3. Chapter 3: True-up of FY 2017-18, FY 2018-19 and FY 2019-20

3.1. Background

The True-up for the FY 2017-18 and FY 2018-19 has to be carried out in accordance with Regulation 8(2) of the MYT Regulations, 2014, stated as follows:

"(2) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures or the provisional actual accounts as available as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.

The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

- (3) The revenue gap/surplus, if any, of the ensuing year shall be adjusted as a result of review and truing up exercises.
- (4) While approving such expenses/revenue to be adjusted in the future years as arising out of the Review and/or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenue. Carrying costs shall be limited to the interest rate approved for working capital borrowings.
- (5) For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is due to conditions beyond its control.
- (6) In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such additional supply of power."

Further, the True-up of FY 2019-20 has to be carried out in accordance with Regulation 11 of the MYT Regulations, 2018, stated as follows:

"11 Annual Performance Review, Truing-up and tariff determination during the Control Period

- 11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations.
- 11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time:

Provided that the Generating Company, Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be specified by the Commission, together with the audited accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges.

11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the

approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

a) True-up: a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;....."

3.2. Approach for True-up for FY 2017-18, FY 2018-19 and FY 2019-20

Petitioner's submission:

The Petitioner has not submitted the True-Up Petition for FY 2017-18, FY 2018-19 and FY 2019-20 as the accounts for FY 2017-18, FY 2018-19 and FY 2019-20 are pending for audit. Further, the Petitioner has submitted that the financial statements for FY 2017-18, FY 2018-19 and FY 2019-20 have been finalised and the true-up petition shall be filed as soon as accounts audit is complete.

Commission's analysis:

The Commission in its previous Orders had stressed upon the requirement of the audited accounts to reflect the true picture and bring in accuracy in the estimates made by the Commission. The JERC MYT Regulations, 2014 and JERC MYT Regulations, 2018 also require the licensee to file the True up along with the audited accounts in the filing.

The Commission directs that the audit of the financial accounts to be completed on priority. The Commission reiterates its direction to the Petitioner to prepare and submit the audited accounts for FY 2017-18, FY 2018-19 and FY 2019-20 based on commercial principles along with the True-up Petitions by 30th November 2021.

The True-up would therefore be taken up only after submission of the audited accounts. Accordingly, the Commission has decided not to take up True-up for the FY 2017-18, FY 2018-19 and FY 2019-20 in the current Order. Any parameter considered for the determination of ARR and revenue gap/surplus in the subsequent chapters will be considered as per the Commission's Tariff Order for the FY 2020-21 dated 18th May 2020 and MYT Order dated 20th May 2019. Further, the Commission directs the Petitioner to submit the audited accounts for the FY 2017-18, FY 2018-19 and FY 2019-20 along with Petition for determination of ARR for the FY 2022-23 by 30th November 2021.

4. Chapter 4: Annual Performance Review of FY 2020-21

4.1. Background

The Tariff Order for the FY 2020-21 was issued by the Commission on May 18, 2020 approving the ARR and Retail Tariff for the FY 2020-21. This Chapter covers the Annual Performance Review (APR) of the FY 2020-21 vis-à-vis the cost parameters approved by the Commission in the Tariff Order dated May 18, 2020. The Annual Performance Review for the FY 2020-21 is to be carried out as per provisions of Regulation 11 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018.

4.2. Approach for Review for the FY 2020-21

The review of the Aggregate Revenue Requirement requires assessment of the quantum of energy sales, energy loss as well as the various cost elements like Power Purchase Cost, O&M Expenses, interest on long-term loans, interest on working capital loans, depreciation etc. The Annual Performance Review for the FY 2020-21 has been done based on the actual data as provided by the Petitioner for the initial 11 months of FY 2020-21 including the Power Purchase Quantum and the Cost, Energy Sales, Capitalisation etc. depending on which the estimates for the remaining months of the financial year have been made. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the actual information submitted by the Petitioner, the MYT Regulations, 2018 and on the basis of the norms approved in the MYT Order dated May 20, 2019 and Tariff Order dated May 18, 2020.

4.3. Energy Sales, Connected Load and Number of Consumers

Petitioner's Submission

The Petitioner has submitted a revised estimate of energy sales as 250.34 MU for the FY 2020-21, based on the actual energy sales for first half of FY 2020-21. Similarly, the Petitioner has proposed the number of consumers as 141,743 respectively for FY 2020-21.

Commission's Analysis

The Commission has considered the actual category wise sales data for initial 11 months of FY 2020-21 and the Petitioner's submission for calculating the category wise sales, connected load and number of consumers respectively for FY 2020-21.

4.3.1. Energy Sales

The Commission has projected the category wise sales data for FY 2020-21 by grossing up the category wise actual sales for initial 11 months of FY 2020-21 as submitted by the Petitioner as shown in the following table:

Table 5: Sales projected for FY 2020-21 (MU)

S. No.	Category	Actual Sales for initial 11 months of FY 2020-21	Projected Sales for FY 2020-21
1	Domestic	127.49	139.08
2	Commercial	42.42	46.28
3	Industry	8.08	8.81
4	Bulk	26.52	28.93
5	Public Lighting	5.64	6.15
6	Irrigation, Pumps & Agriculture	0.91	0.99
7	Total Sales	211.06	230.25

The table below provides the energy sales approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission:

Table 6: Energy Sales (MU) approved for FY 2020-21 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	150.56	145.08	139.08
2	Commercial	68.22	57.76	46.28
3	Industry	19.27	9.26	8.81
4	Bulk	33.61	30.59	28.93
5	Public Lighting	6.67	6.62	6.15
6	Irrigation, Pumps & Agriculture	1.17	1.03	0.99
7	Total Sales	279.51	250.34	230.25

4.3.2. Number of Consumers

The Commission has considered the category wise number of consumers for FY 2020-21 as per the number of consumers in initial eleven months of FY 2020-21 as shown in table below:

Table 7: Number of Consumers projected for FY 2020-21 (MU)

S.No.	Category	Actual Consumers Apr'20 – Feb'21	Projected Number of Consumers for FY 2020-21
1	Domestic	116,991	116,991
2	Commercial	20,885	20,885
3	Industry	471	471
4	Bulk	66	66
5	Public Lighting	734	734
6	Irrigation, Pumps & Agriculture	457	457
7	Total Consumers	139,604	139,604

The following table provides the number of consumers approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission.

Table 8: Number of Consumers approved for FY 2020-21 by the Commission

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	119,645	118,753	116,991
2	Commercial	21,499	21,243	20,885
3	Industry	616	477	471
4	Bulk	68	67	66
5	Public Lighting	705	751	734
6	Irrigation, Pumps & Agriculture	473	452	457
7	Total Consumers	143,005	141,743	139,604

4.3.3. Connected Load

Similarly, the Commission has considered the category wise connected load for FY 2020-21 as per the connected load for initial eleven months of FY 2020-21 as shown in table below:

Table 9: Connected Load projected for FY 2020-21 (kW)

S. No.	Category	Actual Connected Load Apr'20 – Feb'21	Projected Connected Load for FY 2020-21
1	Domestic	182,955	182,955
2	Commercial	92,813	92,813
3	Industry	14,591	14,591
4	Bulk	14,331	14,331
5	Public Lighting	2,786	2,786
6	Irrigation, Pumps & Agriculture	1,210	1,210
7	Total Connected Load	308,688	308,688

The table below provides the category wise connected load approved by the Commission in the Tariff Order, the Petitioner's submission and now approved by the Commission:

Table 10: Connected Load approved by the Commission for FY 2020-21 (kW)

S. No.	Category	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Domestic	186,107	182,955	182,955
2	Commercial	65,684	92,813	92,813
3	Industry	26,816	14,591	14,591
4	Bulk	13,885	14,331	14,331
5	Public Lighting	2,870	2,786	2,786
6	Irrigation, Pumps & Agriculture	3,420	1,210	1,210
8	Total Connected Load	298,781	308,688	308,688

The Commission approves energy sales of 230.25 MU, connected load of 308,688 kW and number of consumers as 139,604 in the APR of FY 2020-21.

4.4. Intra-State Transmission and Distribution (T&D) loss

Petitioner's submission

The Petitioner has proposed Intra-State T&D loss level at 20.00% against an approved loss of 13.84% in the Tariff Order.

Commission's analysis

The Commission had approved loss level of 13.84% for FY 2020-21 in the MYT Order dated May 20, 2019 and subsequently, in the Tariff Order dated May 18, 2020 while determining ARR for the FY 2020-21. The Commission, in the Business Plan Order dated December 31, 2018, had set the loss trajectory for the 2nd Control Period considering the actual loss of 15.34% in FY 2017-18. The Petitioner has not provided any justification for the revision distribution losses for FY 2020-21. The Commission in the APR of FY 2020-21 finds it appropriate to consider the loss level of 13.84% as approved in the MYT Order for FY 2020-21. The following table provides the Intra-State distribution loss approved in the Tariff Order, the Petitioners submission and now approved by the Commission.

Table 11: Intra-State distribution loss (%)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	13.84%	20.00%	13.84%

The Commission approves Intra-State T&D loss of 13.84% in the APR of FY 2020-21.

4.5. Energy Balance

Petitioner's submission

The Petitioner has submitted the energy balance as shown in the table below:

Table 12: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
A	Energy Requirement	
1	Total Sales within the UT	250.34
2	Distribution losses (%)	20.00%
	Distribution losses (MU)	62.59
3	Energy Requirement @ periphery	312.93
В	Energy Availability	
1	Power Purchase	244.55
2	Own Generation	68.38
3	Total Energy Availability	312.93
C	Total shortfall/(Surplus)	0.00

Commission's analysis

The Commission has determined the Energy Balance based on the revised estimates of energy sales. The table below provides the Energy Balance as approved by the Commission in the Tariff Order of FY 2020-21, the Petitioner's submission and the Energy Balance now approved by the Commission.

Table 13: Energy Balance (MU) approved by the Commission for FY 2020-21

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
A	Energy Requirement			
1	Total Sales within the UT	279.51	250.34	230.25
2	Distribution losses (%)	13.84%	20.00%	13.84%
	Distribution losses (MU)	44.90	62.59	36.98

S. No.	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
3	Energy Requirement @ periphery	324.41	312.93	267.23
В	Energy Availability			
1	Power Purchase	253.15	244.55	244.55
2	Own Generation	71.25	68.38	85.82
3	Total Energy Availability	324.41	312.93	330.37
C	Total shortfall/(Surplus)	0.00	0.00	(63.14)

In the APR of FY 2020-21, the Commission has estimated an energy surplus of 63.14 MU.

4.6. Power Purchase Quantum & Cost

Petitioner's submission

The energy requirement is met mainly from own generation apart from procurement of power from the IPPs and other generators. However, there is no availability of power from Central Generating Stations (CGS) or from other sources/ open market/ power exchanges, etc. Accordingly, the Petitioner has claimed the fuel cost of INR 120.13 crore as against the approved cost of INR 106.61 crore and the power purchase cost of INR 403.40 crore as against the approved cost of INR 445.44 crore in the Tariff Order dated May 18, 2020. The Petitioner has submitted the IPP and HPPs wise power generation, fuel consumption and power purchase cost including own generation for FY 2020-21 as presented in the following tables:

Table 14: Power Purchase Quantum and Cost from IPPs and Fuel Cost for Own Generation for FY 2020-21

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	61.26	118.39	1.74	0.00	120.13
2	KHEP (Kalpong Hydro)	10.08	0.00	0.00	0.00	0.00
3	Solar(Own)	14.49	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	39.09	61.55	0.00	4.21	65.76
5	HPP-2 (10MW)	60.47	94.05	0.00	7.07	101.12
6	NTPC - SPV	4.84	0.00	0.00	4.52	4.52
7	Other HPPs	0.31	0.60	0.00	0.37	0.97
8	NTPC DG 5MW	45.00	69.26	0.00	6.39	75.65
9	NTPC DG 10MW	70.80	115.54	0.00	9.52	125.06
10	DG P/Plant Niel 0.96MW	2.76	4.82	0.00	0.25	5.07
11	DG P/Plant Havelock 3 MW	0.22	0.36	0.00	0.03	0.39
12	SECI Solar	0.96	0.00	0.00	0.47	0.47
13	M/s. MUNDRA	3.01	0.00	0.00	0.67	0.67
14	NLC	7.47	0.00	0.00	4.98	4.98
15	Mona Generator	9.62	17.55	0.00	1.19	18.74
16	Total	330.37	482.13	1.74	39.66	523.53

Commission's Analysis

As per Regulation 12.1 of the MYT Regulations, 2018, power purchase and fuel cost are uncontrollable parameters. Thus, the power purchase and fuel cost must be revisited every year by the Commission based on the audited accounts. The Commission has considered that the power requirement shall be met mainly from own generation apart from procurement of power from the IPPs and other generators. The Petitioner has considered the power purchase quantum and own generation units as proposed in energy balance. Accordingly, the

Commission approves the power purchase quantum and own generation units as determined in the energy balance.

Based on scrutiny of the data submitted by the Petitioner, the Commission sought whether the Petitioner has taken a prior approval of the Commission while signing the new PPAs. In response, the Petitioner submitted that the new PPAs were signed to bridge the additional energy demand and an application for the approval shall be filed shortly. The Commission has decided to allow the power purchase cost in the APR on provisional basis and directs the Petitioner to get the PPAs approved on the priority basis failing which the Power Purchase Cost in respect to new PPAs signed shall be disallowed in the true-up of FY 2020-21. The Commission further directs the Petitioner to get PPA approved by the Commission before procuring power from any generating station.

Further, the Commission has noted that while claiming the power purchase cost for fully owned renewable generation has been submitted as Nil considering the same are being considered in the Gross Block in lieu of the power purchase fixed costs. The Petitioner is directed to file a separate tariff determination petition for fully owned renewable generation to get the charges notified in order to bring transparency in the power procurement plan and accordingly, the same may be deducted from the gross block of the Assets.

The Commission has observed that the Petitioner has considered different SFC of HSD and Lube oil for various IPPs and HPPs vis-à-vis the values approved by the Commission in the MYT Order dated May 20, 2019. Further, the Commission has determined the plant wise per unit cost for HSD, lube oil and fixed charges as per the fuel bills submitted by the Petitioner. Accordingly, the Commission has computed the fuel requirement for various IPPs, HPPs and own generation considering the approved values of specific fuel consumption as shown in table below:

Table 15: Fuel Requirement for various IPPs, HPPs & Own generations as approved by the Commission

Tuble 15. Puel	Кединетиен	l joi various i		Own generation			
Particulars	Units generated (MU)	SFC of HSD (ml/kWh)	Per Litre cost of HSD (INR)	Total Consumpti on of HSD (Litre)	SFC of Lube (ml/kWh	Per Litre cost of Lube (INR)	Total Lube Consumpt ion (Litre)
Own Generation (HSD)	61.26	304.00	60.30	18622362.74	0.98	197.99	60032.62
HPP -1 (5 MW)	39.09	273.51	60.30	10691315.07	0.00	0.00	0.00
HPP-2 (10MW)	60.47	258.46	60.55	15629291.10	0.00	0.00	0.00
Other HPPs	0.31	269.00	61.63	83390.00	0.00	0.00	0.00
NTPC DG 5MW	45.00	270.25	59.63	12161249.01	0.00	0.00	0.00
NTPC DG 10MW	70.80	270.25	60.64	19133698.44	0.00	0.00	0.00
DG P/Plant Niel 0.96MW	2.76	270.25	60.64	745889.94	0.00	0.00	0.00
DG P/Plant Havelock 3 MW	0.22	269.00	60.64	59180.00	0.00	0.00	0.00
Mona Generator	9.61	269.00	68.01	2587780.00	0.00	0.00	0.00
Total	289.53		_	79714156.3 O			60032.62

The Commission has considered the fixed cost for various power plants as submitted by the Petitioner. Accordingly, the Commission has computed the power purchase cost for various sources as shown in following table:

Table 16: Power Purchase Cost approved by the Commission for FY 2020-21

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
1	Own Generation (HSD)	61.26	112.29	1.19	0.00	113.48

S. No.	Particulars	Units generated (MU)	Cost of HSD (INR Cr)	Cost of Lube (INR Cr)	Fixed Charges (INR Cr)	Total Cost (INR Cr)
2	KHEP (Kalpong Hydro)	10.08	0.00	0.00	0.00	0.00
3	Solar (Own)	14.49	0.00	0.00	0.00	0.00
4	HPP -1 (5 MW)	39.09	64.47	0.00	4.21	68.68
5	HPP-2 (10MW)	60.47	94.64	0.00	7.07	101.71
6	NTPC - SPV	4.84	0.00	0.00	4.53	4.53
7	Other HPPs	0.31	0.51	0.00	0.37	0.88
8	NTPC DG (5MW)	45.00	72.52	0.00	6.39	78.91
9	NTPC DG (10MW)	70.80	116.03	0.00	9.52	125.55
10	DG P/Plant Niel (0.96MW)	2.76	4.52	0.00	0.25	4.77
11	DG P/Plant Havelock (3 MW)	0.22	0.36	0.00	0.03	0.39
12	SECI Solar	0.96	0.00	0.00	0.46	0.46
13	M/s. MUNDRA	3.01	0.00	0.00	0.66	0.66
14	NLC	7.47	0.00	0.00	4.98	4.98
15	Mona Generator	9.62	17.60	0.00	1.19	18.79
16	Total	330.37	482.94	1.19	39.66	523.78

The approved cost towards diesel-based generation consists of cost incurred towards consumption of HSD oil and Lube oil only as the fixed cost incurred against own generation (i.e. O&M expenses, interest and finance charges, depreciation, interest on working capital etc.) has been considered and revised for the department as a whole in subsequent sections. Accordingly, no separate cost has been approved for own renewable based generation also.

Further, as per the energy balance approved by the Commission, there is an energy surplus of 63.14 MU. The Commission has deducted the power purchase cost pertaining to the energy surplus at Average Power Purchase Cost computed as below:

Table 17: Average Power Purchase Cost and the total Power Purchase cost approved for FY 2020-21

S. No.	Particulars	Value
1	Energy Availability (MU)	330.37
2	Net Energy Excluding Renewable & Hydro generation (MU)	297.00
3	Total Power Purchase Cost as computed by the Commission (INR Crore)	523.78
4	Net Power Purchase Cost Excluding Renewable & Hydro generation (INR Crore)	518.14
5	Average Power Purchase Cost (Rs/Unit) (4/2*10)	17.45
6	Excess Energy (MU) (As per Energy Balance)	63.14
7	Total cost to be deducted from the approved Power Purchase Cost (INR Crore) (5*6/10)	-110.15
8	Net Power Purchase Cost approved by the Commission for FY 2020-21 (INR Crore) (3-7)	413.63

^{*}The excess energy has been computed considering the approved sales and T&D loss, further, T&D loss has considered as per MYT Order which is less than the T&D loss claimed by the Petitioner.

The table below provides the power purchase cost and fuel cost approved in the Tariff Order, claimed by the Petitioner and now approved by the Commission:

Table 18: Power Purchase & Fuel Cost approved for FY 2020-21 (INR crore)

S. No	Particulars	Approved in Tariff Order	Petitioner's Submission	Now Approved by Commission
1	Fuel Cost	106.61	120.13	410.60
2	Power Purchase Cost	445.44	403.40	413.63
3	Total Cost	552.06	523.53	413.63

The Commission approves power purchase quantum of 267.23 MU and cost of INR 413.63 Crore in the APR of FY 2020-21.

4.7. Renewable Purchase Obligations (RPOs)

As per Regulation 1, Sub-regulation (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and revised the RPO targets, according to which the Petitioner had to purchase 14.10% of its total consumption (including 6.10% from Solar) from renewable sources for the FY 2020-21.

For the FY 2020-21, the Commission approves the RPO target of 31.04 MU comprising of 13.43 MU Solar and 17.61 MU Non-Solar. Out of which, the Petitioner has claimed to purchase the solar energy of around 23.30 MU and non-solar energy of around 10.08 MU. Accordingly, the table below provides the cumulative shortfall in RPO compliance till FY 2020-21:

Table 19: Cumulative RPO compliance till FY 2020-21

Particulars	FY 18	FY 19	FY 20	FY 21
Solar Target	2.50%	3.60%	4.70%	6.10%
Non-Solar Target	4.20%	5.40%	6.80%	8.00%
Total Target	6.70%	9.00%	11.50%	14.10%
Sales Within UT	233.50	237.82	262.75	220.17
RPO Target				
Solar	5.84	8.56	12.35	13.43
Non-Solar	9.81	12.84	17.87	17.61
Total RPO Target	15.64	21.40	30.22	31.04
RPO Compliance (Actual Purchase)				
Solar	7.00	8.11	10.13	23.30
Non-Solar	12.82	16.56	5.75	10.08
Total RPO Compliance (Actual Purchase)	19.81	24.68	15.89	33.37
RPO Compliance (REC Certificate Purchase)				
Solar	0.00	0.00	0.00	0.00
Non-Solar	0.00	0.00	0.00	0.00
Total RPO Compliance (REC Certificate)	0.00	0.00	0.00	0.00