Particulars	FY 18	FY 19	FY 20	FY 21
RPO Compliance (REC+ Actual)				
Solar	7.00	8.11	10.13	23.30
Non-Solar	12.82	16.56	5.75	10.08
Total RPO Compliance	19.81	24.68	15.89	33.37
Net Shortfall/(Surplus) for this year	-4.17	-3.27	14.33	-2.33
Cumulative Shortfall in RPO Compliance till current year	0.00	0.00	14.33	12.00

The Commission notes that there is a net surplus in RPO compliance for FY 2020-21 (2.33 MU) and cumulative shortfall of 12.00 MU till FY 2020-21. The Commission directs the Petitioner to complete the RPO obligation on priority.

# 4.8. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 51 of the MYT Regulation, 2018 states the following:

"51.1 The Operation and Maintenance expenses for the Distribution Wires Business shall be computed in accordance with this Regulation.

51.2 Operation and Maintenance (O&M) expenses shall comprise of the following:

- a) Employee expenses salaries, wages, pension contribution and other employee costs;
- b) Administrative and General expenses including insurance charges if any; and
- c) Repairs and Maintenance expenses.

51.3 The Distribution Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

51.4 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

 $R&Mn = K \times GFAn-1 \times (WPI \text{ inflation})$ 

EMPn = (EMPn-1) x (1+Gn) x (CPI inflation)

 $A\&Gn = (A\&Gn-1) \ x \ (CPI \ inflation)$ 

"K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPI inflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

*EMPn* – *Employee expenses of the Distribution Licensee for the nth Year;* 

A&Gn – Administrative and General expenses of the Distribution Licensee for the nth Year;

*R&Mn* – *Repair and Maintenance expenses of the Distribution Licensee for the nth Year;* 

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

Gn is a growth factor for the nthYear. Value of Gn shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Distribution Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, O&M Expenses shall be determined on case to case basis.

51.5 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

51.6 For the purpose of estimation, the same value of factors — CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors — CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation."

*GFAn-1 – Gross Fixed Asset of the transmission Licensee for the n-1th Year;* 

In accordance with above Regulations, the Commission has approved the Employee Expenses, A&G Expenses and R&M Expenses as elaborated below.

# 4.8.1. Employee Expenses

#### **Petitioner's submission**

The Petitioner has submitted employee expenses of INR 137.88 Crore against the approved expenses of INR 111.58 Crore in the Tariff Order.

### Commission's analysis

In accordance with the MYT Regulations, 2018, the Commission has determined the Employee expenses for each year of the MYT Control Period in MYT Order. The Regulation 6 of the MYT Regulations, 2018 stipulates the following:

"6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

In accordance with MYT Regulations, the Employee expenses shall be revised to the extent of change in inflation and growth rate during the control period. Accordingly, the Commission has considered the approved value of employee expenses for FY 2018-19 for computation of revised employee expenses of FY 2020-21. The Commission has considered the employee growth rate for FY 2019-20 and FY 2020-21 as submitted by the Petitioner along with the average CPI of previous three years to arrive at the employee expenses for FY 2020-21.

The CPI Inflation has been computed as follows:

Table 20: Computation of CPI Inflation (%)

FY	Increase in CPI Index	Average increase in CPI Index over 3 years	Average increase in CPI Index over 3 years
2016-17	4.12%		
2017-18	3.08%	4.22%	
2018-19	5.45%		5.35%
2019-20	7.53%		

Table 21: Employee recruitment plan as submitted by the Petitioner

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Employee	2378	2455	2567
2	Recruitment	197	217	223
3	Retirement	120	105	126
4	Closing Employee	2455	2567	2664
5	Growth rate	3.24%	4.56%	3.78%

Table 22: Employee Expenses approved for FY 2020-21 (INR Crore)

S. No	Particulars	FY 2019-20	FY 2020-21
1	EMPn-1 (INR Crore)	95.17	102.39
2	Gn (%)	3.24%	4.56%
3	CPIinflation (%)	4.22%	5.35%
4	Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)	102.39	112.80

Table 23: Employee Expenses approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	EMPn-1 (INR Crore)	102.39		102.39
2	Gn (%)	4.56%		4.56%
3	CPIinflation (%)	4.22%	107 88	5.35%
4	Employee Expenses = (EMPn-1) x (1+Gn) x (CPIinflation)	111.58	137.88	112.80

The Commission now approves employee expenses of INR 112.80 Crore in the APR of the FY 2020-21.

# 4.8.2. Administrative and General (A&G) Expenses

#### **Petitioner's submission**

The Petitioner has submitted a revised estimate of A&G expenses of INR 16.16 crore as against the approved value of INR 37.53 crore in the Tariff Order.

### Commission's analysis

In accordance with MYT Regulations, the A&G expenses shall be revised to the extent of change in inflation during the control period. Accordingly, the Commission has considered the approved value of A&G expenses for FY 2018-19 for computation of revised A&G expenses of FY 2020-21. The A&G expenses for FY 2018-19 has been escalated with the average CPI of previous three years as computed above to arrive at the A&G expenses for FY 2019-20 and subsequently, for FY 2020-21.

The table below provides the A&G expenses approved in Tariff Order, Petitioner's Submission and now approved by the Commission:

S. No **Particulars** FY 2019-20 FY 2020-21 A&Gn-1 (INR Crore) 1 34.55 36.01 2 CPIinflation (%) 4.22% 5.35% Provision (INR Crore) 3 0.00 0.00 Gross A&Gn = A&Gn-1 x4 36.01 37.93

Table 24: A&G Expenses approved for FY 2020-21 (INR Crore)

Table OF. ASC	Evnancae annua	and but he Con	mmiccion for E	Y 2020-21 (INR Cro	ma)
1 anie 25: A&G	Expenses appro	vea ou the Coi	mmission for F	Y 2020-21 UNK CTC	re i

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	A&Gn-1 (INR Crore)	36.01		36.01
2	CPIinflation (%)	4.22%		5.35%
3	Provision (INR Crore)	0.00	16.16	0.00
4	Gross A&Gn = A&Gn-1 x (1+CPIinflation) (INR Crore)	37.53		37-93

The Commission now approves the Administrative & General (A&G) expenses of INR 37.93 Crore in the APR of the FY 2020-21.

# 4.8.3. Repair & Maintenance Expenses (R&M)

(1+CPIinflation) (INR Crore)

#### **Petitioner's submission**

The Petitioner has submitted a revised estimate of R&M expenses of INR 61.32 crore as against the approved value of INR 45.66 crore in the Tariff Order dated May 18, 2020.

## Commission's analysis

In accordance with MYT Regulations, the R&M expenses shall be revised to the extent of change in inflation during the control period. The Commission has considered the k-Factor as approved in the MYT Order and multiplied the same with the opening GFA of FY 2020-21. The resultant amount is then escalated by average WPI Inflation of previous three years to arrive at the R&M expenses for FY 2020-21.

The WPI Inflation has been computed as follows:

Table 26: Computation of WPI Inflation (%)

FY	Increase in WPI Index	Average increase in WPI index over 3 years
2016-17	2.92%	
2017-18	4.28%	2.96%
2018-19	1.68%	

The R&M expenses as approved by the Commission for FY 2020-21 have been provided in the following table:

Table 27: R&M Expenses approved by Commission for FY 2020-21 (INR Crore)

S. No	Particulars	FY 2020-21
1	Opening GFA (GFA <sub>n-1</sub> )	175.38
2	K factor approved (K) (%)	24.99%
3	Avg. WPI Inflation (%)	2.96%
4	R&M Expenses = $K \times (GFA_{n-1}) \times (1+WPI_{inflation})$	45.12

Table 28: R&M Expenses approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Repair & Maintenance Expenses (R&M)	45.66	61.32	45.12

The Commission approves the Repair & Maintenance (R&M) expenses of INR 45.12 Crore in the APR of FY 2020-21.

### 4.8.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M expenses approved in the ARR of FY 2020-21, Petitioner's submission and now approved by the Commission.

*Table 29: O&M Expenses approved by Commission (INR Crore)* 

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	111.58	137.88	112.80
2	Administrative & General Expenses (A&G)	37.53	16.16	37.93
3	Repair & Maintenance Expenses	45.66	61.32	45.12
	Total Operation & Maintenance Expenses	194.77	215.36	195.86

The Commission approves the Operation & Maintenance (O&M) Expenses of INR 195.86 Crore in the APR of FY 2020-21.

# 4.9. Capital Expenditure & Capitalisation

### **Petitioner's submission**

The Petitioner has submitted revised capitalisation of INR 37.17 Crore as against the approved capitalisation of INR 30.30 Crore in the Tariff Order dated May 18, 2020.

## Commission's analysis

The Commission with regard to the capitalisation proposed to be undertaken during the year, directed the Petitioner to submit the details of the schemes to be undertaken during the year along with the supporting documents. In accordance with the submission of the Petitioner and the Capital Expenditure and Capitalisation approved in MYT Order, the Commission approves the capital expenditure and capitalisation for the year as shown in the following table:

Table 30: Capitalisation approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	30.30	37.17	37.17

The Commission approves capitalisation of INR 37.17 Crore in the APR of FY 2020-21. The same shall be trued up at the time of True-up.

# 4.10. Capital Structure

#### **Petitioner's Submission**

The Petitioner has submitted that all the capital assets have been created out of equity contribution from Andaman & Nicobar Administration.

## Commission's analysis

Regulation 26 of the MYT Regulations, 2018 specifies the following:

"26. Debt to Equity Ratio

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalization of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalization of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3 Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation."

The Petitioner has submitted that they have finalized the Fixed Asset Register up-to 31.03.2020. The closing GFA as per the FAR as on 31.03.2020 is Rs.516.24 crores. The Petitioner have incorporated several Fixed Assets pertaining to previous years which were omitted from the Accounts in the FAR after reconciliation with the accounts. Further, the Petitioner has submitted that the depreciation pertaining to previous years amounting to Rs.74.31 crores on account of these assets have also been accounted for prior period depreciation in the Proforma Accounts for the FY 2019-20. The Proforma Accounts for the FY 2017-18, FY 2018-19 & FY 2019-20 has been compiled with above updated asset details and the same is under Audit.

The Commission has noted that there is an abrupt increase of INR 338.83 crore in the opening GFA for FY 2020-21 as claimed by the Petitioner vis-à-vis the opening GFA as approved by the Commission in the Tariff Order dated May 18, 2020. Accordingly, the Commission directs the Petitioner to submit the details of assets additionally recognized in the fixed asset register along with the commissioning date, funding sources, depreciation accounted and the detailed reasons for not recognising these assets in previous tariff petitions along with the true-up petition. Accordingly, the Commission will analyse the Petitioner's submission and shall take the appropriate decision. For the purpose of calculating the opening value of GFA in FY 2020-21, the Commission has considered the closing value of GFA for FY 2016-17 as approved in Tariff Order dated May 18, 2020 and capitalisation for FY 2017-18, FY 2018-19 and FY 2019-20 as submitted by the Petitioner as shown in following table:

Table 31: Capitalisation for FY 2017-18, FY 2018-19 and FY 2019-20 as submitted by the Petitioner (INR Crore)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
Opening GFA	130.81	152.39	171.09
Additions during the FY	21.58	18.70	4.29
Adjustment/Retirement During the FY	0.00	0.00	0.00
Closing GFA	152.39	171.09	175.38

In accordance with the MYT Regulations, 2018, the Commission has determined the Capital Structure for FY 2020-21 as follows:

Table 32: GFA addition approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	177.41	516.24	175.38
2	Addition During the FY	30.30	37.17	37.17
3	Adjustment/Retirement During the FY	0.00	0.00	0.00
4	Closing Gross Fixed Assets	207.71	553.41	212.55

Table 33: Normative Loan addition approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	14.80	185.77	13.43
2	Add: Normative Loan During the year	21.21	26.02	26.02

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
3	Less: Normative Repayment equivalent to Depreciation	7.01	16.93	7.05
4	Closing Normative Loan	29.00	194.86	32.39

<sup>\*</sup>Depreciation calculated in next section

Table 34: Normative Equity addition approved by the Commission for FY 2020-21 (INR Crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	53.22	154.87	52.61
2	Additions on account of new capitalisation	9.09	11.15	11.15
3	Closing Equity	62.31	166.02	63.77

# 4.11. Depreciation

#### **Petitioner's submission**

The Petitioner has submitted the depreciation of INR 16.93 crore as per MYT Regulations 2018 as against the approved depreciation of INR 7.01 crores in the Tariff Order dated May 18, 2020.

## Commission's analysis

Regulation 30 of the MYT Regulations, 2018 stipulates the following:

"30. Depreciation

30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets: In the ARR Order, the Commission approved the following asset wise depreciation rate as per the CERC Tariff Regulations, 2014:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

30.4 In case of existing assets, the balance depreciable value as on April 1, 2019, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2018, from the gross depreciable value of the assets.

30.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

30.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of the Regulations.

30.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

30.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

30.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan."

The Commission has derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in MYT Regulations, 2018, provided in the following table:

**Description** Rate Plant & Machinery 3.60% **Buildings** 1.80% Furniture & Fixtures 6.00% Land 0.00% Vehicles 18.00% Computers 6.00% Office Equipments 6.00%

Table 35: Depreciation Rate (%)

The overall depreciation rate is considered as the weighted average depreciation rate calculated based on the asset wise depreciation rates and asset classification as per the Fixed Asset Register for FY 2019-20. The opening and closing GFA has been considered as approved in the *Section 4.10: Capital Structure* of this Order. Further, depreciation has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year.

The following table provides the calculation of depreciation as approved in the tariff order, Petitioner's submission and now approved by the Commission.

Petitioner's Approved in Now Approved by S. No **Particulars Tariff Order Submission Commission** Opening Gross Fixed Assets 516.24 177.41 175.38 1 2 Addition During the FY 30.30 37.17 37.17 Adjustment/Retirement During the FY 0.00 0.00 0.00 3 Closing Gross Fixed Assets 212.55 4 207.71 553.41 Average Gross Fixed Assets 192.56 5 534.83 193.97 Weighted Average Depreciation rate (%) 3.64% 6 3.64% 3.17% Depreciation 7 7.01 16.93 7.05

Table 36: Depreciation approved by the Commission for FY 2020-21 (In INR Crore)

The Commission now approves depreciation of INR 7.05 Crore in the APR of the FY 2020-21.

# 4.12. Interest and Finance Charges

#### **Petitioner's submission**

The Petitioner has estimated the Interest and Finance charges as per the JERC MYT Regulations, 2018 for the year FY 2020-21. The Petitioner has submitted that the majority of capital assets are created out of the equity contribution from Andaman & Nicobar Administration only. The rate of interest considered is SBI MCLR as on 1st April of that relevant year plus 100 basis points. Further based on the reconciliation of assets in the fixed asset register and the closing loan balances for FY 2016-17 as per Tariff order dated May 20, 2020, the Petitioner has claimed the opening loan balances of INR 185.77 crore considering the 70% of the additional assets recognised as the normative loan and adjustment on account of prior period depreciation as the repayment.

## Commission's analysis

Regulation 28 of the MYT Regulations, 2018 stipulates the following:

"28. Interest on Loan

28.1 The loans arrived at in the manner indicated in Regulation 26 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalization or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the de-capitalised or retired or replaced assets, based on documentary evidence.

28.2 The normative loan outstanding as on April 1, 2019, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2018, from the gross normative loan.

28.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, 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 in accordance with Regulation 30.

28.4 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 Transmission Licensee or the Distribution Licensee: