC equipment at both ends of the line for smooth operation and proper monitoring of the system.

This project will help to meet the sharp increasing load demand of Barpeta and surrounding areas which will also improve the voltage profile, system stability, reliability & will reduce transmission loss.

2. Construction of 132/33 kV Hatsingimari substation with 132 kV S/C Agia-Hatsingimari line on D/C Tower

The power feeding to the distribution network of South Salmara, Hatsingimari, Mankachar, etc areas has not been done from AEGCL grid network. As a result, power feeding is going on from 33/11 kV Garobadha substation of Meghalaya. The concerned areas remain under prolong load shedding everyday especially in pick hours because Meghalaya feed power to those distribution network after fulfilment of their own requirement. Further, there is no security of power feeding to the said areas from Meghalaya in near future.

Therefore, to meet the regular demand of power in the respective areas, AEGCL 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.

This project will help to address the uncertainty of power supply and to remove load restriction in the concerned areas. It will also help to meet the increasing load demand of Hatsingimari and surrounding areas which will further help to improve voltage profile, the system stability and will reduce load shading substantially.

Transmission lines: The Transmission lines executed under TDF are to strengthen power supply to Barpeta, Hatsingimari and Karimganj.

• **Ongoing Projects under TDF:**

Currently, following projects of AEGCL are ongoing under TDF:

Summary of TDF Projects and Capitalisation is tabulated below:

Sr	Particulars	Projected Capital Expenditure			Projected Capitalisation		
		FY	FY	FY	FY	FY	FY

		2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
1	Barpeta SS	79.00	0.00	0.00	73.40	15.80	0.00
2	Hatsingimari SS	1.00	0.00	0.00	4.50	0.20	0.00
	SS Total	80.00	0.00	0.00	77.90	16.00	0.00
1	Construction of 132 KV S/C line on D/C tower from Salakati to APM	7.82	0.00	0.00	21	0.00	0.00
2	Construction of 132 KV LiLO from Dhaligaon Barnagar line	3.29	0.00	0.00	14.38	0.00	0.00
3	Construction of 132 KV S/C line on D/C tower from Agia to Hatsingimari (Pkg_A)	3.89	0.00	0.00	22.52	0.00	0.00
4	Construction of 132 KV S/C line on D/C tower from Agia to Hatsingimari (Package-B)	2.52	0.00	0.00	24.33	0.00	0.00
5	Construction of 132 KV S/C line on D/C tower from Hailakandi to Karimganj	5.25	3.15	0.00	0.00	12.34	0.00
	Trans. Lines Total	7.82	0.00	0.00	82.23	12.34	0.00

Summary of Substation Capacity and Line Length of TDF Projects

Sr	Particulars	Sub-Station Capacity (MVA)			Line Length (Ckt. Km)		
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
1	Barpeta SS	50	-	-	-	-	-
2	Hatsingimari SS	50	-	-	-	-	-
	SS Total	100					
1	Construction of 132 KV S/C line on D/C tower from Salakati to APM	-	-	-	42.6	-	-
2	Construction of 132 KV LiLO from Dhaligaon Barnagar line	-	-	-	23.85	-	-
3	Construction of 132 KV S/C line on D/C tower from Agia to Hatsingimari (Pkg_A)	-	-	-	108.63	-	-
4	Construction of 132 KV S/C line on D/C tower from Agia to Hatsingimari (Package-B)	-	-	-		-	-
5	Construction of 132 KV S/C line on D/C tower from Hailakandi to Karimganj	-	-	-	-	27.00	-
	Total	100	-	-	175.08	27.00	-

Funding of TDF Projects

Sr	Capital Expenditure	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)

A	GoA- Grant	100%	41.8	3.2	0.0	44.9
	Total		41.8	3.2	0.0	44.9

Sr	Capitalisation	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoA- Grant	100%	101.2	12.3	0.0	113.6
	Total		101.2	12.3	0.0	113.6

Kindly note that the ongoing projects were commenced in the previous/current control period and thus the capital expenditure has been incurred since the day of inception. Hence, it is likely that the capital expenditure to be incurred in the upcoming control period (FY 2019-20 to FY 2021-22) is minimal. Hence the projects once capitalised, shall reflect higher capitalisation than the incurred capital expenditure in the control period under projection

- **Upcoming Projects under TDF**

Currently, AEGCL has not undertaken new projects for the upcoming control period under TDF mode of funding.

5. Annual Plan

1. 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

AEGCL proposed this project to increase bus capacity, both at 132 kV and 33 kV levels since, the current carrying capacity of both the buses will be increased around three times which in turn will increase power feeding capacity to the distribution network of the areas covering by the 132/33 kV grid sub-stations at Depota, Rowta, Barnagar and Chandrapur. Not only power feeding capacity will be increased but also frequent interruption of power supply due to requirement of frequent bus maintenance in the aforesaid sub-stations can be reduced to a very less.

2. Augmentation of transformer capacity of 132/33 kV Dhemaji sub-station from 1x16 MVA + 1x10 MVA to 2x50 MVA.

132/33 kV Dhemaji sub-station with transformer capacity of 26 MVA is presently catering entire load of major part of the Dhemaji district. On summer 2017, peak load demand of the sub-station was increased to 35 MW. Maximum safe load transformation capacity of existing 132/33 kV, 1x16 MVA + 1x10 MVA transformers at Dhemaji sub-station is around 22 MW (considering load factor 0.85). Due to power transformation constraint at 132/33 kV Dhemaji sub-station, force load shedding of around 13 MW was imposed on some days during peak load hours of 2017 summer season.

AEGCL propose the augmentation of 132/33 kV transformer capacity of the sub-station, transformation constraint can be addressed and present load shedding scenario can be improved. Implementation of the project will help to feed more power with proper voltage profile to the distribution network of concerned areas, which in turn will help to feed more power to the consumers of the respective areas of the State.

3. Augmentation of transformer capacity of 132/33 kV Rowta sub-station from 2x25 MVA to 2x50 MVA

132/33 kV Rowta sub-station with transformer capacity of 50 MVA is presently catering entire load of major part of the Udalguri and some part of Darrang districts. On summer 2017, peak load demand of the sub-station was around 56 MW. Maximum safe load transformation capacity of existing 132/33 kV, 2x25 MVA transformers at Rowta sub-station is around 42 MW (considering load factor 0.85). Due to power transformation constraint at 132/33 kV Udalguri sub-station, force load shedding of around 14 MW was imposed on some days during peak load hours of 2017 summer season.

AEGCL propose the augmentation of 132/33 kV transformer capacity of the sub-station, transformation constraint can be addressed and present load shedding scenario can be improved. This project will help to increase per capita power consumption of the people of vast areas of Udalguri and some part of the Darrang districts, which in turn will improve socio-economical condition of the people by providing a chance to increase commercial and industrial activities in the concerned areas

4. Augmentation of transformer capacity of 132/33 kV Sipajhar sub-station from 2x16 MVA to 2x50 MVA.

132/33 kV Sipajhar sub-station with transformer capacity of 32 MVA is presently catering entire load of Mangaldoi, Sipajhar, Tangla, Bezara and their surrounding areas. On July' 2016, peak load demand of the sub-station was around 39.80 MW. Maximum safe load transformation capacity of existing 132/33 kV, 2x16 MVA transformer at Sipajhar sub-station is 27.20 MW (considering load factor 0.85). Due to power transformation

constraint at 132/33 kV Sipajhar sub-station, force load shedding of around 12.60 MW was imposed during peak load hours.

AEGCL propose the augmentation of 132/33 kV transformer capacity of the sub-station, transformation constraint can be addressed and present load shedding scenario can be improved.

5. 2nd Circuit stringing of 132kV, 10.268 KM long BTPS – Kokrajhar line on D/C tower with HTLS conductor.

The 132 kV BTPS – Dhaligaon double circuit line is almost 28 years old and due to this old age nature of the line, there is frequent line trip, snapping of the line etc, resulting difficulty in power evacuation from BTPS (Bongaigaon Thermal Power Station) since the other line i.e. BTPS – Kokrajhar is a single circuit one and as a result there is insufficient power feeding to the sub-station in and around the BTPS (Bongaigaon Thermal Power Station) sub-station.

AEGCL propose to solve the problem by 2nd circuit stringing of the BTPS – Kokrajhar – Bilasipara – Gauripur – Gossaigaon – Dhaligaon line such that a considerable amount of power from BTPS can be transmitted to Dhaligaon through this line. This 2nd circuit stringing will also reduce pressure on the existing BTPS – Dhaligaon D/C line thus reducing line tripping, snapping of the line etc, creating an uninterrupted power flow network for the Lower Assam AEGCL grid network.

6. 2nd Circuit stringing of 132kV, 24.201 KM long Kokrajhar - Bilasipara line on D/C tower.

The 132 kV BTPS – Dhaligaon double circuit line is almost 28 years old and due to this old age nature of the line, there is frequent line trip, snapping of the line etc, resulting difficulty in power evacuation from BTPS (Bongaigaon Thermal Power Station).

AEGCL propose to solve the issue 2nd circuit stringing of the BTPS – Kokrajhar – Bilasipara – Gauripur – Gossaigaon – Dhaligaon line such that a considerable amount of power from BTPS can be transmitted to Dhaligaon through this line. This 2nd circuit stringing will also reduce pressure on the existing BTPS – Dhaligaon D/C line thus reducing line tripping, snapping of the line etc, creating an uninterrupted power flow network for the Lower Assam AEGCL grid network.

7. 2nd Circuit Stringing of 132kV, 41.923 km long Samaguri – Khalaigaon (Nagaon) line on D/C tower

132/33 kV Khalaigaon (Nagaon) sub-station with transformer capacity of 50 MVA is presently catering entire load of major part of the Nagaon District and its surrounding areas. During summer of 2017, unrestricted peak load demand of 132/33 kV Khalaigaon (Nagaon) sub-station was around 26 MW. The 132/33 kV Khalaigaon (Nagaon) sub-station is radially connected to 220/132 kV Samaguri sub-station through 132 kV S/C Samaguri – Khalaigaon (Nagaon) line on D/C tower. This line is the only route for feeding power to the Khalaigaon (Nagaon) sub-station. In the event of failure of this line or during maintenance of the line, almost entire Nagaon town and its surrounding areas will be under complete darkness.

To avoid this situation, AEGCL submits that the power feeding to 132 kV Khalaigaon (Nagaon) sub-station can be made redundant by stringing the 2nd circuit on the 132 kV S/C Samaguri – Khalaigaon (Nagaon) line on D/C tower.

8. 132/33 kV, 1x50 MVA transformer with switchyard equipment, etc for Ghoramari sub-station.

132/33 kV Ghoramari sub-station with transformer capacity of 16 MVA is presently catering entire load of AIDC Industrial Estate and surrounding areas of Ghoramari. In last summer season the peak load demand of the sub-station was around 13 MW. Maximum safe load transformation capacity of existing 132/33 kV, 1x16 MVA transformer at Ghoramari sub-station is around 13 MW (considering load factor 0.85).

AEGCL submits that the augmentation of existing transformer capacity of the 132/33 kV Ghoramari sub-station became urgently essential. Since, processing for arrangement of fund for new transformer with switchyard equipment, etc and procurement of the same need some reasonable time and as the required time for the same is not available so, one 132/33 kV, 40 MVA transformer procured for 132/33 kV Azara sub-station (under State Annual Plan) has been diverted to Ghoramari to meet-up emergency load growth. To replace the transformer of Azara sub-station under execution with NLCPR and State funding, AEGCL propose to procure one 132/33 kV, 50 MVA transformer with switchyard equipment, etc are therefore urgently required.

9. State support to execute the project under “Power System Development Fund” (PSDF) of the Govt. of India.

State Govt support to execute the project under “Power System Development Fund” (PSDF) of the Govt. of India amounting to Rs. 13.08 Crore.

10. Projects executed through Annual Plan Budgetary allocation for FY 2019-20

AEGCL has initiated steps towards implementing 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.

The primary objective of setting up an integrated ERP system is to deploy state-of-the-art Information System across all aspects of AEGCL’s operation for the purpose of positioning the organization as an efficient and dynamic organization and ensure computerization of its internal functioning to deliver services to all its stakeholders in an efficient manner.

Steps toward implementation of ERP at AEGCL:

AEGCL has adopted 2-step procedures for ERP implementation:

Step-1: Selection of Project Management Consultant.

Step-2: Selection of ERP Implementation Agency and go-live.

Step-1:

1. AEGCL has invited Request for Proposal (RFP) for Project Management Consultant for “Consultancy Services for implementation of ERP at AEGCL”.
2. Tentative completion period envisaged are
 - Phase I – 9 months from commencement.
 - Phase II – 15 months from signing of contract agreement with ERP implementing agency.
3. Scope of Project Management Consultant.

Phase-I

1. Pre- implementation: Inception Phase, As-IS-Study, To-Be design, preparation of ERP implementation roadmap, preparation of RFP and selection of ERP Implementing Agency, bid management for selection of ERP Implementing Agency.

2. Change management: Preparation of change management strategy, training needs assessment etc.

Phase-II

1. Implementation: ERP implementation program management, Progress monitoring, coordination monitoring etc:
2. Change management: Managing changes in implementation and post implementation phases to ensure that project is in line with RFP to fulfil the entire objective of ERP.
3. Post Implementation: Post implementation audit, Financial and technical Closure, etc.

Step-2:

1. The ERP Implementation Agency selected during the PHASE-I of the Project Management Consultancy, will have 15 (fifteen) months for complete roll out of the ERP at AEGCL office in pan Assam.

Estimated Project Cost:

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

Duration of Project:

1. As-Is-Study, To-Be-Design, DPR for ERP Implementation, RFP For ERP Implementation Agency and Selection of ERP Implementation Agency – 9 Months.
2. Deployment of ERP System – 15 Months.

Project Benefits:

1. ERP enable integration of different functional and geographical dispersed regions/sub-stations through cross-functional, process-oriented and virtually integrated enterprise. This results in improved decision making in day-to-day business transactions and reduction in transaction & coordination costs.
2. AEGCL is an organization with pan Assam presence, where different operations pertaining to the organization are carried out. Number of employees working in each office along with the anticipated volume of ERP transactions from each of these employees varies significantly. Extending reliable and secure LAN/WAN connectivity with high availability of all of these locations to the ERP system will reduce the time delay in decision making.
3. With the successful implementation of ERP, AEGCL will become a system driven organization and will no longer dependent on individual's knowledge or earlier paper-based processes, which were causing delays and sub optimal outcomes.
4. A complete integrated system allows the senior management of the Corporation to monitor the activities of the Corporation.
5. The overall quality of data will be enhanced, thereby improving the flow of information across the corporation for better decision support
6. Improve the efficiency of the operations and increased transparency across the organization
7. All the financial data will be recorded in real time and to be available in the system which can be drilled down up to the initiating transaction level like Plant/substation maintenance, Procurement etc. as and when required.
8. Centralized Master Data related to materials, vendors, equipment and employees will be maintained.

9. Centralized Inventory management – Procurement cycle shall be completely mapped on to the ERP system from indent to PO with controlled workflow as per delegation of powers. This will give more transparency and reduces the lead time in processing. Inventory visibility across the corporation shall be available with detailed stocks.
10. Asset management– Enable Standardization of Maintenance Processes across Plants, Monitoring of Preventive maintenance schedules, History of repeated breakdowns to improve the asset availability. As this centralized integrated system can keep track of spares interchangeability across Plants & Equipment will help AEGCL to minimize the downtime of the equipment.
11. Improved Customer service: Energy billing solution envisaged under ERP will reduce the time to reconcile of energy sent out and for energy audit.
12. HR Management: Central employee data will be created and history will be maintained in ERP for the existing 2200 employees and 12500 pensioners. This will lead to greater transparency in employee data and higher employee satisfaction.
13. Payroll: The payroll will run centrally with all the retrospective calculation which significantly will reduce the manual efforts, and avoid running the payroll in decentralized mode at all the offices of AEGCL.
14. Employee Productivity:
 - Centralized system and hence there will be no duplication of data entry.
 - Time taken to prepare reports will be drastically reduced since these reports will be readily available in the system with analytics.
 - As the processes will be automated with workflows and data will be available in real time, the administrative lead time will be considerably reduced.
 - There will be no need to collect information from various plants, consolidate and to present it to the management. The system will provide the required MIS in real time for decision support.

11. Projects executed through Annual Plan Budgetary allocation for FY 2020-21 to FY 2021-22

Following projects are proposed under the Annual Plan for FY 2020-21 to FY 2021-22. Detail Project Report are under preparation by AEGCL which will furnished to Hon'ble Commission at later stage.

- 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.

- **Ongoing Projects under Annual Plan**

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

- **Augmentation of transformer capacity of 132/33 kV Silchar (Srikona) sub-station from 2x25 MVA to 2x40 MVA**

132/33 kV Silchar (Srikona) sub-station with transformer capacity of 50 MVA is presently catering entire load of Silchar City along with its surrounding areas. On July' 2016, peak load demand of Silchar sub-station was around 51 MW. Maximum safe load transformation capacity of existing 132/33 kV, 2x25 MVA transformer at Silchar sub-

station is 42.50 MW (considering load factor 0.85). Due to power transformation constraint at 132/33 kV Silchar sub-station, force load shedding of around 8 MW was imposed during peak load hours.

AEGCL proposed the augmentation of 132/33 kV transformer capacity of the sub-station, transformation constraint can be addressed and present load shedding scenario can be improved. Implementation of the project will help to feed more power with proper voltage profile to the distribution network of concerned areas, which in turn will help to feed more power to the consumers of the respective areas of the State. This project is expected to get completed by FY 2018-19, hence no projection for this project has been considered in the upcoming control period.

- **Augmentation of transformer capacity of 220/132 kV Sarusajai sub-station from 3x100 MVA to 2x200 MVA + 1x100 MVA.**

On July, 2016 load demand at 132 kV Bus of 220/132 kV Sarusajai sub-station was 292 MW excluding demand of Meghalaya. Maximum safe load transformation capacity of existing 220/132 kV, 3x100 MVA Sarusajai sub-station at 132 kV level is 255 MW (considering load factor 0.85). Due to power transformation constraint at 220/132 kV Sarusajai sub-station, force load shedding of reasonable quantum was imposed on the areas situated in and around Guwahati covered by the downstream 132/33 kV sub-stations.

AEGCL proposed the augmentation of 220/132 kV transformer capacity of the sub-station, transformation constraint on the downstream can be addressed. To cope up with the increasing load demand of the areas covered by the 220/132 kV Sarusajai sub-station, implementation of the project i.e. augmentation of transformer capacity of 220/132 kV Sarusajai sub-station was urgently required. This project is expected to get completed by FY 2018-19, hence no projection for this project has been considered in the upcoming control period.

- **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.**

Execution of 132/33 kV Azara sub-station is in progress with NLCPR fund. Approval of the project under NLCPR fund not included cost of 132/33 kV power transformers, DG set, fire fitting system with erection, testing & commissioning of the same as well as construction of a fire protection wall. Under the present circumstances, without transformer the whole expenditure of turnkey execution will be meaningless and will be idle in nature. Considering all these aspects, AEGCL submits that the construction of 132/33 kV, 2x40 MVA Azara sub-station is most important and of immediate necessity. This project is expected to get completed by FY 2018-19, hence no projection for this project has been considered in the upcoming control period.

- **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.**

132 kV S/C BTPS – APM line on D/C tower is one of the most important line of AEGCL grid network in the Lower Assam region. The 132 kV D/C BTPS – Dhaligaon line was constructed around 1981. For feeding power to 132 kV Dhaligaon, Gossaigaon, Guripur, APM, Barnagar, Nalbari and Rangia sub-stations, 132 kV BTPS – Dhaligaon link is most important. But at present, 132 kV D/C Dhaligaon – BTPS line is often giving troubles

because of aging of the conductor due to use for long period resulting serious problem in power feeding to the aforesaid sub-stations.

However, due to non-availability of alternative route of power feeding from BTPS to the said sub-stations, AEGCL is not in a position to take-up schedule maintenance work of the line as prolong shutdown of the line will be required & which is not possible at the present stage.

To address this bottleneck, AEGCL propose to develop an alternative 132 kV link from BTPS grid sub-station to Dhaligaon substation via APM grid sub-station, which is expected to get completed by FY 2018-19 and hence no projection for this project has been considered in the upcoming control period.

- **Upcoming Projects under Annual Plan**

Currently, following are the upcoming projects of AEGCL during the control period under Annual Plan

Summary of Annual Plan Projects and Capitalisation is tabulated below:

Sr	Particulars	Projected Capital Expenditure			Projected Capitalisation		
		FY 2019-20 (Rs. in Crs.)	FY 2020-21 (Rs. in Crs.)	FY 2021-22 (Rs. in Crs.)	FY 2019-20 (Rs. in Crs.)	FY 2020-21 (Rs. in Crs.)	FY 2021-22 (Rs. in Crs.)
1	State support to execute the project under "Power System Development Fund" (PSDF) of the Govt. of India (100% GOA fund)	9.16	0.00	0.00	7.59	2.75	0.00
2	Augmentation of transformer capacity of 132/33 kV Sipajhar sub-station from 2x16 MVA to 2x50 MVA (100% GOA fund)	2.28	0.00	0.00	1.89	0.68	0.00
3	Augmentation of transformer capacity of 132/33 KV Dhemaji sub-station from 1x16 MVA + 1x10 MVA to 2x50 MVA (100% GOA fund)	4.20	0.00	0.00	3.48	1.26	0.00
4	Augmentation of transformer capacity of 132/33 KV Rowta sub-station from 2x25 MVA to 2x50 MVA (100% GOA fund)	4.20	0.00	0.00	3.48	1.26	0.00
5	132/33 kV, 1x50 MVA transformer with switchyard equipment, etc for Ghoramari sub-station (100% GOA fund)	2.93	0.00	0.00	2.42	0.88	0.00
6	Augmentation of 132 kV and 33 kV Busses of 132/33 kV Depota, Rowta, Barnagar and Chandrapur sub-stations from Strung Bus to Aluminium tube Bus. (100% GOA fund)	3.82	0.00	0.00	3.16	1.14	0.00
7	2nd circuit stringing of 132 kV Samaguri - Khalaigaon line (41.923 Km. long) (100% GOA fund)	4.26	0.00	0.00	0.00	6.08	0.00

8	2nd circuit stringing of 132 kV BTPS - Kokrajhar line (10.268 Km. long) (100% GOA fund)	2.21	0.00	0.00	0.00	3.15	0.00
9	2nd circuit stringing of 132 kV Kokrajhar - Bilasipara line (24.201 Km. long) (100% GOA fund)	2.31	0.00	0.00	0.00	3.30	0.00

Summary of Substation capacity and line length of Annual Projects Projects

Sr	Particulars	Sub-Station Capacity (MVA)			Line Length (Ckt. Km)		
		FY 2020-21	FY 2021-22	FY 2020-21	FY 2021-22	FY 2020-21	FY 2021-22
1	State support to execute the project under "Power System Development Fund" (PSDF) of the Govt. of India (100% GOA fund)	-	-	-	-	-	-
2	Augmentation of transformer capacity of 132/33 kV Sipajhar sub-station from 2x16 MVA to 2x50 MVA (100% GOA fund)	-	-	100	-	-	-
3	Augmentation of transformer capacity of 132/33 KV Dhemaji sub-station from 1x16 MVA + 1x10 MVA to 2x50 MVA (100% GOA fund)	-	-	100	-	-	-
4	Augmentation of transformer capacity of 132/33 KV Rowta sub-station from 2x25 MVA to 2x50 MVA (100% GOA fund)	-	-	100	-	-	-
5	132/33 kV, 1x50 MVA transformer with switchyard equipment, etc for Ghoramari sub-station (100% GOA fund)	-	-	50	-	-	-
6	Augmentation of 132 kV and 33 kV Busses of 132/33 kV Depota, Rowta, Barnagar and Chandrapur sub-stations from Strung Bus to Aluminium tube Bus. (100% GOA fund)	-	-	-	-	-	-
7	2nd circuit stringing of 132 kV Samaguri - Khalaigaon line (41.923 Km. long) (100% GOA fund)	-	-	-	-	-	41.92
8	2nd circuit stringing of 132 kV BTPS - Kokrajhar line (10.268 Km. long) (100% GOA fund)	-	-	-	-	-	10.26
9	2nd circuit stringing of 132 kV Kokrajhar - Bilasipara line (24.201 Km. long) (100% GOA fund)	-	-	-	-	-	24.20

Total	-	-	350	-	-	76.38
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- Funding of Annual Plan Projects**

Sr	Capital Expenditure	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoA- Debt	100%	53.7	63.1	70.4	187.2
	Total		53.7	63.1	70.4	187.2

Sr	Capitalisation	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoA- Debt	100%	27.8	83.2	62.2	173.2
	Total		27.8	83.2	62.2	173.2

6. NERPSIP

GOI sanctioned “North Eastern Region Power System Improvement Project” (NERPSIP) on 01.12.2014 for six NE states (Assam, Meghalaya, Manipur, Tripura, Nagaland & Mizoram) for strengthening of Intra State Transmission and Distribution System. The Scheme is implemented as Central Sector Scheme through POWERGRID as per sanction of the President of India conveyed to the NERPSIP for six (6) states 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 29th May, 2015.

The project is funded 50% through World bank fund and 50% by GoI through MoP Budget. State Government shall reimburse all form of State level taxes, duties and levies. The Government of India (Ministry of Power) shall be the borrower of the Bank loan and the total loan (the Bank loan and GoI/MoP budgetary support) shall be made directly available by GoI to Implementing Agency, POWERGRID for phase wise implementation on behalf of AEGCL. The ownership of the assets lies with AEGCL and upon progressive commissioning, the project elements shall be taken over by AEGCL for operation and maintenance on their own at their own cost.

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

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

- **Ongoing Projects under NERSIP**

Currently, following projects of AEGCL are ongoing under NERSIP:

Summary of NERSIP Projects and Capitalisation is tabulated below:

Sr	Particulars		Projected Capital Expenditure			Projected Capitalisation		
			FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
	Package Name	Projects	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
1	ASM-SS-01	132/33kV Silapathar (New) s/s	49.62	-	-	70.88	-	-
2		132/33kV Tezpur (New) s/s						
3		Extn of 132/33kV Dhemaji s/s						

4		Extn of 132/33kV Sonabil s/s						
5		220/132 kV Behiating (new) s/s						
6		132/33kV Chapakhowa (new)s/s						
7	ASM-SS-02	132/33kV Sarupathar (New) s/s	60.93	-	-	87.05	-	-
8		132/33kV Teok (New) s/s						
9		Extn of 220 kV Tinsukia s/s						
10		Extn of 132/33kV Rupai s/s						
11		132/33kV Tangla (New) s/s						
12	ASM-SS-03	132/33kV Hazo (New) s/s	34.27	-	-	48.96	-	-
13		Extn of 220 kV Rangia s/s						
14		Extn of 132/33kV Kahilipara s/s						
15		220/132 kV Amingaon (new) s/s						
16	ASM-SS-04	132/33kV Palatnbazar (New) s/s	147.77	-	-	197.02	-	-
17		132/33kV Guwahati M.C. (New) s/s						
18	Tr-01	2 X 160MVA, 220/132kV 3-Ph Auto Transformer at Amingaon (New) GIS s/s	81.26	-	-	102.83	-	-
19		2 X 160MVA, 220/132kV 3-Ph Auto Transformer at Samaguri s/s (Augm)						

20	2 X 100MVA, 220/132kV 3- Ph Auto Transformer at Behiating (New) s/s						
21	2 X 50 MVA, 132/33 kV 3- Ph Auto Transformer at Dhaligaon s/s (Augm)						
22	2 X 50MVA, 132/33 kV 3- Ph Auto Transformer at Guwahati Medical College (New) GIS s/s						
23	2 X 50MVA, 132/33 kV 3- Ph Auto Transformer at Paltan bazar (New) GIS s/s						
24	2 X 50MVA, 132/33 kV 3- Ph Auto Transformer at new Tejpur (New) s/s						
25	1 X 50 MVA, 132/33 kV 3- Ph Auto Transformer at Samaguri s/s (Augm)						
26	2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Hazo (New) s/s						
27	2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Tangla (New) s/s						
28	2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Silapathar (New) s/s						

29		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Teok (New) s/s						
30		2X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Sarupathar (New) s/s						
31		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Chapakhowa (New) s/s						
32	ASM P01	Pile foundation package of river crossing location corresponding to Tower packages	5.84	27.27			38.97	
33	ASM- SS-01	Augmentation of 220/132kV Samaguri s/s				-	-	As mentione d above under package name AS- SS-01
34	ASM- SS-03	Augmentation of 132/33 kV Dhaligaon s/s				-	-	As mentione d above under package name AS- SS-03
35	TW02	220kV D/C Tinsukia- Beheating T/L	5.2	24.3		-	-	34.78
36	TW04	132kV S/C (on D/C Tower) Dhemaji- Silapathar T/L	3.0	15.1		-	-	20.16
37	TW05	132kV S/C (on D/C Tower) Rupai- Chapakhowa T/L	4.2	14.8		-	-	21.14

38	TW-07	i) LILO of 132 kV S/C Rangia-Rowta TL	10.5	36.9	-	-	52.68	-
39		ii) LILO of 132 kV S/C Golaghat-Bokajan at Sarupathar						
40		(iii) 132 kV D/C Sonabil-Tezpur TL						
41		iv) LILO of 132 kV S/C Jorhat-Nazira at Teok						
42		v) LILO of 132 kV S/C Kamalpur-Sishugram at Amingaon						
43		vi) 132kV D/C Amingaon - Hazo T/L						
44		(vii) LILO of 132 kV S/C Kamalpur-Khamakhya at Amingaon						
45		viii) 220kV D/C Rangia-Amingaon T/L						

Summary of Substation Capacity and Line Length of NERSIP Projects

Sr	Particulars		Sub-station Capacity (MVA)			Line Length (Ckt. Km)		
			FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
	Package Name	Projects						
1	ASM-SS-01	132/33kV Silapathar (New) s/s	63	-	-	-	-	-
2		132/33kV Tezpur (New) s/s	100	-	-	-	-	-
3		Extn of 132/33kV Dhemaji s/s	-	-	-	-	-	-
4		Extn of 132/33kV Sonabil s/s	-	-	-	-	-	-

5	ASM-SS-02	220/132 kV Behiating (new) s/s	200	-	-	-	-	-
6		132/33kV Chapakhowa (new)s/s	63	-	-	-	-	-
7		132/33kV Sarupathar (New) s/s	63	-	-	-	-	-
8		132/33kV Teok (New) s/s	63	-	-	-	-	-
9		Extn of 220 kV Tinsukia s/s	-	-	-	-	-	-
10		Extn of 132/33kV Rupai s/s	-	-	-	-	-	-
11	ASM-SS-03	132/33kV Tangla (New) s/s	63	-	-	-	-	-
12		132/33kV Hazo (New) s/s	63	-	-	-	-	-
13		Extn of 220 kV Rangia s/s	-	-	-	-	-	-
14		Extn of 132/33kV Kahilipara s/s	-	-	-	-	-	-
15	ASM-SS-04	220/132 kV Amingaon (new) s/s	320	-	-	-	-	-
16		132/33kV Palatnbazar (New) s/s	100	-	-	-	-	-
17		132/33kV Guwahati M.C. (New) s/s	100	-	-	-	-	-
18	Tr-01	2 X 160MVA, 220/132kV 3-Ph Auto Transformer at Amingaon (New) GIS s/s	-	-	-	-	-	-
19		2 X 160MVA, 220/132kV 3-Ph Auto Transformer at Samaguri s/s (Augm)	-	-	-	-	-	-
20		2 X 100MVA, 220/132kV 3-Ph Auto Transformer at	200	-	-	-	-	-

		Behiating (New) s/s						
21		2 X 50 MVA, 132/33 kV 3- Ph Auto Transformer at Dhaligaon s/s (Augm)			-	-	-	-
22		2 X 50MVA, 132/33 kV 3- Ph Auto Transformer at Guwahati Medical College (New) GIS s/s			-	-	-	-
23		2 X 50MVA, 132/33 kV 3- Ph Auto Transformer at Paltan bazar (New) GIS s/s			-	-	-	-
24		2 X 50MVA, 132/33 kV 3- Ph Auto Transformer at new Tejpur (New) s/s			-	-	-	-
25		1 X 50 MVA, 132/33 kV 3- Ph Auto Transformer at Samaguri s/s (Augm)			-	-	-	-
26		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Hazo (New) s/s			-	-	-	-
27		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Tangla (New) s/s			-	-	-	-
28		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Silapathar (New) s/s			-	-	-	-
29		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at			-	-	-	-

		new Teok (New) s/s						
30		2X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Sarupathar (New) s/s		-	-	-	-	-
31		2 X 31.5 MVA, 132/33 kV 3- Ph Auto Transformer at new Chapakhowa (New) s/s		-	-	-	-	-
32	ASM P01	Pile foundation package of river crossing location corresponding to Tower packages		-	-	-	-	-
33	ASM- SS-01	Augmentation of 220/132kV Samaguri s/s	320	-	-	-	-	-
34	ASM- SS-03	Augmentation of 132/33 kV Dhaligaon s/s	100	-	-	-	-	-
35	TW02	220kV D/C Tinsukia- Beheating T/L	-	-	-	-	55	-
36	TW04	132kV S/C (on D/C Tower) Dhemaji- Silapathar T/L	-	-	-	-	36	-
37	TW05	132kV S/C (on D/C Tower) Rupai- Chapakhowa T/L	-	-	-	-	53	-
38		i) LILO of 132 kV S/C Rangia- Rowta TL	-	-	-	-	10	-
39	TW-07	ii) LILO of 132 kV S/C Golaghat- Bokajan at Sarupathar	-	-	-	-	-	-
40		(iii) 132 kV D/C Sonabil- Tezpur TL	-	-	-	-	-	-

41	iv) LILO of 132 kV S/C Jorhat-Nazira at Teok	-	-	-	-	-	-
42	v) LILO of 132 kV S/C Kamalpur-Sishugram at Amingaon	-	-	-	-	-	-
43	vi) 132kV D/C Amingaon - Hazo T/L	-	-	-	-	-	-
44	(vii) LILO of 132 kV S/C Kamalpur-Khamakhya at Amingaon	-	-	-	-	-	-
45	viii) 220kV D/C Rangia-Amingaon T/L	-	-	-	-	-	-
	Total	1818		-	-	154	-

• **Funding of NERSIP Projects**

Sr	Capital Expenditure	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoI- Grant	50%	127.5	59.2	0.0	186.7
B	World Bank- Grant	50%	127.5	59.2	0.0	186.7
	Total		255	118.4	0.0	373.4

Sr	Capitalisation	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoI- Grant	50%	253.4	83.9	0.0	337.2
B	World Bank- Grant	50%	253.4	83.9	0.0	337.2
	Total		506.8	167.7	0.0	674.5

Kindly note that the ongoing projects were commenced in the previous/current control period and thus the capital expenditure has been incurred since the day of inception. Hence, it is likely that the capital expenditure to be incurred in the upcoming control period (FY 2019-20 to FY 2021-22) is minimal. Hence the projects once capitalised, shall reflect higher capitalisation than the incurred capital expenditure in the control period under projection

• **Upcoming Projects under NERSIP:**

Currently, AEGCL has not undertaken any new projects for the upcoming control period under NERSIP mode of funding.

7. NEC

1. 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.

Main objective of the project is to establish a (N-1) contingency link as per CEA guide line to feed power to Silapather sub-station in case of failure 132 kV Dhemaji – Silapather line.

132 kV North Lakhimpur – Silapather line is an important line in north bank of the river Brahmaputra in upper Assam. At present, North Lakhimpur – Dhemaji (existing) is a single circuit line and under construction Dhemaji – Silapather line is also a single circuit line. As a result, a risk factor always exists because of single circuit link, since there is no alternative 132 kV link. The entire Dhemaji district will be out of power in case of outage of 132 kV S/C North Lakhimpur – Dhemaji line since, feeding of power to Dhemaji and Silapather (under construction) sub-stations will be stooped due to non-availability of any alternate arrangement. It is also very difficult to get shutdown for routine maintenance of the line. In this case, (N-1) contingency plan of CEA guide lines is also not fulfilled.

Therefore, construction of 132 kV North Lakhimpur – Silapather line is urgently required. It will not only provide an alternate route to feed power to Silapather and Dhemaji sub-stations but also will help to strengthen 132 kV grid network of the areas. Considering importance of the project, it is proposed for funding from NEC.

On execution of the project, not only this sever problem can be addressed but also routine maintenance of the lines can be take-up as and when required. To address this bottleneck, construction of 132 kV North Lakhimpur – Silapather line is urgently required.

Also, this project will help to back feed power to the Dhemaji sub-station (existing) via Silapather sub-station 132 kV bus, in case of outage of 132 North Lakhimpur – Dhemaji line at any point of time. Further, this project will help to feed more quality power to the people of Silapther, Jonai on the North Bank of river Brahmaputra of upper Assam through power distribution networks of the areas for socio-economic upliftment of the people.

2. 132/33 KV, 1x50 MVA Mobile sub-station

Main objective of the project is to restore power feeding to the distribution network rapidly to those areas which come under blackouts due to sudden outage of existing 132/33 kV sub-station because of equipment failure, weather and other natural disaster, prolong maintenance requirement, etc.

Mobile sub-station is a self-contained trailer, equipped with different power system equipment. Due to its mobility and flexibility nature along with customized design as per necessary requirement, it can be connected into the grid in a very short period of time to avoid power blackout for a prolonged period in the affected areas due to outage of existing grid sub-station.

Grid sub-stations take a crucial role in transformation of power to the consumers through distribution network. The grid is itself an integrated network which requires periodic and schedule maintenance. Some time, unavoidable prolong shutdown/breakdown maintenance of a particular grid sub-station require on emergency basis to save its equipment from being damage. In such a situation, it impacts a large number of consumers due to disruption of power supply in vast area for prolong period. The mobile sub-station will help a lot to restore power supply to the consumers by reducing blackout period to a reasonable extent. This will help to establish a step-gap arrangement and service of the mobile sub-station can be withdrawn when the existing grid sub-station become ready for taking into service again after completion of required maintenance work.

At present AEGCL grid network have 64 Nos. 132/33 kV grid sub-station, spread over length and breadth of Assam. The AEGCL is facing problem time and again here and there due to sudden outage of grid sub-station because of major equipment (i.e. transformer, breaker, etc) failure. Since, these are not readily available in market and since these are costly equipment (especially transformer) so it is not possible to keep spare of the same in large number. Hence, mobile substation is urgently required to address the problems highlighted above. Considering importance of the project, it is proposed for funding under NEC.

Summary of NEC Projects and Capitalisation is tabulated below:

Sr	Particulars	Projected Capital Expenditure			Projected Capitalisation		
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
1	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. (90:10)	15.00	30.00	35.00	0.00	0.00	0.00
2	132/33 KV, 1X50 MVA Mobile Substation	8.00	15.07	-	0.00	23.07	0.00

Summary of Substation capacity and line length of NEC Projects

Sr	Particulars	Sub-stations Capacity (MVA)			Line Lengths (Ckt.km)		
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
1	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. (90:10)	-	-	-	-	-	-

2	132/33 KV, 1X50 MVA Mobile Substation	-	50	-	-	-	-
	Total	-	50	-	-	-	-

• **Funding of NEC Projects**

Sr	Capital Expenditure	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
			(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoI- Grant	90%	20.7	40.6	31.5	92.8
B	GoA- Debt	10%	2.3	4.5	3.5	10.3
	Total		23.0	45.1	35.0	103.1

Sr	Capitalisation	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	GoI- Grant	90%	0.0	20.8	0.0	20.8
B	GoA- Debt	10%	0.0	2.3	0.0	2.3
	Total		0.0	23.1	0.0	23.1

8. Other Capital Projects

1. Provision for Renovation of AEGCL Quarters

AEGCL submits that the current condition of AEGCL's official quarter for employees requires renovation and maintenance as condition of such quarters are deteriorating on regular and continuous basis in the last few years, due to lack of maintenance. Due to lack of proper periodical maintenance of staff quarters such as exterior painting, application of roof sealants, regular painting of doors and windows, resulted to a dilapidated condition which requires urgent attention and immediate renovation.

As on date, total 945 numbers of quarters were constructed for AEGCL's employee, which requires immediate renovation. In view of such condition, AEGCL propose an estimated cost of Rs 1,20,000/- for each quarter and total shall cost Rs. 11,34,00,000/-.

Table for year wise Capital Expenditure (Debt: Equity 70:30)

Sr	Capital Expenditure	Control Period			
		FY 2019-20	FY 2020-21	FY 2021-22	Total
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
	Capital Expenditure	5.67	5.67		11.3

Table for year wise Capitalisation

Sr	Mode of Funding	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Debt	70%	3.99	3.99	-	7.98
B	Equity	30%	1.71	1.71	-	3.32
	Total (A+B)		5.7	5.7	-	11.3

2. Provision for Compound Wall

AEGCL submits that due to lack of compound wall at Sub-Station has given rise to high degree of S/s land encroachments. Even incidents pertaining to theft of inventory equipment from S/s have been recorded frequently.

AEGCL further highlights that the entire Campus comprising 945 houses is neither walled nor segregated as an exclusive gated community for AEGCL STAFF. It is posing many difficulties with a constant threat for privacy among the staff and unauthorised intruders.

Taking all this into account, particularly the safety and security of all staff and their family members, their belongings, AEGCL propose for the construction of a pucca compound wall with foundation drench and five or six foot brick wall surrounding the entire campus. The construction of 19 km boundary wall with an estimated cost of Rs 17,00,00,000/- is necessary in the overall interest of the protection of AEGCL assets and Staff colony.

Table for year wise Capital Expenditure (Debt: Equity 70:30)

Sr	Mode of Funding	Control Period			
		FY 2019-20	FY 2020-21	FY 2021-22	Total
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
	Capital Expenditure	5.1	5.1	6.8	17.0

Table for year wise Capitalisation

Sr	Mode of Funding	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Debt	70%	3.57	3.57	4.76	11.9
B	Equity	30%	1.53	1.53	2.04	5.1
	Total (A+B)		5.1	5.1	6.8	17.0

3. Provision for New Guest Houses at Substation locations

AEGCL submits that many substations are in remote locations where lodging and boarding are difficult for employees, which reduces the no of technical employees from visiting the various sites. The places are devoid of any basic facilities like decent hotels for accommodation or staying. This particular factor is certainly acting as a deterrent for Technical Employees to venture and opt for going to those remotest places. This is directly affecting the efficiency of the substations.

To avoid such issues, AEGCL propose to invest in construction of at least 5 new guest-houses in (i) Hatsingimari, (ii) Gohpur, (iii) Gormur, (iv) Umranshu and (v) Dullavcheerra, which is estimated to cost Rs 80 lakhs per guest house and total shall cost Rs. 4 Crores. In addition to the above mentioned location, it is anticipated that in next 3 years another 5 more guest house shall be required in different locations.

This particular cost is a capital expenditure which will go a long way in directly impacting the willingness of employees to attend the urgent calls from those Sub stations, and it will directly be resulting in improvement of overall efficiency of AEGCL's department. In view of the fact that few of the sub stations are being housed in an inhospitable/remotest location which requires basic amenities for staff on inspection for accommodation of overnight stay or work for longer days.

Table for year wise Capital Expenditure (Debt: Equity 70:30)

Sr	Mode of Funding	Control Period			
		FY 2019-20	FY 2020-21	FY 2021-22	Total
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
	Capital Expenditure	2.4	2.4	3.2	8.0

Table for year wise Capitalisation

Sr	Mode of Funding	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Debt	70%	1.68	1.68	2.24	5.6
B	Equity	30%	0.72	0.72	0.96	2.4
	Total (A+B)		2.4	2.4	3.2	8.0

4. Provision for Colony Roads

AEGCL submits that present scenario of colony roads of most of the sub stations are in deplorable condition due to lack of proper supervision wherein rain plays a havoc and spoilsport role. The vehicles have to endure back rattling drives which causes damages to the vehicles. Around 50 substations are facing such problem. The average length of the roads of those colonies are 500 m in width 4 m in breadth. Total area shall be equal to 10,000 m² {(500 m x 4 m) x 50}.

The repairing cost of each such road shall be Rs 1600/ m² (Travas block of Rs 1100/m² + base preparation of Rs 500/m²) and total estimated requirement shall be Rs 16 Crores (Rs 1600/m² x 10,000 m²)

In order to repair such roads, AEGCL propose to invest Rs. 16 Crores for repair and maintenance of such colony roads.

Table for year wise Capital Expenditure (Debt: Equity 70:30)

Sr	Mode of Funding	Control Period			
		FY 2019-20	FY 2020-21	FY 2021-22	Total
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
	Capital Expenditure	4.8	4.8	6.4	16.0

Table for year wise Capitalisation

Sr	Mode of Funding	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Debt	70%	3.36	3.36	4.48	11.2
B	Equity	30%	1.44	1.44	1.92	4.8
	Total (A+B)		4.8	4.8	6.4	16.0

5. Provision for Vehicles at Various Sites.

Commuting in time is yet another challenge for AEGCL employees resulting in inordinate delay in addressing the problem, which ultimately results in decrease of efficacy and reflates the functioning of AEGCL,

The major cause for not addressing a specific issue at a substation is the inability to reach in time due to the lack of direct transport system or non-availability of vehicular facility in offices.

AEGCL submits that the employees are facing such difficulties in the absence of direct and immediate transport facilities to reach substations at remote locations which is affecting the efficiency of substations. To avoid such constraints in the existing substations and for the upcoming new substations, AEGCL proposes to invest in purchasing for at least 25 new vehicles (Mahindra Bolero), which shall cost around Rs 8 lakhs per vehicle and total estimated price shall be around Rs 2 Crores for 25 vehicles.

Augmentation of its own fleet covering entire Assam will go a long way in directly addressing the problem of remotest sub stations will certainly help in redressing the problem and improvement of its efficiency. Peripheral recurring expense of this Capex is the cost of Drivers salary, recruitment, vehicular maintenance and fuel cost. Though, this will be a regular monthly variable expense which have to be borne by the Company but in the long run, it will ensure that the benefits of these expenses weigh positively in favour of improvising the overall performance of AEGCL and its staffs.

Table for year wise Capital Expenditure (Debt: Equity 70:30)

Sr	Mode of Funding	Control Period			
		FY 2019-20	FY 2020-21	FY 2021-22	Total
		(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
	Capital Expenditure	1.00	1.00	0.00	2.00

Table for year wise Capitalisation

Sr	Mode of Funding	Funding Pattern	Control Period			
			FY 2019-20	FY 2020-21	FY 2021-22	Total
		%	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)	(Rs. in Crs.)
A	Debt	70%	0.70	0.70	0.00	1.40
B	Equity	30%	0.30	0.30	0.00	0.60
	Total (A+B)		1.00	1.00	0.00	2.00

Thus, the overall investments as detailed above in various fields connected directly as CAPEX or indirectly for both infrastructure and social infrastructure shall be a real push for an overall growth of AEGCL.

SALARY ENHANCE RATE AFTER ROP-17

GROSS SALARY BEFORE ROP-17, IS \longrightarrow 7,99,94,925.00
(Consider Salary for the month of Nov-17 paid in Dec-17 including employers cont towards NPS)

GROSS SALARY AFTER ROP-17, IS \longrightarrow 9,55,53,096.00
(Consider Salary for the month of Jan-18 paid in Feb-18 including employers cont towards NPS)

RATE OF SALARY HIKE AFTER ROP-17, IS \longrightarrow

$$\begin{aligned} &= \left[\frac{95553096.00 - 79994925.00}{95553096.00} \right] \times 100 \\ &= 16.28\% \end{aligned}$$

ENCLOSED- NOTE SHEETS OF NORMAL ALLOTMENT FOR THE MONTH OF NOV-17 AND JAN-18

REMARK:

DATA IS BASED ON RECORDS FOR THE MONTH OF NOV-17 AND JAN-18, EXCLUDING DEC-17 BECAUSE REVISED PAYSLEIPS FOR MOST OF THE EMPLOYEES WERE NOT ISSUED IN THE MONTH OF DEC-17

2/8/18
Dy. General Manager (F&A)
AEGCL, Bijules Bhawan
Guwahati-01

DGM (F&A)/CGM(RSA)

The allotment for salary, contribution to NPS and Pension Trust for the month of Nov- 17 payable in Dec- 17 has been prepared based on actual requisition received from all locations including Supplementary bills.

The details of the same are shown below:

	Emp. Prior 1.1.04	Emp. after 1.1.04	Total	Arrear pay, Leave salary, ROP & other arrear	Gross Total
No. of emp.	793	818	1611		
Basic Pay	16511450	8669285	25180735	591379	25772114
Gr. Pay	2396453	2436936	4833389	55732	4889121
D.P	0	0	0		0
D.A	25713581	15104298	40817879	283678	41101557
Other Allow.	2665121	1937213	4602334	19669	4622003
Pt. Sweeper.	0		0		0
Fixed pay	1939536		1939536		1939536
Total (A)			77373873	950458	78324331
Recoveries					
GPF			7741900	27000	7768900
NPS			2621052	20451	2641503
Other Recoveries			198193	70	198263
Total			10561145	47521	10608666
Net Salary Payable			66812728	902937	67715665
Employers Cont of NPS 10%			2621052	20451	2641503
Employees Cont of NPS 10%			2621052	20451	2641503
To NPS Account			5242104	40902	5283006
Net Requisition			72054832	943839	72998671
Pension cont. of Emp. Prior 1.1.04					
(@ 23.31% on Basic+DP+DA)			1,04,01,268.00		
B.S.T			15,41,08,333.00		
(181.52+3.41/12=15.41Cr.)					
Total for release to Pension Trust)			16,45,09,601.00		

181.52 for 2017-18 and 3.41 for 2016-17 which is 50% of revenue gap of 6.82 (161.74-154.92) vide approved ARR for 2016-17, 2017-18 & 2018-19 dt. 31.03.17.

Total Net Salary payable	Rs. 6,77,15,665.00
Total to be sent to NPS	Rs. 52,83,006.00
Pension Cont. of Emp	Rs. 1,04,01,268.00
BST	Rs. 15,41,08,333.00
Total Requisition	Rs. 23,75,08,272.00

Put up for your necessary approval.

Submitted.

Prady
9/12/17
Pradip Kr. Beishya
Accounts Officer (Budget)
AECCL, Biluwa Bazar

Approved

Co-Ordinator

1/12/17

1/12/18
Accounts Officer (F&A)
Bilwan

DGM (F&A)

The allotment for salary, contribution to NPS and Pension Trust for the month of Jan-18 payable in Feb-18 has been prepared based on actual requisition received from all locations including Supplementary bills.

The details of the same are shown below:

	Emp. Prior 1.1.04	Emp. after 1.1.04	Total	Arrear pay, Leave salary	Gross Total
No. of emp.	755	814	1569		
Basic Pay	41838628	23099554	64938182	589620	65527802
Gr. Pay	5996690	6513545	12510235	113032	12623267
D.P	0	0	0		0
D.A	2525844	1511744	4037588	331998	4369586
Other Allow.	5129962	3917793	9047755	71588	9119343
Pt. Sweeper.	0		0		0
Fixed pay	1910167		1910167		1910167
Total (A)	57401291	35042636	92443927	1106238	93550165
Recoveries					
GPF			7200040	55000	7255040
NPS			3109169	46745	3155914
Other Recoveries			335060	81	335141
Total			10644269	101826	10746095
Net Salary Payable			81799659	1004412	82804071
Employers Cont of NPS 10%			3109169	46745	3155914
Employees Cont of NPS 10%			3109169	46745	3155914
To NPS Account			6218338	93490	6311828
Net Requisition			88017997	1097902	89115899
Pension cont. of Emp. Prior 1.1.04					
(@ 23.31% on Basic+DP+DA)			1,17,39,187.00		
B.S.T			15,41,08,333.00		
(181.52+3.41/12=15.41Cr.)					
Total for release to Pension Trust)			16,58,47,520.00		

181.52 for 2017-18 and 3.41 for 2016-17 which is 50% of revenue gap of 6.82 (161.74-1 vide approved A/R for 2016-17, 2017-18 & 2018-19 dt. 31.03.17.

Total Net Salary payable	Rs. 8,28,04,070.50
Total to be sent to NPS	Rs. 63,11,828.00
Pension Cont. of Emp	Rs. 1,17,39,187.00
BST	Rs. 15,41,08,333.00
Total Requisition	Rs. 25,49,63,418.50

Put up for your necessary approval.

Submitted.

Chauhan
31/01/18

Prady
31/01/18
Prady Kr. Baishya
Accounts Officer (Budget)
AEOCL, Bhubaneswar

DGM (F&A) / G.M (F&A)

Certified

Prady
31/01/18
Manager (F&A)
Bhubaneswar

Approved

Prady
31/01/18

F.Y. 2017-18

1) **LUMP SUM AMOUNT AGAINST ROP-17 PAID IN SEPT-17**

FIELD OFFICES	15220000.00
GAD	490000.00
HQ	870000.00
TOTAL	16580000.00

2) **LUMP SUM AMOUNT AGAINST ROP-17 PAID IN JAN-18**

FIELD OFFICES	1,46,90,000.00
GAD	4,70,000.00
HQ	8,30,000.00
TOTAL	1,59,90,000.00

TOTAL PAYMENT MADE AGAINST ROP-17 ARR DURING F.Y. 2017-18 IS - **3,25,70,000.00**

F.Y. 2018-19

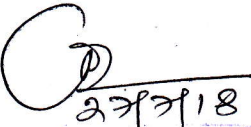
1) **ROP-17 ARR W.E.F FEB-17 TO NOV-17 PAID IN APRIL-18**

FIELD OFFICES	8,20,38,342.00
GAD	57,20,930.00
HQ	40,18,009.00
EMPLOYERS CONTRIBUTION TOWARDS NPS	47,00,139.00
TOTAL	9,64,77,420.00

2) **ROP-17 ARR W.E.F SEPT-16 TO JAN-17 PAID IN APRIL-18**

FIELD OFFICES	5,21,04,593.00
GAD	43,92,892.00
HQ	24,90,965.00
EMPLOYERS CONTRIBUTION TOWARDS NPS	22,36,608.00
TOTAL	6,12,25,058.00

TOTAL PAYMENT MADE AGAINST ROP-17 ARR DURING F.Y. 2018-19 IS - **15,77,02,478.00**


27/7/18

Dy. General Manager (F&A)
AEGCL, Bijulee Bhawan
Guwahati-01

1
ASSAM ELECTRICITY GRID CORPORATION LIMITED

BALANCE SHEET AS AT 31ST MARCH, 2018

(₹ Lakh)

Particulars	Notes	As at 31st March, 2018	As at 31st March, 2017
<u>I. EQUITY & LIABILITIES</u>			
(A) Shareholder's Funds			
(a) Share Capital	1	9,993	9,993
(b) Reserves and Surplus	2	1,38,486	94,698
(B) Share Application Money (Pending Allotment)			
	3	-	-
(C) Non Current Liabilities			
(a) Long Term Borrowings	4	62,658	55,327
(b) Long Term Provisions	5	5,136	19,935
(D) Current Liabilities			
(a) Short Term Borrowings	6	-	-
(b) Trade Payables	7	22,428	30,817
(c) Other Current Liabilities	8	66,700	56,762
(d) Short Term Provisions	9	13,867	3,718
Total ::		3,19,268	2,71,250
<u>II. ASSETS</u>			
(A) Non-Current Assets			
(a) Fixed Assets			
(i) Tangible Assets	10	60,643	61,419
(ii) Capital Work-In-Progress	10	1,17,857	1,01,350
(b) Non Current Investment	11	5,348	5,348
(c) Other Non Current Assets	12	3	3
(B) Current Assets			
(a) Current Investment	13	-	-
(b) Inventories	14	2,299	2,394
(c) Trade Receivable	15	49,107	40,990
(d) Cash & Cash Equivalents	16	51,530	29,672
(e) Short Term Loans & Advances	17	2,809	2,792
(f) Other Current Assets	18	29,672	27,282
Total ::		3,19,268	2,71,250
Significant Accounting Policies	I		

The accompanying notes form an integral part of these financial statements.


For and on behalf of the Board


(S.N. Kalita)
Managing Director


(S. Sarma)
Director



For RKP ASSOCIATES
CHARTERED ACCOUNTANTS
Kamal Mour
(CA. KAMAL MOUR) 17/08/18
Partner
MRN-067544
FRN-322473E


(D. Barua)
Company Secretary

ASSAM ELECTRICITY GRID CORPORATION LIMITED

STATEMENT OF PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED
31ST MARCH, 2018

(₹ Lakh)

Particulars	Notes	Year ended 31st March, 2018	Year ended 31st March, 2017
<u>I. INCOME</u>			
(a) Revenue From Operations	19	1,19,499	53,792
(b) Other Income	20	20,572	9,086
Total Revenue ::		1,40,071	62,878
<u>II. EXPENDITURE</u>			
(a) Employee Benefits Expense	21	14,941	13,312
(b) Finance Costs	22	4,084	3,643
(c) Depreciation and Amortization Expenses	23	5,954	6,033
(d) Other Expenses	24	69,873	77,812
Total Expenses ::		94,852	1,00,800
Profit (Loss) Before Tax (I-II)		45,219	(37,922)
<u>III. TAX EXPENSES</u>			
(a) Current Tax		9,480	-
(b) Deferred Tax		-	-
Profit (Loss) for the period		35,739	(37,922)
<u>IV. Earnings per share :</u>			
(a) Basic (In ₹)	25	358	(379)
(b) Diluted		-	-
Significant Accounting Policies	I		

The accompanying notes form an integral part of these financial statements.

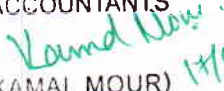
For and on behalf of the Board



(S.N. Kalita)
Managing Director


(S. Sarma)
Director



For RKP ASSOCIATES
CHARTERED ACCOUNTANTS


(CA. KAMAL MOUR)
Partner
MRN-067544
FRN-322473E



(D. Barua)
Company Secretary

ASSAM ELECTRICITY GRID CORPORATION LIMITED
CASH FLOW STATEMENT FOR THE YEAR ENDED 31ST MARCH, 2018

(₹ Lakh)

Sl. No.	Particulars	Year ended 31 st March, 2018	Year ended 31 st March, 2017
A	Cash Flow from Operating Activities		
	Net Profit (loss) before Tax	45,219	(37,922)
	Add :-		
	Misc. Expenditure written off	-	-
	Depreciation including adjustment	6,091	6,384
	Other income	(20,572)	(9,086)
	Interest & Finance Charges	4,084	3,643
	Provision for Income Tax	(9,480)	-
	Operating Profit (loss) before Working Capital changes	25,342	(36,981)
	Adjusted for :		
	Changes in Inventories	95	(590)
	Changes in Sundry Debtors	(8,117)	30,794
	Changes in Other Current Assets	(2,390)	(1,723)
	Changes in Loans and Advances	(17)	(13)
	Changes in Other Current Liabilities	9,938	8,568
	Changes in Short Term Provisions	10,149	82
	Changes in Trade Payable	(8,389)	(3,325)
	Changes in Short Term Borrowings	-	-
	Changes in Long Term Provisions	(14,799)	785
	Other income from PGCIL, sale of Fixed Assets, etc.	18,972	7,649
	Operating Profit (loss) after Working Capital changes	30,784	5,246
	Net Cash Flow from Operating Activities	30,784	5,246
B	Cash Flow from Investment Activities		
	Changes in Fixed Assets	(5,315)	(8,409)
	Changes in CWIP	(16,507)	(9,178)
	Changes in Investments	-	-
	Other income from FD with Banks, Interest from Banks, etc.	1,600	1,437
	Net Cash Flow from Investing Activities	(20,222)	(16,150)
C	Cash Flow from Financing Activities		
	Changes in Share Capital	-	-
	Changes in Secured Loan	-	(1,000)
	Changes in Unsecured Loan	7,609	4,752
	Changes in GoA Grant	-	6,097
	Changes in ADB Grant	1,113	3,283
	Changes in Grant from Central Government	5,507	3,780
	Changes in GPF	(279)	(190)
	Changes in Other Reserves	1,430	1,445
	Interest and Other Charges	(4,084)	(3,643)
	Net Cash Flow from Financing Activities	11,296	14,524
	Net Changes in Cash and Cash Equivalents (A+B+C)	21,858	3,620
	Opening Balance of Cash and Cash Equivalents	29,672	26,052
	Closing Balance of Cash and Cash Equivalents	51,530	29,672

For and on behalf of the Board


(S.N. Kalita)
Managing Director



For RKP ASSOCIATES
CHARTERED ACCOUNTANTS

Kamal Mour
(CA. KAMAL MOUR)
Partner
MRN-067544
FRN-322473E


(S. Sarma)
Director


(D. Barua)
Company Secretary

Notes to the Financial Statements for the Year Ended 31st March, 2018

I. Significant Accounting Policies: -

1. Basis of Preparation and accounting:

These financial statements are prepared in accordance with applicable accounting standards in India and the relevant presentational requirements of the Companies Act, 2013. The Financial Statements have also been prepared on a going concern basis under the historical cost convention on the accrual basis of accounting except otherwise stated, in conformity with the Generally Accepted Accounting Principles ("GAAP").

The operations of the Corporation are governed by the provisions of the Electricity Act, 2003 and various regulations and policies framed there under by the appropriate authorities. Accordingly, the Financial Statements have been prepared in terms thereof.

Accounting policies approved by the Board of the Corporation have been followed while preparing the Annual Accounts under AS-1 related to Disclosure of Accounting Policies.

2. Inventories:

Inventories of stores and spares as at the end of the year are valued at cost.

3. Fixed Assets:

Classifications of Fixed Assets are as per Transfer Scheme. Addition of assets has been booked under their natural head of classification. Capitalizations of assets are done on completion /commission of the asset. Block Registers showing categories of Assets, the amount of depreciation charged/ withdrawn, year wise in respect of the assets are maintained at Head Office. The Fixed Asset Register showing particulars including quantitative details and situation of fixed assets as on 31.03.2014 has already been prepared. The Fixed Assets are stated at actual cost less accumulated depreciation.

Conduction of Physical Verification of Fixed Assets were handed over to M/s Pricewaterhouse Coopers Private Limited, Kolkata on 10.04.2015 and they had submitted their report on 18.12.2015. Based on these reports steps have been initiated to update the Fixed Asset Register.



4. Classification of Assets and Liabilities:

All assets & liabilities of the corporation are segregated into current & non-current based on the principles and definitions set out in the Schedule III of the Companies Act, 2013 as amended.

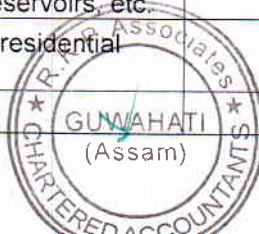
5. Capital work-in-progress:

All expenses incurred for acquiring, erecting and commissioning of fixed assets and incidental expenditure incurred during construction of the projects are shown under capital work-in-progress and are allocated to the fixed assets on the completion of the projects.

6. Depreciation/Amortization:

Depreciation is provided as per Schedule II of the Companies Act 2013. Part 'B' of this schedule states that " The useful life or residual value of any specific asset, as notified for accounting purposes by a Regulatory Authority constituted under an Act of parliament or by the Central Government shall be applied in calculating the depreciation to be provided for such asset irrespective of the requirements of this Schedule". As such depreciation has been provided at the rates specified in Appendix-I to Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2015 on Straight Line Method subject to a maximum of 90% of the original cost of the asset. Rates of depreciation are shown in the following table.

<u>Assets</u>	<u>Depreciation Rate</u>
Land Owned under full title	0.00%
Land held under lease	3.34%
APDRP Land	0.00%
Building containing transmission installations	3.34%
Office Building	3.34%
Temporary erections such as wooden structures	100.00%
APDRP building	3.34%
Other Buildings	3.34%
Cooling Water System	5.28%
Cooling Tower & Circulating Water System	5.28%
Sweet water arrangement including reservoirs, etc.	5.28%
Plant and Pipeline for water supply in residential colony	5.28%
Drainage & sweage residential colony	5.28%



ASSAM ELECTRICITY GRID CORPORATION LIMITED

Other Roads	3.34%
APDRP Other Civil Works	3.34%
Miscellaneous Civil Works	3.34%
Transformers	5.28%
Other plant & equipment	5.28%
Material handling equipment-earth movers, bulldozers	5.28%
Material handling equipment-cement mixers	5.28%
Material handling equipment-cranes	5.28%
Material handling equipment-others	5.28%
Switch-gear including cable connections	5.28%
Batteries including charging equipments	5.28%
Fabrication shop/work-shop Plant & Equipment	5.28%
Linghtning Arrestors (Pole Type)	5.28%
Linghtning Arrestors (Station Type)	5.28%
Communication Equipment-Radio & High Frequency carrier system	6.33%
Communication Equipment-Telephone Lines & Telephones	6.33%
Static machine tools & equipments	5.28%
Air Conditioning plant static	5.28%
Air Conditioning plant portable	9.50%
Meter testing laboratory tools & equipment	5.28%
Equipment in hospital/clinics	5.28%
Tools & Tackles	5.28%
Show-room equipment	5.28%
Other miscellaneous equipment	5.28%
Over-head lines(towers, poles, fixtures, overhead conductors & devices) - lines on fabricated steel supports operating at nominal voltages higher than 66KV	5.28%
Over-head lines(towers, poles, fixtures, overhead conductors & devices) - lines on fabricated steel supports operating at nominal voltages from 13.2 KV to 66 KV	5.28%
Over-head lines(towers, poles, fixtures, overhead conductors & devices) - lines on reinforced concrete supports/steel supports-11 KV and above	5.28%
Over-head lines(towers, poles, fixtures, overhead conductors & devices) - lines on treated wood supports	5.28%
Upgradation transmission & distribution network(33 to 66)	5.28%
Under ground cables including joint boxes & disconnecting boxes-11KV	5.28%
Under ground cables-cable duct systems	5.28%
Metering equipment	5.28%
Miscellaneous Equipments	5.28%
Trucks	9.50%
Jeeps. Trekkers & Motor Cars	9.50%
Other Vehicles	9.50%



ASSAM ELECTRICITY GRID CORPORATION LIMITED

Furniture & Fixtures	6.33%
Electrical wiring, Light & Fan Installations	6.33%
Others	6.33%
Calculators	6.33%
Typewriters	6.33%
Cash Registers in Cash Offices	6.33%
Refrigerators & water coolers	6.33%
Telephone & EPABX	6.33%
Computers	15.00%
Other Office Equipment	6.33%

The Depreciation on addition of assets during the year has been calculated day wise. AS-6 related to Depreciation Accounting has been followed while calculating the depreciation.

7. Revenue Recognition:

Wheeling Charges of electric energy is accounted for on the basis of rates approved by the Hon'ble AERC i.e., Annual Fixed Charge of ₹ 1194.99 Crore including SLDC Charge of ₹ 2.60 Crore in the Tariff Order dated 31.03.2017. As per the said Tariff Order, the above Wheeling Charges include the following.

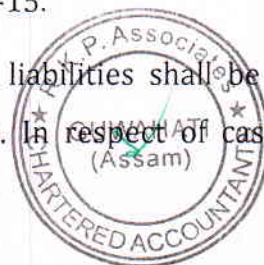
- Transmission ARR for FY 2017-18 (excluding SLDC charges) - ₹ 872.46 Crore.
- Revenue Gap after Truing up for FY 2014-15 along with carrying cost - ₹ 7.43 Crore.
- Revenue Gap after Truing up for FY 2015-16 along with carrying cost - ₹ 169.15 Crore.
- Revenue Gap for FY 2016-17 - ₹ 143.35 Crore.
- SLDC charges for FY 2017-18 - ₹ 2.60 Crore.

Out of total wheeling charges ₹ 181.52 Crore relates to BST Charge against past liability towards Pension Trust. AS-9 related to Revenue Recognition has been complied.

8. Employee Benefits:

Pursuant to the Transfer Scheme, the Government of Assam (GoA) vide its Notification No.PEL.190/2004/69 dated 4th February, 2005 notified a plan for meeting out the terminal benefit obligations of personnel so transferred from ASEB to successor entities. As per Clause 1.5 of the said notification, "Terminal Benefit" means the ASEB's employee related liabilities including payment of pension, gratuity, leave encashment and General Provident Fund and any other retirement benefits and other applicable benefits including right to appropriate revisions in the above benefits consistent with the practice that were prevalent in ASEB. Accounting for Retirement Benefits in the Financial Statements of Employers-Provision for Pension, Gratuity and Leave Salary Encashment have been provided as per actuarial valuation under AS-15.

- Funding for past-unfunded terminal liabilities shall be on the basis of actuarial valuation done as at 9th December 2004. In respect of cash outflows towards past-



ASSAM ELECTRICITY GRID CORPORATION LIMITED

unfunded liabilities of existing employees, existing pensioners and existing family pensioners, funding pattern will be guided by the aforesaid Government notification.

(b) Funding for future services-Terminal Benefits:

The Corporation makes a provision for terminal benefits liability for future service of its permanent employees joining in the service before 01.01.2004 @ 23.31% of Basic plus Dearness Allowance as per AERC and in the line with the GoA's Notification mentioned above.

(c) Leave Encashment benefit (LEB) of employees:

Leave encashment benefits of the old employees are accounted for on cash basis and the claim for recovery of the appropriate share of such amount, i.e., share of past liability relating to period prior to 01.04.2005 is forwarded to the pension trust authorities as per GoA's Notification mentioned here-in-above.

(d) GPF deductions/payments of employees:

Payment on account of GPF (Final Withdrawal and Non-refundable advance) to the existing employees is being made from the GPF Account of the Corporation. Claim for recovery of appropriate share of such fund, i.e., share of past-unfunded liability is also forwarded to the Pension Trust authorities as per GoA Notification mentioned here in above.

Provision for interest payable on GPF is made @ 7.8 % per annum on the opening balance and the average subscription of the employees during the year.

(e) Terminal benefit for new employees (appointed on or after 1.1.2004):

New pension Scheme is being implemented for the new employees of the Corporation as per Government of India Notification No.5/7/2003-ECB & PR dated 22.12.2003.

9. Accounting for Government Grants:

Government grants (both GoA and GoI) have been accounted as capital receipts and taken to Capital Reserves.



ASSAM ELECTRICITY GRID CORPORATION LIMITED

10. Segment Reporting:

As the Corporation deals in single product and operates under the same economic environment and is not subject to different risk and return, segment reporting as per AS-17 is not required to be disclosed.

11. Investments:

Investment consists of Fixed Deposits with Banks. Investments are valued at cost.

12. Taxes on Income:

Current tax will be provided for on the taxable profits of the year at the applicable tax rates.

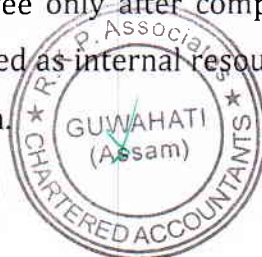
	(₹ in Lakh)
<u>Particulars</u>	<u>FY 2017-18</u>
Net profit after tax	45217
Add: Provision for Current Tax	2
Book Profit	45219
MAT :	
Tax @ 18.5%	8366
Add: Surcharge @10%	837
Total	9203
Add: Education Cess & Higher Edu. Cess @ 3%	276
	9479

13. Preliminary Expenses:

Preliminary expenses are written off over a period of five years in equal installments from the year of commencement of operations.

14. General Provident Fund:

GPF liability is payable to an employee only after completion of 25 years of qualifying services. Accumulation of GPF is utilized as internal resources by the Corporation. As such GPF has been shown as unsecured loan.



15. Prior Period Items:

Accounting of Prior period items have been done as per AS-5. Prior period items are income or expenses which arise in the current period as a result of errors or omissions in the preparation of the financial statements of one or more prior periods.

16. AS-30 related to financial instruments: recognition and measurement is not applicable to the Corporation.

17. BST Charge:

BST charge payable to Pension Trust has been calculated @20 paisa per unit on the actual energy injected to APDCL.

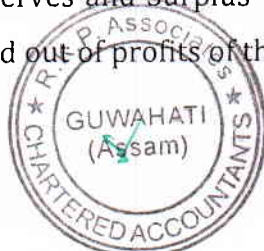
18. As per the Ministry of Corporate Affairs (MCA) notification no. G.S.R.111 (E) dated 16.02.2015, unlisted companies having net worth of rupees two hundred and fifty crore or more but less than rupees five hundred crore, shall comply with the Indian Accounting Standards (Ind AS) for the accounting periods beginning on or after 01.04.2017 [para4 (iii) (b)].

As per section 2(57) of the Companies Act, 2013, 'net worth' has been defined as "Aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited balance sheet, but does not include reserves created out of revaluation of assets, write-back of depreciation and amalgamation".

Thus, 'net worth' may be calculated using the following formula.

Net worth= (Paid-up Share Capital) + (All Reserves created out of profits of the company)-(Accumulated loss).

In this context it may be mentioned that in the books of accounts of AEGCL, "Reserves and Surplus" includes "Capital Reserves". These "Capital Reserves" are created out of Grant funds given by GoA, ADB and GoI to AEGCL for creation of Fixed Assets of the corporation. Hence, as per the definition of 'net worth', these "Capital Reserves" should be excluded from "Reserves and Surplus" in computation of net worth, because these reserves are not created out of profits of the corporation.



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Moreover, these "Capital Reserves" could not be shown under "Paid-up Share Capital", because no Gazette notification from Govt. to covert Grants into Equity is available, without which AEGCL could not raise its' "Paid-up Share Capital".

As per the definition and in view of above explanations, 'net worth' of AEGCL from the FY 2013-14 to FY 2017-18 have been calculated as shown in the following table.

Particulars	As on	As on	As on	As on	As on
	31.03.2018	31.03.2017	31.03.2016	31.03.2015	31.03.2014
	(Provisional)	(Audited)	(Audited)	(Audited)	(Audited)
Paid-up Share Capital	99.93	99.93	99.93	99.93	99.93
Add: Reserves and Surplus	1848.90	1768.40	1622.35	1477.66	1312.87
Less: Capital Reserves	1748.19	1681.99	1550.39	1415.50	1262.79
Less: Accumulated Loss	464.04	821.42	442.20	242.46	161.87
Net-worth	(263.40)	(635.08)	(270.31)	(80.37)	(11.86)

It is seen from the above table that 'net worth' of AEGCL for the FY 2017-18 does not exceed ₹ 250 Crore. Thus as per the above mentioned notification of MCA, 'Ind AS' is not applicable to AEGCL for the FY 2017-18.



II. Notes on Accounts

The amounts in Financial Statements are presented in Indian Rupees and all figures have been rounded off to the nearest rupees lakh except when otherwise stated. The operations of the Corporation are governed by the provisions of the Electricity Act, 2003 and various regulations and policies framed there under by the appropriate authorities. The financial statements for the year ended 31st March 2018 are prepared as per Companies Act 2013. The previous year figures have also been reclassified/ regrouped/ rearranged wherever necessary.

1. SHARE CAPITAL

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Authorised Shares Capital		
10000000 equity share of 100 each	10,000	10,000
Issued, Subscribed and paid up		
(i) 9993194 equity share of ₹100/- each fully paid up	9,993	9,993
(Previous year 9993194 equity share of ₹100/- each fully paid up)		
Total	9,993	9,993

1.1 9993194 (previous year 9993194) shares out of the issued, subscribed and paid up Shares Capital were allotted as fully paid up pursuant to transfer scheme without payment being received in cash.

1.2 The details of shareholders

(₹)

Name of the Shareholder	As at 31-03-2018		As at 31-03-2017	
	No	% Held	No	% Held
Government of Assam (G.O.A.)	99,93,194	100	99,93,194	100

1.3 The reconciliation of the number of shares outstanding is set out below

(₹)

Particulars	As at 31-03-2018	As at 31-03-2017
Equity shares at the beginning of the year	99,93,194	99,93,194
Add : Shares Issued during the year	-	-
Equity shares at the end of the year	99,93,194	99,93,194



ASSAM ELECTRICITY GRID CORPORATION LIMITED

2. RESERVES AND SURPLUS

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Capital Reserves	1,74,819	1,68,199
Other Reserve	10,071	8,641
Profit & Loss Account :		
Profit (Loss) as per Last Balance Sheet	(82,142)	(44,220)
Profit (Loss) for the Year	35,739	(37,922)
	(46,404)	(82,142)
Total	1,38,486	94,698

(₹ Lakh)

2.1 Capital Reserve Includes :-

As at 31-03-2018As at 31-03-2017

(a) Grant From GoA	67,859	67,859
(b) Grant From ADB	95,426	94,313
(c) Grant From Central Government	11,534	6,027

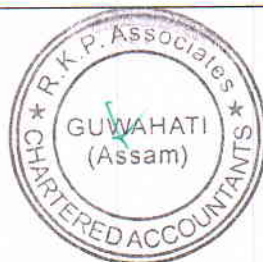
2.2 Other Reserve Includes :-

Claim for recovery of appropriate share (84.49 %) of GPF as past unfunded liabilities receivable from Pension Trust as per GoA notification No. PEL. 190/2004/69 dated 04-02-05.

3. SHARE APPLICATION MONEY PENDING ALLOTMENT

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Part of Share Capital of Assam State Electricity Board apportioned to the company vide transfer scheme as per notification of the Government of Assam dated 16-08-2005 which is pending allotment	-	-
Total	-	-



4. LONG TERM BORROWING

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
SECURED :		
	-	-
Sub-Total	-	-
UNSECURED :		
Loans from ADB	9,428	9,304
State Govt. Loan	47,310	39,824
General Provident Fund	5,920	6,199
Sub-Total	62,658	55,327
Total	62,658	55,327

4.1 Loan from State Govt. includes ₹ 39, 59, 20,942 /- as Repayment Due.

5. LONG TERM PROVISION

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Provision For Employee Benefits :		
Liability towards Pension Trust	5,136	19,935
Others :		
Provision for doubtful loans and advances	-	-
Total	5,136	19,935

5.1 Liability towards Pension Trust includes 23.31% of Pay plus DA of the permanent employees of AEGCL (excluding those who joined services on or after 01.01.04) for the FY 2017-18 for terminal benefits liability for future service as per AERC and GoA's notification No.PEL.190/2004/69 dated 04.02.2005 and Board's approval no. 23 dated 15.03.2013.

5.2 Liability towards Pension Trust includes ₹ 172, 09, 74,000 /- being BST charge payable to Pension Trust during 2017-18.



6. SHORT TERM BORROWINGS

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
SECURED :		
Bank Overdraft Account	-	-
UNSECURED :		
Total	-	-

7. TRADE PAYABLE

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Micro, Small And Medium Enterprises	-	-
Others		
Wheeling Charges Payable to PGCIL	5,531	13,901
Liability Towards APDCL	16,897	16,916
Total	22,428	30,817



8. OTHER CURRENT LIABILITIES

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Interest accrued and due	40,783	34,342
Other Payables		
Liabilities for Capital supplies/works	3,519	490
Liabilities for O&M supplies/works	2,442	2,598
Unpaid salaries, wages, bonus, etc	6	6
Salaries, wages, bonus, etc., payable	2,483	2,611
Staff deduction and recovery payable	491	493
Deposits and retention from suppliers and contractors	5,840	4,983
Other Liabilities	11,102	11,207
Advance from APGCL	33	33
Advance For Terminal Benefits	-	-
Total	66,700	56,762

8.1 Interest accrued and due includes :As at 31-03-
2018(₹ Lakh)
As at 31-03-
2017

- (i) Interest accrued and due on SG Loan (ADB)
(ii) Interest accrued and due on State Govt. Loan
(iii) Interest accrued and due on borrowings for Working Capital

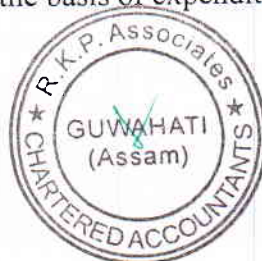
6,115	5,115
34,667	29,227
-	-

9. SHORT TERM PROVISION

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Provision For Employee Benefits		
Staff related provision	1,014	545
Others		
Provision for Liability for Expenses	3,405	3,173
Minimum Alternate Tax	9,448	-
Provision for Income Tax	-	-
Total	13,867	3,718

9.1 Staff related provision includes provision for bonus of ₹ 12, 00,000 /-. Provision for bonus has been made on the basis of expenditure of the previous year.



ASSAM ELECTRICITY GRID CORPORATION LIMITED

10. FIXED ASSETS

(₹ Lakh)

Description	GROSS BLOCK			DEPRECIATION			NET BLOCK	
	As at 1.4.2017	Additions/Deletions during the year	As at 31.3.2018	As at 1.4.2017	Depreciation for the year	As at 31.3.2018	As at 31.3.2018	As at 31.3.2017
TANGIBLE ASSETS								
OWN ASSETS								
Land & Rights	2,917	880	3,797	1	1	2	3,795	2,916
Building	3,052	368	3,420	1,746	126	1,871	1,549	1,306
Hydraulic	264	-	264	251	-	251	13	13
Other Civil Works	6,947	148	7,095	580	242	822	6,273	6,367
Plant & Machinery	75,866	3,048	78,914	33,898	4,249	38,148	40,767	41,969
Lines & Cable Network	72,723	764	73,487	64,095	1,394	65,489	7,998	8,628
Vehicles	468	22	490	400	22	422	68	68
Furniture & Fixtures	382	26	408	284	25	310	98	97
Office Equipment	249	58	307	193	33	226	81	55
Total	1,62,868	5,315	1,68,183	1,01,449	6,092	1,07,541	60,643	61,419
CAPITAL WORK IN PROGRESS							1,17,857	1,01,350

10.1

(i) In the absence of shift log book for Plant & Machinery, depreciation on Plant & Machinery has been charged on continued process plant basis.

(ii) On fixed assets acquired during the year depreciation is charged on 'Put to Use'.

(iii) Addition of Fixed Assets during the FY 2017-18 includes ₹ 28, 00, 88,640 /- related to prior periods.

(iv) Addition of Depreciation during the FY 2017-18 includes ₹ 1, 37, 47,311/- related to prior periods.

10.2

Capital Work In Progress Includes :-

(a) Capital works in progress

(b) Advance to suppliers/contractors (Capital)

As at 31-03-2018

1,17,324

532

(₹ Lakh)

As at 31-03-2017

1,00,734

616



11. NON CURRENT INVESTMENT

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Trade Investment	5,348	5,348
Other Investments	-	-
Total	5,348	5,348

11.1 Investment in M/s. North East Transmission Company Ltd. as on 31.03.2018 is ₹ 53,48,20,000/- (5,34,82,000 Equity Shares of ₹10 each) against 13% Equity Share.

12. OTHER NON CURRENT ASSETS

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Long Term Trade Receivable		
Unsecured Considered Good	-	-
Others		
Deferred Cost	-	-
Exp. On Surveys/Feasibility Studies	3	3
Total	3	3

13. CURRENT INVESTMENT

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Investment in Equity Instruments	-	-
Investment in Liquid Funds	-	-
Other Investment	-	-
Total	-	-



ASSAM ELECTRICITY GRID CORPORATION LIMITED

14. INVENTORIES

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
1. Capital Materials Stock A/c	2,808	2,758
2. O&M Materials Stock A/c	937	992
3. Other Material Account	316	315
4. Material Stock-Excess/Shortage Pending Investigation – Capital	35	35
Gross Total	4,096	4,102
Less Provision Against Stock	1,797	1,708
Net Total	2,299	2,394

14.1 There is a difference of ₹ 2.48 Crore between book figure of stocks and physical verification report of stocks as on 31.03.2018 which is in the process of reconciliation.

15. TRADE RECEIVABLES

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
(Unsecured & Considered Good)		
Over Six Months	-	-
Others	-	-
Receivables against Transmission Charges From-APDCL	49,107	40,990
Total	49,107	40,990

16. CASH & CASH EQUIVALENTS

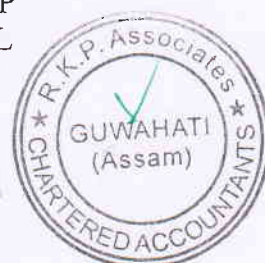
(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Balances With Bank	9,839	9,772
Cash In Hand	135	133
Fixed Deposits With Banks	41,556	19,767
Total	51,530	29,672

- 16.1 Balances with bank include closing bank balance of HQ as well as of all field units along with the fund in transit.
- 16.2 Cash in Hand includes closing cash balance of HQ as well as of all field units along with imprest with staff.
- 16.3 Fixed Deposits with Banks include closing balance of fixed deposit at various banks.

(₹ Lakh)

	As at 31-03-2018	As at 31-03-2017
STDRs managed by AEGCL (Principal Account)	34,669	14,309
STDRs managed by AEGCL-NERPSIP	18	17
STDRs managed by NPS Cell, AEGCL	-	193
STDRs managed by CPF-I, AEGCL	6,869	5,248
Total	41,556	19,767



17. SHORT TERM LOANS & ADVANCES

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
(Unsecured & Considered Good)		
Advances for O&M supplies/works	1,724	1,710
Loans and Advances to staff	71	68
Advance Income Tax	1,005	1,005
Amount receivable from Employees/Ex-Employees	4	4
Advances to APDCL	1	1
Others	4	4
Advances for GPF	-	-
Total	2,809	2,792

18. OTHER CURRENT ASSETS

(₹ Lakh)

Particulars	As at 31-03-2018	As at 31-03-2017
Income Accrued but not Due	957	898
Inter Unit A/c-Materials	428	424
Inter Unit A/c-Capital Expenditure & Fixed Assets	-	-
Inter Unit A/c-Personnel	-	-
Inter Unit A/c-Opening Balance	-	-
Inter Unit A/c-Other Transaction/Adjustments	114	114
Receivable From Pension Trust	15,532	13,401
Receivable From APDCL	10,525	10,525
Receivable From APGCL	2	2
Misc. Receivables	1,299	1,251
Receivable from Income Tax Authority	815	667
Other deposits	1	-
Total	29,672	27,282

18.1 As per GoA's notification No. PEL. 190/2004/69 dated 4th February, 2005, the unfunded past liability on account of GPF and LEB will be funded through the cash streams as mentioned therein and the existing Pension Trust of ASEB will be the common trust for all the new companies. In terms of the said notification, ₹ 21,30,79,968 /- being unfunded past liability towards GPF and LEB paid during the year has been claimed from Pension Trust out of which an amount of ₹ 14,30,17,584/- relating to GPF has been transferred to Other Reserve.

18.2 Inter Unit Accounts include Inter Unit A/c-Materials of ₹ 428/- lakh, which is in the process of reconciliation.

18.3 Receivable from Income Tax Department includes Interest on Fixed Deposits deducted by Banks as TDS during FY 2017-18.



ASSAM ELECTRICITY GRID CORPORATION LIMITED

19. REVENUE FROM OPERATIONS

(₹ Lakh)

Particulars	Year ended 31-03-2018	Year ended 31-03-2017
Wheeling Charges (Transmission Charges) From APDCL	1,19,499	53,792
Total	1,19,499	53,792

19.1 Revenue from Wheeling Charge of ₹ 1194, 99, 00,000 /- including SLDC Charge of ₹ 2, 60, 00,000 /- as approved by the Hon'ble AERC was billed to APDCL.

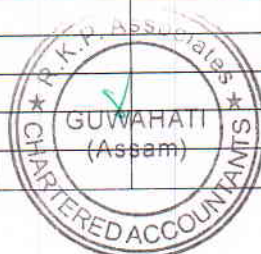
19.2 The quantitative details of electrical energy transacted by the Corporation during the FY 2017-18 along with previous year were as follows:

Particulars	Energy Handled (in MU)	
	2017-18	2016-17
Power available at AEGCL periphery	8921.27	8239.77
Power injected to DISCOM & OA Consumers :		
APDCL & OA Consumers	8604.87	7948.08
Transmission Loss in AEGCL Network	316.40	291.69
Percentage of Transmission Loss	3.55	3.54

20. OTHER INCOME

(₹ Lakh)

Particulars	Year ended 31-03-2018	Year ended 31-03-2017
Interest		
Interest on investment in the form of Fixed Deposits with Banks	1,431	1,313
Interest on Investments in any other Investments	-	-
Interest from Banks	142	109
Dividend		
Dividend from Investment in liquid fund	-	-
Net Gain on Sale of Investment		
Short Term Capital Gain from liquid fund	-	-
Long Term Capital Gain from liquid fund	-	-
Others		
Rebate received from PGCIL	247	6
Profit on sale of fixed assets	-	-
Hire Charges from contractors	-	4
Hire Charges from others/suppliers	15	10
Sale of scrap	-	-
Misc. receipts	18,676	7,601
Rentals from staff quarters	34	28
Income from Investment	28	15
Total	20,572	9,086



ASSAM ELECTRICITY GRID CORPORATION LIMITED

20.1 Misc. receipts include Transmission surcharge bill of Rs. 55, 95, 26,907/- and Transmission incentive bill of Rs. 12, 10, 15,485/-.

21. EMPLOYEE BENEFITS EXPENSE

(₹ Lakh)

Particulars	Year ended 31-03-2018	Year ended 31-03-2017
Salaries and Wages	12,307	11,152
Contribution to Provident and Other Funds	1,958	1,830
Payment of ex-gratia	1	1
Payment of Gratuity	470	143
Other Employee Costs	175	165
Staff Welfare Expenses	31	23
Total	14,941	13,312

21.1 Contribution to Provident and Other Funds include 23.31% of Basic Pay and DA of employees who joined in service prior to 01-01-2004, which has been paid to the ASEB Employees Pension Fund Investment Trust and 10% of Basic Pay and DA of employees who are covered under New Pension Scheme. Payment of Gratuity includes provision for gratuity of employees who are covered under New Pension Scheme.

22. FINANCE COSTS

(₹ Lakh)

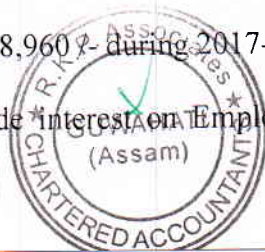
Particulars	Year ended 31-03-2018	Year ended 31- 03-2017
Interest Expenses	4,059	3,629
Other Borrowing Costs	26	14
Total	4,084	3,643

22.1

Interest on State Govt. Loan	4,205	3,655
Interest on ADB Loan	-	-
Interest on borrowings for Working Capital	-	3
Interest on GPF	453	482
Penal Interest	1,235	1,039
Sub-Total	5,893	5,180
Less Interest Capitalised	1,835	1,551
Total	4,059	3,629

Interest on ADB Loan of ₹ 10, 00, 28,960/- during 2017-18 has been fully capitalised.

22.2 Other Borrowing Costs include interest on Employees' and Employer's contribution to NPS and Bank Charges.



23. DEPRECIATION AND AMORTIZATION EXPENSES

(₹ Lakh)

Particulars	Year ended 31-03-2018	Year ended 31-03-2017
Depreciation on Leasehold Assets	1	1
Depreciation on Building	114	105
Depreciation on Hydraulic Works	-	-
Depreciation on Other Civil Works	239	223
Depreciation on Plant & Machinery	4,138	3,982
Depreciation on Lines , Cables Network	1,382	1,669
Depreciation on Vehicles	22	1
Depreciation on Furniture, Fixtures, etc.	25	24
Depreciation on Office Equipments	33	29
Total	5,954	6,033

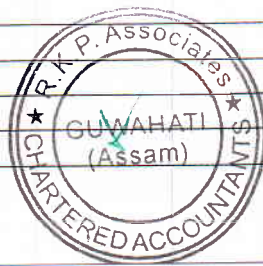


ASSAM ELECTRICITY GRID CORPORATION LIMITED

24. OTHER EXPENSES

(₹ Lakh)

Particulars	Year ended 31-03-2018	Year ended 31-03-2017
Repairs And Maintenance Expenses :		
Repair and Maintenance of Plant & Machinery	1,043	1,029
Repair and Maintenance of Building	98	123
Repair and Maintenance of Other Civil Works	99	84
Repair and Maintenance of Lines, Cable Net Works, etc	219	142
	50,929	59,045
Transmission Charge To PGCIL		
Establishment Expenses :		
Rent, Rates and Taxes	23	305
Insurance	9	7
Telephone Charges	23	29
Postage, Telegram & Tele Charges	3	3
Audit Fees	6	4
Consultancy fees and expenses	-	1
Legal Charges	3	6
Technical fees and other professional fees and expenses	7	7
Fees including TA & DA for non official member of the Board	-	3
Conveyance and Travel	118	113
Fees & Subscription	167	174
Book and Periodicals	3	3
Printing and Stationery	29	23
Advertisement, Contributions	27	36
Hiring of Vehicles	133	127
Electricity Charges	117	64
Water Charges	-	-
Entertainments	6	4
Participation fees paid for Training/Conference	1	-
Training of Staff and Officers	2	1
Misc. Expenses	10	19
Freight	-	-
Other Purchase related expenses	5	6
Other Miscellaneous Expenses	4	-
Repair and Maintenance of Vehicles	16	14
Repair and Maintenance of Furniture and Fixtures	6	6
Repair and Maintenance of Office Equipment	33	37
Other Debits To Revenue :		
Miscellaneous losses written off	89	25
Write-off of deferred revenue expenditure	-	-
Assets De-Commissioning Costs :		
Transmission lines/sub-stations de-commissioning costs	1	1
Bulk Supply Tariff :		
Bulk Supply Tariff	17,210	15,896
Prior Period Charges / (Credits)		
Net Prior Period Charges/(Credits)	(568)	475
Total	69,873	77,812



	<u>Year ended</u> <u>31-03-2018</u>	(₹ Lakh) <u>Year ended</u> <u>31-03-2017</u>
24.1 <u>Prior Period Item Includes</u>		
<u>Prior Period Expenses and Losses :</u>		
Transformer Oil related expenses/losses relating to prior period	-	-
Employee costs relating to prior periods	-	-
Depreciation under provided in prior periods	137	351
Other Expenses relating to Prior Period	814	133
Interest and other finance charges relating to prior periods	8	-
Materials related expenses relating to prior periods	11	-
<u>Prior Period Income :</u>		
Other income relating to prior periods	1,538	8
Other excess provision in prior periods	1	-
Excess provision for depreciation in prior periods	-	1
Interest income for prior period	-	-

24.2 Audit fee of ₹ 6,49,720 /- includes the following :

As Statutory Audit Fees	₹ 3,74,000 /-
GST	₹ 67,320 /-
	₹ 4,41,320 /-
Tax Audit Fees	₹ 25,000 /-
NPS Audit Fees	₹ 7,000 /-
Secretarial Audit Fees	₹ 45,000 /-
PSDF I & II Audit Fees	₹ 15,000 /-

Fees for Cost Auditors	₹ 66,400 /-
(Out of Pocket Expenses)	₹ 50,000 /-



25. EARNINGS PER SHARE (EPS)

Particulars	(₹ Lakh)	
	Year ended 31-03-2018	Year ended 31-03-2017
Net Profit After Tax as per Statement of Profit & Loss	35,739	(37,922)
Number of Equity Shares	99,93,194	99,93,194
Earnings Per Share (In ₹)	358	(379)
Face Value per Equity Share (In ₹)	100	100

26. RELATED PARTY DISCLOSURE:-

1. Related Party and his relationship : Key Management Personnel

U. Bora (W.e.f. 01.04.2017 to 30.06.2017)	Managing Director (i/c)
S.N. Kalita (W.e.f. 01.07..2017 to 31.03.2018)	Managing Director

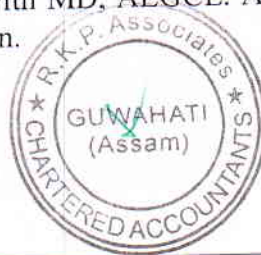
2. Disclosure of transactions between the Corporation and the related parties and status of outstanding balances :

Particulars	Amount
(a) Salary/Remuneration	₹ 17,49,290/-
(b) Travelling Allowance	₹ 3,24,888/-
(c) Outstanding balances	Nil

27. Assets other than vehicles are not insured. Vehicles are also insured only for liabilities that may arise towards third parties.

28. Accounts in respect of Medical Expenses Reimbursement, Leave Travel Concession, Earned Leave Encashment, Telephone Charges, Electricity Charges, and Water Charges are maintained on accrual basis.

29. The internal audit of the Corporation's field units are being carried out by its own audit staff. The internal audit staff conducts internal audit of various field offices as well as head quarter. Reports are placed with MD, AEGCL. Any serious matter is discussed in Audit Committee of the Corporation.



ASSAM ELECTRICITY GRID CORPORATION LIMITED

30. In exercise of the powers conferred by section 148 of Companies Act, 2013, the Board of Directors of the Corporation had re-appointed M/s Sanjib Das & Associates as the Cost Auditors of the Corporation for the FY 2017-18. The Corporation in the meantime has been able to maintain preliminary cost records.

For and on behalf of the Board

(S.N. Kalita)
Managing Director

(S. Sarma)
Director

For RKP ASSOCIATES
CHARTERED ACCOUNTANTS

Kamal Mour
(CA. KAMAL MOUR) *17/08/18*
Partner
MRN-067544
FRN-322473E

(D. Barua)
Company Secretary



INDEPENDENT AUDITOR'S REPORT

To
The Members of
Assam Electricity Grid Corporation Limited
Bijulee Bhawan, Paltan Bazar
Guwahati - 781001

We have audited the accompanying standalone financial statements of **ASSAM ELECTRICITY GRID CORPORATION LIMITED** ("the Company"), which comprises the Standalone Balance Sheet as at 31st March, 2018, the Statement of Standalone Profit and Loss Account and the Standalone Cash Flow Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

Managements Responsibility for the Financial Statements:

The Company's Board of Directors is responsible for the matters in section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014. This responsibility also includes the maintenance of adequate accounting records in accordance with the provision of the Act for safeguarding of the assets of the Company and for preventing and detecting the frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of internal financial control, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

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Auditor's Responsibility:

Our responsibility is to express an opinion on these financial statements based on our audit.

We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made there under.

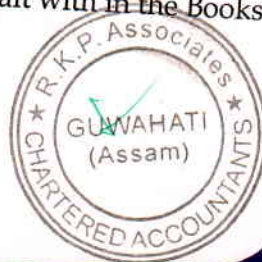
We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the financial statements that give true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by Company's Directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Basis of Qualified Opinion:

Management had conducted physical verification of Inventories during the F.Y 2017-18, however, discrepancies noticed during physical verification of Inventories amounting ₹2.48 Crores had not been properly dealt with in the Books of Accounts



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Qualified Opinion:

In our opinion and to the best of our information and according to the explanations given to us, except for the effects of the matter described in the Basis of Opinion paragraph above, the aforesaid financial statements, give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- a) In the case of the Balance Sheet, of the state of affairs of the Company as at March 31, 2018;
- b) In case of the Statement of Profit and Loss, of the profit for the year ended on that date;
- c) In the case of Cash Flow Statement, of the cash flow for the year ended on that date.

Report on Other Legal and Regulatory Requirements:

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government of India in terms of sub-section (11) of section 143 of the Companies Act 2013, we have attached *Annexure - A*, a statement on the matters specified in paragraph 3 & 4 of the order.
2. As required by the Companies Act, 2013 under section 143(5), we have attached *Annexure -B* a statement on matters directed by C&AG.
3. As required by section 143(3) of the Act, we report that:
 - a) We have sought and obtained all the information and explanations *except to the matters detailed in Annexure A, Annexure B, Annexure C and Annexure D*, which to the best of our knowledge and belief were necessary for the purposes of our audit;
 - b) In our opinion proper books of account as required by law have been kept by the Company so far as appears from our examination of those books.
 - c) The Balance Sheet, the Statement of Profit and Loss and Cash Flow Statement dealt with by this Report are in agreement with the books of account.
 - d) *Except for the effects of the matter described in the Basis for Qualified Opinion paragraph*, the aforesaid financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014.

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- e) On the basis of the Gazette Notification No. 372 dated 05.06.2015 issued by the Ministry of Corporate Affairs, Government of India, the provisions of Section 164(2) of the Companies Act, 2013 regarding "Disqualification of Directors" for appointment as Director of Company shall not apply being a Government Company.
- f) With respect to the adequacy of the internal financial control over financial reporting of the company and the operating effectiveness of such control, refer to our separate report in 'Annexure - D', and
- a) With Respect to the other matters to be included in the Auditor's report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanation given to us:
- The Company has pending litigations as per *Table - 1 attached to this Report*; however, we *could not sort out financial implications due to insufficient information*.
 - The Company had not entered into any long-term contracts including derivative contracts for which there would have been any material foreseeable losses.
 - There are no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

Dated at Guwahati
the 17th day of August' 2018

FOR RKP ASSOCIATES
CHARTERED ACCOUNTANTS



Kamal Mour
(CA. KAMAL MOUR)
PARTNER
MRN. 067544
FRN. 322473E

ANNEXURE-A TO THE INDEPENDENT AUDITORS' REPORT

Referred to in para (1) of our Independent Auditors' Report of even date on statements of Account of **ASSAM ELECTRICITY GRID CORPORATION LIMITED** for the year ended on 31st March'2018

- I) a) The Fixed Asset Register of the Corporation is updated upto 31.03.2014 and no identifications are given to any asset as observed in the Fixed Asset Register maintained by the Company.
- b) Management had conducted physical verification of Fixed Assets during the F.Y 2015-16, *however, discrepancies noticed during physical verification of Fixed Assets had not been properly dealt with in the Books of Accounts.*
- c) *Title Deeds relating to all Lands were not produced during the course of Audit for our verification. Title Deeds relating to Land value amounting to ₹ 22.07 Crores only were produced during the course of Audit. It is worthwhile to mention here that value of Land as per the Balance Sheet as on 31.03.2018 is ₹37.95 Crores.*
- II) a) Management had conducted physical verification of Inventories during the F.Y 2017-2018, *however, discrepancies noticed during physical verification of Inventories amounting ₹ 2.48 Crores had not been properly dealt with in the Books of Accounts.*
- III) According to the information and explanations given to us and on the basis of our examination of the books of account, the Company has not granted any loans, secured or unsecured, to companies, firms, and limited liability partnership or other parties covered in the register maintained under Section 189 of the Companies Act, 2013. Consequently, the provisions of clauses iii (a) and iii (b) of the order are not applicable to the Corporation.
- IV) In our opinion and according to the information and explanations given to us, the company had neither given any loan or guarantee nor provide any security to director or any person to whom the directors are interested. Further, the Company had not made any investment. Therefore, the provisions of clause (iv) of Para. 3 of the CARO 2016 are not applicable to the company.
- V) In our opinion and according to the information and explanation given to us, the company has not accepted any deposits from public. Therefore, the provisions of clause (v) of Para. 3 of the CARO 2016 are not applicable to the company.

- VI) As informed to us the Central Government has prescribed compulsory maintenance of cost records sub-section (1) of section 148 of the Companies Act, 2013 and the Company had maintained Cost Records relating to the FY 2017-18 as opined by the Cost Auditor in the Cost Audit Report.
- VII) a) According to information and explanations given to us and on the basis of our examination of the books of account, and records, the company is regular in depositing undisputed statutory dues including Provident Fund, Employees State Insurance, Income-Tax, Sales tax, Duty of Customs, Duty of Excise, Value added Tax, Cess and any other statutory dues with the appropriate authorities *except delay in payment of Service Tax and GST as detailed in Table - 2 & 2A of this Report.*
- According to the information and explanations given to us, no undisputed amounts payable in respect of the above were in arrears as at March 31st, 2018 for a period of more than six months from the date on which they become payable.
- b) According to the information and explanations given to us there are no dues of sales tax, value added tax etc. which have not been deposited on account of any dispute.
- VIII) Company had *defaulted in repayment of Loan taken from Government of Assam amounting to ₹39.59 Crores* as Repayment Due as on 31.03.2018. Moreover, Company is *having liability of ₹172.09 Crores being BST Charge Payable to Pension Trust* as on 31.03.2018 as referred to in Note No.5.2 of the Balance Sheet as on 31.03.2018.
- IX) According to the information and explanations given to us the company did not raise any moneys by way of initial public offer or further public offer including debt instruments. Therefore, the provisions of clause (ix) of Para. 3 of the CARO 2016 are not applicable to the company.
- X) According to information & explanations given to us, no fraud by the company or on the company by its officers or employees has been noticed or reported during the course of our audit.
- XI) As per the Notification dated 05.06.2015 issued by Ministry of Corporate Affairs the provisions of Section 197 relating to managerial remuneration shall not apply to a Government company. Therefore the provisions of clause (XI) of Pare 3 of the CARO 2016 are not applicable to the Company.

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- XII) In our opinion and according to information & explanations given to us, the company is not a Nidhi Company. Therefore, the provisions of clause (xii) of Para.3 of the Order are not applicable to the Company.
- XIII) According to information & explanations given to us and based on our examination of the records of the company, transactions with the related parties are in compliance with section 177 and 188 of Companies Act, 2013 where applicable and details of such transactions have been disclosed in the Financial Statements as required by the applicable accounting standards.
- XIV) According to information & explanations given to us and based on our examination of the records of the company, the company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year. Accordingly, the provisions of clause (xiv) of Para. 3 of the Order are not applicable to the Company.
- XV) According to information & explanations given to us and based on our examination of the records of the company, the company has not entered into any non-cash transactions with directors or persons connected with him. Accordingly, the provisions of clause (xv) of Para. 3 of the Order are not applicable to the Company.
- XVI) In our opinion, the company is not required to be registered under section 45 IA of the Reserve Bank of India Act, 1934 and accordingly, the provisions of clause (xvi) of Para. 3 of the Order are not applicable to the Company.

Dated at Guwahati
the 17th day August' 2018



FOR RKP ASSOCIATES
CHARTERED ACCOUNTANTS

Kamal Mour
(CA. KAMAL MOUR)
PARTNER
MRN. 067544
FRN. 322473E

ANNEXURE-B TO THE INDEPENDENT AUDITORS' REPORT

Report on the Internal Financial Controls under Clause (i) of sub-section 3 of Section 143 of the Companies Act, 2013 ('the Act')

We have audited the internal financial controls over financial reporting of **ASSAM ELECTRICITY GRID CORPORATION LIMITED** ('the Company') as of 31 March 2018 in conjunction with our audit of the financial statements of the company for the year ended on the date.

Management's Responsibility for Internal Financial Controls:

The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India ('ICAI'). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility:

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls over Financial Reporting (the 'Guidance Note') and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting were established and maintained and if such controls operated effectively in all material respects.

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Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial control systems over financial reporting.

Meaning of Internal Financial Controls over Financial Reporting:

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transaction and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of the Management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls over Financial Reporting:

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to

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the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion and as per the representation received, the Company has, in material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at 31 March 2018 *except to the lapses detailed in qualifications / comments / observations mentioned in in various points of the Statutory Auditors Report of even date issued by us*, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

Dated at Guwahati
the 17th day of August, 2018



FOR RKP ASSOCIATES
CHARTERED ACCOUNTANTS

Kamal Mour
(CA. KAMAL MOUR)
PARTNER
MRN. 067544
FRN. 322473E

ANNEXURE - C

COMPLIANCE CERTIFICATE

We have conducted the audit of accounts of **ASSAM ELECTRICITY GRID CORPORATION LIMITED** for the year ended 31.03.2018 in accordance with the directions/sub directions issued by the C & AG of India under Section 143(5) of the Companies Act , 2013 and certify that we have complied with all directions/sub-directions issued to us.

Dated at Guwahati
the 17th day of August' 2018

FOR RKP ASSOCIATES
CHARTERED ACCOUNTANTS



Kamal Mour
(CA. KAMAL MOUR)
PARTNER
MRN. 067544
FRN. 322473E

Directions indicating the areas to be examined by the Statutory Auditors during the course of audit of annual accounts of ASSAM ELECTRICITY GRID CORPORATION LIMITED for the year 2017-18 issued by the Comptroller & Auditor General of India under Section 143(5) of the Companies Act, 2013

1.	Whether the company has clear title/lease deeds for freehold and leasehold respectively? If not please state the area of freehold and leasehold land for which title/lease deeds are not available.	Title Deeds relating to all Lands were not produced during the course of Audit for our verification. Title Deeds relating to Land value amounting to ₹ 22.07 Crores only were produced during the course of Audit. It is worthwhile to mention here that value of Land as per the Balance Sheet as on 31.03.2018 is ₹ 37.95 Crores.
2.	Please report whether there are any cases of waiver/write off of debts/loans/interest etc., if yes, the reasons there for and the amount involved.	No case of waiver/write off of debts/loan/interest etc. was observed during the course of audit.
3.	Whether proper records are maintained for inventories lying with third parties & assets received as gift/grant(s) from Govt. or other authorities.	No such instance observed during the course of audit.

Dated at Guwahati
the 17th day of August' 2018



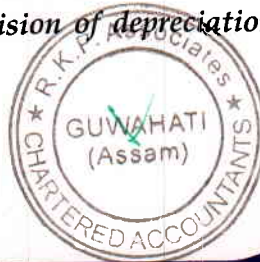
FOR RKP ASSOCIATES
CHARTERED ACCOUNTANTS

Kamal Mour
(CA. KAMAL MOUR)
PARTNER
MRN. 067544
FRN. 322473E

ANNEXURE-D TO THE INDEPENDENT AUDITORS' REPORT

QUALIFICATIONS/ COMMENTS/ OBSERVATIONS FORMING PART OF THE AUDITORS' REPORT

1. During the course of Audit we have observed that excess *provision for Accrued Interest on Fixed Deposits amounting to ₹13.23/- Lacs has been made*. Due to the said provisioning of accrued interest, *profit as reflected in the Financial Statement relating to the FY 2017-18 has been overstated* to that extent. Consequentially, the balance of *"Interest Accrued but not due" as reflected under the "Other Current Assets" has also been overstated* to that extend.
2. During the course of audit it was observed that additional provisioning for short booking of TDS Receivable from Income Tax Authorities was not done. *Hence, Balance receivable from Income Tax Authorities was understated by ₹57.89 lakhs relating to F.Y.2017-2018.*
3. *No valid documentary evidence/supporting documents was produced relating to Capitalization of Interest amounting to ₹1,835/- Lacs during the course of Audit.*
4. *During the course of audit we have observed that current year transmission charges include bills amounting to ₹ 562.01 relating to the period 2011-2017 accounted in 2017-2018. As these bills relates to prior period, the Company should have accounted for the same as "Prior Period Charges" under the head "Other Expenses".*
5. *During the course of Audit we have observed that Sales tax of ₹1.75 lacs for procuring materials have been wrongly booked under the head "Liability for Central Sales Tax" instead of debiting in the respective heads of Expenditure.*
6. During the course of Audit we have observed that there are instances of *delay in Capitalization of various Assets amounting to ₹1440.25 Lacs which have been completed in earlier F.Y, however, capitalized during FY 2016-17 and 2017-2018. Consequently, profit to the extent amounting to ₹ 134.15 Lacs has been overstated due to non-provision of depreciation on those Assts. Refer Part-A of Table-3 as annexed with the Report.*
7. *During the course of Audit we have observed that expenditure amounting to ₹108.43 Lacs booked under Capital Work In Progress although works gets completed during FY 2016-2017 and 2017-2018. Consequently, profit to the extent amounting to ₹ 4.85 Lacs has been overstated due to non-provision of depreciation on those Assts. Refer Part-B of Table-3 annexed with the Report.*



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8. During the course of Audit we have observed that there are instances where *expenditure amounting to ₹109.60 Lacs incurred for various work which are capital in nature, however those expenditures were considered as revenue expenditure and booked as Repair and Maintenance Expenditure. Consequentially, profit to the extent amounting to ₹ 3.53/- Lacs has been overstated* due to non-provision of depreciation on those non capitalized Assets and also *profit has been understated due to wrong classification of capital expenditure by ₹ 109.60 Lacs Refer Part-C of Table-3 annexed with the Report.*

Total profit overstated due to non-provision of depreciation amounts to ₹ 142.52 Lacs. Division / Field office wise details are given in *Table - 3* attached with this Audit Report.

9. *Balance confirmations relating to Creditors were not produced* during the course of Audit for verification.
10. During the course of Audit, copies of all the *Title Deeds relating to Lands in the name of the company were not produced for verification.* It is worthwhile to mention here that *Title Deeds of Land value amounting to ₹2,207/- lakhs has been produced* for verification out of the total Land value of ₹3,795/- lakhs as reflected in the Financial Statement.
11. *During the course of our visit at T&T Division, Nagaon, AEGCL, we have observed that the company had incurred loss due to theft of material amounting to ₹99,518/- as per the FIR produced, however, in the Books of Account no provision for loss of material has been made.*
12. *During the course of our visit at various units of AEGCL, it was observed that "Capital Materials are considered as O&M Materials and charged to Profit and Loss A/c instead of Capitalization" relating to various works as Annexed in Table- 4 amounting to ₹ 37.43/- Lacs.*
13. During the course of our *visit to various Field offices, Tally Data relating FY 2017-18 were not available.* Moreover, procedure for taking regular back-up had also not been adhered to; else the same could have been recovered. Field Offices where we have observed such instances are as follows:-
- Office of the DGM, T&T Circle, Dhaligaon, Bongaigaon
 - Office of the AGM, 132 KV GSS, Dhaligaon, Bongaigaon

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- c) Office of the DGM, UA T&T Circle, Jorhat
- d) Office of the AGM, UA T&T Division, Jorhat
- e) Office of the AGM, 132KV GSS, Chirakhundi
- f) Office of the AGM, 220KV GSS, Sarusajai
- g) Office of the AGM, T&C Division, Tezpur
- h) Office of the AGM, 132KV GSS, Depota

14. During the process of verification of Bank Reconciliation Statements at Field Offices, we have observed that there are *few Cheques pending for clearing since long and have become stale but no accounting entry for the same have passed*. Details of all such cheques are as follows :-

SL NO	NAME OF FIELD OFFICES	DATE	CHEQUE NO	AMOUNT
1	LA T & T Circle, Narangi	20.12.2017	287401	600.00
2	220 KV GSS, Sarusajai	04.12.2017	520196	1963.00
3	220 KV GSS, Sarusajai	04.12.2017	520197	607.00

15. During the course of our visit to Tinsukia Grid Sub-Station it was observed that in the year 2014, there was 3 Nos of 132KV CT with ACC 200-400-800/1-1-1 of value ₹. 1, 85,673/- each, total ₹. 5, 57,019/- . In the same year 1 Nos of 132KV CT with ACC 200-400-800/1-1-1 was issued to 132 KV GSS, Dibrugarh. In the year 2015 another 2 Nos issued to Dibrugarh GSS, but omitted to be recorded in the books of accounts in FY 2015-16. The same had been recorded as issue in FY 2016-17. Therefore, Stock of the same should have been Zero. On an enquiry of Stock Verification Report 31.03.2017 reveals that there are 4 Nos. 132KV CT with ACC 200-400-800/1-1-1 available in Stock of Value ₹. 7, 42,692 (Refer SL 16 and SL 99 of PVR). It results in understatement of profit by same amount. As per PVR 2017-2018, there was no stock lying. ISTN 14, MAF 32 NO 36 dated 10.04.2017 reveals that 2 Nos 132KV CT with ACC 200-400-800/1-1-1 issued to Dibrugarh GSS value ₹. 3, 71,346/- and Journal entry passed for 4 Nos. of value ₹. 7, 42,692/- in the month of May 2017 and June 2017. On physical verification as on the date of audit, there is a 132KV CT with ACC 200-400-800/1-1-1 available at Tinsukia GSS. On verification of Priced Stock Ledger, GRS, ISTN and Gate Keeper Record it was revealed that only 3 Nos was purchased from 2014-2018.

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16. During the course of audit it was observed that expenses amounting to ₹. 59,352/- incurred against Imprest Cash having a balance of ₹. 59,352/- has not been charged against respective expenses in SLDC, Kahilipara. This results in overstatement of profit by ₹. 59,352/-.
17. *Internal Audit Reports were not produced during the course of our visit to various Field offices, as explained by Accounts Officer/ Dy. Accounts Officers, Internal Audit was not been conducted for the FY 2017-18.* We observed similar instance in all the field offices.

The Company had one IA wing headed by Deputy General Manager (F&A Audit). However, neither the wing was properly manned nor any report of IA was made available to audit for verification. The Statutory Auditors in their reports on the annual accounts of the Company for the years 2015-16 to 2016-17 had repetitively commented that the IA system did not commensurate with the size and nature of the business of the Company. The aspect of not conducting any IA in 2010-11 was also pointed out (March 2012) by ADB Consultative Mission. The wing was reconstituted (October 2011) with one Assistant Manager (Audit) , two Accounts Officers, one Deputy Accounts Officer, one Accounts Trainee and two Article Clerks headed by Deputy General Manager (Audit). Out of 32 accounting units, No unit was audited for the FY 2017-2018 by IA wing. As a normal practice, complete Internal Audit Reports were not placed in Audit Committee meeting for discussion but only cases involving heavy monetary value were placed. However, copies of reports were forwarded to Managing Director and Chief General Manager (Finance & Accounts) of the Company. Further, it was observed that no Internal Audit reports were placed before the Board of Directors for discussion and necessary remedial action. Thus, in the absence of structured and well defined IA system, the important financial affairs and transactions of the Company mostly remained unverified and unchallenged. At present, there are two Accounts Officer and one Deputy Accounts Officer available for Internal Audit.

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18. During the course of verification of *various ROC Returns / Forms filed by the Company, we have observed delay filing of various Returns / Forms. Moreover, due to these delay filing Company had paid Additional Fees.* Details of such Returns / Forms are as follows:-

Form No.	Purpose	Date of Appointment/ Resolution	Date of Filing	Normal Fees	Additional Fees
DIR-12	Appointment & Cessation of Director		16-08-2017	600.00	1,200.00
MGT-7	Filing of Annual Return for FY 2014-2015		30-01-2018	600.00	7,200.00
AOC 4 -XBRL	Filing of Financial Statement for the FY ending 2016		20-11-2017	600.00	6,000.00
MGT-14	Special Resolution		25-10-2017	600.00	1,200.00
TOTAL				2,400.00	15,600.00

19. *Fixed Assets Register has not been updated till 31.03.2018*
20. During the course of our visit to 132KV EHV Grid Sub Station, Bongaigaon, Dhaligaon, we observed that Stock value ₹ 2, 48,905.44 sealed in Gunni Bag due to dispute in receipt. Those materials cannot be utilized; however, the same has also been taken into PSL Stock. Moreover, Spare receipt against verbal order which is sealed in the Gunni Bag due to non-receipt of official order, however, the same are not taken into stock, value of stock amounts to ₹ 2,59,523.80.



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21. During the course of our visit to **132KV EHV Grid Sub Station Chirakhundi, Rangia and 132KV EHV Grid Sub Station, Bongaigaon, Dhaligaon**, we have observed many instances where relatively high Zirat compensation paid for crop damage. We have also observed some instances where huge amount paid as compensation for a **Single Location** for erection of tower. We are unable to draw a proper conclusion as proper information were not produced during the course of Audit. It is found that additional 8% establishment cost, 2% Contingency Cost, 30% compensation for additional cost estimated and fund demanded from HQ without any proper documents of beneficiary and it overrules the ADB Norms and LARR Act 2013. **Refer Annexure-5A and 5B for Observations.**
- House valuation is prepared by AEGCL, Technical Staff and verified by Circle Office. But Claim Statement from Beneficiaries are not available.
 - Valuation has not been done on area basis. Gross valuation has been done for all areas. No Fair Market Valuation of Land, Building etc. has been obtained.
 - Updated Valuation Report of Agriculture/ Forest Department for Crops, Trees has not been produced. Rate chart submitted pertain to the year 2013 for Trees, 2011 for Rubber.
 - We observed many instances where Signature of Owner, Witnesses, Asstt Manager (Electrical), Deputy Manager (Accounts), DGM, Circle Officer are missing in documents i.e payment voucher, Compensation Register, Statement of Payments, Valuation & Verification Report (132KV Dhaligaon GSS)
 - Payment made upto 3 times to same person on account of crops/ tree damages.



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22. During the course of our audit we have observed that amount received from LIC towards Group Insurance Scheme amounting to ₹ 87,733/- *has been wrongly debited under the head "Amount received from LIC towards Group Insurance Scheme"* instead of the correct head mentioned under the code 44.413.
23. Accounting Policy relating to Taxes on Income (AS-22) has not been incorporated in the Financial Statement; hence, the same may suitably be incorporated in the Financial Statement. Further, the corporation may assess the disclosure requirement relating to Deferred Tax Assets/Deferred tax Liabilities, if any, in the Notes to Accounts.

Dated at Guwahati
the 17th day of August' 2018

FOR RKP ASSOCIATES
CHARTERED ACCOUNTANTS



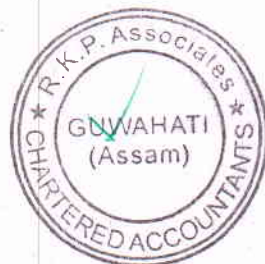
Kamal Mour
(CA. KAMAL MOUR)
PARTNER
MRN. 067544
FRN. 322473E

TABLE -1 TO THE INDEPENDENT AUDITORS' REPORT

List of available litigation cases pending against the AEGCL as on 31.03.2018

Sl No.	Case No	Party Name	Duration of Pendency	Effectiveness of monitoring mechanism for expenditure	Reason for Pendency
1.	T.S. 130/2008	Smt. Rebati Prashad Sharma -VS- AEGCL	10 years	Effective	Procedural Delay
2.	W. P (C) No. 684 of 2014	Sri Babu Ghosh VS- AEGCL.	4 year	Effective	Procedural Delay
3.	T.S. 130/08	Monoronjan Banik - VS- ASEB	10 year	Effective	Procedural Delay
4.	M.S. No. 7/2011	Smti Joymati Tessa -VS- AEGCL	7 year	Effective	Procedural Delay
5.	T.S. 34/2014	Parshuram Prajapati and another-Vs- AEGCL	4 years	Effective	Procedural Delay
6.	Misc Case No. 11/2012 & 12/2012 arising out of L.A. Case No. 10/2010	Sri Amulya Kumar Das -VS- AEGCL	6 years	Effective	Procedural Delay
7.	W. P (C) No. 6175/2013	Sri Dinesh Ch. Deka - VS- AEGCL & Ors.	5 years	Effective	Procedural Delay
8.	T.S. 138/15	Adus Sattar Sikdar and Ors -VS- AEGCL and Ors	3 years	Effective	Procedural Delay
9.	T.S. No. 29/17	Smti Protima Gogoi - VS- AEGCL & Ors	1 year	Effective	Procedural Delay
10.	WP (C) No. 5854/2017	The Association of Engineers -VS- The State of Assam, AEGCL & Ors.	1 year	Effective	Procedural Delay
11.	WP (C) No. 4778/2015	Sri Champak Deka - VS- AEGCL & Ors.	3 year	Effective	Procedural Delay
12.	T.S. No. 446/2017 & Misc Case (J) No. 893/2017	Abdul Kuddus Hazarika - VS- AEGCL & Ors	1 year	Effective	Procedural Delay

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Sl No.	Case No	Party Name	Duration of Pendency	Effectiveness of monitoring mechanism for expenditure	Reason for Pendency
13.	WP (C) No. 4984/16	RatanSutradhar-Vs-AEGCL and ORS	2 years	Effective	Procedural Delay
14.	CR 79/2015	ParshuramPrajapati - VS- Sri Khireswargogoi	3 year	Effective	Procedural Delay
15.	WP (C) No. 767/16	Badan Chandra Boraghain VS-AEGCL	2 year	Effective	Procedural Delay
16.	WP (C) No. 5242/2016	(Sri ChandanUria - Vs- AEGCL &Ors)	2 year	Effective	Procedural Delay
17.	Suit No.MS 07/2016	Mr. KanuramBorgoyary - VS- AEGCL	2 year	Effective	Procedural Delay
18.	WP (C) No. 7589/2017	SmtiRitu Borah &Ors -VS- AEGCL &Ors	1 year	Effective	Procedural Delay
19.	T.S. No. 476/2016 and Misc No. 718/2016	Sri SeelMikir and ORS -VS- AEGCL and ORS	2 years	Effective	Procedural Delay
20.	WP (C) No. 785/2018	Smtilakhyajyot Borah (Bhagawati) -VS- AEGCL and Ors	1 years	Effective	Procedural Delay
21.	WP (C) No. 776/2018	(Sri Harus Ali Laskar-VS- AEGCL and Ors	1 years	Effective	Procedural Delay
22.	WP (C) o. 8086/017	Haidar Ali -VS- the State of Assam and Ors.	1 years	Effective	Procedural Delay
23.	T.S. No. 2/2014	Sri DebaPatar -VS- AEGCL	4 years	Effective	Procedural Delay
24.	WP (C) No. 785/2018	SmtiLakhyajyotiBhagawati -VS-AEGCL	1 years	Effective	Procedural Delay



TABLE - 2

(Part of Annexure - D of the Audit Report)

Delay In Payment Of Service Tax (2017-2018)

Sl No	Name of the Vendor	Taxable Amount (₹)	Service Tax Rate (%)	Service Tax (₹)	Service Tax (AEGCL's Share) (₹)	Invoice Date	Due Date	Date of Payment	Delay In Payment (Days)
1	ABBU BAKKAR SIDDIQUE	97,254.00	15.00	2,917.00	2,723.00	02/11/2016	06/12/2016	10/05/2018	520
2	MUDIT KUMAR BORA	883,743.00	15.00	26,513.00	24,745.00	18/02/2017	06/03/2017	11/05/2017	66
3	GB CONSTRUCTIONS	1,337,762.00	15.00	40,134.00	37,458.00	09/09/2016	06/10/2016	11/05/2017	217
4	KALITA ENTERPRISE	602,387.00	15.00	18,073.00	16,867.00	14/12/2016	06/01/2017	11/05/2017	125
5	OK ENTERPRISE	5,281,333.00	15.00	158,440.00	147,876.00	17/02/2017	06/03/2017	11/05/2017	66
6	MAHESHWAR DAS	62,579.00	15.00	1,878.00	1,752.00	08/11/2016	06/12/2016	16/06/2017	192
7	HAIDER KHAN	140,248.00	15.00	4,209.00	3,927.00	23/02/2017	06/03/2017	16/06/2017	102
8	SABNAM ELECTRICALS	713,031.00	15.00	21,391.00	19,965.00	17/02/2017	06/03/2017	16/06/2017	102
9	SABNAM ELECTRICALS	289,690.00	15.00	8,691.00	8,111.00	17/02/2017	06/03/2017	16/06/2017	102
10	GANPATI ENTERPRISE	82,615.00	15.00	4,338.00	4,048.00	14/09/2016	06/10/2016	11/05/2017	217
	TOTAL	9,490,642.00		286,584.00	267,472.00				1709



TABLE - 2

(Part of Annexure - D of the Audit Report)

Delay In Payment Of GST (2017-2018)

hb a	MONTH	DUE DATE	DATE OF FILING	DELAY (DAYS)	LATE FEES		TOTAL(₹)	
					CGST(₹)	SGST(₹)		
1	OCTOBER,2017	20/11/2017	02/04/2018	133.00	3,325.00	3,325.00	6,650.00	
2	NOVEMBER,2017	20/12/2017	02/04/2018	103.00	2,575.00	2,575.00	5,150.00	
3	DECEMBER,2017	22/01/2018	02/04/2018	70.00	1,750.00	1,750.00	3,500.00	
4	JANUARY,2018	20/02/2018	02/04/2018	41.00	1,025.00	1,025.00	2,050.00	
5	FEBRUARY,2018	20/03/2018	02/04/2018	13.00	325.00	325.00	650.00	
TOTAL							9,000.00	18,000.00



TABLE - 3
(Part of Annexure - B of the Audit Report)

DETAILS OF NON CAPITALISED ASSETS

SL NO	FIELD OFFICES	Assets Not Yet Capitalised (₹ In Lakhs)	Rate of Depreciation	Depreciation (₹ In Lakhs)	REMARKS
Part-A: Delay in Capitalisation					
1	Office of the AGM, 132KV GSS, Chirakhundi, Rangia	2.57	3.34%	0.24	Roof treatment, repairing of slab etc. for Control Room building at 132KV Rangia GSS for an expenditure of Rs. 2,57,658 booked under CWIP (APSEIP Civil Works) 14.024.012. Date of Completion is 06.12.2017. The said expenditure should have been converted into asset under Office Building 10.202 and provided for depreciation.
2	Office of the AGM, 132KV GSS, Chirakhundi, Rangia	14.09	3.34%	0.30	Provided short depreciation Rs. 29,839/- on the following assets which was actually completed on 17.07.2017 but wrongly mentioned date of completion 31.03.2018 Miscellaneous Civil Works 10.402 Rs. 514997 Roads 10.401 Rs. 181440 Office Building 10.202 Rs. 713366
3	Office of the AGM, 132KV GSS, Chirakhundi, Rangia	2.23	3.34%	0.10	Construction of Box Culvert at Chainage at Kamalpur GSS at an expenditure of Rs. 2,23,386/- booked under CWIP (APSEIP Civil works) 14.024.012. Date of completion of work is 18.10.2016. The said expenditure should have been converted into asset under Miscellaneous Civil Works 10.402 and provided for depreciation



SL NO	FIELD OFFICES	Assets Not Yet Capitalised (₹ In Lakhs)	Rate of Depreciation	Depreciation (₹ In Lakhs)	REMARKS
4	Office of the AGM, 132KV GSS, Samaguri	1345.77	5.28%	133.51	Abnormal delay in construction of bay at Samaguri GSS: Extension, Augmentation and Refurbishment of existing EHV Sub-station under ASEIP (Tranche-2) ADB Loan No. 2677-IND. The said project was booked under CWIP (P&M) PSDF 14.09024 on March 2018 for Rs. 2,80,87,208/- . As per different Completion and Operational Certificate issued by the Technical Authority on different dates it is observed that Plants & Equipment were commissioned on multiple dates. On the other hand, AGM of Samaguri GSS issued Operational Acceptance Letter to The Project Director, GM (HQ) on 29.01.2018. The whole project was commissioned on 28.02.2016 at an expenditure of Rs. 13,45,77,408/- . The entire expenditure should have been converted into asset.
7	Office of the AGM, Works Division, Kahilipara	75.59	3.34%	0.87	Construction of RE Residence and Officers Hostel at 132KV Sonapur GSS at an expenditure of Rs. 75,58,716, which was completed on 10.07.2017 but converted into asset on 29.12.2017 but actual date of conversion was 27.11.2017
Sub-Total (A)		1440.25		134.15	

Part-B: Completed but in CWIP

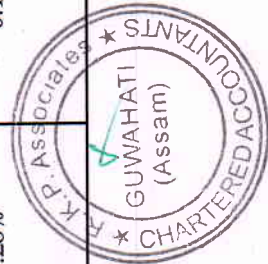
1	Office of the AGM, 132 KV GSS, Dhaligaon	8.42	5.28%	0.43	Supply, installation and commissioning of centrally operated fire protection system at 132 KV Bilasipara GSS at a cost of Rs. 8,42,349/- Which was completed on 03.10.2017 still under APSDP Plant & Machinery 14.015013 (CWIP). The said expenditure should have been converted to asset under Other Plant & Equipment 10.502 and provided for depreciation.
2	Office of the AGM, 132 KV GSS, Dhaligaon	10.71	6.33%	0.48	Purchased Furniture for Bilasipara GSS at an expenditure of Rs. 10,70,510/- under Work Order No. AEGCL/DGM/T&T Circle/T-22/2017/35 has been debited to EEPA Furniture & Fixture 14.028.013 CWIP on 19.06.2017. The expenditure should have been converted to Asset under Furniture & Fixtures 10.810 and provided for depreciation.



SL NO	FIELD OFFICES	Assets Not Yet Capitalised (₹ In Lakhs)	Rate of Depreciation	Depreciation (₹ In Lakhs)	REMARKS
2	Office of the AGM, 132 KV GSS, Dhaligaon	8.07	5.28%	0.39	Installation of Deep Tube Well and Renovation of damaged water supply pipe line at 132/33 KV Joyma GSS, Gossaigaon for Rs. 8,06,993/- under Work Order No. AEGCL/DGM/Bong/T&T Circle/T4/2016/611 Dtd. 19.01.2017. Date of Completion is 24.03.2017. Expenditure has been debited to R & M of Roads & Other Civil Works 74.492 by crediting Contractor Control A/C O&M 43.400. The said expenditure should have been booked as Asset under the head Plant & Pipe line for water supply in residential colony 10.320 and provided depreciation.
3	Office of the AGM, 132 KV GSS, Dhaligaon	14.49	3.34%	0.79	Construction of hume pipe foundation at location No. 185 of 132KV Rangia-Barnagar line for Rs. 14,49,124/- under work order No. AEGCL/DGM/Bong/T&T Circle/T-4/2015/418. Date of Completion 11.06.2016. Expenditure has been debited to R&M to Overhead Lines 74.501 by crediting Contractor Control A/C O&M 43.400. The said expenditure should have been booked as Asset under the head Miscellaneous Civil Works 10.402 and provided depreciation.
4	Office of the AGM, 132 KV GSS, Dhaligaon	5.14	5.28%	0.10	Installation of deep tube well at Dhaligaon GSS colony for Rs. 5,14,205/- debited under the head R&M of Road & Other Civil Works 74.492 crediting Contractor Control O&M 43.400. Date of Completion 31.10.2017. The said expenditure should have been booked as Asset under the head Plant & Pipe line for water supply in residential colony 10.320 and provided depreciation.
5	Office of the AGM, 132 KV GSS, Dhaligaon	14.26	5.28%	0.40	Installation of 3rd 25MVA transformer at 132KV Barnagar GSS at a cost of Rs. 14,25,616. The work was completed on 28.08.2017 and debited to R&M Plant & Machinery 74.151. The said expenditure should have been booked as asset under the head Transformers 10.501 and provided for depreciation.



SL NO	FIELD OFFICES	Assets Not Yet Capitalised (₹ In Lakhs)	Rate of Depreciation	Depreciation (₹ In Lakhs)	REMARKS
6	Office of the AGM, 132 KV GSS, Dhaligaon	16.3	3.34%	0.28	Construction of boundary wall at 132KV Dhaligaon GSS under Con. No. AEGCL/DGM/Bong/T&T Circle/T-4/2017/745 DB No. 250 dated 22.08.2017 at an expenditure of Rs. 16,30,456/- booked under R&M of Road & Other Civil Works 74.492. The expenditure should have been booked as asset under the head Other Civil Works 10.400 and provided for depreciation. Date of Completion Aug17.
7	Office of the AGM, UA T&T Division, Jorhat	4.79	5.28%	0.15	Purchase Hydraulic compressor machine for Rs. 4,78,560/ booked under O&M Material Purchases 22.202 and treated as revenue expenditure instead of considering capital expenditure. The expenditure should have been booked under Other Plant & Equipment 10.502. Invoice No. KTC/1043/17-18 . J.V date 27/07/2017.
8	Office of the AGM, 132 KV Gargaon GSS, Nazira	1.88	5.28%	0.08	Procurement of Hydraulic Compressor Machine 100MT capacity vide ZPC resolution No. 25 dated 16.12.2015 at a cost of Rs. 1,87,795 (including VAT) considered as O&M Material and debited to R&M Plant & Machinery. It should have been considered as Capital Material and thus capitalized under Other Plant & Equipment 10.502. Journal Voucher 07 dated 26.05.2017
9	Office of the AGM, 132 KV Gargaon GSS, Nazira	0.46	15.00%	0.05	Purchases of Lenovo 300 Series Desktop Computer at a cost of Rs. 46,142 debited to Liability for Supply of Materials 42.400 crediting Supplier's Control Capital 42.200. The expenditure should have been directly book under Computer & Accessories 10.905 and provide for depreciation. Journal Voucher 36 Dated 17.06.2017. Date of Supply 16.05.2017
10	Office of the AGM, 132 KV Dibrugath GSS	3.71	5.28%	0.17	132KV Current Transformer received from Tinsukia GSS vide STN No. 36 Dated 07.04.2017 of Rs. 3,71,346/- considered as O&M Material and booked under R&M of Plant & Machinery 74.151 instead of capitalization under 10.501. Journal Voucher Nos. 139 and 147 dated 10.07.2017



SL NO	FIELD OFFICES	Assets Not Yet Capitalised (₹ In Lakhs)	Rate of Depreciation	Depreciation (₹ In Lakhs)	REMARKS
11	Office of the AGM, 220 KV Tinsukia GSS	21.76	5.28%	0.06	Pending Rectification for AY 2016-17: As per HQ instruction Sub-Station reversed rectification for the following observation: Capital material issued to MMDT Sub Division for Rs. 21,76,969.38 vide MRS-18 No. 37 Dtd 23.02.2017 but credited to Material Issue (O&M). It should be credited to Material Issue Capital 22.301. Again entry for conversion into asset under Other Plant and Equipment 10.502
12	Office of the AGM, 220 KV Mariani GSS	1.88	5.28%	0.07	Procurement of Hydraulic Compressor Machine 100MT capacity at an expenditure of Rs. 188525/- considered as revenue expenditure and booked under Liability For Supply Of Materials (O&M) 43.100 instead of considering as capital expenditure and booked under Capital Material purchase 22.201 / Liability For Supply Of Materials (Capital) 42.100. On the other hand when asset issued to Sub Station it should have been converted to asset under Other Plant & Equipment 10.502.
13	Office of the AGM, T&T Division, Nagaon	9.78	5.28%	0.70	Loading, Unloading, Transportation, dragging, overhauling at site, installation and ready for commissioning of 132/33KV, 16MVA, GE make Transformer of Umrangsu, NEEPCO for commissioning at 132KV Umrangsu Sub-Station. Total expenses incurred Rs. 978472/- and booked under R&M of Plant & Machinery 74.151. Date of completion was 01.10.2016. The said Transformer was manufactured in the year 1982 and was put to use at NEEPCO Site in 1982. Clarification required regarding Original Cost of Asset and WDV as on 01.10.2016 and why the cost was not capitalised. As said expenditure in direct in the nature to bring the asset to the current location and Construction of New Sub-station. It should have been booked under Transformers 10.501.



SL NO	FIELD OFFICES	Assets Not Yet Capitalised (₹ In Lakhs)	Rate of Depreciation	Depreciation (₹ In Lakhs)	REMARKS
14	Office of the AGM, 220 KV GSS Depota	1.83	5.28%	0.07	Procurement of Hydraulic Compressor Machine 100MT capacity at an expenditure of Rs. 183750/- considered as revenue expenditure and booked under Material Purchase (O&M) 22.202 instead of considering as capital expenditure and booked under Capital Material purchase 22.201 / Liability For Supply Of Materials (Capital) 42.100. On the other hand when asset issued to Sub Station it should have been converted to asset under Other Plant & Equipment 10.502 instead of Repairs & Maintenance to Plant & Machinery 74.151.
15	Office of the AGM, T&T Division, North Lakhimpur	3.49	5.28%	0.12	Procurement of 9 Nos of Fire Extinguisher/Protection System at an expenditure of Rs.348577/- considered as revenue expenditure and booked under Material Purchase (O&M) 22.202 instead of considering as capital expenditure and booked under Capital Material purchase 22.201 / Liability For Supply Of Materials (Capital) 42.100. On the other hand when asset issued to Sub Station it should have been converted to asset under Other Plant & Equipment 10.502 instead of Repairs & Maintenance to Plant & Machinery 74.151.
Sub-Total (C)		109.6		3.53	
Grand Total		1658.28		142.52	



TABLE -4

(Part of Annexure - B of the Audit Report)

Statement showing instance where Capital Materials considered as O&M Materials and Charged in Profit and Loss A/c instead of Capitalisation

SL NO	FIELD OFFICES	AMOUNT (₹ In Lakhs)	REMARKS
1	Office of the AGM, 132KV GSS, Dhaligaon, Bongaigaon	1.86	Purchase of monster jaw size Clamp on Earth tester for Rs. 1,86,660/- on 25.05.2017 considered as Revenue expenditure and booked under O&M Material Purchase A/c 22.202. The said Expenditure should have been considered as capital expense and booked under Capital Material Purchase A/c 22.201.
2	Office of the AGM, UA T&T Division, Jorhat	4.78	Purchase Hydraulic compressor machine for Rs. 4,78,560/ booked under O&M Material Purchases 22.202 and treated as revenue expenditure instead of considering capital expenditure & booked under capital Material Purchase 22.201. The expenditure should have been booked under Other Plant & Equipment 10.502 when issued to Sub-station. Invoice No. KTC/1043/17-18. J.V date 27/07/2017.
3	Office of the AGM, 132KV GSS, Dibrugarh	3.71	132KV Current Transformer of value Rs. 3,71,346 received from 132KV GSS, Tinsukia vide MRS 386 on 20.05.2017 booked under Material Transferred Inward- O&M 22.402 instead of booking under Material Transferred Inward Capital 22.401. On the other hand any type of Transformers should be recorded as asset under the head Transformers 10.501 and provided for depreciation as per CWIP and Fixed Asset Manual 2014 and AS-10 PPE.
4	Office of the AGM, 220 KV Tinsukia GSS	21.76	Capital material issued to MMDT Sub Division for Rs. 21,76,969.38 vide MRS-18 No. 37 Dtd 23.02.2017 but credited to Material Issue (O&M). It should be credited to Material Issue Capital 22.301. Again entry for conversion into asset under Other Plant and Equipment 10.502
5	Office of the AGM, 220 KV GSS Depota	1.83	Procurement of Hydraulic Compressor Machine 100MT capacity at an expenditure of Rs. 183750/- considered as revenue expenditure and booked under Material Purchase (O&M) 22.202 instead of considering as capital expenditure and booked under Capital Material purchase 22.201 / Liability For Supply Of Materials (Capital) 42.100
6	Office of the AGM, T&T Division, North Lakhimpur	3.49	Procurement of 9 Nos of Fire Extinguisher/Protection System at an expenditure of Rs. 3,48,577/- considered as revenue expenditure and booked under Material Purchase (O&M) 22.202 instead of considering as capital expenditure and booked under Capital Material purchase 22.201 / Liability For Supply Of Materials (Capital) 42.100.
TOTAL		37.43	



**REPLY OF THE MANAGEMENT TO THE STATUTORY
AUDITOR'S REPORT ON THE ACCOUNTS OF ASSAM
ELECTRICITY GRID CORPORATION LTD. FOR THE YEAR
ENDED 31ST MARCH, 2018**

**REPLY OF THE MANAGEMENT TO ANNEXURE-D TO THE
INDEPENDENT AUDITORS' REPORT**

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
1	During the course of Audit we have observed that excess provision for Accrued Interest on Fixed Deposits amounting to ₹ 13.23/- Lacs has been made. Due to the said provisioning of accrued interest, profit as reflected in the Financial Statement relating to the FY 2017-18 has been overstated to that extent. Consequentially, the balance of "Interest Accrued but not due" as reflected under the "Other Current Assets" has also been overstated to that extend.	Rectification will be made in the FY 2018-19.
2	During the course of audit it was observed that additional provisioning for short booking of TDS Receivable from Income Tax Authorities was not done. Hence, Balance receivable from Income Tax Authorities was understated by ₹ 57.89 lakhs relating to F.Y.2017-2018.	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
3	No valid documentary evidence/supporting documents was produced relating to Capitalization of Interest amounting to ₹ 1,835/- Lacs during the course of Audit.	AEGCL's calculation sheet, Loan details, Asset details had been produced during the course of Audit and no more documentary evidence in respect of Interest Capitalization is available with AEGCL.

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
4	<p>During the course of audit we have observed that current year transmission charges include bills amounting to ₹ 562.01 relating to the period 2011-2017 accounted in 2017- 2018. As these bills relates to prior period, the Company should have accounted for the same as "Prior Period Charges" under the head "Other Expenses".</p>	<p>It is assumed that transmission charges are related to PGCIL, as it is not mentioned by the Statutory Auditor and the bill amounts to ₹ 562.04 Lacs instead of ₹ 562.01. Although the bills are related to the period 2011-2017, but these are received by AEGCL in the FY 2017-18 and accordingly payments are made and thus these expenses are incurred during the current year 2017-18. As there is no error due to omission or commission on part of AEGCL, as per AS-5, in the books of AEGCL the amount was considered in the FY 2017-18.</p>
5	<p>During the course of Audit we have observed that sales tax of ₹ 1.75 lacs for procuring materials have been wrongly booked under the head "Liability for Central Sales Tax" instead of debiting in the respective heads of Expenditure.</p>	<p>This has been rectified.</p>
6	<p>During the course of Audit we have observed that there are instances of delay in Capitalization of various Assets amounting to ₹ 1440.25 Lacs which have been completed in earlier F.Y, however, capitalized during FY 2016-17 and 2017-2018. Consequently, profit to the extent amounting to ₹ 134.15 Lacs has been overstated due to non-provision of depreciation on those Assts. Refer Part-A of Table-3 as annexed with the Report.</p>	<p>Capitalization has already been made and will be shown in the Annual Accounts for the FY 2018-19.</p>

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
7	<p>During the course of Audit we have observed that expenditure amounting to ₹ 108.43 Lacs booked under Capital Work In Progress although works gets completed during FY 2016- 2017 and 2017-2018. Consequently, profit to the extent amounting to ₹ 4.85 Lacs has been overstated due to non-provision of depreciation on those Assts. Refer Part-B of Table-3 annexed with the Report.</p>	<p>Capitalization has already been made and will be shown in the Annual Accounts for the FY 2018-19.</p>
8	<p>During the course of Audit we have observed that there are instances where expenditure amounting to ₹ 109.60 Lacs incurred for various work which are capital in nature, however those expenditures were considered as revenue expenditure and booked as Repair and Maintenance Expenditure. Consequentially, profit to the extent amounting to ₹ 3.53/- Lacs has been overstated due to non-provision of depreciation on those non capitalized Assets and also profit has been understated due to wrong classification of capital expenditure by ₹ 109.60 Lacs Refer Part-C of Table-3 annexed with the Report.</p> <p>Total profit overstated due to non-provision of depreciation amounts to ₹ 142.52 Lacs. Division / Field office wise details are given in Table – 3 attached with this Audit Report.</p>	<p>Furnished vide Annexure-1.</p>
9	<p>Balance confirmations relating to Creditors were not produced during the course of Audit for verification.</p>	<p>M/s. PGCIL, Suppliers and Contractors are the major Creditors of AEGCL. AEGCL have reconciliation statements with M/s. PGCIL at the end of every quarter and these are available with AEGCL and may be seen. AEGCL has a large number of Suppliers and Contractors spread all over the Assam and so it is not viable to have confirmation from all such creditors.</p>

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
10	During the course of Audit, copies of all the Title Deeds relating to Lands in the name of the company were not produced for verification. It is worthwhile to mention here that Title Deeds of Land value amounting to ₹ 2,207/- lakhs has been produced for verification out of the total Land value of ₹ 3,795/- lakhs as reflected in the Financial Statement.	Copies of Title Deeds relating to all lands acquired during the FY 2017-18 had been produced during the course of Audit. Some of the lands are related to ASEB periods. AEGCL is in the process of collecting the Title Deeds for the remaining lands.
11	During the course of our visit at T&T Division, Nagaon, AEGCL, we have observed that the company had incurred loss due to theft of material amounting to ₹ 99,518/- as per the FIR produced, however, in the Books of Account no provision for loss of material has been made.	Provision for loss will be made in the FY 2018-19.
12	During the course of our visit at various units of AEGCL, it was observed that "Capital Materials are considered as O&M Materials and charged to Profit and Loss A/c instead of Capitalization" relating to various works as Annexed in Table- 4 amounting to ₹ 37.43/- Lacs.	Furnished vide Annexure-2.
13	<p>During the course of our visit to various Field offices, Tally Data relating FY 2017-18 were not available. Moreover, procedure for taking regular back-up had also not been adhered to; else the same could have been recovered. Field Offices where we have observed such instances are as follows:-</p> <ol style="list-style-type: none"> a) Office of the DGM, T&T Circle, Dhaligaon, Bongaigaon b) Office of the AGM, 132 KV GSS, Dhaligaon, Bongaigaon c) Office of the DGM, UA T&T Circle, Jorhat d) Office of the AGM, UA T&T Division, Jorhat e) Office of the AGM, 132KV GSS, Chirakhundi f) Office of the AGM, 220KV GSS, Sarusajai g) Office of the AGM, T&C Division, Tezpur 	In these offices the Tally software got damaged due to some unavoidable technical problems and such offices are maintaining accounting records in Ms Excel. However, necessary steps have been initiated to repair the Tally software.


SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY																				
	h) Office of the AGM, 132KV GSS, Depota																					
14	<p>During the process of verification of Bank Reconciliation Statements at Field Offices, we have observed that there are <i>few Cheques pending for clearing since long and have become stale but no accounting entry for the same have passed</i>. Details of all such cheques are as follows :-</p> <table border="1"> <thead> <tr> <th>SL NO</th> <th>NAME OF FIELD OFFICES</th> <th>DATE</th> <th>CHEQUE NO</th> <th>AMOUNT</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>LA T & T Circle, Narangi</td> <td>20.12.2017</td> <td>287401</td> <td>600.00</td> </tr> <tr> <td>2</td> <td>220 KV GSS, Sarusajai</td> <td>04.12.2017</td> <td>520196</td> <td>1963.00</td> </tr> <tr> <td>3</td> <td>220 KV GSS, Sarusajai</td> <td>04.12.2017</td> <td>520197</td> <td>607.00</td> </tr> </tbody> </table>	SL NO	NAME OF FIELD OFFICES	DATE	CHEQUE NO	AMOUNT	1	LA T & T Circle, Narangi	20.12.2017	287401	600.00	2	220 KV GSS, Sarusajai	04.12.2017	520196	1963.00	3	220 KV GSS, Sarusajai	04.12.2017	520197	607.00	Sl. No. 1, 2, 3: Accounting for Stale cheque has already been made in the FY 2018-19.
SL NO	NAME OF FIELD OFFICES	DATE	CHEQUE NO	AMOUNT																		
1	LA T & T Circle, Narangi	20.12.2017	287401	600.00																		
2	220 KV GSS, Sarusajai	04.12.2017	520196	1963.00																		
3	220 KV GSS, Sarusajai	04.12.2017	520197	607.00																		
15.	<p>During the course of our visit to Tinsukia Grid Sub-Station it was observed that in the year 2014, there was 3 Nos of 132KV CT with ACC 200-400-800/1-1-1 of value ₹ 1, 85,673/- each, total ₹ 5, 57,019/- . In the same year 1 Nos of 132KV CT with ACC 200-400-800/1-1-1 was issued to 132 KV GSS, Dibrugarh. In the year 2015 another 2 Nos issued to Dibrugarh GSS, but omitted to be recorded in the books of accounts in FY 2015-16. The same had been recorded as issue in FY 2016-17. Therefore, Stock of the same should have been Zero. On an enquiry of Stock Verification Report 31.03.2017 reveals that there are 4 Nos. 132KV CT with ACC 200-400-800/1-1-1 available in Stock of Value ₹ 7, 42,692 (Refer SL 16 and SL 99 of PVR). It results in understatement of profit by same amount.</p> <p>As per PVR 2017-2018, there was no stock lying. ISTN 14, MAF 32 NO 36 dated 10.04.2017 reveals that 2 Nos 132KV CT with ACC 200-400-800/1-1-1 issued to Dibrugarh GSS value ₹ 3, 71,346/- and Journal entry passed for 4 Nos. of value ₹ 7, 42,692/- in the month of May 2017 and June 2017. On physical verification as on the date of audit, there is a 132KV CT with ACC 200-400-800/1-1-1 available at Tinsukia GSS. On verification of Priced Stock Ledger, GRS, ISTN and Gate Keeper Record it was revealed that only 3 Nos was purchased from 2014-2018.</p>	Rectification has already been made in the FY 2018-19.																				

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY																		
16	During the course of audit it was observed that expenses amounting to ₹ 59,352/- incurred against Imprest Cash having a balance of ₹ 59,352/- has not been charged against respective expenses in SLDC, Kahilipara. This results in overstatement of profit by ₹ 59,352/-.	The Imprest will be adjusted and necessary accounting entries will be made in the FY 2018-19.																		
17	Internal Audit Reports were not produced during the course of our visit to various Field offices, as explained by Accounts Officer/ Dy. Accounts Officers, Internal Audit was not been conducted for the FY 2017-18. We observed similar instance in all the field offices. The Company had one IA wing headed by Deputy General Manager (F&A Audit). However, neither the wing was properly manned nor any report of IA was made available to audit for verification. The Statutory Auditors in their reports on the annual accounts of the Company for the years 2015-16 to 2016-17 had repetitively commented that the IA system did not commensurate with the size and nature of the business of the Company. The aspect of not conducting any IA in 2010-11 was also pointed out (March 2012) by ADB Consultative Mission. The wing was reconstituted (October 2011) with one Assistant Manager (Audit) , two Accounts Officers, one Deputy Accounts Officer, one Accounts Trainee and two Article Clerks headed by Deputy General Manager (Audit). Out of 32 accounting units, No unit was audited for the FY 2017-2018 by IA wing. As a normal practice, complete Internal Audit Reports were not placed in Audit Committee meeting for discussion but only cases involving heavy monetary value were placed. However, copies of reports were forwarded to Managing Director and Chief General Manager (Finance & Accounts) of the Company. Further, it was observed that no Internal Audit reports were placed before the Board of Directors for discussion and necessary remedial action. Thus, in the absence of structured and well defined IA system, the important financial affairs and transactions of the Company mostly remained unverified and unchallenged. At present, there are two Accounts Officer and one Deputy Accounts Officer available for Internal Audit.	Necessary steps will be initiated to solve this problem.																		
18	<p>During the course of verification of various ROC Returns / Forms filed by the Company, we have observed delay filing of various Returns / Forms. Moreover, due to these delay filing Company had paid Additional Fees. Details of such Returns / Forms are as follows:-</p> <table border="1"> <thead> <tr> <th>Form No.</th> <th>Purpose</th> <th>Date of Appointment / Resolution</th> <th>Date of Filing</th> <th>Normal Fees</th> <th>Additional Fees</th> </tr> </thead> <tbody> <tr> <td>DIR-12</td> <td>Appointment & Cessation of Director</td> <td></td> <td>16-08-2017</td> <td>600.00</td> <td>1,200.00</td> </tr> <tr> <td>MGT-7</td> <td>Filing of Annual Return for FY 2014- 2015</td> <td></td> <td>30-01-2018</td> <td>600.00</td> <td>7,200.00</td> </tr> </tbody> </table>	Form No.	Purpose	Date of Appointment / Resolution	Date of Filing	Normal Fees	Additional Fees	DIR-12	Appointment & Cessation of Director		16-08-2017	600.00	1,200.00	MGT-7	Filing of Annual Return for FY 2014- 2015		30-01-2018	600.00	7,200.00	Since most of the Directors of the Company are Senior Officers of the Government of Assam, so there were some delay in obtaining the required documents for filing purpose. Further, the time
Form No.	Purpose	Date of Appointment / Resolution	Date of Filing	Normal Fees	Additional Fees															
DIR-12	Appointment & Cessation of Director		16-08-2017	600.00	1,200.00															
MGT-7	Filing of Annual Return for FY 2014- 2015		30-01-2018	600.00	7,200.00															

SL. NO.	STATUTORY AUDITOR'S OBSERVATION						MANAGEMENT'S REPLY
	AOC 4 -XBRL	Filing of Financial Statement for the FY ending 2016		20-11-2017	600.00	6,000.00	<p>difference between the date of Govt. Notification issued regarding appointment & cessation of any Directors and the date of Meeting of Board members for approval of such appointment and cessation was too vast due to which we could not file the necessary forms within due time and as a result we have to pay the additional fee for filing the same with the Registrar of Companies. Moreover, since the Annual Accounts are not ready by the time of AGM, it is placed in a deferred AGM after the due date. As such, there is delay in filing the necessary forms with the ROC.</p>
	MGT-14	Special Resolution		25-10-2017	600.00	1,200.00	
	TOTAL				2,400.00	15,600.00	
19	Fixed Assets Register has not been updated till 31.03.2018.						The process of updating the Fixed Assets Register is going on.
20	During the course of our visit to 132KV EHV Grid Sub Station, Bongaigaon, Dhaligaon, we observed that Stock value ₹ 2, 48,905.44 sealed in Gunni Bag due to dispute in receipt. Those materials cannot be utilized; however, the same has also been taken into PSL Stock. Moreover, Spare receipt against verbal order which is sealed in the Gunni Bag due to non- receipt of official order, however, the same are not taken into stock, value of stock amounts to ₹ 2,59,523.80.						The process of solving the problem is in progress.

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
21.	<p>During the course of our visit to 132KV EHV Grid Sub Station Chirakhundi, Rangia and 132KV EHV Grid Sub Station, Bongaigaon, Dhaligaon, we have observed many instances where relatively high Zirat compensation paid for crop damage. We have also observed some instances where huge amount paid as compensation for a Single Location for erection of tower. We are unable to draw a proper conclusion as proper information were not produced during the course of Audit. It is found that additional 8% establishment cost, 2% Contingency Cost, 30% compensation for additional cost estimated and fund demanded from HQ without any proper documents of beneficiary and it overrules the ADB Norms and LARR Act 2013. Refer Annexure-5A and 5B for Observations.</p> <p>a) House valuation is prepared by AEGCL, Technical Staff and verified by Circle Office. But Claim Statement from Beneficiaries are not available.</p> <p>b) Valuation has not been done on area basis. Gross valuation has been done for all areas. No Fair Market Valuation of Land, Building etc. has been obtained.</p> <p>c) Updated Valuation Report of Agriculture/ Forest Department for Crops, Trees has not been produced. Rate chart submitted pertain to the year 2013 for Trees, 2011 for Rubber.</p> <p>d) We observed many instances where Signature of Owner, Witnesses, Asstt Manager (Electrical), Deputy Manager (Accounts), DGM, Circle Officer are missing in documents i.e payment voucher, Compensation Register, Statement of Payments, Valuation & Verification Report (132KV Dhaligaon GSS)</p> <p>e) Payment made upto 3 times to same person on account of crops/ tree damages.</p>	Furnished vide Annexure-3 & 4.

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
22	During the course of our audit we have observed that amount received from LIC towards Group Insurance Scheme amounting to ₹ 87,733/- has been wrongly debited under the head "Amount received from LIC towards Group Insurance Scheme" instead of the correct head mentioned under the code 44.413.	The said amount has been transferred to the correct head and will be shown in the Annual Accounts for the FY 2018-19.
23	Accounting Policy relating to Taxes on Income (AS-22) has not been incorporated in the Financial Statement; hence, the same may suitably be incorporated in the Financial Statement. Further, the corporation may assess the disclosure requirement relating to Deferred Tax Assets/Deferred tax Liabilities, if any, in the Notes to Accounts.	Noted for future compliance.


 Deputy General Manager (F&A),
 AEGCL

ASSAM ELECTRICITY GRID CORPORATION LTD

ANNEXURE-1

Reply to Sl. No. 8 of Annexure-D to the Independent Auditor's Report:

Part-C, Table-3 : Capital Expenditure considered as Revenue Expenditure

Sl. No.	Field Offices	Assets Not Yet Capitalised (Rs. In Lakhs)	Reply of Field Offices
1	Office of the T&T Circle, Dhaligaon, Bongaigaon	1.76	The expenditures were mistakenly booked under the head of R&M to Buildings (74.251) instead of Other Buildings (10.204). Now it has been corrected and booked against the head of Other Buildings (10.204). The Journal Voucher showing the corrected journal entry has been attached with MTB for the month of April, 2018.
2	Office of the AGM, 132 KV GSS, Dhaligaon	8.07	The expenditure amounting to Rs. 8,06,993/- for "Installation of Deep Tube well and renovation of damaged water supply pipe line at 132/33 kV Joyma GSS, Gossaigaon" was booked under R&M to Roads & Other Civil Works (74.492) because the said work was carried out for repairing & maintenance of the existing water supply pipe line and the said work was not a further extension of the Asset. Therefore it was booked under R&M to Roads &

Sl. No.	Field Offices	Assets Not Yet Capitalised (Rs. In Lakhs)	Reply of Field Offices
			Other Civil Works (74.492) instead of Plant & Pipe line for water supply in residential colony (10.320).
3	Office of the AGM, 132 KV GSS, Dhaligaon	14.49	The expenditure amounting to Rs. 14,49,124/- for "Construction of hume pipe foundation at Loc No. 185 of 132 kV Rangia-Barnagar line" which was mistakenly booked under R&M to overhead lines (74.501) now rectified and booked as Asset under the head overhead lines (10.601).
4	Office of the AGM, 132 KV GSS, Dhaligaon	5.14	The expenditure amounting to Rs. 5,14,205/- for "Installation of deep tube well at Dhaligaon GSS colony " which was mistakenly booked under R&M to Roads & Other Civil Works (74.492) now rectified and booked as Asset under the head Miscellaneous Civil Works (10.402).
5	Office of the AGM, 132 KV GSS, Dhaligaon	14.26	The expenditure amounting to Rs. 14,25,616 for "Installation of 3 rd 25 MVA transformer at 132 kV Barnagar GSS" which was mistakenly booked under R&M to Plant & Machinery (74.151) now rectified and booked as Asset under the head

Sl. No.	Field Offices	Assets Not Yet Capitalised (Rs. In Lakhs)	Reply of Field Offices
			Transformers (10.501).
6	Office of the AGM, 132 KV GSS, Dhaligaon	16.3	The expenditure amounting to Rs. 16,30,456/- for "Construction of boundary wall at 132 kV Dhaligaon GSS" which was mistakenly booked under R&M to Roads & Other Civil Works (74.492) now rectified and booked as Asset under the head Other Civil Works (10.4)
7	Office of the AGM, UA T&T Division, Jorhat	4.79	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
8	Office of the AGM, 132 KV Gargaon GSS, Nazira	1.88	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
9	Office of the AGM, 132 KV Gargaon GSS, Nazira	0.46	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
10	Office of the AGM, 132 KV Dibrugarh GSS	3.71	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
11	Office of the AGM, 220 KV Tinsukia GSS	21.76	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
12	Office of the AGM, 220 KV Mariani GSS	1.88	This has already been rectified.
13	Office of the AGM, T&T Division,	9.78	Rectification will be made

Sl. No.	Field Offices	Assets Not Yet Capitalised (Rs. In Lakhs)	Reply of Field Offices
	Nagaon		in the FY 2018-19.
14	Office of the AGM, 220 KV GSS Depota	1.83	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
15	Office of the AGM, T&T Division, North Lakhimpur	3.49	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
	Sub-Total (C)	109.6	

ASSAM ELECTRICITY GRID CORPORATION LTD

ANNEXURE-2

Reply to Sl. No. 12 of Annexure-D to the Independent Auditor's Report:

Table-4 : Statement showing instance where Capital Materials considered as O&M Materials and Charged in Profit and Loss A/c instead of Capitalisation

Sl. No.	Field Offices	Amount (Rs. In Lakhs)	Reply of Field Offices
1	Office of the AGM, 132KV GSS, Dhaligaon, Bongaigaon	1.86	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
2	Office of the AGM,UA T&T Division, Jorhat	4.78	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
3	Office of the AGM, 132KV GSS, Dibrugarh	3.71	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
4	Office of the AGM, 220 KV Tinsukia GSS	21.76	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
5	Office of the AGM, 220 KV GSS Depota	1.83	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
6	Office of the AGM, T&T Division, North Lakhimpur	3.49	Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.
	Total	37.43	

ASSAM ELECTRICITY GRID CORPORATION LTD

ANNEXURE-3

Reply to Sl. No. 21 of Annexure-D to the Independent Auditor's Report:

Sl. No.	Statutory Auditor's Observation	Reply furnished by Assistant General Manager, 132 kV GSS, Chirakhundi, Rangia
21	<p>During the course of our visit to 132KV EHV Grid Sub Station Chirakhundi, Rangia and 132KV EHV Grid Sub Station, Bongaigaon, Dhaligaon, we have observed many instances where relatively high Zirat compensation paid for crop damage. We have also observed some instances where huge amount paid as compensation for a Single Location for erection of tower. We are unable to draw a proper conclusion as proper information were not produced during the course of Audit. It is found that additional 8% establishment cost, 2% Contingency Cost, 30% compensation for additional cost estimated and fund demanded from HQ without any proper documents of beneficiary and it overrules the ADB Norms and LARR Act 2013. Refer Annexure-5A and 5B for Observations.</p> <p>a) House valuation is prepared by AEGCL, Technical Staff and verified by Circle Office. But Claim Statement from Beneficiaries are not available.</p> <p>b) Valuation has not been done on area basis. Gross valuation has</p>	<p>8% Establishment cost is paid to the Circle Office or District Administration for their co-operation and assistance in various survey activities. The establishment cost is used for TA/DA and Conveyance of LR Staff, their stationery expenses etc., required for smooth running of the project. This also includes the revenue for the land acquired for tower footing. 2% Contingency Cost is earmarked for any contingency expenditures like inclusion of any new beneficiary previously over sighted, expenditures incurred for any miscellaneous expenses.</p> <p>a) Claim Statement from Beneficiaries are available at our field offices and may be seen.</p> <p>b) Valuation of land is done by Circle Officer and not by AEGCL authorities, as we are not authorized to determine land valuation. In case of house, the existing PWD rates at the time of valuation are used.</p>

Sl. No.	Statutory Auditor's Observation	Reply furnished by Assistant General Manager, 132 kV GSS, Chirakhundi, Rangia
	<p>been done for all areas. No Fair Market Valuation of Land, Building etc. has been obtained.</p> <p>c) Updated Valuation Report of Agriculture/ Forest Department for Crops, Trees has not been produced. Rate chart submitted pertain to the year 2013 for Trees, 2011 for Rubber.</p> <p>d) We observed many instances where Signature of Owner, Witnesses, Asstt Manager (Electrical), Deputy Manager (Accounts), DGM, Circle Officer are missing in documents i.e payment voucher, Compensation Register, Statement of Payments, Valuation & Verification Report (132KV Dhaligaon GSS)</p> <p>e) Payment made upto 3 times to same person on account of crops/ tree damages.</p>	<p>c) The District wise rate list for Crops and trees are available at office and may be seen. As the project started in the FY 2011-12 and the beneficiaries of that time were paid as per the prevailing rate chart and to maintain the uniformity the beneficiaries of later period were paid according to the same rate chart.</p> <p>d) The signature of every person is not obtained in each document to avoid procedural delay in payments. The notices are signed by owner. AEGCL representatives and Lat Mandal. Sometimes the LM signs on the summary of notices or the estimate only. The Circle Officer also signs either on the notices or the estimates. This varies for various Circle Offices and they decide the way as a Government Office.</p> <p>e) 27 metres corridor was determined at first for construction of the line, which was later on extended to 35 metres. Due to expansion of the 8 metres, double payments were required to be made at certain locations. Again in some cases, after stringing of the line, additional damages were reported due to movement of tractors, etc., for which additional payments were needed to be made to same person.</p>


ASSAM ELECTRICITY GRID CORPORATION LTD

ANNEXURE-4

Reply to Sl. No. 21 of Annexure-D to the Independent Auditor's Report:

Sl. No.	Statutory Auditor's Observation	Reply furnished by Assistant General Manager, 132 kV GSS, Division, AEGCL, Dhaligaon
21	<p>During the course of our visit to 132KV EHV Grid Sub Station Chirakhundi, Rangia and 132KV EHV Grid Sub Station, Bongaigaon, Dhaligaon, we have observed many instances where relatively high Zirat compensation paid for crop damage. We have also observed some instances where huge amount paid as compensation for a Single Location for erection of tower. We are unable to draw a proper conclusion as proper information were not produced during the course of Audit. It is found that additional 8% establishment cost, 2% Contingency Cost, 30% compensation for additional cost estimated and fund demanded from HQ without any proper documents of beneficiary and it overrules the ADB Norms and LARR Act 2013. Refer Annexure-5A and 5B for Observations.</p> <p style="padding-left: 40px;">a) House valuation is prepared by AEGCL, Technical Staff and verified by Circle Office. But Claim Statement from Beneficiaries are not</p>	<p>Zirat payment was made in proportion to the damages caused to the beneficiaries. Different beneficiary have different values of Zirat, which is decided after joint verification of AEGCL Authorities and Lat Mandal. Payment was made after proper verification of Circle Officer. Hence maintaining consonance in Zirat payment is not possible. Various miscellaneous expenses were incurred by Civil Authorities in the interest of the work including survey of Land, Zirat, House, etc., and hence, 8% establishment cost is demanded from the HQ to meet up the expenses. During the progress of the work various unforeseen emergency arise specially pecuniary affairs, hence to counter such emergencies an additional 2% Contingency Cost is demanded from the HQ.</p> <p style="padding-left: 40px;">a) The Statutory Auditor had not asked for the Claim Statement from Beneficiaries during the course of audit. But these are available at our field offices and may be seen.</p> <p style="padding-left: 40px;">b) Land valuation is as per rate fixed and approved by Circle</p>

Sl. No.	Statutory Auditor's Observation	Reply furnished by Assistant General Manager, 132 kV GSS, Division, AEGCL, Dhaligaon
	<p>available.</p> <p>b) Valuation has not been done on area basis. Gross valuation has been done for all areas. No Fair Market Valuation of Land, Building etc. has been obtained.</p> <p>c) Updated Valuation Report of Agriculture/ Forest Department for Crops, Trees has not been produced. Rate chart submitted pertain to the year 2013 for Trees, 2011 for Rubber.</p> <p>d) We observed many instances where Signature of Owner, Witnesses, Asstt Manager (Electrical), Deputy Manager (Accounts), DGM, Circle Officer are missing in documents i.e payment voucher, Compensation Register, Statement of Payments, Valuation & Verification Report (132KV Dhaligaon GSS)</p> <p>e) Payment made upto 3 times to same person on account of crops/ tree damages.</p>	<p>Officer & Lat Mandal of corresponding revenue village & the House valuation report had been prepared by the Civil wing of O/o the DGM, Bongaigaon, T&T Circle, AEGCL, Dhaligaon as per the PWD Schedule 2013-14. Signatures of the Lat Mandal, Circle Officer along with the AEGCL representatives are available at the Land/Zirat Compensation bill.</p> <p>c) The rate for the damaged Crops, Zirat has been provided by the Director of Agriculture, BTC, Kokrajhar vide Letter No. DA/BTC/K/Dev-4/2013-14/100 Dtd. 23/05/2013 and the payment has been made accordingly.</p> <p>d) The bill for the said instances as pointed by the Auditor have been duly verified by the AEGCL Authorities and the payment has been made after proper verification from Civil Authorities. The signature of the beneficiaries while receiving the payment (60% & 40%) have been recorded along with the photograph.</p> <p>e) Payment has been made for foundation, erection and stringing separately. The reason is the sufficient time gap between erection and stringing. This may lead to payment in</p>



Sl. No.	Statutory Auditor's Observation	Reply furnished by Assistant General Manager, 132 kV GSS, Division, AEGCL, Dhaligaon
		<p>multiple times. Other impediments to the stringing work such as weather constraints and various other factors have obviated the complete stringing of 6 (six) conductors at a time and hence while stringing the remaining conductors have resulted additional damages to the same beneficiaries. This may be another reason for multiple payments.</p>

**REPLY OF THE MANAGEMENT TO ANNEXURE-A TO THE
INDEPENDENT AUDITORS' REPORT**

SL. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
I)	a) The Fixed Asset Register of the Corporation is updated upto 31.03.2014 and no identifications are given to any asset as observed in the Fixed Asset Register maintained by the Company.	The process of updating the Fixed Asset Register is going on.
	b) Management had conducted physical verification of Fixed Assets during the FY 2015-16, however, discrepancies noticed during physical verification of Fixed Assets had not been properly dealt with in the Books of Accounts.	M/s. Price Water House Coopers, Kolkata had been engaged to physically verify the Fixed Assets and they had submitted their report in December, 2015 and a scrutiny on this report is in progress. After completion of the scrutiny, any discrepancy noticed may be adjusted in the Books of Accounts.
	c) Title Deeds relating to all Lands were not produced during the course of Audit for our verification. Title Deeds relating to Land value amounting to ₹ 22.07 Crores only were produced during the course of Audit. It is worthwhile to mention here that value of Land as per the Balance Sheet as on 31.03.2018 is ₹ 37.95 Crores.	Copies of Title Deeds relating to Lands added during the FY 2017-18 were produced during the course of Audit. Some of the lands are related to ASEB periods. AEGCL is in the process of collecting the Title Deeds for the remaining lands.
II)	a) Management had conducted physical verification of Inventories during the FY 2017-18, however, discrepancies noticed during physical verification of Inventories amounting ₹ 2.48 Crores had not been properly dealt with in the Books of Accounts.	This difference is in the process of reconciliation and necessary adjustments will be

Sl. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
		made in the Annual Accounts of the subsequent year.
III)	According to the information and explanations given to us and on the basis of our examination of the books of account, the Company has not granted any loans, secured or unsecured, to companies, firms, and limited liability partnership or other parties covered in the register maintained under Section 189 of the Companies Act, 2013. Consequently, the provisions of clauses iii (a) and iii (b) of the order are not applicable to the Corporation.	No Comments.
IV)	In our opinion and according to the information and explanations given to us, the company had neither given any loan or guarantee nor provide any security to director or any person to whom the directors are interested. Further, the Company had not made any investment. Therefore, the provisions of clause (iv) of Para 3 of the CARO 2016 are not applicable to the company.	No Comments.
V)	In our opinion and according to the information and explanation given to us, the company has not accepted any deposits from public. Therefore, the provisions of clause (v) of Para 3 of the CARO 2016 are not applicable to the company.	No Comments.
VI)	As informed to us, the Central Government has prescribed compulsory maintenance of cost records sub-section (1) of section 148 of the Companies Act, 2013 and the Company had maintained Cost Records relating to the FY 2017-18 as opined by the Cost Auditor in the Cost Audit Report.	No Comments.
VII)	<p>(a) According to information and explanations given to us and on the basis of our examination of the books of account, and records, the company is regular in depositing undisputed statutory dues including Provident Fund, Employees State Insurance, Income-Tax, Sales Tax, Duty of Customs, Duty of Excise, Value added Tax, Cess and any other statutory dues with the appropriate authorities except delay in payment of Service Tax and GST as detailed in Table – 2 & 2A of this Report.</p> <p>According to the information and explanations given to us, no undisputed amounts payable in respect of the above were in arrears as at March 31st, 2018 for a period of more than six months from the date on which they become payable.</p>	No Comments.
	(b) According to the information and explanations given to us there are no dues of sales tax, value added tax etc. which have not been deposited on account of any dispute.	No Comments.
VIII)	Company had defaulted in repayment of Loan taken from Government of Assam amounting to ₹ 39.59 Crores as Repayment Due as on 31.03.2018. Moreover, Company is having liability of ₹ 172.09 Crores being BST Charge Payable to Pension Trust as on 31.03.2018 as referred to in Note No. 5.2 of the Balance Sheet as on 31.03.2018.	No Comments.
IX)	According to the information and explanations given to us the company did not raise any moneys by way of initial public offer or further public offer including debt instruments. Theretofore, the provisions of clause (ix) of Para 3	No Comments.

Sl. NO.	STATUTORY AUDITOR'S OBSERVATION	MANAGEMENT'S REPLY
	of the CARO 2016 are not applicable to the company.	
X)	According to information and explanations given to us, no fraud by the Company or on the company by its officers or employees has been noticed or reported during the course of our audit.	No Comments.
XI)	As per the Notification dated 05.06.2015 issued by Ministry of Corporate Affairs the provisions of Section 197 relating to managerial remuneration shall not apply to a Government company. Therefore the provisions of clause (XI) of Para 3 of the CARO 2016 are not applicable to the Company.	No Comments.
XII)	In our opinion and according to information & explanations given to us, the company is not a Nidhi Company. Therefore, the provisions of clause (xii) of Para 3 of the Order are not applicable to the Company.	No Comments.
XIII)	According to information & explanations given to us and based on our examination of the records of the company, transactions with the related parties are in compliance with section 177 and 188 of Companies Act, 2013 where applicable and details of such transactions have been disclosed in the Financial Statements as required by the applicable accounting standards.	No Comments.
XIV)	According to information & explanations given to us and based on our examination of the records of the company, the company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year. Accordingly, the provisions of clause (xiv) of Para 3 of the Order are not applicable to the Company.	No Comments.
XV)	According to information & explanations given to us and based on our examination of the records of the company, the company has not entered into any non-cash transactions with directors or persons connected with him. Accordingly, the provisions of clause (xv) of Para 3 of the Order are not applicable to the Company.	No Comments.
XVI)	In our opinion, the company is not required to be registered under section 45 IA of the Reserve Bank of India Act, 1934 and accordingly, the provisions of clause (xvi) of Para 3 of the Order are not applicable to the Company.	No Comments.


 Deputy General Manager (F&A),
 AEGCL

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA
UNDER SECTION 143(6)(b) OF THE COMPANIES ACT, 2013 ON THE
FINANCIAL STATEMENTS OF ASSAM ELECTRICITY GRID CORPORATION
LIMITED FOR THE YEAR ENDED 31 MARCH 2018

The preparation of financial statements of **ASSAM ELECTRICITY GRID CORPORATION LIMITED**, for the year ended **31 March, 2018**, in accordance with the financial reporting framework prescribed under the Companies Act, 2013, is the responsibility of the management of the company. The statutory auditor, appointed by the Comptroller and Auditor General of India, under section 139(5) of the Act, is responsible for expressing opinion on the financial statements under section 143 of the Act, based on independent audit, in accordance with the standards on auditing prescribed under section 143(10) of the Act. This is stated to have been done by them, vide their Audit Report dated **17 August 2018**.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit, under section 143(6)(a) of the financial statements of **ASSAM ELECTRICITY GRID CORPORATION LIMITED**, for the year ended **31 March, 2018**. This supplementary audit has been carried out independently, without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records. Based on my supplementary audit, I would like to highlight the following significant matters under section 143(6)(b) of the Act, which have come to my attention and which, in my view, are necessary for enabling a better understanding of the financial statements and the related audit report:

A COMMENTS ON PROFITABILITY

1. Statement of Profit and Loss

Expenditure

Tax Expenses

Current Tax ₹ 94.80 crore

The Company, while making provisions for Minimum Alternate Tax (MAT) for the financial year 2017-18 did not deduct unabsorbed depreciation (₹ 430.23 crore) from the net profits (₹ 452.19 crore) for the year. Accordingly, the liability towards MAT for the year worked out to ₹ 8.80 crore instead of ₹ 94.80 crore provided by the Company. This resulted in excess provision of MAT and understatement of profit for the year with corresponding overstatement of current liabilities by ₹ 86 crore each.

2. STATEMENT OF PROFIT AND LOSS

INCOME

Other Income (Note-20):

Miscellaneous receipts: ₹186.76 crore

The above included ₹55.95 crore being surcharge on outstanding transmission bill preferred (April 2018) on Assam Power Distribution Company Limited (APDCL). The Company, while calculating surcharge receivable on bills outstanding during the current financial year, erroneously, included the bills (January, February and March 2018) which were served in March and April 2018. Further, a payment of ₹50 crore received from APDCL in April 2018 was wrongly taken as the payment received during the current financial year. Thus, due to erroneous calculation of bill outstanding during the current financial year, the Company booked surcharge bill of ₹55.95 crore instead of actual surcharge bill of ₹18.64 crore. This has resulted in overstatement of the above head and profit by ₹37.31 crore each with corresponding overstatement of 'Trade Receivables' by the same amount.

3. Statement of Profit and Loss

Expenditure

Employee Benefits Expense (Notes-21)

Salaries and wages ₹ 123.07 crore

The Board of Directors (BoD) of the Company while approving (December 2017) Revised Pay Rules, 2017 decided to implement the revised pay in the Company *w.e.f.* 1 April 2016. During the financial year 2017-18, out of the total arrear pay of ₹ 20.86 crore relating to the period April 2016 to November 2017, the company booked only ₹ 3.26 crore. This has resulted in understatement of the above head and 'Other Current Liabilities' by ₹ 17.60 crore each with corresponding overstatement of profit by the same amount.

4. Statement of Profit and Loss

Income

Revenue from Operation (Note-19) ₹ 1194.99 crore

As per the tariff order issued by AERC, the Company was entitled to levy Bulk Supply Tariff (BST) charges at the rate of 20 paise per unit on total energy transmitted to APDCL. The BST charges is to be utilised for maintaining pension fund for the employees of the

Company. During the year 2017-18, the Company transmitted 8573.55 MU of energy for which it was entitled for BST charges of ₹ 172.10 crore. Although, the company booked ₹ 172.10 crore under 'Other Expenses' as BST charges for transfer of fund to pension, it accounted ₹ 181.52 crore towards income on account of BST charges receivable from APDCL. Excess accounting of revenue resulted in overstatement of the above head and profit by ₹ 9.42 crore¹ each with corresponding overstatement of 'Trade Receivables' by the same amount.

5. Statement of Profit and Loss

Income

Other Income (Note-20)

Misc. Receipts ₹ 186.76 crore

(a) As per the provisions of tariff regulation² of Assam Electricity Regulatory Commission (AERC) the Company was required to calculate incentive/penalty for maintaining transmission availability on monthly basis. During the year 2017-18, the Company while accounting incentive bills considered transmission availability on annual basis. This resulted in overstatement of above head by ₹ 6.39 crore, being the difference between incentive accounted by the Company (₹ 12.10 crore) and incentive actually recoverable from APDCL (₹ 5.71 crore). This has also resulted in overstatement of Trade Receivables (Note-15) by ₹ 6.39 crore with corresponding overstatement of profit for the year to the same extent.

(b) The Company had not accounted credit of ₹ 0.54 crore allowed (November 2017) by Power Grid Corporation of India Limited on Short Term Open Access. This resulted in understatement of the above head by ₹ 0.54 crore with corresponding overstatement of 'Wheeling Charges Payable to PGCIL' under the head 'Trade Payable' by the same amount. As a result, the profit for the year was also understated by ₹ 0.54 crore.

6. Statement of Profit and Loss

Income

Other Income (Note-20)

Dividend NIL

The above did not include interim dividend of ₹ 2.14 crore approved (26 March 2018) and paid (2 April 2018) by North East Transmission Company Limited (NETCL) to the Company for the year 2017-18, against investment of ₹ 53.48 crore in the equity of NETCL. This has resulted in understatement of the above head and profit by ₹ 2.14 crore each with corresponding understatement of receivables by the same amount.

¹ ₹ 181.52 crore minus ₹ 172.10 crore

² As per the provisions Assam Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations 2015. the Company is entitled for incentive, if the Transmission Availability exceeds 98.5 per cent. On the other hand, the Company was liable for penalty, if the Transmission Availability falls below 98 per cent.

B. GENERAL

Reference is invited to the comments no. B (ii) of Comptroller & Auditor General of India on the accounts for the year 2016-17 regarding adoption of the depreciation rates by the Company (with effect from 2015-16) as specified in the Appendix to Assam Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) regulation 2006 as per Schedule II to the Companies Act, 2013 and non-adjustment of impact thereof in the books of accounts. The impact of the change in the rate of depreciation is still pending to be adjusted in the books of accounts of the Company.

**For and on the behalf of the
Comptroller and Auditor General of India**

Opasana

**Place: Guwahati
Dated: 29-11-2018**

Accountant General (Audit), Assam

ASSAM ELECTRICITY GRID CORPORATION LIMITED

REPLY OF THE MANAGEMENT TO THE COMMENTS OF THE
COMPTROLLER & AUDITOR GENERAL OF INDIA UNDER SECTION
143(6)(b) OF THE COMPANIES ACT, 2013 ON THE FINANCIAL
STATEMENTS OF ASSAM ELECTRICITY GRID CORPORATION
LIMITED FOR THE YEAR ENDED 31 ST MARCH, 2018.

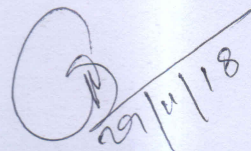
COMMENTS OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA	MANAGEMENTS REPLY
A. <u>COMMENT ON PROFITABILITY</u>	
<p>1. Statement of Profit and Loss Expenditure Tax Expenses Current Tax ₹ 94.80 crore</p> <p>The Company, while making provisions for Minimum Alternate Tax (MAT) for the financial year 2017-18 did not deduct unabsorbed depreciation (₹ 430.23 crore) from the net profits (₹ 452.19 crore) for the year. Accordingly, the liability towards MAT for the year worked out to ₹ 8.80 crore instead of ₹ 94.80 crore provided by the Company. This resulted in excess provision of MAT and understatement of profit for the year with corresponding overstatement of current liabilities by ₹ 86 crore each.</p>	<p>Brought forward losses/unabsorbed depreciation have been considered while calculating Minimum Alternate Tax (MAT), which has been worked out to Rs. 8.80 Crore and accordingly it was paid to the Income Tax department for the FY 2017-18.</p> <p>However, while calculating provision for MAT in the books of Accounts, same was not considered. Moreover, the provision for the Minimum Alternate Tax (MAT) in the books of Account does not affect the tax liability for the said year. However, reversal and adjustment of excess provision for the MAT will be made in the Books of Accounts for the FY 2018-19.</p>
<p>2. STATEMENT OF PROFIT AND LOSS INCOME Other Income (Note-20): Miscellaneous receipts: ₹186.76 crore</p>	

COMMENTS OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA	MANAGEMENTS REPLY
<p>The above included ₹55.95 crore being surcharge on outstanding transmission bill preferred (April 2018) on Assam Power Distribution Company Limited (APDCL). The Company, while calculating surcharge receivable on bills outstanding during the current financial year, erroneously, included the bills (January, February and March 2018) which were served in March and April 2018. Further, a payment of ₹50 crore received from APDCL in April 2018 was wrongly taken as the payment received during the current financial year. Thus, due to erroneous calculation of bill outstanding during the current financial year, the Company booked surcharge bill of ₹55.95 crore instead of actual surcharge bill of ₹18.64 crore. This has resulted in overstatement of the above head and profit by ₹37.31 crore each with corresponding overstatement of 'Trade Receivables' by the same amount.</p>	<p>Rectification has already been made and accordingly credit bill has been raised to APDCL & this will be shown in the Annual Accounts for the FY 2018-19.</p>
<p>3. Statement of Profit and Loss</p> <p>Expenditure</p> <p>Employee Benefits Expense</p> <p>(Notes-21)</p> <p>Salaries and wages ₹ 123.07 crore</p> <p>The Board of Directors (BoD) of the Company while approving (December 2017) Revised Pay Rules, 2017 decided to implement the revised pay in the Company <i>w.e.f.</i> 1 April 2016. During the financial year 2017-18, out of the total arrear pay of ₹ 20.86 crore relating to the period April 2016 to November 2017, the company booked only ₹ 3.26 crore. This has resulted in understatement of the above head and 'Other Current Liabilities' by ₹ 17.60 crore each with corresponding overstatement of profit by the same amount.</p>	<p>Accounting of arrear due to ROP has been made on payment basis. The arrear due to ROP amounting to Rs. 3.26 crore, which was paid during the FY 2017-18 had already been booked in the Annual Accounts for the FY 2017-18. Also, arrear due to ROP amounting to Rs.15.08 crore, which was paid during the FY 2018-19 (Rs. 9.18 crore in April, 2018 & Rs. 5.90 crore in July, 2018) had already been booked in the Accounts for the FY 2018-19. The remaining arrear due to ROP will be booked in the Accounts on payment basis. As the accounting of arrear due to ROP has automatically been</p>

COMMENTS OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA	MANAGEMENTS REPLY
	made as soon as these are paid, provision for arrear due to ROP had not been made in the Annual Accounts for the FY 2017-18.
<p>4. Statement of Profit and Loss Income Revenue from Operation (Note-19) ₹ 1194.99 crore</p> <p>As per the tariff order issued by AERC, the Company was entitled to levy Bulk Supply Tariff (BST) charges at the rate of 20 paise per unit on total energy transmitted to APDCL. The BST charges is to be utilised for maintaining pension fund for the employees of the Company. During the year 2017-18, the Company transmitted 8573.55 MU of energy for which it was entitled for BST charges of ₹ 172.10 crore. Although, the company booked ₹ 172.10 crore under 'Other Expenses' as BST charges for transfer of fund to pension, it accounted ₹ 181.52 crore towards income on account of BST charges receivable from APDCL. Excess accounting of revenue resulted in overstatement of the above head and profit by ₹ 9.42 crore¹ each with corresponding overstatement of 'Trade Receivables' by the same amount.</p>	<p>Rectification has already been made and accordingly credit bill has been raised to APDCL & this will be shown in the Annual Accounts for the FY 2018-19.</p>
<p>5. Statement of Profit and Loss Income Other Income (Note-20) Misc. Receipts ₹ 186.76 crore</p> <p>(a) As per the provisions of tariff regulation of Assam Electricity Regulatory Commission (AERC) the Company was required to calculate incentive/penalty for maintaining transmission availability on monthly basis. During the year 2017-18, the Company while accounting incentive bills considered transmission availability on annual basis. This resulted in overstatement of above head by ₹ 6.39 crore, being the difference between incentive accounted by the Company (₹ 12.10 crore) and incentive actually recoverable from APDCL (₹ 5.71 crore). This has also resulted in overstatement of Trade Receivables (Note-15) by ₹ 6.39 crore with corresponding overstatement of profit for the year</p>	<p>(a) Rectification has already been made and accordingly credit bill has been raised to APDCL & this will be shown in the Annual Accounts for the FY 2018-19.</p>

COMMENTS OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA	MANAGEMENTS REPLY
<p>to the same extent.</p> <p>(b) The Company had not accounted credit of ₹ 0.54 crore allowed (November 2017) by Power Grid Corporation of India Limited on Short Term Open Access. This resulted in understatement of the above head by ₹0.54 crore with corresponding overstatement of 'Wheeling Charges Payable to PGCIL' under the head 'Trade Payable' by the same amount. As a result, the profit for the year was also understated by ₹ 0.54 crore.</p>	<p>(b) Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.</p>
<p>6. Statement of Profit and Loss</p> <p>Income</p> <p>Other Income (Note-20)</p> <p>Dividend NIL</p> <p>The above did not include interim dividend of ₹ 2.14 crore approved (26 March 2018) and paid (2 April 2018) by North East Transmission Company Limited (NETCL) to the Company for the year 2017-18, against investment of ₹ 53.48 crore in the equity of NETCL. This has resulted in understatement of the above head and profit by ₹ 2.14 crore each with corresponding understatement of receivables by the same amount.</p>	<p>Rectification has already been made and will be shown in the Annual Accounts for the FY 2018-19.</p>
<p>B. GENERAL</p>	
<p>Reference is invited to the comments no. B (ii) of Comptroller & Auditor General of India on the accounts for the year 2016-17 regarding adoption of the depreciation rates by the Company (with effect from 2015-16) as specified in the Appendix to Assam Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) regulation 2006 as per Schedule II to the Companies Act, 2013 and non-adjustment of impact thereof in the books of accounts. The impact of the change in the rate of depreciation is still pending to be adjusted in the books of accounts of the Company.</p>	<p>Up to the FY 2014-15, AEGCL had prepared its Financial Statements in accordance with 'Companies Act 1956'. But as 'Companies Act 2013' was mandatory from the FY 2015-16, AEGCL had prepared its Financial Statements in accordance with the relevant presentational requirements of the 'Companies Act 2013'</p>

COMMENTS OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA	MANAGEMENTS REPLY
	from the FY 2015-16 onwards. As per Part 'B' of Schedule II of 'Companies Act 2013' depreciation had been provided at the rates specified in the Appendix to Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations. As AEGCL had not changed its Accounting Policies, in the preparation of Financial Statements retrospective affect had not been provided.

Handwritten signature and date: 29/4/18

Deputy General Manager (F&A),
Assam Electricity Grid Corporation Limited,
Bijulee Bhawan, Guwahati-781 001.

Before
Assam Electricity Regulatory Commission

**Petition for
Multi Year Tariff for FY 2019-20 to FY
2021-22**



State Load Despatch Centre, Assam
Kahilipara, Guwahati - 781 019



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**1 EXECUTIVE SUMMARY****1.1 Preamble**

The Hon'ble Commission vide order dated 19th March 2018 had directed AEGCL to file separate Aggregate Revenue Requirement petition for SLDC from the next Control Period onwards. Hence in accordance to the aforesaid directive, a separate ARR petition is being filed for SLDC. Excerpts of AERC directive is reproduced below for ready reference

“The Commission directs SLDC to complete the process of segregation of accounts of SLDC from SLDC, in order to file separate Aggregate Revenue Requirement Petition for the next Control Period.”

This Section summarizes the petition for Multi Year Tariff Determination of FY 2019-20 to FY 2021 22 of Assam State Load Dispatch Center. (SLDC)

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

As per AERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018, SLDC has presented Multi Year Tariff Determination for FY 2019-20 to FY 2021-22. The summary of Projected ARR for first control period is shown in the table below:

Table 1: Summary of Projected ARR for FY 2019-20 to FY 2021-22**(Rs. Crs.)**

S.N	Particulars	Annual Revenue Requirement		
		FY 19-20	FY 20-21	FY 21-22
1	O&M Expenses	6.33	7.61	9.16
A	Employee Cost	4.64	5.92	7.55
B	R&M Expenses	0.48	0.48	0.49
C	A&G Expenses	1.21	1.22	1.12
D	Training Expenses	0.25	0.00	0.00
2	Depreciation	0.03	0.12	0.16
3	Interest & Finance Charges	0.09	0.13	0.25
4	Interest on Working Capital	0.29	0.35	0.42
5	Return on Equity	0.01	0.05	0.14
6	Less: Non-Tariff Income/ Other Income	(0.85)	(0.89)	(0.93)
7	Aggregate Revenue Requirement	6.15	7.37	9.20
8	Net Aggregate Revenue Requirement	6.15	7.37	9.20



2 INTRODUCTION

2.1 Assam SLDC

The **State Load Despatch Centre (SLDC)** is the apex body constituted vide Section 31 of the Indian Electricity Act - 2003 (Central Act No. 36 of 2003) and complies with the directions stipulated in Section 33 to ensure integrated operation of the power system in the state of Assam. *SLDC, ASSAM* was established in the year 1983 is located at Kahilipara, Guwahati. SLDC, Assam is presently being operated by the state transmission utility of Assam i.e. Assam Electricity Grid Corporation Ltd. (SLDC).

The responsibility of SLDC as enshrined in the statute includes:

1. Monitor & operate the state grid of Assam on real time basis through optimum scheduling & despatch in secure and economic ways, and in accordance with the provisions of Indian Electricity Grid Code (IEGC) and State Grid Code.
2. Supervise and Control the intra-state transmission system.
3. Keep account of the quantity of electricity transmitted through the state grid including the energy exchanged through Power Exchange entities, and bi-lateral trading through Open Access system.
4. SLDC has to control and schedule all the grid substations under SLDC by maintaining their loads within safe limits so as to balance the drawal with the schedule provided by NERLDC.
5. SLDC has to provide backing down instruction to APGCL as and when required.
6. Comply with the operational guide-lines of NERLDC for overall system stability and security.
7. SLDC implements the orders/directives from NERLDC, Shillong and other statutory bodies.
8. SLDC is the nodal agency for RPO compliance monitoring for all the obligated entities in Assam namely the open access customers, The captive power producers and Discom of the state.
9. Outage planning of the of the SLDC grid.



10. Preparation of Load Generation Balance Report (LGBR) and submission to NERPC.
11. Preparation of daily power position reports of the Assam grid.
12. Ensure compliance of regulations of Hon'ble' CERC and AERC.

2.2 Approach for filing the petition

- a) The Hon'ble Commission notified that AERC (Terms and Conditions for determination of MYT) Regulations, 2018 (*hereinafter to be referred as MYT Regulations 2018*) which were applicable for tariff period upto 31st March 2022.
- b) The Hon'ble Commission vide order dated 19th March 2018 had directed AEGCL to file separate Aggregate Revenue Requirement petition for SLDC from the next Control Period onwards. Hence in accordance to the aforesaid directive, a separate ARR petition is being filed for SLDC. Excerpts of AERC directive is reproduced below for ready reference.

"The Commission directs SLDC 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."

- c) Since annual accounts of SLDC is included in annual accounts of AEGCL till FY 17-18 and with unavailability of separate accounts of SLDC, the projection for the MYT Control period has been carried out with the limited available data from audited account of AEGCL and certain assumptions.
- d) As per the provisions of the MYT Regulations, 2018, SLDC is filing the Multi Year Petition for the first control period i.e. FY 2019-20 to FY 2021-22.

2.3 Provision of Law

- a) The Hon'ble Commission has notified the MYT Regulations, 2015. The scope of this regulation included tariff determination for transmission licensee under Multi Year Tariff principle. From FY 2016-17 onwards, MYT Regulations, 2015 are applicable, hence True Up Petition for FY 2017-18 and APR for FY 2018-19 are prepared as per the provisions of MYT Regulations, 2015. The relevant extract of the MYT Regulations 2015 is reproduced below for ready reference.



3. Object, Scope of Regulations and Extent of Application

3.1. *The object of these Regulations is to specify the terms and conditions for the determination of tariffs by the Assam Electricity Regulatory Commission for the supply of electricity by a generating company to a distribution licensee, for transmission of electricity, for wheeling of electricity and for retail sale of electricity, and SLDC.*

3.2 *The Commission in specifying these Regulations is guided by the principles contained in Sections 61 and 62 of the Act, the National Electricity Policy, 2005 and the Tariff Policy, 2006 notified by the Central Government under Section 3 of the Act.*

3.3 *The Commission shall determine tariff, including terms and conditions thereof, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:-*

- (i) Supply of electricity by a Generating Company to a Distribution Licensee;*
- (ii) Intra-State transmission of electricity;*
- (iii) Wheeling Business for Distribution of electricity;*
- (iv) Retail Supply Business of electricity;*
- (v) State Load Dispatch Centre;*

Provided that the Commission shall determine such tariff, having regard to the terms and conditions contained in Chapter 6,7, 8, 9 & 10 of these Regulations for applications under this Regulation for determination of tariff, for generation, transmission, distribution Wheeling Business and retail supply business and SLDC:

Provided further that the Commission, while determining tariff upon an application made to it under this Regulation, shall also have regard to the terms and conditions of tariff as may be specified by the State Commission of such other State and/or the terms and conditions of tariff as may be specified by the Central Commission where any of the Parties to such transaction come under the jurisdiction of such State Commission or of the Central Commission.

3.4 *Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff if such tariff has been determined through a transparent*



process of bidding in accordance with the guidelines issued by the Central Government.

- b) The provisions for filing Multi Year Tariff petitions during the control period from FY 2019-20 to FY 2021-22 are defined in the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018. The relevant para of the regulation is reproduced below:

3 Object, Scope of Regulations and Extent of Application

3.1 *The objective of these Regulations is to specify the terms and conditions for the determination of tariffs by the Assam Electricity Regulatory Commission for the supply of electricity by a generating company to a distribution licensee, for transmission of electricity, for wheeling of electricity and for retail sale of electricity, and SLDC.*

3.2 *The Commission in specifying these Regulations is guided by the principles contained in Sections 61 and 62 of the Act, the National Electricity Policy, 2005 and the Tariff Policy, 2016 notified by the Central Government under Section 3 of the Act.*

3.3 *The Commission shall determine tariff, including terms and conditions thereof, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:-*

- (i) Supply of electricity by a Generating Company to a Distribution Licensee;*
- (ii) Intra-State transmission of electricity;*
- (iii) Wheeling Business for Distribution of electricity;*
- (iv) Retail Supply Business of electricity;*
- (v) State Load Dispatch Centre;*

Provided that the Commission shall determine such tariff, having regard to the terms and conditions contained in Chapter 6,7, 8, 9 & 10 of these Regulations for applications under this Regulation for determination of tariff, for generation, transmission, distribution Wheeling Business and retail supply business and SLDC:

Provided further that the Commission, while determining tariff upon an application made to it under this Regulation, shall also have regard to the terms



and conditions of tariff as may be specified by the State Commission of such other State and/or the terms and conditions of tariff as may be specified by the Central Commission where any of the Parties to such transaction come under the jurisdiction of such State Commission or of the Central Commission.

3.4 *Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government.*

Multi-Year Tariff Framework

4.1 *The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), (iv) and (v) of Regulation 3.3 above under a Multi-Year Tariff framework with effect from 1st April 2019.*

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

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.
- c) Accordingly, SLDC has prepared the Multi Year Tariff Petition for FY 2019-20 to FY 2021-22. SLDC is submitting the above petition along with specified data formats as provided in Annexure: I for approval of Hon'ble Commission.

2.4 Petition Structure

The True Up, APR and MYT Tariff Petition included the following Chapters:

S.N.	Section	Contents
1	Section 1	Executive summary of Petition
2	Section 2	Introduction and overall approach to filling the Petition
3	Section 3	Multi Year Tariff Petition for FY 2019 – 20 to FY 2021 – 22
4	Section 4	Prayers to the Hon'ble Commission



3 AGGREGATE REVENUE REQUIREMENT FOR FY 2019-20 TO FY 2021-22

3.1 Preamble

This section deals with the determination of Aggregate Revenue Requirement of SLDC for the year 2019-20 to 2021-22 based on the projections made for the current year over the previous year i.e. FY 2018-19.

3.2 Aggregate Revenue Requirement for FY 2019-20 to FY 2021-22

Aggregate Revenue Requirement shall comprise of following components:

- a) Return on Equity Capital;
- b) Interest on Loan Capital;
- c) Depreciation;
- d) Operation and Maintenance expenses;
- e) Interest on working capital.

Less:

- g) Non-tariff income;

3.3 Principles of ARR for FY 2019-20 to FY 2021-22

It is essential that all the costs are allowed so as to ensure the financial viability of SLDC. It requires generating adequate amount of profit from its operations so that it can maintain the state grid properly and simultaneously it can take up R&M tasks to maintain and upgrade its software and equipments. Also needs to incur capital expenditure to cater to the future needs of the system.

In the circumstances and conditions mentioned above, the Aggregate Revenue Requirement as proposed by SLDC in this petition shall be allowed.

3.4 Capital Expenditure and Capitalization for FY 2019-20 to FY 2021-22

As per Regulation 6 of AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018, SLDC shall submit a Capital Investment Plan for the entire Control Period, as part of the MYT Petition.

The scheme-wise capital expenditure along with funding pattern of SLDC for the Control Period 2019-20 to 2021-22 and the Year wise details of expenses capitalized are as follows:



3.4.1 Requirement of Dyna Roof for Rooftop Solar Installations on SLDC office

SLDC submits that the consumption of power in the office building during the day time is very high, which makes them ideally suited to solar power where electricity is generated only during daytime. Installing rooftop solar panels to generate solar energy for SLDC building is a great way to take cares about the environment and minimizing its carbon footprints. Solar system can be set up on for lighting, AC and other usage that can help the SLDC to move away from solely relying on grid electricity and thus reducing electricity bills of the office. Rooftop solar can at least meet a substantial percentage of office building electricity requirement at least during day hours.

Further, there is sufficient space for setting up of solar panel at the rooftop of the SLDC building. To make it more effective, Dyna roof over the slab of SLDC office building is required for providing of installation of solar panel as well as to prevent roof leakage. Dyna Roof is being used by structural specialists because of its durability, energy efficiency and corrosion free qualities.

Taking into account the advantages of energy security, cost-effective, minimal maintenance, flexible configurations and moreover as an initiative for adoption of solar rooftop, SLDC submits that roof truss with Dyna roof over the roof slab of SLDC office building is required for installation of solar panel to generate at least 35 KW of power for office requirement. Moreover SLDC believes that this step shall serve as.

Estimated Cost: Rs 70 Lakhs

Capital Expenditure tenure: FY 2019-20 to FY 2021-22

Funding Pattern: 70% Debt (GoA Loan) 30% Equity

3.4.2 Requirement of new building at SLDC campus

SLDC submits that the present situation of SLDC office building doesn't have basic amenities and facilities which is required for regular day to day activities at office. SLDC proposes the requirement of a multi storey building comprising of a Seminar Hall with fully media equipped with LCD projector and HD sound system for various meetings and conference, presentation, skill development program, etc., Library for employee to have a vibrant role in the development of a knowledge, culture that promotes wider reading and motivate employees to enhance their



information literacy skills, Gymnasium to keep the employee physically and mentally fit.

Estimated Cost: Rs. 3 Crs.

Capital Expenditure tenure: FY 2019-20 to FY 2021-22

Funding Pattern: 70% Debt (GoA Loan) 30% Equity

3.4.3 Mandatory civil works in existing buildings of SLDC

SLDC submits that the current condition of office building requires renovation and maintenance as condition of few rooms and cabins are in dilapidated state and are deteriorating continuously due to lack of maintenance which requires high annual maintenance along with painting and masonry construction works. Therefore, SLDC request Hon'ble Commission to approve the cost for civil works in the present office building.

Estimated Cost: Rs. 20.56 Lakhs.

Capital Expenditure tenure: FY 19-20

Funding Pattern: 70% Debt (GoA Loan) 30% Equity

3.4.4 Provision for lines, cable, networks, etc.

Currently, SLDC is fed power from 132 KV Kahilipara GSS through their 250KVA transformer which is getting over loaded due to which SLDC has to go through power cut sometimes. Therefore, for regular and uninterrupted power supply, SLDC proposes for the creation of a 33/0.4 kV Sub-station for dedicated power supply to SLDC which requires new lines, cables, networks, etc. However the same shall be finalized after holding discussions with APDCL.

Estimated Cost: Rs. 50 Lakhs.

Capital Expenditure tenure: FY 2019-20 to FY 2020-21

Funding Pattern: 70% Debt (GoA Loan) 30% Equity

3.4.5 Procurement of furniture and fixtures

SLDC submits that the few old furniture of SLDC office requires replacement with new ones as recommended under ergonomics by FOR. Having a modern office with contemporary furniture also reflects SLDC's growing and financial stability towards clients and others. Also, modern office furniture can boost employee morale and make the SLDC office a good place to work.



Estimated Cost: Rs. 6 Lakhs.

Capital Expenditure tenure: FY 19-20 to FY 20-21

Funding Pattern: 70% Debt (GoA Loan) 30% Equity

Provision for office equipment

SLDC submits that on account of impending rapid recruitment which shall result in increase of SLDC employee count from 21 Nos to 47 Nos, shall result in requirement of office equipment. The current office equipment such as laptops, printers and other accessories are very less in number which reduces the effectiveness of work. Therefore, SLDC proposes for 5 nos. of laptop and 5 nos. of desktop with printers and necessary accessories for Finance, HR, Administrative and for scheduling and accounting of Open Access along with SAMAST works. Also, 5 nos. of new ACs for AGM and above shall be required.

Estimated Cost: Rs. 3 Lakhs.

Capital Expenditure tenure: FY 19-20

Funding Pattern: 70% Debt (GoA Loan) 30% Equity

Table 2: Summary of Capital Expenditure

Particulars	Projected Capital Expenditure			Total Capex
	FY 2019-20	FY 2020-21	FY 2021-22	
Land	-	-	-	-
Building	90.00	90.00	120.00	300.00
Hydraulic	-	-	-	-
Other Civil Works	55.56	35.00	-	90.56
Plant & Machinery	-	-	-	-
Lines & Cable Network	25.00	25.00	-	50.00
Vehicles	-	-	-	-
Furniture & Fixtures	2.00	2.00	2.00	6.00
Office Equipment	3.00	-	-	3.00
Total Capex (Rs. Lakhs.)	175.56	152.00	122.00	449.56

**Table 3: Summary of Capital Expenditure**

(Rs. Lakhs)

Particulars	Projected Capitalisation			Total Capex
	FY 2019-20	FY 2020-21	FY 2021-22	
Land	-	-	-	-
Building	-	-	300.00	300.00
Hydraulic	-	-	-	-
Other Civil Works	55.56	35.00	-	90.56
Plant & Machinery	-	-	-	-
Lines & Cable Network	-	50.00	-	50.00
Vehicles	-	-	-	-
Furniture & Fixtures	2.00	2.00	2.00	6.00
Office Equipment	3.00	-	-	3.00
Total Capitalisation (Rs. Lakhs.)	60.56	87.00	302.00	449.56

3.5 Funding of Capital Expenditure and Capitalization for FY 2019-20 to FY 2021-22

3.5.1 The funding of above mentioned Capital Expenditure is envisaged through various sources categorized under headings Equity, Grant, and Loan. The expenditure projected for FY 2019-20 to 2021-22 are proposed to be funded through equity, loan and if required grant as per funding patterns of the schemes.

Table 4: Funding of Capitalisation for FY 2019-20 to FY 2021-22

(Rs.Crores)

S.N.	Particulars	Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Grant	-	-	-
2	Equity	0.182	0.261	0.906
3	Debt	0.424	0.609	2.114
4	Total Capitalisation	0.606	0.870	3.020

3.6 Operation and Maintenance Expenses for FY 2019-20 to FY 2021-22

The Operation & Maintenance (O&M) expenses consists of Repair and Maintenance Expenses, Employee Expenses and Administration & General Expenses. Regulation 66.9 & 66.10 of AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 provides for computation of O&M norms. The relevant provisions are reproduced below:



“Regulation 68.9 (Operation and Maintenance Expenses): The O&M expenses for the nth year and also for the year immediately preceding the Control Period shall be approved based on the formula given below:-

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

Where –

O&M_n – Operation and Maintenance expense for the nth year;

EMP_n – Employee Costs for the nth year;

R&M_n – Repair and Maintenance Costs for the nth year;

A&G_n – Administrative and General Costs for the nth year;

Regulation 68.10 (Operation and Maintenance Expenses): The above components shall be computed in the manner specified below:

$$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI \text{ inflation})$$

$$R\&M_n = K \times (GFA_{n-1}) \times (WPI \text{ inflation}) \text{ and}$$

$$A\&G_n = (A\&G_{n-1}) \times (WPI \text{ inflation}) + \text{Provision}$$

Where -

EMP_{n-1} – Employee Costs for the (n-1)th year;

A&G_{n-1} – Administrative and General Costs for the (n-1)th year;

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission.

‘K’ is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee’s filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-a-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;

WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;

GFA_{n-1} --- Gross Fixed Asset of the transmission licensee for the n-1th year;

G_n is a growth factor for the nth year. Value of G_n shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee’s filings, benchmarking, and any other factor that the Commission feels appropriate”



3.6.1 WPI & CPI Inflation for the Control Period

WPI Inflation computation for Control Period (FY 2019-20 to FY 2021-22)

The average increase in the Wholesale Price Index (WPI) for immediately preceding three years gives the WPI Inflation 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 WPI Inflation is considered for computational purpose throughout the control period. Tabulations as follows:

Table 5 : WPI Inflation for Control Period

Fiscal	WPI Index	YOY Change %
FY 2017-18	114.90	2.96%
FY 2016-17	111.60	1.73%
FY 2015-16	109.70	-3.69%
FY 2014-15	113.90	
Average WPI Inflation (Last 3 Yrs)		0.33%

CPI Inflation computation for Control Period (FY 2019-20 to FY 2021-22)

The average increase in the Consumer Price Index (CPI) for immediately preceding three years gives the CPI Inflation for 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 CPI Inflation is considered for computational purpose throughout the control period. Tabulations as follows:

Table 6: CPI Inflation for Control Period

Fiscal	CPI Index	YOY Change %
FY 2017-18	284.42	3.08%
FY 2016-17	275.92	4.12%
FY 2015-16	265.00	5.65%
FY 2014-15	250.83	
Average CPI Inflation (Last 3 Yrs)		4.28%

3.6.2 Normative Calculation of R&M expense for the control period

Repairs & maintenance expenses are directly related to number of the substation and lines, age of the assets, its wear and tear during the period. R&M expenses are generally incurred in order to ensure the maintenance of the transmission lines/systems.



Regulation 66.10 of AERC (MYT Regulations), 2018 provides the manner in which components of O&M expenses shall be computed. The methodology for R&M expense is as follows:

$$R\&M_n = K \times (GFA_{n-1}) \times (WPI_{inflation})$$

Table 7 : Repair and Maintenance Expenses for FY 2019-20 to FY 2021-22

Normative R&M Expense (Rs. Crs.)		FY 2019-20	FY 2020-21	FY 2021-22
1	Opening GFA for previous year	5.01	5.01	5.61
2	Closing GFA for previous year	5.01	5.61	6.48
3	Average GFA for previous year	5.01	5.31	6.05
4	K Factor	1.00%	1.00%	1.00%
5	WPI Inflation	0.33%	0.33%	0.33%
6	Normative R&M Expense	0.05	0.05	0.06
7	AMC Cost of SCADA/EMS	0.33	0.33	0.33
8	Additional R&M Expenses on account of Separation of SLDC	0.10	0.10	0.10
9	Net Normative R&M Expense	0.48	0.48	0.49

AMC cost of SCADA / EMS has been transferred from AEGCL Accounts to SLDC from Control period onwards.

K Factor for Control Period

AERC (MYT Regulations), 2018 provides for computation of K factor:

“K” is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee’s filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-a-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission”.

As per the above quoted computation methodology of AERC (MYT Regulations), 2018, K factor shall be determined through the approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past. The ‘K factor’ for SLDC has been considered inline to the prevailing ‘K factor’ of current control period. SLDC requests the Hon’ble Commission to approve the proposed Repair and Maintenance expenses for FY 2019-20 to 2021-22 without any disallowance.



3.6.3 Normative Calculation of Employee expense for FY 2017-18

Employee expenses include salaries, bonus, other benefits like medical expense reimbursement, LTA, etc. and terminal benefits in the form of pension, gratuity, leave encashment, staff welfare etc.

Regulation 66.10 of AERC (MYT Regulations), 2018 provides the manner in which components of O&M expenses shall be computed. The methodology for Employee expense is as follows:

$$EMP_n = (EMP_{n-1}) \times (1 + G_n) \times (CPI_{inflation})$$

Table 8: Employee Expenses for FY 2019-20 to FY 2021-22

Normative Employee Expense (Rs. Cr.)		FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
1	Base Employee Cost (n-1)	2.03	2.85	3.64	4.64	5.92
2	CPI Inflation	5.35%	4.28%	4.28%	4.28%	4.28%
3	Gn (Growth Factor for nth Year)	22.31%	22.31%	22.31%	22.31%	22.31%
4	Normative Employee Cost for FY 17-18 (Excl. ROP)	2.62				
5.	Impact of Revision of Pay	0.24				
6.	Normative Employee Cost for the year (Incl. Revision of Pay)	2.85	3.64	4.64	5.92	7.55

The Base employee cost of FY 18-19 has been computed considering the employee cost on account of Revision of Pay. The same is highlighted in the above projection table.

Shortage of Employee and Gn Factor Computation for Control Period

SLDC submits that as per AERC directions to AEGCL to take steps towards ring fencing and parallelly keeping in mind that SLDC continues to discharge the functions and duties in an efficient and effective manner, there arises need for recruitment of employees as current employee strength is very less as compared to work load.

SLDC further submits that it directly affects the efficiency and effectiveness of Load Dispatch Center. In view of above, SLDC propose to hire 26 new employees for technical, accounts and HR department including 1 DGM as currently, only 21



employees are working under SLDC including 1 DGM. Details for existing employees and requirement of new employee are furnished below:

TECHNICAL EMPLOYEES

1. DGM OPERATION

a) AGM SYSTEM OPERATION

Requirement of AGM: **1 No** (team leader) System Operation in 3 shifts with 5 groups having 2 AM/DM & 1 JM in each group. **Total= 10 AM/DM & 5 JM**, where one group will remain spare/standby for training /replacement.

Another sub-group of **2 AM/DM & 1 JM** is required for Operational Planning, Merit Order, Strategy, Outage co- ordination, ADMS, MIS, Energy Efficiency, System studies with ATC & TTC, system reliability co-ordination, documentation, data reporting etc.

b) AGM (REGULATORY AFFAIRS)

Requirement of AGM; **1 No** (team leader) along with **2 AM/DM & 1 JM** for all regulatory affairs.

c) AGM (MARKET OPERATION)

Requirement of AGM: **1 No** (team leader) along with **3 AM /DM& 1 JM** for Tariff, LDC Fees & Charges, Govt. Policy, Petition, Hearing, Reponses, Feedback to ERCs., Open Access, Market Analysis, Market Surveillance, Renewable Energy, RPO- Monitoring & Implementation, Scheduling & Forecasting, Energy Accounting, DSM, Reactive Accounting, etc.

2. DGM LOGISTICS

a) AGM (METERING AND TELEMETRY)

Requirement of AGM: **1 No** (team leader) along with **2 AM/DM & 1 JM** for "SAMAST" Implementation, Metering Design, Data Acquisition System, Online Database Development Maintenance, Energy Management System, Metering Data Collection, Validation & Processing Settlement Etc.

b) AGM (IT)

Requirement of AGM: **1 No** (team leader) along with **2 AM/DM & 1 JM** for Logistics (IT & Communication), System Logistics, SCADA (Hardware &



Software), IT Software Development, IT System Maintenance, Applied R&D, liaisoning with software developer for its customization, Communication System, SLDC website maintenance & development, Internet Knowledge Portal Etc.

ACCOUNTS EMPLOYEES

Currently, **3 accounts** personnel are working under SLDC. In order to manage all the accounts related activities after separation of SLDC, **another 3 employees** shall be required.

HUMAN RESOURCE EMPLOYEES

At present there is no HR wing present in SLDC. In order to manage all the human resource related affairs of SLDC after separation of SLDC including training, leaves and other HR activities, HR wing at SLDC shall be required.

Hence it is evident that SLDC has been facing acute shortage of manpower. Thus, in similar lines to AEGCL, SLDC too shall be carrying out recruitment in phased manner to bridge the gap between actual required employee strength and working strength. For the computation purpose, the actual requirement of 47 nos of employees is considered. The growth factor is computed through CAGR methodology

	End of FY 17-18	End of FY 21-22
Employee Strength	21	47
Gn (Growth Factor)		22.31%

SLDC firmly submits that by taking Gn factor (21.31%) into cognizance, the projected employee expenses shall be credible in reflecting the employee cost of SLDC for the control period.

The Petitioner humbly requests the Hon'ble Commission to approve the proposed employee expenses for FY 2019-20 to 2021-22 without any disallowance.

3.6.4 Normative Calculation of A & G Expenses for FY 2017-18

Regulation 66.10 of AERC (MYT Regulations), 2018 provides the manner in which components of O&M expenses shall be computed. The methodology for Administrative and General Expenses is as follows:



$(A\&G_{n-1}) \times (WPI \text{ inflation}) + Provision$

Table 9: Administration & General Expenses for FY 2019-20 to FY 2021-22

	Normative A&G Expense (Rs. Crs.)	FY 18-19	FY 19-20	FY 20-21	FY 21-22
1	A&G Expense for Previous year	0.41	0.81	0.81	0.82
2	WPI Inflation	0.33%	0.33%	0.33%	0.33%
3	Provision	0	0	0	0
4	Additional A&G Expenses on account of Separation of SLDC	0.40			
5	Normative A&G Expense	0.81	0.81	0.82	0.82
6	Additional A&G Expenses only for Control Period		0.4	0.4	0.3
7	Total A&G Expense		1.21	1.22	1.12

SLDC humbly submits that the upcoming control period shall witness additional A&G expenses under on account of segregation of SLDC from AEGCL. The A&G cost was projected for the first year of Control period taking into consideration all possible expenses under A&G head. The same is reproduced below for reference purpose:

S.No.	Particulars	FY 19-20
1	Insurance	10,00,000
2	Telephone, Postage, Telegram & Telex Charges	2,76,000
3	Incentive & Award to Employees/Outsiders	3,20,000
4	Other Professional Charges	20,000
5	Conveyance and Travelling	10,00,000
6	Security / Service Charges Paid to Outside Agencies	10,20,000
7	Fee and Subscriptions Books and Periodicals	50,000
8	Printing and Stationery	1,00,000
9	Electricity Charges to Offices	36,00,000
10	Entertainment Charges	2,00,000
11	Miscellaneous Expenses	6,00,000
12	Purchase Related Advertisement Expenses	30,000
	Total A&G Expenses for SLDC	82,16,000

It is observed that the estimation is in-line to the Normative A&G expenses after including *Additional A&G expense on account of separation of SLDC from AEGCL of Rs. 40 Lakh*. Thus SLDC requests the Hon'ble Commission to approve the proposed A&G expenses for the FY 2019-20 to 2021-22 without any disallowance.



Additional A&G Expenses only for this Control Period

In addition to the above, SLDC humbly submits that the following A&G expenses shall be incurred only during this control period, on account of ring fencing. AERC may kindly approve Rs. 1 Cr. for engaging consultants during the control period to carry out asset evaluation of SLDC as the same was not done earlier, Web site upgradation and maintenance, Scheduling and accounting of open access software.

SLDC kindly submits that the same may be approved by AERC at actuals during the truing up of respective year and the same being one time cost, shall not fall under sharing mechanism.

3.6.5 Training and Capacity Building of SLDC Employees

SLDC states that the power sector is undergoing a paradigm shift and new technologies with updates are being adopted on continuous basis to improve operational efficiency. These technologies are posing different challenges for power sector, which need to overcome well within time so as to have effective operational benefits.

SLDC submits that on account of technological changes, training of manpower is required in order to achieve operational effectiveness along with the accident free workplace. It is pertinent to mention that for awareness of new technology and adapting better working condition to reduce accident and mis happening, SLDC proposes to conduct technology and safety training workshops at regular intervals.

It can be seen that rigorous training at different transmission company carried out in regular interval, which is effective and necessary for the employees. Technical training on “Grid Security”, “SCADA Pro Level Programs” shall be required to SLDC employees.

Therefore, SLDC would like to invest in educating and enhancing the employees through various workshops and for conducting workshops activities, estimated cost shall be Rs. 25 Lakhs for FY 2019-20.

The Summary of projected O&M Expense for the control period is as follows

**Table 10: Operation and Maintenance Expenses - FY 2019-20 to FY 2021-22**

(Rs.Crs.)

S.N.	Particulars	MYT Projection		
		FY 19-20	FY 20-21	FY 21-22
1	Employee Cost	4.64	5.92	7.55
2	Repair & Maintenance	0.48	0.48	0.49
3	Administrative & General Expenses	1.21	1.22	1.12
4	Training and Capacity Building	0.25	0.00	0.00
5	Total	6.33	7.61	9.16

3.6.6 SLDC requests the Hon'ble Commission to approve the normative O&M Expenses as shown in the above table.

3.7 Depreciation for FY 2019-20 to FY 2021-22

Depreciation has been computed as per AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2018 for the FYs 2019-20, 2020-21 & 2021-22. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the provisional capitalization. The addition of assets during the FYs 2019-20, 2020-21 & 2021-22 have been projected considering capital expenditure plan for FYs 2019-20 to 2021-22. The Closing Gross Block of Fixed Assets for the FY 2018-19 has been considered as the opening balance of assets in the beginning of the FY 2019-20. As specified in Regulation 33 [(33.2) & (33.4)] of AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2015, depreciation is calculated as per SLM considering depreciation on opening Fixed Asset to the extent of 90% of the Asset Value. Depreciation on the Assets added during the FYs has been calculated for 180 days assuming the date of commission of the Assets as middle of the Financial Year. Depreciation has been provided at the rates specified in the AERC's Depreciation Rate Schedule. The Depreciation of assets created through Grant has been reduced before arriving at Net depreciation.

Grants received from GoA in the upcoming control period towards total investment of the project is being accounted for in compliance with Accounting Standard (AS) 12 notified by Ministry of Corporate Affairs (MCA) and accordingly depreciation has been provided on those assets at the rates prescribed by the Regulation of AERC. Year wise details of Fixed Assets and Depreciation are tabulated in the table below.

**Table 11: Depreciation for FY 2019-20****(Rs. Crs.)**

Sr. No.	Particulars	Depreciation Rate	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year
1	Land	0.00%	-	-	-
2	Building	3.34%	0.31	-	0.31
3	Hydraulic	5.28%	-	-	-
4	Other Civil Works	3.34%	-	-	-
5	Plant & Machinery	5.28%	2.60	0.12	2.72
6	Lines & Cable Network	5.28%	-	-	-
7	Vehicles	9.50%	-	-	-
8	Furniture & Fixtures	6.33%	0.01	0.00	0.01
9	Office Equipment	6.33%	0.03	0.00	0.03
	Total		2.94	0.12	3.07

Table 12: Depreciation for FY 2020-21**(Rs. Crs.)**

Sr. No.	Particulars	Depreciation Rate	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year
1	Land	0.00%	-	-	-
2	Building	3.34%	0.31	-	0.31
3	Hydraulic	5.28%	-	-	-
4	Other Civil Works	3.34%	-	0.02	0.02
5	Plant & Machinery	5.28%	2.72	0.24	2.96
6	Lines & Cable Network	5.28%	-	0.01	0.01
7	Vehicles	9.50%	-	-	-
8	Furniture & Fixtures	6.33%	0.01	0.00	0.01
9	Office Equipment	6.33%	0.03	0.00	0.03
	Total		3.07	0.29	3.36

Table 13: Depreciation for FY 2021-22**(Rs. Crs.)**

Sr. No.	Particulars	Depreciation Rate	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year
1	Land	0.00%	-	-	-
2	Building	3.34%	0.31	-	0.31
3	Hydraulic	5.28%	-	-	-



4	Other Civil Works	3.34%	0.02	0.03	0.05
5	Plant & Machinery	5.28%	2.96	0.24	3.20
6	Lines & Cable Network	5.28%	0.01	0.03	0.04
7	Vehicles	9.50%	-	-	-
8	Furniture & Fixtures	6.33%	0.01	0.00	0.01
9	Office Equipment	6.33%	0.03	0.00	0.04
	Total		3.36	0.31	3.66

3.8 Interest and Finance Charges for FY 2019-20 to FY 2021-22

3.8.1 Interest on Loan

The interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. Further, the projected capital expenditure and the funding of the same also have a major bearing on the long-term interest expenditure.

The interest on the loans has been computed @10.00% on the Govt. Loans, 10.50% on Govt. Loans taken from Financial Institutions. The Interest and Finance Charges for FYs 2019-20 to 2021-22 are tabulated in Table below.

Table 14: Interest and Finance Charges for FY 2019-20

(Rs. Crs.)

S.No.	Particulars	Projections		
		FY 19-20	FY 20-21	FY 21-22
1	Net Normative Opening Loan	0.52	0.91	1.40
2	Addition of normative loan during the year	0.42	0.61	2.11
3	Normative Repayment during the year	0.03	0.12	0.16
4	Net Normative Closing Loan	0.91	1.40	3.35
5	Interest Rate	9.49%	9.49%	9.58%
6	Interest Expenses on Loan	0.068	0.110	0.228
7	Finance Charges	0.02	0.02	0.02
8	Total Interest and Finance Charges	0.09	0.13	0.25

3.9 Interest on Working Capital for FY 2019-20 to FY 2021-22

The interest on working capital has been calculated based on the normative working formula by the Hon'ble Commission in its Terms & Conditions for determination of Multi Year Tariff Regulations, 2018.



The rate of interest provided on the working capital is the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (one year tenor) prevalent during last available six months for the determination of tariff.

Table 15: Interest on working capital for FY 2019-20 to FY 2021-22

(Rs. Crs.)

S.No.	Particulars	Units	FY 19-20	FY 20-21	FY 21-22
1	O&M expenses for 1 month	Rs. Crore	0.53	0.64	0.76
2	Maintenance spares @ 15% of O&M	Rs. Crore	0.95	1.14	1.38
3	Receivables for two months	Rs. Crore	1.03	1.23	1.54
4	Total Working Capital	Rs. Crore	2.51	3.01	3.67
5	Rate of Interest	%	11.50%	11.50%	11.50%
6	Interest on Working Capital	Rs. Crore	0.29	0.35	0.42

3.10 Return on Equity for FY 2019-20 to FY 2021-22

As specified in Regulation 33 of AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2018, Return on Equity is calculated @ 15.50 %.

The Return on Equity has been computed @15.50% on closing balance of equity based upon the opening balance of equity and normative additions during the years. Return on Equity is computed as shown in the table below:

SLDC requests the Hon'ble Commission to approve the Reasonable Rate of return on Equity for FY 2019-20 to FY 2021-22.

Table 16: Return on Equity for FY 2019-20 to FY 2021-22

S.No.	Particulars	Units	FY 19-20	FY 20-21	FY 21-22
1	Equity (Opening Balance)	Rs. Crore	-	0.18	0.44
2	Net additions during the year	Rs. Crore	0.18	0.26	0.91
3	Less: Reduction during the year	Rs. Crore			
4	Equity (Closing Balance)	Rs. Crore	0.18	0.44	1.35
5	Average Equity	Rs. Crore	0.09	0.31	0.90
6	Rate of Return on Equity	%	15.50%	15.50%	15.50%
7	Return on Equity	Rs. Crore	0.01	0.05	0.14

**3.11 Other Costs and Bad Debts for FY 2019-20 to FY 2021-22**

SLDC submits that other costs and bad debts has not been considered in estimated ARR and reserves the right to claim the same at the time of true-up of the respective financial year in the next petition.

3.12 Taxes for FY 2019-20 to FY 2021-22

As per AERC (terms & conditions for determination of Multi Year Tariff) 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.

3.13 Non-Tariff Income for FY 2019-20 to FY 2021-22

As per the AERC (terms & conditions for determination of Multi Year Tariff) Regulations, 2018, the amount of non-tariff income as approved by the Commission shall be deducted from the aggregate revenue requirement in determining annual transmission charges of the Transmission Licensee.

The income in this category comprises of income from investments with Banks & miscellaneous receipts. Year wise details of Non-tariff Income are shown in the table below.

Table 17: Non-Tariff Income for FY 2019-20 to 2021-22**(Rs. Crs.)**

S.No.	Particulars	FY 19-20	FY 20-21	FY 21-22
1	Other Non-Tariff Income			
2	Open Access Application Fees	0.09	0.09	0.10
3	SLDC Charges paid by IEX	0.76	0.80	0.84
	Total	0.85	0.89	0.93

SLDC submits to the Honorable Commission to consider the above charges and approve it without any disallowance.

**3.14 Aggregate Revenue Requirement for FY 2019-20 to FY 2021-22**

Based on the category-wise expense as described above, the Aggregate Revenue Requirement during FY 2019-20 to 2021-22 for SLDC has been determined

**Table 18: Annual Revenue Requirement for SLDC for Control Period
(Rs. Crs.)**

S. No.	Particulars	Annual Revenue Requirement		
		FY 19-20	FY 20-21	FY 21-22
1	O&M Expenses	6.33	7.61	9.16
A	Employee Cost	4.64	5.92	7.55
B	R&M Expenses	0.48	0.48	0.49
C	A&G Expenses	1.21	1.22	1.12
D	Training Expenses	0.25	0.00	0.00
2	Depreciation	0.03	0.12	0.16
3	Interest & Finance Charges	0.09	0.13	0.25
4	Interest on Working Capital	0.29	0.35	0.42
5	Return on Equity	0.01	0.05	0.14
6	Less: Non-Tariff Income/ Other Income	(0.85)	(0.89)	(0.93)
7	Aggregate Revenue Requirement	6.15	7.37	9.20
8	Net Aggregate Revenue Requirement	6.15	7.37	9.20

Determination of Tariff

For Determination of Tariff, the existing peak load of FY 18-19 of 1809 MW is escalated by 10% for arriving at peak load of FY 19-20. Similar escalation of 10% in peak load is considered throughout the control period.

Particulars	FY 19-20	FY 20-21	FY 21-22
Net Annual Revenue Requirement	6.15	7.37	9.20
Peak Demand MW	1,990	2,189	2,408
SLDC Charge (Rs./MW/Day)	84.69	92.30	104.67

SLDC requests the Hon'ble Commission to approve the Aggregate Revenue Requirement and the SLDC charge for FY 2019-20 to 2021-22 without any disallowances.



4 PRAYERS TO THE HON'BLE COMMISSION

1. The present petition provides, SLDC's approach for formulating the proposed tariff for ensuing year, the broad basis for projections used, summary of the proposals being made to the Hon'ble Commission.
2. In order to align the thoughts and principles behind the Tariff Proposal and the ARR, AEGCL on behalf of SLDC respectfully seeks an opportunity to present their case prior to the finalization of the Tariff Order. SLDC believes that such an approach would go a long way towards providing a fair opportunity to all the stakeholders including SLDC and may eliminate the need for a review or clarification.
3. AEGCL on behalf of SLDC may also be permitted to propose suitable changes to the ARR and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission.
4. In view of the above, the Petitioner respectfully prays that Hon'ble Commission may:
 - Accept the Annual Revenue Requirements and Tariff proposal for Transmission Business respectively in accordance with:
 - The guidelines outlined in previous AERC Orders passed in various matters relating to SLDC; and
 - The principles contained in AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations 2018;
 - To admit the MYT Petition as per the provisions of the AERC (MYT) Regulations 2018 and consider present Petition for further proceedings before Hon'ble Commission;
 - To approve the total recovery of Aggregate Revenue Requirement and revenue gap for FY 2019-20 to FY 2021-22 along with other claims as proposed by SLDC;
 - To allow the ARR based on assumptions wherever considered, till the segregation of accounts of SLDC is carried out.
 - To grant any other relief as the Hon'ble Commission may consider appropriate;
 - To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;
 - To condone any error/omission and to give opportunity to rectify the same;
 - To permit SLDC to make further submissions, addition and alteration to this Petition as may be necessary from time to time;

**REGULATORY
FORMATS
SLDC**

S. No.	Particulars	Form No.
1	Profit and Loss Account	
2	Balance Sheet	
3	Cash flow Statement	
4	Aggregate Revenue Requirement Summary	F1
5	Transmission Losses	F2a
6	Transmission Availability	F2b
7	PGCIL Charges	F29
8	Repair & Maintenance Expenses	F18
9	Employee Expenses	F19
10	Employee Strength	F19a
11	Administration and General Expenses	F20
12	Bulk Supply Tariff (BST)	
13	Fixed Assets & Depreciation	F21
14	Interest & Finance Charges	F22
15	Working Capital Requirements	F25
16	Income Tax Provision	F28
17	Other Debits	
18	Statement of Equity	F23
19	Details of Non-Tariff Income	F26
20	Details of Expenses Capitalised	F24
21	Consumer Contributions & Grants towards cost of capital Assets	F21a
22	Statement of Work in progress	F17
23	Investment Plan	F4
24	Actual Transmission Works	F4a
25	Breakup of Construction/Supply/Service Packages	F9
26	Details of element wise cost of the project	F9a
27	Calculation of weighted average rate of interest on actual loan	F12a
28	Calculation of normative loans	F12b

Annual Revenue Requirement for SLDC for Control Period FY 19 Form - F1
Rs.Crs.

S. No.	Particulars	ARR Projection		
		FY 19-20	FY 20-21	FY 21-22
1	O&M Expenses	6.33	7.61	9.16
a	Employee Cost	4.64	5.92	7.55
b	R&M Expenses	0.48	0.48	0.49
c	A&G Expenses	1.21	1.22	1.12
d	Training Expenses	0.25	0.00	0.00
2	Depreciation	0.03	0.12	0.16
3	Interest & Finance Charges	0.09	0.13	0.25
4	Interest on Working Capital	0.29	0.35	0.42
5	Return on Equity	0.01	0.05	0.14
6	Less: Non-Tariff Income/ Other Income	(0.85)	(0.89)	(0.93)
7	Aggregate Revenue Requirement	6.15	7.37	9.20
8	Net Aggregate Revenue Requirement	6.15	7.37	9.20

Work In Progress

S.No.	Particulars	FY 19-20	FY 20-21	FY 21-22
		Ensuing Year		
		AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Opening balance	-	1.15	1.80
	Add:			
2	i) Capital expenditure	1.76	1.52	1.22
	Less :Capitalisation	0.61	0.87	3.02
	Closing Balance	1.15	1.80	-

A&G Expenses**Form - F20**

S.No.	Particulars	Projection (Rs. Crs.)		
		FY 19-20	FY 20-21	FY 21-22
1	A&G Expenses	1.21	1.22	1.12
	Total	1.21	1.22	1.12

R&M Expenses**Form - F18**

S.No.	Particulars	Projection (Rs. Crs.)		
		FY 19-20	FY 20-21	FY 21-22
1	R&M Expenses	0.48	0.48	0.49
	Total	0.48	0.48	0.49

Employee Expenses**Form - F19**

S.No.	Particulars	Projection (Rs. Crs.)		
		FY 19-20	FY 20-21	FY 21-22
1	Employee Expenses	4.64	5.92	7.55
	Total	4.64	5.92	7.55

Break-Up of SLDC Charges

Sl No.	Particulars	Ensuing Year		
		FY 19-20	FY 20-21	FY 21-22
1	Employee Cost	4.64	5.92	7.55
2	Repair & Maintenance	0.48	0.48	0.49
3	Administrative & General Expenses	1.21	1.22	1.12
4	Training & Capacity Building	0.25		
	Total	6.58	7.61	9.16

Form S: Assets & Depreciation

(A) Gross Fixed Assets

(Rs. Crore)

Sr. No.	Particulars	FY 2017-18				FY 2018-19				FY 2019-20			
		Actual				Estimated				Projected			
		Balance at the beginning of the year	Additions during year	Retirement of assets during year	Balance at the end of the year	Balance at the beginning of the year	Additions during year	Retirement of assets during year	Balance at the end of the year	Balance at the beginning of the year	Additions during year	Retirement of assets during year	Balance at the end of the year
1	Land	-	-	-	-	-	-	-	-	-	-	-	
2	Building	0.35	-	-	0.35	0.35	-	-	0.35	0.35	-	0.35	
3	Hydraulic	-	-	-	-	-	-	-	-	-	-	-	
4	Other Civil Works	-	-	-	-	-	-	-	-	0.56	-	0.56	
5	Plant & Machinery	4.58	0.02	-	4.59	4.59	-	-	4.59	4.59	-	4.59	
6	Lines & Cable Network	-	-	-	-	-	-	-	-	-	-	-	
7	Vehicles	-	-	-	-	-	-	-	-	-	-	-	
8	Furniture & Fixtures	0.02	-	-	0.02	0.02	-	-	0.02	0.02	0.02	0.06	
9	Office Equipment	0.03	0.01	-	0.05	0.05	0.0003	-	0.05	0.05	0.03	0.08	
	Total	4.98	0.03	-	5.01	5.01	0.0003	-	5.01	5.01	0.61	-	

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21				FY 2021-22			
		Projected				Projected			
		Balance at the beginning of the year	Additions during year	Retirement of assets during year	Balance at the end of the year	Balance at the beginning of the year	Additions during year	Retirement of assets during year	Balance at the end of the year
1	Land	-	-	-	-	-	-	-	
2	Building	0.35	-	-	0.35	0.35	3.00	-	3.35
3	Hydraulic	-	-	-	-	-	-	-	-
4	Other Civil Works	0.56	0.35	-	0.91	0.91	-	-	0.91
5	Plant & Machinery	4.59	-	-	4.59	4.59	-	-	4.59
6	Lines & Cable Network	-	0.50	-	0.50	0.50	-	-	0.50
7	Vehicles	-	-	-	-	-	-	-	-
8	Furniture & Fixtures	0.04	0.02	-	0.06	0.06	0.02	-	0.08
9	Office Equipment	0.08	-	-	0.08	0.08	-	-	0.08
	Total	5.61	0.87	-	6.48	6.48	3.02	-	9.50

Form 5: Assets & Depreciation

(B) Depreciation

Sr. No.	Particulars	FY 2017-18						FY 2018-19			FY 2019-20		
		Actual						Actual			Estimated		
		Depreciation rate	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Accumulated depreciation at the end of the year		
1	Land	0.00%	-	-	-	-	-	-	-	-	-	-	
2	Building	3.34%	0.31	-	0.31	0.31	-	0.31	-	0.31	-	0.31	
3	Hydraulic	5.28%	-	-	-	-	-	-	-	-	-	-	
4	Other Civil Works	3.34%	-	-	-	-	-	-	-	-	-	-	
5	Plant & Machinery	5.28%	2.02	0.29	2.31	2.31	0.29	2.60	-	2.60	0.12	2.72	
6	Lines & Cable Network	5.28%	-	-	-	-	-	-	-	-	-	-	
7	Vehicles	9.50%	-	-	-	-	-	-	-	-	-	-	
8	Furniture & Fixtures	6.33%	0.00	0.00/14	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	
9	Office Equipment	6.33%	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.03	0.00	0.03	
	Total		2.36	0.29	2.65	2.65	0.29	2.94	2.94	2.94	0.12	3.07	

Sr. No.	Particulars	FY 2020-21			FY 2021-22		
		Accumulated depreciation at the beginning of the year	Projected		Accumulated depreciation at the beginning of the year	Projected	
			Additions during the year	Accumulated depreciation at the end of the year		Additions during the year	Accumulated depreciation at the end of the year
1	Land	0.00%	-	-	-	-	-
2	Building	3.34%	0.31	-	0.31	0.31	-
3	Hydraulic	5.28%	-	-	-	-	-
4	Other Civil Works	3.34%	-	0.02	0.02	0.02	0.03
5	Plant & Machinery	5.28%	2.72	0.24	2.96	2.96	0.24
6	Lines & Cable Network	5.28%	-	0.01	0.01	0.01	0.04
7	Vehicles	9.50%	-	-	-	-	-
8	Furniture & Fixtures	6.33%	0.01	0.00	0.01	0.01	0.00
9	Office Equipment	6.33%	0.03	0.00	0.03	0.03	0.00
	Total		3.07	0.29	3.36	3.36	0.31

Form S: Assets & Depreciation

(C) Net Fixed Assets

(Rs. Crore)

Sr. No.	Particulars	FY 2017-18				FY 2018-19				FY 2019-20			
		Actual				Actual				Estimated			
		Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year	Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year	Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year
1	Land	-	-	-	-	-	-	-	-	-	-	-	-
2	Building	0.03	-	-	0.03	0.03	-	-	0.03	0.03	-	-	0.03
3	Hydraulic	-	-	-	-	-	-	-	-	-	-	-	-
4	Other Civil Works	-	-	-	-	-	-	-	-	-	0.56	-	0.56
5	Plant & Machinery	2.56	-0.27	-	2.28	2.28	-0.29	-	2.00	2.00	-0.12	-	1.88
6	Lines & Cable Network	-	-	-	-	-	-	-	-	-	-	-	-
7	Vehicles	-	-	-	-	-	-	-	-	-	-	-	-
8	Furniture & Fixtures	0.01	-0.00	-	0.01	0.01	-0.00	-	0.01	0.01	0.02	-	0.01
9	Office Equipment	0.01	-0.01	-	0.01	0.01	-0.01	-	0.01	0.01	0.03	-	0.05
	Total	2.62	-0.26	-	2.35	2.35	-0.29	-	2.06	2.06	0.48	-	2.54

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21				FY 2021-22			
		Projected				Projected			
		Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year	Fixed Asset - beginning of the year	Additions during the year	Withdrawals during the year	Fixed Asset - end of the year
1	Land owned under full ownership	-	-	-	-	-	-	-	-
2	Building	0.03	-	-	0.03	0.03	3.00	-	3.03
3	Hydraulic	-	-	-	-	-	-	-	-
4	Other Civil Works	0.56	0.33	-	0.88	0.88	-0.03	-	0.85
5	Plant & Machinery	1.88	-0.24	-	1.63	1.63	-0.24	-	1.39
6	Lines & Cable Network	-	0.49	-	0.49	0.49	-0.03	-	0.46
7	Vehicles	-	-	-	-	-	-	-	-
8	Furniture & Fixtures	0.03	0.02	-	0.05	0.05	0.02	-	0.06
9	Office Equipment	0.05	-0.00	-	0.04	0.04	-0.00	-	0.04
	Total	2.54	0.58	-	3.13	3.13	2.71	-	5.84

S.No.	Particulars	FY 19-20 (Projection)						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	0.67	0.00		0.07	0.67
2	ADB Loan		10.50%	0.43	0.00		0.05	0.43
3	Central Government Loans						0.00	0.00
4	General Provident Fund		8%	0.520	0.046	0.047	0.042	0.520
	Sub-total			1.62	0.05	0.05	0.15	1.62
	Interest on Long Term Loans/Credits from the FIs/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.02	0
	<i>Penal Interest Charges</i>							0
	Sub-total			1.62	0.05	0.05	0.17	1.62
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			1.62	0.05	0.05	0.17	1.62

(Rs. Cr.)

S.No.	Particulars	FY 20-21 (Projection)						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	0.67	0.35		0.08	1.02
2	ADB Loan		10.50%	0.43	0.00		0.05	0.43
3	Central Government Loans						0.00	0.00
4	General Provident Fund		8%	0.52	0.05	0.05	0.04	0.52
	Sub-total			1.62	0.40	0.05	0.17	1.97
	Interest on Long Term Loans/Credits from the FIs/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.02	0
	<i>Penal Interest Charges</i>							0
	Sub-total			1.62	0.40	0.05	0.19	1.97
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			1.62	0.40	0.05	0.19	1.97

(Rs. Cr.)

S.No.	Particulars	FY 21-22 (Projection)						
		Loan Tenure	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
	Loan Details							
A	Interest charges on State Govt. Loans, Bonds And Advances,							
1	State Government Loans		10%	1.02	2.10		0.21	3.12
2	ADB Loan		10.50%	0.43	0.00		0.05	0.43
3	Central Government Loans						0.00	0.00
4	General Provident Fund		8%	0.52	0.05	0.05	0.04	0.52
	Sub-total			1.97	2.15	0.05	0.29	4.07
	Interest on Long Term Loans/Credits from the FIs/banks/organisations approved by the State Govt.							
A	Secured Loans						0.00	0
B	Unsecured Loans						0.00	0
C	Other Interest & Finance Charges							0
	<i>Cost of raising Finance/Bank Charges</i>						0.02	0
	<i>Penal Interest Charges</i>							0
	Sub-total			1.97	2.15	0.05	0.32	4.07
D	Grand Total Of Interest & Finance Charges (A+B+C)							
E	Less : Interest & Finance Charges Capitalised							0
	Net Total Of Interest Finance Charges (D-E)			1.97	2.15	0.05	0.32	4.07

Working of Normative Loan

S.No.	Particulars	FY 19-20	FY 20-21	FY 21-22
		Ensuing Year		
		AEGCL Submission	AEGCL Submission	AEGCL Submission
1	Net Normative Opening Loan	0.52	0.91	1.40
2	Addition of normative loan during the year	0.42	0.61	2.11
3	Normative Repayment during the year	0.03	0.12	0.16
4	Net Normative Closing Loan	0.91	1.40	3.35
5	Interest Rate	9.49%	9.49%	9.58%
6	Interest Expenses on Loan	0.068	0.110	0.228
7	Finance Charges	0.02	0.02	0.02
8	Total Interest and Finance Charges	0.09	0.13	0.25

Source of Funding

S.No.	Particulars	FY 19-20	FY 20-21	FY 21-22
		MYT Submission		
1	Grant	-	-	-
2	Equity	0.182	0.261	0.906
3	Debt	0.424	0.609	2.114
	Total Capitalistion	0.606	0.870	3.020

Return on Equity

S.No.	Particulars	Units	Projection		
			FY 19-20	FY 20-21	FY 21-22
1	Equity (Opening Balance)	Rs. Crore	-	0.18	0.44
2	Net additions during the year	Rs. Crore	0.18	0.26	0.91
3	Less : Reduction during the year	Rs. Crore			
4	Equity (Closing Balance)	Rs. Crore	0.18	0.44	1.35
5	Average Equity	Rs. Crore	0.09	0.31	0.90
6	Rate of Return on Equity	%	15.50%	15.50%	15.50%
7	Return on Equity	Rs. Crore	0.01	0.05	0.14

Interest on Working Capital

Form - F25

S.No.	Particulars	Units	Projection		
			FY 19-20	FY 20-21	FY 21-22
1	O&M expenses for 1 month	Rs. Crs.	0.53	0.63	0.76
2	Maintenance spares @ 15% of O&M	Rs. Crs.	0.95	1.14	1.37
3	Receivables for two months	Rs. Crs.	1.03	1.23	1.53
	Total Working Capital	Rs. Crs.	2.50	3.01	3.67
4	Rate of Interest	%	11.50%	11.50%	11.50%
	Interest on Working Capital	Rs. Crs.	0.29	0.35	0.42

Non-Tariff Income

S.No.	Particulars	Projection		
		FY 19-20	FY 20-21	FY 21-22
	Other Non-Tariff Income			
a	Open Access Application Fees	0.09	0.09	0.10
b	SLDC Charges paid by IEX	0.76	0.80	0.84
	Total	0.85	0.89	0.93