

3.8.10 Further a query was sought from the Petitioner providing the details of GST claimed for FY 2018-19. In this regard the Petitioner submitted the details as shown in the Table below:

Table 3-48: Details of GST as submitted by the Petitioner

S. No.	GST Item	Service Tax Rate (%)	GST Rate (%)	Variance (%)
1	Services (e.g. security, contractor etc.)	15.00	18.00	3.00
2	Material/ service (e.g. vehicle spares)	14.00	28.00	14.00
3	Lawyers fee (reverse charge)	15.00	18.00	3.00
4	Material (others)	14.50	18.00	3.50
	Average	14.63	20.50	5.88

- 3.8.11 With regards to R&M expenses, neither does the Regulation provide any escalation with respect to indices (CPI WPI) for R&M Expenses nor any provision for adjustment of one time expenses. Further, R&M is computed as %age (Kb \* GFAn) of GFA, and in True-Up GFA is taken as actuals which already includes the impact of GST in itself. Hence additional impact of GST is not allowed in R&M Expenses.
- 3.8.12 Further the Commission has observed that the issue of GST was also appraised in other State Commission's as well. In this regard MERC in AEML-D Order 325 of 2019 dated 30 March, 2020 in the True Up for FY 2017-18 and FY 2018-19 provided that:

#### Quote

Impact of GST: The Commission is of the view that the change in Tax regime from Service Tax to GST is merely change in name. The taxes levied under Service Tax are of same nature of the taxes levied under GST and therefore, there is no New tax that is being levied on account of GST. Further, O&M expenses have been linked to escalation index arrived based on WPI and CPI published by the Govt. of India. Both WPI and CPI include the impact of all taxes and duties applicable at that point of time. Therefore, as escalation factor arrived as above already includes impact of all taxes, no separate impact on O&M expenses on account of GST needs to be allowed. Therefore, the Commission does not consider the contentions of AEML-D to separately allow impact of GST as an uncontrollable expenditure under 'Change in Law'.

Unquote



3.8.13 The Commission is of the view that even though it has allowed the same in the True Up Order dated September 03, 2019 for FY 2017-18, however, trued up Order for FY 2017-18 is not being disturbed and taking into consideration all the above, impact of GST claimed by the Petitioner is being disallowed for FY 2018-19.

#### 3.9 CAPITAL EXPENDITURE

3.9.1 The Petitioner has submitted that the, Commission vide its Tariff Order dated 22nd January, 2019 had approved the capital expenditure for FY 2018-19 at Rs. 172.49 Crore including interest and expenses capitalisation. However, as per audited accounts, for FY 2018-19, the actual capital expenditure by the Petitioner stands at Rs. 125.38 Crore (excluding assets of Rs. 10.13 Crore handed over by GNIDA for distribution of electricity to its consumers and maintenance thereof). The details of the same are given in the Table below: -

Table 3-49: Capital Expenditure for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Nature of Works	Actual
1	New Connection	17.75
2	Replacement Stock	5.18
3	Metering	0.26
4	33/11 kV Substation	13.94
5	33 kV Network Development	14.01
6	11 kV Network Development	18.05
7	LT Network Development	10.29
8	Network at Villages	7.34
9	Network Renovation	0.56
10	Process System Automation	6.43
11	Civil Works & Office Infrastructure Facility	12.03
12	IT Projects	4.34
13	Tools / Testing Equipment, Vehicles etc.	2.38
14	Demand Side Management	0
15	Land	6.2
16	Misc./Contingent Works	6.62
17	Sub-Total	125.38
18	Interest Capitalisation	Nil
19	Salary Capitalisation	Included above
20	Total Capex incurred	125.38
21	Add: Assets taken over from GNIDA	10.13
	Grand Total	135.51

3.9.2 The Petitioner submitted that GNIDA is the local development authority responsible for the development and upkeep of Greater Noida area. Every year the basic electric network developed by GNIDA is handed over to the Petitioner for facilitation of



distribution of power to the consumers of Greater Noida and proper maintenance thereof. The ownership of the assets is not transferred to the Petitioner. Hence, for the purpose of accounting, upkeep and insurance, the Petitioner considers these assets at the value declared by GNIDA which is accordingly considered for the purpose of determination of tariff. Since the ownership of these assets is not transferred to the Petitioner, they are not considered in addition to fixed assets. Hence, there is no impact on computation of ROE, interest on Term Loans and depreciation with respect to these assets.

3.9.3 The details of assets taken over from GNIDA amounting to Rs. 10.13 Crore during FY 2018-19 is provided in Table below: -

Table 3-50: GNIDA Assets as submitted by the Petitioner (Rs. Crore.)

Asset Description	Amount
Extra High-Tension Switchgears	2.40
Extra High-Tension Tower, Poles, Fixtures & Devices	1.31
High-Tension Conductors & Devices	0.01
Extra High-Tension Underground Cable & Ducts	6.41
Total	10.13

Note: Total may not tally due to rounding-off

3.9.4 The Petitioner had submitted its capital expenditure plan for the Control Period based on the forecast of maximum system demand and anticipated developments in its license area i.e. Greater Noida relating to new load, replacement of existing assets, strengthening and modernization in response to new load which, inter-alia, included construction of 220/33kV Substation as shown in Table below:

Table 3-51: Proposed 220/33 kV Substation as submitted by the Petitioner

SI. No.	Location	Туре	Capacity in MVA
1	BZP- Sector, Greater Noida	GIS	200
2	KP-V- Sector, Greater Noida	GIS	200
	Total		400

- 3.9.5 However, in view of the Commission's Order dated 30th October, 2018 with regard to 220/33 kV RC Green and Gharbara sub-stations, the Petitioner has for the time being not incurred the cost on the above substations and will take necessary action in the matter as per the outcome of the Appeals filed in APTEL.
- 3.9.6 The Petitioner in its MYT petition for the control period, had also sought approval of the Commission for below mentioned augmentation works for efficient and reliable power supply to the consumers of Greater Noida:
  - a. Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 to 220/132/33kV RC Green substation for enhancement of



- upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation
- b. Cost of addition of 5 nos. 33kV bays (GIS) at 400 kV Substation at Sector-148, Noida under ETD-1 for the purpose of distribution of electricity in Greater Noida area.
- 3.9.7 The Petitioner submitted that accordingly, as demanded by UPPTCL, the Petitioner paid Rs. 19.12 Crore for construction of 220kV LILO lines during FY 2017-18 under deposit scheme. Since the work was under progress even as on 31st March, 2019, the Petitioner has included the above amount in CWIP of FY 2017-18 as well as closing CWIP of FY 2018-19.
- 3.9.8 The Petitioner said however, the Commission vide its Tariff Order dated 3rd September, 2019 has disallowed the above mentioned CWIP of Rs. 19.12 Crore in Truing-up of ARR for FY 2017-18 vide Tariff Order dated 3rd September, 2019 on the sole premise that the aforementioned cost of Rs.19.12 Crores were towards the construction of 220 kV RC Green Substation and its associated 220kV lines subject to the final decision of the Hon'ble Appellate Tribunal in the Appeal filed by the Petitioner which is still under *sub-judice*.
- 3.9.9 The Petitioner has produced the relevant extract of the aforementioned Order dated 3<sup>rd</sup> September, 2019 is reproduced herein below for reference:
  - "3.8.17 The Commission observed that the Petitioner has claimed Rs.19.12 Cr for construction of 220KV sub-station at RC Green and associated 220 kV line to NPCL which is against the Commission's aforesaid decision. Since the work is yet to be completed by UPPTCL, the same has been included in closing CWIP of FY 2017-18 by the Petitioner.
  - 3.8.18 Although, the mater is sub-judice in APTEL, the Commission finds its appropriate to disallow this amount from the closing CWIP subject to final decision of APTEL in this matter. The Petitioner is directed to apprise the Commission about the matter during True-Up of FY 2018-19."
- 3.9.10 The Petitioner in its submission submitted that it has paid the abovementioned amount of Rs. 19.12 Crore for the purpose of "Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 (changed from earlier Sector-129) to 220/132/33kV RC Green substation for enhancement of upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation" as against "Construction of 220 kV sub-station at RC Green and associated 220 kV line to NPCL" being inadvertently considered by the Commission.



- 3.9.11 Therefore, the Petitioner has filed a Review Petition No. 1512/2019 on 3<sup>rd</sup> October, 2019 before the Commission to for rectification of ex-facie error apparent in its Tariff Order dated 3<sup>rd</sup> September, 2019 which has since been admitted vide Order dated 2<sup>nd</sup> December, 2019.
- 3.9.12 Since, the aforesaid review petition is still pending to be decided, the Petitioner in line with its submissions in the review petition, has considered the above mentioned CWIP of Rs. 19.12 Crore as forming part of the Capital Expenditure for FY 2017-18 for the purpose of preparation of this True-up Petition. Accordingly, the Petitioner has considered the impact of such CWIP of Rs. 19.12 Crore on the opening balances of Normative Term Loan, Equity Base and Regulatory Asset etc. for FY 2018-19.
- 3.9.13 The Petitioned said that apart from the above, during FY 2018-19, as demanded by UPPTCL, the Petitioner paid Rs. 20.11 Crore towards the cost of addition of 5 nos. 33kV bays (GIS) at 400 kV Substation at Sector-148, Noida under ETD-1 for the purpose of distribution of electricity in Greater Noida area under deposit scheme. Since the work was under progress as on 31st March, 2019, the same has been included in the closing CWIP of FY 2018-19.
- 3.9.14 The Petitioner mentioned that as per Regulation 21.1 of the MYT Regulations, 2014, the capital expenditure is required to be funded in the Debt-Equity ratio of 70:30. Accordingly, based on capex for FY 2018-19, the details of the funding of the aforesaid capital expenditure is given in the Table below:-

Table 3-52: Capital Expenditure Funding for FY 2018-19 as Submitted by Petitioner (Rs. Crore.)

Particulars	Ref.	Approved Vide T.O. dated 22 January, 2019	Actual
Total Additions to	а	172.49	125.38
Assets	a	172.49	125.56
Add: Closing CWIP	b	42.3	58.88
Less: Opening CWIP	С	33.58	33.58
Capital Expenditure	d=a+b-c	181.22	150.68
Less: Assets Retired	е	4.85	4.3
Net Capex	f=d-e	176.37	146.39
Consumer Contribution	g	33.73	37.34
Net Capex	h=f-g	142.64	109.05
Debt - 70%	i=h x 70%	99.85	76.33
Equity- 30%	j=h x 30%	42.79	32.71

<sup>\*</sup> Note: Total may not tally due to rounding-off

3.9.15 As detailed above, the Petitioner has requested the Commission to kindly approve the capital expenditure of Rs. 150.68 Crore for FY 2018-19 as well as funding thereof as submitted above.



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

3.9.16 In this regard, the UPERC MYT Regulations, 2014 specifies as follows:

Quote

#### 21 Capital Cost of the Project

- 21.1 The capital cost of the project shall include the following:
- a) Expenditure incurred or projected to be incurred on original scope of work, including the interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation, during construction, on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check shall form the basis for determination of Tariff;

......

#### 23. Debt-Equity Ratio

a. For all capital expenditure incurred after April 1, 2015, debt equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan.

Provided that in case actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

Provided that in case of existing projects, the actual debt equity shall be used for tariff determination. However, any additional capital expenditure shall be in the abovementioned ratio.

- b. The debt and equity amounts arrived at in accordance with clause (a) above shall be used for calculating interest on loan and return on equity.
   Unquote
- 3.9.17 Further the Regulation 23A of UPERC MYT Regulations, 2014 provides that: Quote

### Capital Expenditure



- a. Capital expenditure shall be considered on scheme wise basis.
- b. For capital expenditure greater than INR 10 Crore, the Distribution Licensee shall seek prior approval of the Commission.
- c. The Distribution Licensee shall submit detailed supporting documents while seeking approval from the Commission.

Provided that supporting documents shall include but not limited to purpose of investment, capital structure, capitalization schedule, financing plan and cost-benefit analysis:

- d. The approval of the capital expenditure by the Commission for the ensuing year shall be in accordance with load growth, system extension, rural electrification, distribution loss reduction or quality improvement as proposed in the Distribution Licensee's supporting documents.
- e. The Commission may also undertake a detailed review of the actual works compared with the works approved in the previous Tariff Order while approving the capital expenditure for the ensuing year.
- f. In case the capital expenditure is required for emergency work, the licensee shall submit an application, containing all relevant information along with reasons justifying the emergent nature of the proposed work, seeking post facto approval by the Commission.
- g. The Distribution Licensee shall take up the work prior to receiving the approval from the Commission provided that the emergent nature of the scheme has been certified by its Board of Directors.
- h. If capital expenditure is less than INR 10 Crore, the Distribution Licensee shall undertake the execution of the plan with simultaneous notification to the Commission with all of the relevant supporting documents.
- i. During the true-up exercise, the Commission shall take appropriate action as is mentioned in Regulation 19.1 of these regulations.
- j. Consumer's contribution towards cost of capital asset shall be treated as capital receipt and credited in current liabilities until transferred to a separate account on commissioning of the assets.

#### Unquote

- 3.9.18 As regards to capital expenditure, the Commission noticed that for some schemes the Petitioner incurred capex for more than Rs. 10 Crore. The Regulation 23A of the UPERC (MYT for Distribution Tariff) Regulations, 2014 provides that:
  - a. "Capital expenditure shall be considered on scheme wise basis.



- b. For capital expenditure greater than INR 10 Crore, the Distribution Licensee shall seek prior approval of the Commission.
- c. The Distribution Licensee shall submit detailed supporting documents while seeking approval from the Commission.

  Provided that supporting documents shall include but not limited to purpose of investment, capital structure, capitalization schedule, financing plan and cost-benefit analysis: "
- 3.9.19 The Commission sought the clarification whether the licensee has taken approval for the same. The Petitioner submitted that that the expenditure incurred on the projects /schemes such as 33/11 kV substation, 33 kV Network development, 11 kV Network Development and civil works, new connection and other infrastructure facility have been implemented at different time frames and at different locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10 Cr. It further submitted that vide letter no. P-77A/2019/003 dated 16th April'2019, as per the procurement policy of the Petitioner, procurement of material is done through competitive bidding on the SAP-ERP Platform.
- 3.9.20 The Petitioner submitted that it has been maintaining all its processes whether relating to accounts or operations or maintenance in the renowned and most dependable ERP software viz. SAP-ERP. Further, the has been also maintaining its procurement function through the standard module of SAP-ERP viz. Supplier Relationship Management (SRM). Through this module, all major procurements are made through the transparent process of competitive bidding. The prices so discovered through competitive bidding are further subjected to reverse auction, a process similar to the one followed at DEEP portal for procurement of power. Accordingly, the orders are placed with the successful bidder providing the lowest quote for best quality or most suited to Petitioner's specification. It further added that it follows transparent process of e-bidding including reverse auction for procurement of material and services through relevant SAP-ERP module viz. Supplier Relationship Management (SRM) to assure best possible prices vis-à-vis quality.
- 3.9.21 The Commission noticed that the Petitioner claimed Rs. 125.38 Crore towards capital expenditure for FY 2018-19 and the detailed breakup project / scheme wise capex approved in the MYT Order vis-à-vis capitalisation for each project / scheme and also whether the project / scheme is completed in the control period or are they spilling over to the next. In this regard the Petitioner submitted that all the projects / schemes envisaged at the time of filing the ARR were as per the schedule and there is no spill over of any project other than already planned and considered in the CWIP for the respective FY. Apart from the above, the projects / schemes executed by UPPTCL has



spilled over the next ARR period and therefore included in the CWIP for FY 2017-18 as well as FY 2018-19.

- 3.9.22 With regards to retirement of asset of Rs. 4.30 Crore for FY 2018-19, the Commission sought the following details from the Petitioner:
  - i. The useful life of the Asset.
  - ii. Whether it has simultaneously reduced the depreciation for such assets.
  - iii. Whether the asset was in warranty / guarantee period.
  - iv. Whether the asset was insured and provide the details of insurance cost recovered from it.
  - v. The depreciation charged till date.
  - vi. Date of put to use & its cost.

In this regard the Petitioner submitted the Fixed asset Register for FY 2018-19.

- 3.9.23 Further a query was sought from the Petitioner to provide the details of actual scheme wise breakup of capex and capitalisation claimed for FY 2018-19 vis a vis scheme / projects approved in MYT Order dated November 30, 2017 and Tariff Order dated January 22,2019 and also provide the justification for variance if any.
- 3.9.24 In response of the above query, the Petitioner submitted that:

  The scheme wise breakup of Capex for FY 2018-19 as compared to approved Capex is provided here-in-below: -

Table 3-53: Capital expenditure details as submitted by the Petitioner for FY 2018-19

SI.	Nature of Works	Approved	Actual
No.		• •	
1	New Connection, Metering & Replacement jobs	22.23	23.19
2	Substation & Network Development	70.21	64.19
3	Process System Automation	18.21	6.43
4	Civil Works & Office Infrastructure Facility	17.98	12.03
5	IT Projects	9.00	4.34
6	Tools / Testing Equipment, Vehicles etc.	5.91	2.38
7	Demand Side Management	1.00	0.00
8	Land & Other	13.25	12.82
9	Sub-Total	157.78	125.38
10	Interest Capitalisation	3.76	Included above
11	Salary Capitalisation	10.95	iliciuded above
12	Total Capex incurred	172.49	125.38
13	Add: Assets taken over from GNIDA	1.00	10.13
	Grand Total	173.49	135.51
Note	: Total may not tally due to rounding-off		



3.9.25 With regards to the capital advances of Rs. 40.63 Crore mentioned in the Audited accounts of FY 2018-19, a query was sought from the Petitioner to provide the breakup of the same. In this regard the Petitioner submitted that details as shown in the Table below:

Table 3-54: Details of Capital Advances as submitted by the Petitioner for FY 2018-19

SI.	Particulars	Amount
No.		in Rs. Cr.
1	Advance for 5 nos. 33 kV bays at 220/33 kV Substation at Sec- 148, Noida	20.48
2	Advance for construction of LILO from 220kV Substation Sec-148 Noida to 220 kV RC Green Substation paid to UPPTCL through GNIDA	14.59
3	Advance for construction of 2 nos. 220kV bays at RC Green Substation paid to UPPTCL through GNIDA	4.53
4	Advance for Power Transformer	0.17
5	Other Capital Advances	0.87
	Total	40.63

3.9.26 The Commission vide its Order dated January 22, 2019 in Petition No. 1349 of 2018 ruled that:

#### Quote

5.5.1 Clause 21 of the Distribution MYT Regulations, 2014, provides as follows:

Quote

#### 21. Capital Cost of the Project

- 21.1 The capital cost of the project shall include the following:
- a) Expenditure incurred or projected to be incurred on original scope of work, including the interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation, during construction, on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check shall form the basis for determination of Tariff;



Unquote

Quote

5.5.2 Further, Clause 23 of Distribution MYT Regulations, 2014, provides as follows:

#### 23. Debt-Equity Ratio

For all capital expenditure incurred after April 1, 2015, debt equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan.

Provided that in case actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

Provided that in case of existing projects, the actual debt equity shall be used for tariff determination. However, any additional capital expenditure shall be in the abovementioned ratio.

The debt and equity amounts arrived at in accordance with clause (a) above shall be used for calculating interest on loan and return on equity.

#### Unquote

5.5.3 The capital expenditure for FY 2018-19 has been considered as per the Petitioner's submission after deducting the assets transferred from UPSIDC and considering the employee capitalisation as computed by the Commission and interest capitalisation as submitted by the Petitioner. The opening CWIP for FY 2018-19 is Rs. 33.58 Crore. As Greater Noida area has been developing at a very fast rate, resulting in the higher electricity requirement and network coverage in the area, and considering that the Petitioner in past has been able to capitalise the allowed capital expenditure, the Commission has allowed total capitalization, i.e., transfers to GFA for the Control Period as proposed by the Petitioner after making the appropriation as mentioned above.



5.5.4 The Commission vide Order dated October 31, 2018 in Petition No. 987 of 2014 in the matter of Denial /Delay by UPPTCL in handing over the physical possession of the 220 kV R.C. Green Substation at Greater Noida to NPCL has stated that:

#### Quote

- 86. Keeping in view the overall efficiency, economical and integrated operations of state transmission sector, interest of consumers of Greater Noida area coupled with the obligation of GNIDA to provide free land and bear the cost of substation up to 220 kV, the Commission decides that
- (i). NPCL petition for owning, operating and maintaining 220 kV sub-station as distribution licensee is dismissed.
- (ii). NPCL shall claim refund of the amount deposited with Greater Noida Authority towards costs of land and construction of 220 KV sub-station at RC Green and associated 220 kV line to NPCL.
- (iii). The investment allowed by this Commission to NPCL in the distribution tariff shall be trued up again after deducting this refund.
- (iv). UPPTCL as STU and transmission licensee, shall own, operate and maintain 220 kV Sub-Station at RC Green.

#### Unquote

5.5.5 Also, the Commission in Order dated October 31, 2018 in Petition No. 1020 of 2015 in the matter of Denial / Delay by UPPTCL in granting connectivity to the 220 kV Gharbara Substation at NPCL at 400 kV Greater Noida (Pali) Substation of UPPTCL has stated that:

#### Quote

49. Keeping in view the overall efficiency, economical and integrated operations of state transmission sector, interest of consumers of Greater Noida area coupled with the obligation of GNIDA to provide free land and bear the cost of substation up to 220 kV, the Commission decides that



- a. NPCL petition for direction to UPPTCL to grant connectivity of Gharbara Substation from 400 kV Greater Noida (Pali) sub-station is dismissed.
- b. NPCL shall claim refund of the amount deposited with Greater Noida Authority towards cost of land and construction of 220 kV Gharbara sub station and associated 220 kV line from GNIDA.
- c. Since the Petitioner did not comply with the provisions of U.P. Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulation-2006, before making investment in the 220 kV Gharabara sub-station, this expenditure cannot be allowed in distribution ARR. The Commission shall review this investment in the True-up of ARR filed by the Petitioner.
- d. UPPTCL as STU and transmission licensee, shall own, operate and maintain 200 kV Sub-Station at village Gharbara.
- e. UPPTCL shall arrange adequate transmission capacity for NPCL as per their power distribution plan without creating any obstacle.
- f. NPCL shall be granted connectivity from Gharbara sub-station through 33 kV feeders.

#### Unquote

- 5.5.6 In line with the above directions of the Commission in the aforementioned Orders, the Commission has directed the Licensee the following:
  - 1) To apprise the Commission about the compliance of the above Orders in the next ARR / Tariff and True- Up filing.
  - 2) Submit the impact on the allowed year wise ARRs (including True- Up ARRs) in regard to the investments made in the 220 kV Gharbara Sub-Station and RC Green Substation along with the next ARR/Tariff and True- Up filing.
- 5.5.7 Also, the Commission on the basis of aforementioned Orders dated October 31, 2018 in regard to 220 kV Gharbara and RC Green Substation has considered it appropriate to disallow the Capital expenditure of Rs 24.00 Crs as submitted by the Petitioner for BZP and KP-V 220 kV Substation and shown in the Table above, for FY 2018-19. The Commission will carry out the detailed prudence check of Capital



expenditure for FY 2018-19 while carrying out the truing up for FY 2018-19.

5.5.8 The Commission while working out debt and equity has considered 70% of the capital expenditure financed through loan and 30% of capital expenditure financed through equity after deducting Consumer Contribution from the total capital expenditure in accordance with Clause 23 of the Distribution MYT Regulations, 2014. The details of the capital expenditure allowed by the Commission are as follows:

TABLE-5-22- CAPEX DETAILS FOR FY 2018-19 APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Approved in T.O dtd. 30.11.2017	Petition	Approved
Total Additions to Assets (excluding interest Capitalisation)	225.63	192.73	168.73
Add: Closing CWIP	2.00	42.3	42.3
Less: Opening CWIP	2.00	33.58	33.58
Total Capex (excluding interest Capitalisation)	225.63	201.46	177.46
Add: Interest Capitalisation	5.86	3.76	3.76
Total Capex	231.49	200.37*	181.22
Consumer Contribution	16.9	33.73	33.73
Net Capex	214.58	166.64	147.49
Debt @ 70%	150.21	116.65	103.24
Equity @ 30%	64.37	49.99	44.25

<sup>\*</sup>After deducting Rs 4.85 Crs for Assets retired.

#### Unquote

3.9.27 Also the Commission in its True Up of FY 2017-18 in its Order dated September 03, 2019 ruled that:

#### Quote

3.7.1 In the Order dated October 31, 2018 in Petition No. 987 of 2014 in the matter of Denial / Delay by UPPTCL in granting connectivity to the 220 kV RC Green Substation at NPCL at Greater Noida, the Commission has stated the following:

Quote



- 50. Keeping in view the overall efficiency, economical and integrated operations of state transmission sector, interest of consumers of Greater Noida area coupled with the obligation of GNIDA to provide free land and bear the cost of substation up to 220 kV, the Commission decides that:
  - a. NPCL petition for owning, operating and maintaining 220 kV substation as distribution licensee is dismissed.
  - b. NPCL shall claim refund of the amount deposited with Greater Noida Authority towards costs of land and construction of 220 KV sub-station at RC Green and associated 220 kV line to NPCL.
  - c. The investment allowed by this Commission to NPCL in the distribution tariff shall be trued up again after deducting this refund.
  - d. UPPTCL as STU and transmission licensee, shall own, operate and maintain 220 kV Sub-Station at RC Green.

#### Unquote

- 3.7.2 The Commission observed that the Petitioner has claimed Rs 19.12 Cr for construction of 220 KV sub-station at RC Green and associated 220 kV line to NPCL which is against the Commission's aforesaid decision. Since the work is yet to be completed by UPPTCL, the same has been included in closing CWIP of FY 2017-18 by the Petitioner.
- 3.7.3 Although, the matter is sub-judice in APTEL, the Commission finds it appropriate to disallow this amount from the closing CWIP subject to final decision of APTEL in this matter. **The Petitioner is directed to apprise the Commission about the matter during the True- Up of FY 2018-19.**
- 3.9.28 Further the Commission vide its Order dated June 04, 2020 in the Petition No. 1512 of 2019 in the matter of review Petition filed by NPCL under Section 94 (1)(f) of the Electricity Act, 2003 read with Regulations 150 of the UPERC (Conduct of Business) Regulations, 2004 seeking partial Review of the Order dated September 03, 2019 passed by the Commission in Petition No. 1382 of 2018 said that:

#### Quote

25. Keeping in view of interest of consumers of Greater Noida area coupled with the obligation of GNIDA to take care of the development, the Commission decides that:



- (i) NPCL shall refund of amount deposited with GNIDA towards the cost of 220 kV LILO amounting to Rs. 14.59 Crore.
- (ii) The remaining claim refund to Rs. 4.53 Crore for 2 no.(s) 220 kV bays at R.C Green Substation will be subject to final decision of Hon'ble APTEL in Appeal No. 336 of 2018.

#### Unquote

3.9.29 It has been observed that the Petitioner, over the years has accumulated various 132 kV and above assets and the same was verified from its FAR submitted for FY 2017-18 and FY 2018-19. However, the Commission in its various above said rulings, has ruled that a distribution Licensee cannot own, operate 132 kV and above assets. The Commission sought deficiency from the Petitioner vide mail dated September 08, 2020 details related to 132kV and above assets which have been capitalized and part of FAR and Financials. Also, it was asked from the Petitioner that if any asset is left to be included in list, the same has to be provided with the details of the same. The query was also asked whether these assets will be transferred to UPPTCL / GNIDA as shown in the Table below:



## Table 3-55: Assets details till FY 2017-18 (As per FAR of FY 2017-18)

Asset Category	Asset description	Capitalisation Date	Сарех	Quantity	Opening Balance (Rs.)	Addition (Rs.)	Retirement (Rs.)	Gross closing balance (Rs.)
Leasehold Land	220 KV S.STN - BZP AREA	06-02-2015	NPCL	16,807	10,92,64,246.00	-	-	10,92,64,246.00
Transmission & Distribution System	100 MVA Transformer 220/132 KV	31-01-2013	NPCL	1	8,06,43,750.00	-	-	8,06,43,750.00
Transmission & Distribution System	60 MVA Transformer, 220/33 KV	31-01-2013	NPCL	1	12,20,72,500.00	-	-	12,20,72,500.00
Transmission & Distribution System	220/33 kV, 100 MVA power transformer	31-03-2015	NPCL	1	7,72,63,787.52	-	1	7,72,63,787.52
Transmission & Distribution System	160 MVA, 220/132 KV T/F	31-03-2018	NPCL	1	-	6,47,40,650.00	1	6,47,40,650.00
Transmission & Distribution System	Current Transformers (220 KV)	31-03-2018	NPCL	3	-	8,28,529.00	1	8,28,529.00
Transmission & Distribution System	220 KV Circuit Breakers	31-01-2013	NPCL	4	1,94,81,000.00	-	-	1,94,81,000.00
Transmission & Distribution System	220 KV Tendom Isolator	31-01-2013	NPCL	6	19,92,375.00	-	-	19,92,375.00
Transmission & Distribution System	220 KV Standard with Bus Isolator 1 E/S	31-01-2013	NPCL	6	20,87,250.00	-	-	20,87,250.00
Transmission & Distribution System	220 KV Standard with Line Isolator 2 E/S	31-01-2013	NPCL	1	4,04,800.00	-	-	4,04,800.00
Transmission & Distribution System	220 kV 3150 Amps. SF6 Circuit Breakers	31-03-2015	NPCL	1	1,23,93,714.58	-	1	1,23,93,714.58
Transmission & Distribution System	220 KV 1600A Isolator with Double EarthSwitch	31-03-2015	NPCL	1	3,74,595.26	-	-	3,74,595.26
Transmission & Distribution System	220 KV 2000A Isolator with Single EarthSwitch	31-03-2015	NPCL	1	8,05,783.85	-	1	8,05,783.85
Transmission & Distribution System	220 KV 1600A Isolator with Single EarthSwitch	31-03-2015	NPCL	3	34,52,822.18	-	1	34,52,822.18
Transmission & Distribution System	220 KV 1600A Isolator w/o EarthSwitch	31-03-2015	NPCL	1	12,61,832.89	-	-	12,61,832.89
Transmission & Distribution System	Circuit Breaker (220 KV)	31-03-2018	NPCL	1	-	20,83,000.00	-	20,83,000.00



Asset Category	Asset description	Capitalisation Date	Сарех	Quantity	Opening Balance (Rs.)	Addition (Rs.)	Retirement (Rs.)	Gross closing balance (Rs.)
Transmission & Distribution System	Isolator without E/S (Motorised) (220 KV)	31-03-2018	NPCL	2	-	3,98,463.00	-	3,98,463.00
Transmission & Distribution System	Tantem Isolators (Motorised) (220 KV)	31-03-2018	NPCL	2	-	4,12,203.00	-	4,12,203.00
Transmission & Distribution System	220 KV CT 1000/800/300/I Amp	31-01-2013	NPCL	11	94,63,781.25	-	-	94,63,781.25
Transmission & Distribution System	220 KV PT/CVT	31-01-2013	NPCL	6	64,13,550.00	-	-	64,13,550.00
Transmission & Distribution System	220 KV Poly Con Insulators	31-01-2013	NPCL	95	60,08,750.00	-	-	60,08,750.00
Transmission & Distribution System	220 KV Double feeder Control Panel	31-01-2013	NPCL	1	3,33,643.75	-	-	3,33,643.75
Transmission & Distribution System	220 KV Transformer Control Panel	31-01-2013	NPCL	2	7,68,487.50	-	-	7,68,487.50
Transmission & Distribution System	220 KV Bus Coupler Control Panel	31-01-2013	NPCL	1	1,62,868.75	-	1	1,62,868.75
Transmission & Distribution System	220 KV Transformer Bus Coupler Control Panel	31-01-2013	NPCL	1	2,37,187.50	1	1	2,37,187.50
Transmission & Distribution System	220 KV Transfer Protection Panel	31-01-2013	NPCL	1	7,96,950.00	1	1	7,96,950.00
Transmission & Distribution System	220 KV Distance protection Panel	31-01-2013	NPCL	1	13,28,250.00	-	-	13,28,250.00
Transmission & Distribution System	220 kV Lightning Arrestor	31-03-2015	NPCL	2	6,70,329.59	1	1	6,70,329.59
Transmission & Distribution System	220 KV CT 800-400A	31-03-2015	NPCL	3	48,39,741.11	-	-	48,39,741.11
Transmission & Distribution System	220 KV CVT 800-400A	31-03-2015	NPCL	4	68,02,203.15	1	1	68,02,203.15
Transmission & Distribution System	220 kV Circuits Control panel	31-03-2015	NPCL	1	5,64,618.00	-	-	5,64,618.00
Transmission & Distribution System	220 KV Transformer Protection Panel	31-03-2015	NPCL	1	48,08,756.00	-	-	48,08,756.00
Transmission & Distribution System	220 KV bus coupler breaker Control Panel	31-03-2015	NPCL	1	17,08,719.00	-	-	17,08,719.00

Asset Category	Asset description	Capitalisation Date	Сарех	Quantity	Opening Balance (Rs.)	Addition (Rs.)	Retirement (Rs.)	Gross closing balance (Rs.)
Transmission & Distribution System	220kV Transfer bus breaker Control Panel	31-03-2015	NPCL	1	7,45,327.00	-	-	7,45,327.00
Transmission & Distribution System	220 kV busbar Protection panel	31-03-2015	NPCL	1	47,27,680.00	-	-	47,27,680.00
Building & Structures	Boundary Wall partly at 220KV KP-5 ESS01	30-11-2015	NPCL	50	7,82,920.63	-	-	7,82,920.63
Transmission & Distribution System	220KV Isolator Contacts	31-03-2015	NPCL	75	14,91,865.80	-	-	14,91,865.80
Transmission & Distribution System	220KV Bay Marshalling kiosk	31-03-2015	NPCL	1	3,53,700.00	-	1	3,53,700.00
Transmission & Distribution System	220V Battery Tubular	31-03-2015	NPCL	1	4,81,056.52	-	1	4,81,056.52
Transmission & Distribution System	220V Battery Charger	31-03-2015	NPCL	1	12,66,094.14	-	1	12,66,094.14
Transmission & Distribution System	220KV Bus Post Insulator	31-03-2015	NPCL	705	5,97,066.18	-	-	5,97,066.18
Transmission & Distribution System	220KV Insulator String Hardware	31-03-2015	NPCL	5,226	87,47,694.80	-	-	87,47,694.80
Meters	220KV Outdoor CT	31-03-2015	NPCL	100	46,93,350.00	-	-	46,93,350.00
Transmission & Distribution System	220 KV Breaker Spare Parts	31-03-2016	NPCL	3	92,447.86	-	1	92,447.86
Building & Structures	Boundary Wall 220 KV Sub- Station	31-03-2015	NPCL	256	49,45,099.79	-	1	49,45,099.79
Building & Structures	Guard Room at 220KV Gharbara Sub/Stn.	31-03-2017	NPCL	1	8,47,857.65	-	-	8,47,857.65
Building & Structures	LED Light at KP5 220KV SS	31-03-2018	NPCL	25	-	1,78,360.00	1	1,78,360.00
Building & Structures	Const. of Boundary Wall at KP5 220KV SS	31-03-2018	NPCL	1	-	3,98,19,837.65	-	3,98,19,837.65
Transmission & Distribution System	40 MVA TRANSFORMER 132/33KV	31-01-2013	NPCL	1	7,90,62,500.00	0.00	0.00	7,90,62,500.00
Transmission & Distribution System	40 MVA 132/33KV T/F-II	31-01-2013	NPCL	1	3,95,31,250.00	0.00	0.00	3,95,31,250.00



Asset Category	Asset description	Capitalisation Date	Сарех	Quantity	Opening Balance (Rs.)	Addition (Rs.)	Retirement (Rs.)	Gross closing balance (Rs.)
Transmission & Distribution System	132/33 KV 63 MVA Transformer	31-01-2013	NPCL	1	5,23,39,375.00	0.00	0.00	5,23,39,375.00
Transmission & Distribution System	132 KV Current Transformer 400/200/1A	31-01-2013	NPCL	2	4,50,656.25	0.00	0.00	4,50,656.25
Transmission & Distribution System	Current Transformers (132 KV)	31-03-2018	NPCL	3	0.00	4,12,203.00	0.00	4,12,203.00
Transmission & Distribution System	132 KV Line Isolator	31-01-2013	NPCL	1	1,58,125.00	0.00	0.00	1,58,125.00
Transmission & Distribution System	132 KV Bus Isolator	31-01-2013	NPCL	3	5,39,062.50	0.00	0.00	5,39,062.50
Transmission & Distribution System	132 KV Tandem Isolator	31-01-2013	NPCL	2	3,45,000.00	0.00	0.00	3,45,000.00
Transmission & Distribution System	132 KV CB	31-01-2013	NPCL	1	13,65,625.00	0.00	0.00	13,65,625.00
Transmission & Distribution System	132 KV CVT	31-01-2013	NPCL	2	10,65,187.50	0.00	0.00	10,65,187.50
Transmission & Distribution System	132 KV Line Isolator	31-01-2013	NPCL	1	1,58,125.00	0.00	0.00	1,58,125.00
Transmission & Distribution System	132 KV Bus Isolator	31-01-2013	NPCL	1	1,07,812.50	0.00	0.00	1,07,812.50
Transmission & Distribution System	132 KV Tandem Isolator	31-01-2013	NPCL	1	1,15,000.00	0.00	0.00	1,15,000.00
Transmission & Distribution System	132/KV Circuit Breaker	31-01-2013	NPCL	1	13,10,856.25	0.00	0.00	13,10,856.25
Transmission & Distribution System	132 KV Bus Isolator	31-01-2013	NPCL	1	2,24,537.50	0.00	0.00	2,24,537.50
Transmission & Distribution System	132 KV Tandom Isolator	31-01-2013	NPCL	1	1,13,850.00	0.00	0.00	1,13,850.00
Transmission & Distribution System	132 KV Circuit Breakers	31-01-2013	NPCL	1	11,92,262.50	0.00	0.00	11,92,262.50
Transmission & Distribution System	132 KV Tandem Isolator	31-01-2013	NPCL	1	98,037.50	0.00	0.00	98,037.50
Transmission & Distribution System	132 KV Bus Isolator	31-01-2013	NPCL	1	98,037.50	0.00	0.00	98,037.50



Asset Category	Asset description	Capitalisation Date	Сарех	Quantity	Opening Balance (Rs.)	Addition (Rs.)	Retirement (Rs.)	Gross closing balance (Rs.)
Transmission & Distribution System	132 KV Line Isolator	31-01-2013	NPCL	1	1,34,406.25	0.00	0.00	1,34,406.25
Transmission & Distribution System	Isolator without E/S (Motorised) (132 KV)	31-03-2018	NPCL	2	0.00	3,24,267.00	0.00	3,24,267.00
Transmission & Distribution System	Circuit Breaker (132 KV)	31-03-2018	NPCL	1	0.00	7,90,056.00	0.00	7,90,056.00
Transmission & Distribution System	Tantem Isolators (Motorised) (132 KV)	31-03-2018	NPCL	1	0.00	1,62,133.00	0.00	1,62,133.00
Transmission & Distribution System	132 KV C.T.800/400/1 A	31-01-2013	NPCL	5	12,93,750.00	0.00	0.00	12,93,750.00
Transmission & Distribution System	132 KV C.V.T.	31-01-2013	NPCL	3	21,30,375.00	0.00	0.00	21,30,375.00
Transmission & Distribution System	132 KV Lighting Arrester	31-01-2013	NPCL	5	4,14,000.00	0.00	0.00	4,14,000.00
Transmission & Distribution System	132 KV Post Insulator	31-01-2013	NPCL	46	11,90,250.00	0.00	0.00	11,90,250.00
Transmission & Distribution System	Control Panel (2 No. T/F C and R, 1No.,132KV C/P 3	31-01-2013	NPCL	1	36,87,130.00	0.00	0.00	36,87,130.00
Transmission & Distribution System	132 KV CTs	31-01-2013	NPCL	2	4,31,250.00	0.00	0.00	4,31,250.00
Transmission & Distribution System	132 KV Lighting Arrestor	31-01-2013	NPCL	2	1,38,000.00	0.00	0.00	1,38,000.00
Transmission & Distribution System	132 KV Post Insulator	31-01-2013	NPCL	10	2,58,750.00	0.00	0.00	2,58,750.00
Transmission & Distribution System	132 KV Double Feeder Panel	31-01-2013	NPCL	1	7,18,750.00	0.00	0.00	7,18,750.00
Transmission & Distribution System	132 KV Relay Panel (D.P.P)	31-01-2013	NPCL	1	7,47,500.00	0.00	0.00	7,47,500.00
Transmission & Distribution System	132 KV Lighting Arrester	31-01-2013	NPCL	2	1,37,568.75	0.00	0.00	1,37,568.75
Transmission & Distribution System	132 KV Polycone Insulator	31-01-2013	NPCL	10	2,21,375.00	0.00	0.00	2,21,375.00
Transmission & Distribution System	132/33 KV T/F Control & Relay Panel	31-01-2013	NPCL	1	6,38,825.00	0.00	0.00	6,38,825.00



Asset Category	Asset description	Capitalisation Date	Сарех	Quantity	Opening Balance (Rs.)	Addition (Rs.)	Retirement (Rs.)	Gross closing balance (Rs.)
Transmission & Distribution System	132 KV CT 1000/800/300/I Amp	31-01-2013	NPCL	2	4,74,375.00	0.00	0.00	4,74,375.00
Transmission & Distribution System	132 KV Poly Con Insulators	31-01-2013	NPCL	13	3,70,012.50	0.00	0.00	3,70,012.50
Transmission & Distribution System	132 KV Capacitor Bank with associated equipments	31-01-2013	NPCL	1	1,43,10,092.00	0.00	0.00	1,43,10,092.00
Meters	INSTALLATION OF ABT METERS AT SURAJPUR 132Kv SUB S	28-02-2007	NPCL	1	1,19,06,012.82	0.00	0.00	1,19,06,012.82
Office Equipment	CARRIER MAKE 2 TON SPLIT AC FOR 132 KV SUB-STATION	21-04-2010	NPCL	1	32,500.19	0.00	0.00	32,500.19

### Table 3-56: Assets details for FY 2018-19

Asset Category	Asset description	Сарех	Quantity	Depreciation Rate	Opening Balance	Addition (Rs.)	Retirement	Gross closing balance (Rs.)
Building & Structures	Mild Steel Works at 220KV IT City S/Stn.	NPCL Assets	425	W302	ı	79,295	T	79,295
Transmission & Distribution System	160 MVA Transformer 220/132 KV	NPCL Assets	1	W781	1	5,75,62,761	1	5,75,62,761
Transmission & Distribution System	132 KV Current Transformer (1000/800/500/1AMP)	NPCL Assets	3	W781	1	3,95,239	1	3,95,239



3.9.30 In this regard the Petitioner submitted that the assets classified in the below list other than mentioned above cannot be classified as 220 kV /132 KV.

Asset Category	Asset Description	Capitalisation Date	Capex	Quantity	Gross Closing Balance (Rs.)	Remarks
Leasehold Land	220 KV S.STN - BZP AREA	06-02-2015	NPCL	16,807	10,92,64,246.00	This Land is for
Building & Structures	Boundary Wall partly at 220KV KP-5 ESS01	30-11-2015	NPCL	50	7,82,920.63	This Land is for construction of Distribution
Building & Structures	Boundary Wall 220 KV Sub-Station	31-03-2015	NPCL	256	49,45,099.79	Substation including 33kV / stores/
Building & Structures	Const. of Boundary Wall at KP5 220KV SS	31-03-2018	NPCL	1	3,98,19,837.65	customer care office etc.
Building & Structures	LED Light at KP5 220KV SS	31-03-2018	NPCL	25	1,78,360.00	ctc.
Meters	INSTALLATION OF ABT METERS AT SURAJPUR 132Kv SUB S	28-02-2007	NPCL	1	1,19,06,012.82	Cost of ABT Meters installed at 33kV feeders of 132/33 kV Surajpur Substation to comply with Open Access Regulations
Computers	Barcode scanners (SYMBOL LS2208AP)	09-07-2007	NPCL	6	32760	Bar Code Scanners provided at Collection Centre at Alpha II and has inadvertently been considered as 220 kV related Assets.
Office Equipments	BainMade(04Hot*02 Ambient) (2200*300)	28-02-2018	NPCL	2	1,48,680	The office equipment's has
Office Equipments	Tray Slide for Bain Marie (2200x300)	28-02-2018	NPCL	2	20,178	inadvertently been considered as 220 kV related Assets.
Office Equipments	CARRIER MAKE 2 TON SPLIT AC FOR FOR 132 KV SUBSTATION	21-04-2010	NPCL	1	32,500	Cost of ABT Meters installed at 33kV feeders of 132/33 kV Surajpur Substation to comply with Open Access Regulations

3.9.31 The Petitioner further submitted that it is pertinent to mention that the capital expenditure incurred by the Company on all the assets mentioned in the mail relate to



strengthening / augmenting distribution system of the Petitioner to provide reliable power supply to the consumers as per their growing demand. These expenditures other than the asset details for FY 2018-19 given in your above mail had been incurred much prior to the Orders dated October 31, 2018 of the Commission in the matter of R C Green and Gharbara respectively and duly approved by the Commission.

3.9.32 The Petitioner further vide its mail dated September 14, 2020 submitted that:

"The capital expenditure incurred by the Company on all the assets mentioned in your mail relates to strengthening / augmenting distribution system of the Company to provide reliable power supply to the consumers as per their growing demand. Further, all these assets have been created either at 220kV R.C. Green Substation & 220kV Gharbara Substation related to proposed 220kV Substations, which according to Company are Distribution assets and not transmission assets as stated above."

It is also relevant to note that all the assets mentioned herein are already trued-up till FY 2017-18.

As informed earlier, with respect to the question that whether the distribution licensee can establish, own, operate and maintain a distribution system over and above 33kV Voltage level, the same is pending adjudication before the Hon'ble APTEL in Appeal related to 220kV R.C. Green Substation (Appeal No. 336 of 2018) & 220kV Gharbara Substation (Appeal No. 4 of 2019). Since, the matters are subjudice before the Hon'ble APTEL, any action, which may impinge on such judicial process, is, therefore, not warranted as of now."

- 3.9.33 The Commission with regards to asset Construction of LILO from 220 kV Substation Sec-148 Noida to 220 kV RC Green substation of Rs. 14.59 Crore, Cost of 2 no. 220 kV bays at RC Green Substation of Rs. 4.53 Crore and cost of 5 no. 33 bays at 220/33 kV Substation at Sec-148 Noida of Rs. 20.48 Crore sought the details to provide whether the above assets are capitalized or not. If yes, provide in which year these assets were capitalized and also, provide asset wise detail of CWIP for FY 2019-20 and FY 2020-21.
- 3.9.34 The Petitioner in this regard submitted that:

"With regards to asset Construction of LILO from 220 kV Substation Sec-148 Noida to 220 kV RC Green substation of Rs. 14.59 Crore, Cost of 2 no. 220 kV bays at RC Green Substation of Rs. 4.53 Crore and cost of 5 no. 33 bays at 220/33



kV Substation at Sec-148 Noida of Rs. 20.48 Crore, the Company hereby states that the said assets have been capitalized. The details of same are provided in Table below:"

	Concerning Date of Capitalization of A	ssets
S. No.	Asset details	Date of Capitalization
1	LILO from 220 kV Substation Sec-148 Noida to 220 kV RC Green substation of Rs. 14.59 Crore	31 <sup>st</sup> December, 2019
2	Cost of 2 no. 220 kV bays at RC Green Substation of Rs. 4.53 Crore	31 <sup>st</sup> December, 2019
3	Cost of 5 no. 33 bays at 220/33 kV Substation at Sec-148 Noida of Rs. 20.48 Crore	31 <sup>st</sup> March, 2020

3.9.35 The Commission in its various Orders i.e. in Petition No. 987 of 2018, Petition No. 1020 of 2015 and Petition No. 1512 of 2019 has ruled that a distribution licensee cannot establish, own, operate, and maintain a distribution system of 132 and 220 kV assets, however the Petitioner still capitalised 132 kV and above assets in FY 2018-19. The Commission further sought the details of 132 kV and above assets capitalised in FY 2018-19. In this regard the Petitioner submitted the details of 132kV and above assets capitalized in FY 2018-19 as shown in the Table below:

Table 3-57: 220kV /132 kV assets capitalised in FY 2018-19 as submitted by the Petitioner

Asset Category	Asset Description	Capitalized Date	Qty.	Addition in Rs. Cr.	Remarks
Building & Structures	Mild Steel Works at Land for 220KV IT City S/s.	31-03-2019	425 Kg	0.01	The land is for 33/11kV S/s and associated office facilities, inadvertently mentioned as 220kV S/s. The cost incurred is for metal signboard to safeguard the above land from illegal encroachment.
Transmission & Distribution	160 MVA Transformer 220/132 KV	31-03-2019	1 no.	5.76	Cost of new 160 MVA transformers
Transmission & Distribution	132 KV Current Transformer (1000/800/500/1AMP)	31-03-2019	3 no.	0.04	for increasing distribution capacity at R C Green Substation paid to UPPTCL through GNIDA

3.9.36 The Petitioner submitted that the detailed justification for the Capital Expenditure on 160 MVA transformer at RC Green Substation which was required for increasing distribution capacity for meeting the growing demand of the consumers and has already been



provided in Petitions No. 1349 of 2018 and 1382 of 2018. Further, as informed, the Petitioner has filed appeals before the Hon'ble APTEL against the orders dated October 30, 2018 in Petition No. 987 of 2014 and 1020 of 2015 wherein the Commission is also the relevant party. Also, with regard to Order dated June 04, 2020 of the Commission, the Petitioner has filed an appeal before Hon'ble APTEL. Therefore, the Petitioner submitted that, all the aforesaid matters are sub-judice before the Hon'ble APTEL and therefore, any action, which may impinge on such judicial process is not warranted in the matter.

- 3.9.37 Since the Petitioner is continuously capitalising the 132 kV and above assets in its FAR, the Commission is constraint to take an adverse decision. The assets related to 132 kV and above assets (as per the list above) capitalised till FY 2017-18 and addition in FY 2018-19 are being deducted from GFA. Further 100% depreciation till FY 2017-18 for 132 kV assets and above in the FAR, is also being deducted from opening balance of Accumulated depreciation.
- 3.9.38 Further during proceedings, in the public hearing several objections were raised issue regarding purchase of high number of vehicles every year by NPCL which includes many high end vehicles. In this regard, the Petitioner submitted that:

"The Petitioner submitted that the company vehicles are provided to the Senior Officers for discharging their official duties efficiently including travelling within NCR and destinations within 300 Kms. The Petitioner mentioned that the licensed area of the Company is spread over 335 Sq. Kms. and vehicles are required for smooth movement of these officers for discharging their duties. The Petitioner also mentioned that such vehicles are also necessary for 24x7 availability as well as safety of the employees and the vehicles provided to the officers varies as per their seniority/designation. The Petitioner also submitted that, as per the policy, these vehicles are generally replaced after 5 years period. Further, the Petitioner submitted that the field duties and shift-based duties in call center, control room etc. pooled vehicles are provided to the officers/staff. Also, it was submitted that, Greater Noida city lacks adequate public transport facility for local movement."



3.9.39 The Commission analysed the FAR of FY 2018-19 submitted by the Petitioner as shown below:

Table 3-58: Details of Vehicles till FY 2018-19 as per Fixed Asset Register (FAR) submitted by the Petitioner

Asset Description	Quantit Y	Gross Block (Opening)	Addition	Retireme nt	Gross Block (Closing)	Accumulate d Depreciatio n (Opening)	Depreciatio n for the year	Depreciat ion on Retired Assets	Accumula ted Depreciati on (Closing)
PURCHASE OF BIKE PASSION PRO (HERO HONDA MAKE)	1	50,700	-	-	50,700	45,630	-	-	45,630
HYUNDAI ACCENT 1.5 EXECUTIVE BS IV- (UP16AC1277)	1	1	1	1	1	-	-	ı	-
YO STYLE ER BIKE	1	28,417	_	-	28,417	25,575	-	-	25,575
ACCESSORIES FOR VEHICLES- GPS SYSTEM	15	2,59,098	1	-	2,59,098	2,33,188	-	1	2,33,188
HONDA ACCORD M/T	1	21,09,534	-	-	21,09,534	18,98,581	-	-	18,98,581
HONDA CITY 1.5 VMT (AVN)	1	10,10,085	-	-	10,10,085	9,09,077	-	-	9,09,077
HONDA CITY VX MT PETROL (DL 13 CC 3323)	-	9,94,806	-	9,94,806	-	8,95,325	-	8,95,325	-
HONDA CITY VX(MT) UP16AW6863	ı	10,93,705	ı	10,93,705	1	9,55,854	28,480	9,84,335	-
HONDA AMAZE 1.2 REGN.NO.UP-16 AX 2536	1	7,43,732	-	7,43,732	-	6,37,301	20,160	6,57,461	-
HONDA ACTIVA 125 SCOOTER REGN.NO.UP-16 AY 3336	1	61,968	-	-	61,968	49,966	4,009	1	53,974
HONDA DREAM NEO BIKE REGN.NO.UP-16 AY 3376	1	60,482	-	-	60,482	48,767	3,913	-	52,680
HONDA DREAM NEO BIKE REGN.NO.UP-16 AY 3375	1	60,481	-	-	60,481	48,767	3,913	1	52,679
MARUTI ECCO FLEXI CAR (REGN.NO.UP-16 CT 6626)	1	4,59,971	-	-	4,59,971	3,74,244	28,633	1	4,02,877
MARUTI SWIFT DZIRE ZXI REGN.NO.UP16AY941 6	1	7,42,974	-	-	7,42,974	5,80,958	54,114	-	6,35,071
HONDA CITY VXMT (DSL) METALIC REGN NP.UP16AY 9761	-	12,19,071	-	12,19,071	-	9,55,463	61,270	10,16,733	-



Asset Description	Quantit Y	Gross Block	Addition	Retireme nt	Gross Block	Accumulate d Depreciatio	Depreciatio n for the	Depreciat ion on Retired	Accumula ted Depreciati
		(Opening)			(Closing)	n (Opening)	year	Assets	on (Closing)
MAHINDRA SCORPIO S4 7 SEATER REGN.NO.UP16AY992 5	1	10,14,130	1	-	10,14,130	7,89,894	74,895	-	8,64,789
Honda City 1.5 VX UP16-BA-6182	1	11,65,840	-	-	11,65,840	8,22,323	1,14,735	-	9,37,057
HYUNDAI CRETA 1.6CRDI SX+ POLAR WHITE	-	12,23,380	-	12,23,380	-	8,19,040	83,250	9,02,290	-
MARUTI CIAZ VDI+ UP16BB1148	1	9,34,387	-	-	9,34,387	6,44,870	96,699	-	7,41,569
Honda Amaze 1.2 VX(O) (UP16BC3399	1	7,80,438	-	-	7,80,438	4,95,933	95,025	-	5,90,957
Maruti Suzuki Ciaz Zxi (UP16BC2027)	1	7,62,429	-	-	7,62,429	4,86,342	92,213	-	5,78,555
Maruti Suzuki Ertiga Zdi+ (UP16BC2939)	1	7,70,444	ı	ı	7,70,444	4,90,518	93,495	ı	5,84,014
Maruti S-Cross Alpha- SCRDCL2 UP16BF6556	1	10,13,120	1	1	10,13,120	5,07,558	1,68,858	1	6,76,416
Mahindra TUV300 (UP16BH6154)	1	7,58,726	ı	ı	7,58,726	3,47,281	1,37,423	1	4,84,703
Mahindra TUV300 (UP16BH6153)	1	7,58,726	ı	1	7,58,726	3,47,281	1,37,423	1	4,84,703
Mahindra TUV300 (UP16BH6152)	1	7,58,726	1	1	7,58,726	3,47,281	1,37,423	1	4,84,703
Mahindra TUV300 (UP16BH6008)	1	7,58,726	1	ı	7,58,726	3,47,281	1,37,423	1	4,84,703
Mahindra TUV300 (UP16BH6169)	1	7,58,726	1	1	7,58,726	3,47,281	1,37,423	-	4,84,703
XUV 500 W4 (UP1BH7831)	1	12,46,712	1	ı	12,46,712	5,65,321	2,27,585	1	7,92,905
Maruti Suzuki Ertiga VDI Hybrid (UP16BJ0588)	1	7,88,802	ı	-	7,88,802	3,48,067	1,47,205	-	4,95,273
Maruti Suzuki Ciaz Vxi + (AT)	1	7,85,409		-	7,85,409	3,50,399	1,45,293	1	4,95,693
Maruti Suzuki Ciaz Vxi + (UP16BJ0778)	1	7,88,468	-	-	7,88,468	3,47,920	1,47,143	-	4,95,063
Nissan Terrano XL D (O) (UP16BK3085)	1	10,27,549	-	-	10,27,549	4,10,207	2,06,192	-	6,16,400
Hyundai Creta 1.6 VTVT E+ (UP16BJ9241)	1	9,98,151	1	1	9,98,151	4,28,887	1,90,134	-	6,19,021
Ashok Leyland DOST- 2350MM (UP16ET0905)	1	6,10,889	1	-	6,10,889	2,59,137	1,17,485	-	3,76,622



Asset Description	Quantit Y	Gross Block (Opening)	Addition	Retireme nt	Gross Block (Closing)	Accumulate d Depreciatio n (Opening)	Depreciatio n for the year	Depreciat ion on Retired Assets	Accumula ted Depreciati on (Closing)
Maruti Suzuki Ciaz VXI+ (UP16BH9146)	1	7,87,683	-	-	7,87,683	3,51,414	1,45,714	-	4,97,128
Honda Jazz CVT	1	9,77,388	-	-	9,77,388	3,30,022	2,16,220	-	5,46,242
HONDA DREAM REGN NO.UP16BM8390	1	54,692	-	-	54,692	16,415	12,784	-	29,200
Mercedes Benz (DL2CAW8598)	1	69,02,516	-	-	69,02,516	21,79,115	15,77,616	-	37,56,731
Mahindra TUV300 T4 Silver (UP16BM9025)	1	7,85,676	-	-	7,85,676	2,27,187	1,86,535	-	4,13,723
Toyota Innova Crysta 2.8 ZX (AT)Regn.No.UP16BS 6488	1	24,16,781	-	-	24,16,781	1,43,749	7,59,193	-	9,02,942
TUV 300 T4	1	8,65,555	-	-	8,65,555	34,850	2,77,456	-	3,12,305
TUV 300 T4+mHAWK100	1	8,65,555	-	-	8,65,555	34,850	2,77,456	-	3,12,305
TUV 300 T4+mHAWK100	1	8,65,555	-	-	8,65,555	34,850	2,77,456	-	3,12,305
TUV 300 T4+mHAWK100	1	8,65,555	-	-	8,65,555	34,850	2,77,456	-	3,12,305
Maruti Wagon R Green LXI- REGN NO.UP16BU8204	1	4,93,088	-	-	4,93,088	7,900	1,61,979	(221)	1,70,100
S Cross (Zeta) 1.3 D REGN.NO.UP16BW42 08	1	-	9,90,522	-	9,90,522	-	2,66,480	-	2,66,480
New Dzire Zxi (+) REGN.NO.UP16BW31 01	1	-	7,69,463	-	7,69,463	-	2,11,233	-	2,11,233
Vento Highline (P) MT (UP16BZ2208)	-	-	10,78,876	10,78,876	-	-	1,55,985	1,55,985	-
MARUTI CIAZ ALPHA MT (P) REGN.NO.UP16BZ362 2	1	-	11,06,260	-	11,06,260	-	1,59,944	-	1,59,944
Hyundai Creta SX (P) UP16BZ9659	1	-	11,58,685	-	11,58,685	-	1,43,137	-	1,43,137
Ciaz Alpha MT(P) 1.5 (UP16BZ6453)	1	-	10,97,757	-	10,97,757	-	1,46,660	-	1,46,660
Innova Crysta 2.4 MT (D) (UP16CA8107)	1	-	22,66,768	-	22,66,768	-	2,17,796	-	2,17,796
Honda City VMT (P) UP16BZ9426	1	-	10,92,438	-	10,92,438	-	1,35,953	-	1,35,953
Corolla Altis VL CVT(P) (UP16CA4091)	1	-	17,40,967	-	17,40,967	-	1,94,359	-	1,94,359
Corolla Altis VL CVT(P) (UP16CB1329)	1	-	21,76,105	-	21,76,105	-	1,77,224	-	1,77,224



Asset Description	Quantit Y	Gross Block (Opening)	Addition	Retireme nt	Gross Block (Closing)	Accumulate d Depreciatio n (Opening)	Depreciatio n for the year	Depreciat ion on Retired Assets	Accumula ted Depreciati on (Closing)
Marrazo M6 (D) 7STR (UP16CA070)	1	-	13,98,016	1	13,98,016	-	1,70,144	ı	1,70,144
Ciaz Alpha MT(P) 1.5 (UP16CA4022)	1	-	11,00,860	-	11,00,860	-	1,23,906		1,23,906
Marazzo M4 (D) 7STR (UP16CA0062)	1	-	11,32,654	-	11,32,654	-	1,37,849	-	1,37,849
Skoda Superb Style 1.8 (MT) (P) UP16CA6737	1	-	21,56,070	1	21,56,070	-	2,20,971	1	2,20,971
Total	67	4.25	1.93	0.64	5.54	2.06	0.95	0.46	2.55

3.9.40 It was analysed that over the years, NPCL has accumulated large number of vehicles. The usual business of the Petitioner is of distribution of electricity to its consumers and purchasing high number of luxury vehicles is not in synchronisation with its core / usual business. Hence the Commission for True Up of FY 2018-19 has disallowed the vehicles accumulated by the Petitioner till FY 2018-19. A query vide mail dated October 07, 2020 related to number of vehicles accumulated by NPCL was sought. The Petitioner vide mail dated October 08, 2020 submitted the details as shown in the Table below:

Table 3-59: Details of Two-Wheelers as submitted by the Petitioner (Rs. Crore)

Year		Opening		ition during the year	dele	tirement / etion during the year	Clos	sing balance
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
FY 2013-14	2	0.01	0	0	0	0	2	0.01
FY 2014-15	2	0.01	3	0.02	0	0	5	0.03
FY 2015-16	5	0.03	0	0	0	0	5	0.03
FY 2016-17	5	0.03	0	0	0	0	5	0.03
FY 2017-18	5	0.03	1	0.01	0	0	6	0.03
FY 2018-19	6	0.03	0	0	0	0	6	0.03

Table 3-60: Details of Four-Wheelers as submitted by the Petitioner (Rs. Crore)

Year	Ор	ening		ion during ne year	delet	rement / ion during ne year	Closii	ng balance	No. of	Connected Load	Sales
	No.	Amou nt	No.	Amount	No.	Amount	No.	Amount	Consumer	(MW)	(MU)
FY 2013-14	22	1.59	9	0.67	4	-0.2	27	2.05	60,484	561.14	1,128.67



Year	Op	ening		Addition during the year		rement / ion during ie year	Closir	ng balance	No. of	Connected Load	Sales
	No.	Amou nt	No.	Amount	No.	Amount	No.	Amount	Consumer	(MW)	(MU)
FY 2014-15	27	2.05	7	0.61	6	-0.36	28	2.3	64,981	645.34	1,309.89
FY 2015-16	28	2.3	9	0.84	5	-0.44	32	2.69	70,994	707.53	1,377.16
FY 2016-17	32	2.69	15	1.29	10	-0.76	37	3.22	75,918	600.78	1,500.40
FY 2017-18	37	3.22	8	1.41	7	-0.41	38	4.22	82,231	832.37	1,667.60
FY 2018-19	38	4.22	14	1.93	6	-0.64	46	5.51	91,234	934.6	1,850.07

- 3.9.41 It is noted that the Petitioner has not been able substantiate the base of high-end vehicles clearly. Further, such costs of high-end luxury vehicles cannot be passed on to the consumers. Further in the above tables it can be seen that the Petitioner has almost 50 vehicles. Therefore, the rise in number of vehicles is not in proportion to the increase in number of consumers, load and sales. The vehicles added till FY 2017-18 are being disallowed and reduced from the opening GFA of FY 2018-19. Further vehicles added in FY 2018-19 are being reduced from the GFA addition during the year. Further 100% depreciation till FY 2017-18 for vehicles is also being deducted from the accumulated depreciation.
- 3.9.42 Further the Commission observed that certain assets such as KP-I and KP-IV are of amount more than Rs. 10 Crore, however, the Petitioner did not take prior approval from the Commission for incurring capex more than Rs. 10 Crore. Hence the Commission has reduced the 25% of the opening GFA from the net GFA and corresponding 25% depreciation till FY 2017-18 for opening balance of Accumulated depreciation of FAR is also being deducted. The details of such assets as per FAR of FY 2018-19 is shown in the Table below:

Table 3-61: Details of KP-I substation as per Fixed Asset Register (FAR) submitted by the Petitioner for FY 2018-19

Asset Description	Quantity	Gross Block (Opening)	Addition	Retireme nt	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciati on for the year	Depreciatio n on Retired Assets	Accumula ted Depreciati on (Closing)
LAND AT PLOT NO. 37/A, KP-I	2,560	1,46,68,056	-	-	1,46,68,056	6,54,593	1,62,978	-	8,17,571
Aluminium Works Customer Care KP-1	273	60,96,074	-	-	60,96,074	1,84,591	1,78,527	-	3,63,117
Supply & Fixing of Lift Wall KP-1	418	61,03,321	-	-	61,03,321	1,84,810	1,78,739	-	3,63,549



Asset Description	Quantity	Gross Block (Opening)	Addition	Retireme nt	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciati on for the year	Depreciatio n on Retired Assets	Accumula ted Depreciati on (Closing)
Supply & Fixing of Sanitary Fittings KP1	1,550	26,42,351	-	-	26,42,351	80,011	77,383	-	1,57,394
Lighting & Fixing Works GF KP-1	275	25,20,463	-	-	25,20,463	76,320	73,813	-	1,50,133
Lighting & Fixing Works BM KP-1	234	22,63,206	-	-	22,63,206	68,530	66,279	-	1,34,810
Supply & Installation of ACDB Panels KP1	6	13,20,883	-	-	13,20,883	39,997	38,683	-	78,679
Supply of Raw & Sewage water Tank KP1	3	5,70,150	-	-	5,70,150	17,264	16,697	-	33,961
Insta.of Over-Deck Roof-Insulatio KP1	800	8,48,029	-	-	8,48,029	25,679	24,835	-	50,514
SS Railing & Granite Works at KP-1 Build	552	77,29,280	-	-	77,29,280	2,34,044	2,26,356	-	4,60,401
Green Building Certification KP-1	1	3,18,750	-	-	3,18,750	9,652	9,335	-	18,987
Civil Construction KP- 1 Office	5,575	6,00,27,000	-	-	6,00,27,000	4,139	15,10,815	-	15,14,955
Construction of STP System at KP-1	1	10,36,519	-	-	10,36,519	13,036	31,303	-	44,339
Construction of RO Plant at KP-1	1	4,32,450	-	-	4,32,450	5,439	13,060	-	18,499
Green Building Consultancy Service KP- 1	4,006	4,90,555	-	-	4,90,555	41	14,814	-	14,854
Fire Hydrant Works at KP-1	2,805	74,41,738	-	-	74,41,738	616	2,24,722	-	2,25,338
Facade Works KP-1 Office	910	2,17,78,487	-	-	2,17,78,487	1,802	6,57,656	-	6,59,458
Civil Construction KP-1 Office	1	-	30,70,875	-	30,70,875	-	254	-	254
Green Building Consultancy Service KP- 1	1	-	2,01,724	-	2,01,724	-	1,001	-	1,001
Boundary Wall at KP-1	364	15,14,256	-	-	15,14,256	1,78,900	40,328	-	2,19,228
Boundary Wall 33/11KV KP - 1 Sub/Stn	216	42,02,853	-	-	42,02,853	3,73,449	1,15,648	-	4,89,097
Building Structure Customer Care KP-1	2,500	6,78,12,942	ı	ı	6,78,12,942	40,39,480	19,25,959	-	59,65,439
Switch Yard Structure Customer Care KP-1	75	20,19,220	1	ı	20,19,220	1,20,281	57,348	-	1,77,629
Control Room Building KP-1	190	87,05,440	-	-	87,05,440	5,18,566	2,47,244	-	7,65,809
Civil Switch Yard Structure KP-1	150	22,81,950	-	-	22,81,950	1,35,931	64,810	-	2,00,741
Boundary Wall at KP-1 11/0.4KV Txr.House	85	12,68,041	-	-	12,68,041	78,680	35,919	-	1,14,599
Bore Well Water Testing KP-1	1	8,350	-	-	8,350	253	245	-	497
Interior Architectural Service KP-1 Offi	1	3,41,796	-	-	3,41,796	10,350	10,010	-	20,359



Asset Description	Quantity	Gross Block (Opening)	Addition	Retireme nt	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciati on for the year	Depreciatio n on Retired Assets	Accumula ted Depreciati on (Closing)
Fire Hydrant System at KP-1 S/S	643	49,31,479	1	ı	49,31,479	1,49,326	1,44,421	-	2,93,747
Civil Building Structure KP-1 S/S	2,127	2,72,96,781	-	-	2,72,96,781	8,26,553	7,99,401	-	16,25,954
Civil Switchyard Structure KP-1 S/S	2,657	96,83,386	1	ı	96,83,386	2,93,215	2,83,583	-	5,76,798
Elevator KP-1 Office	1	56,85,112	-	-	56,85,112	470	1,71,676	-	1,72,147
11/0.433 kV, 250 KVA Trf. KP-1 Tugalpur	-	-	-	-	-	-	-	-	-
11/0.433 kV, 250 KVA Trf. KP-1 Tugalpur	1	5,86,479	-	-	5,86,479	88,146	38,920	-	1,27,066
Supply & Erection of DG Sets at KP-1	1	39,73,951	-	-	39,73,951	3,12,344	2,87,070	-	5,99,414
Generator KP - 1 Office	1	7,15,625	-	-	7,15,625	154	56,105	-	56,259
Woodwork KP- 1 Office	923	1,54,44,397	-	-	1,54,44,397	5,403	19,72,249	-	19,77,653
Table KP - 1 Office	52	29,37,416	-	-	29,37,416	1,028	3,75,108	-	3,76,136
Chair KP - 1 Office	254	28,68,419	-	-	28,68,419	1,004	3,66,297	-	3,67,301
Sofa Set KP - 1 Office	49	16,89,684	-	-	16,89,684	591	2,15,773	-	2,16,364
Electrical Wirings & Fittings KP - 1	1	1,70,38,621	-	1	1,70,38,621	5,961	21,75,832	-	21,81,793
Woodwork KP-1 Office	1	-	59,626	-	59,626	-	21	-	21
Table KP-1 Office	1	-	41,437	-	41,437	-	15	-	15
Electrical Wirings & Fittings KP-1 Offic	2	-	16,33,337	-	16,33,337	-	571	-	571
VRF Based Air-Condition BM KP-1 Office	114	37,11,809	-	-	37,11,809	12,42,006	8,24,914	-	20,66,921
VRF based AC & Toilet Ventila at KP-1 GF	80	36,83,364	-	-	36,83,364	12,32,488	8,18,592	-	20,51,081
VRF based AC & Toilet Ventila at KP-1 FF	28	28,16,618	1	1	28,16,618	9,42,467	6,25,966	-	15,68,433
Air Conditioners KP- 1 Office	76	1,73,65,911		-	1,73,65,911	15,891	58,00,214	-	58,16,105
Air Conditioners KP-1 Office	892	-	1,85,162	-	1,85,162	-	169	-	169
UPS for KP1 with Panel	1	15,63,193	-	-	15,63,193	1,36,833	2,13,954	-	3,50,787
Networking Equipment KP - 1 Office	1,505	8,48,385	-	-	8,48,385	349	1,27,205	-	1,27,554
Networking Equipment KP-1 Office	70	-	10,532	-	10,532	-	4	-	4
Upgrade of QMS implemented in KP-1	1	-	22,42,332	-	22,42,332	-	922	-	922
Total (Rs. Crore)		34.73	0.74	-	35.47	1.23	2.13	-	3.36



## Table 3-62: Details of KP-IV substation as per Fixed Asset Register (FAR) submitted by the Petitioner for FY 2018-19

Asset Description	Quantity	Gross Block (Opening)	Addition	Retirement	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciation for the year	Depreciation on Retired Assets	Accumulated Depreciation (Closing)
LAND AT PLOT NO. ESS, KP-IV	2,400	1,36,96,392	-	-	1,36,96,392	6,11,230	1,52,182	-	7,63,412
COST OF LAND FOR ELECTRIC SUB/STN AT KP-IV G.Noida	-	-	-	-	-	-	-	-	-
LAND FOR ELECTRIC SUB/STN AT KP-IV	1,640	1,84,18,681	-	-	1,84,18,681	4,31,782	1,84,187	-	6,15,969
Supply of Raw & Sewage water Tank KP4	3	5,70,150	-	-	5,70,150	17,264	16,697	-	33,961
Insta.of Over-Deck Roof-Insulation KP4	1,200	12,71,405	-	-	12,71,405	38,498	37,234	-	75,732
Supply & Fixing of Sanitary Fittings KP4	2,597	38,43,306	1	-	38,43,306	1,16,376	1,12,553	-	2,28,930
Supply & Installation Heat Recovery KP-4	1	13,50,029	-	-	13,50,029	40,879	39,536	-	80,416
Civil Construction Ground Floor KP-4	4,674	1,34,46,648	-	-	1,34,46,648	4,07,168	3,93,792	-	8,00,960
65 Watt LED Light at KP-4	20	79,000	-	-	79,000	2,392	2,314	-	4,706
Civil Construction KP- 4 Office	11,308	9,41,28,881	-	-	9,41,28,881	8,616	31,44,692	-	31,53,308
Construction of STP System at KP-4	1	11,37,793	-	-	11,37,793	14,309	34,361	-	48,671
Construction of RWH System at KP-4	1	11,08,136	-	-	11,08,136	13,936	33,466	-	47,402
Construction of RO Plant at KP-4	1	7,77,665	-	-	7,77,665	9,780	23,485	-	33,266
Elevator KP - 4 Office	3	8,13,69,078	-	-	8,13,69,078	6,732	24,57,346	-	24,64,079
Air Conditions Low Side 3rd Floor KP4	30	16,57,306	-	-	16,57,306	137	50,047	-	50,184
Green Building Consultancy Service KP-4	8,045	12,63,180	-	-	12,63,180	105	38,145	-	38,249
Fire Hydrant Works at KP-4	3,582	83,73,824	-	-	83,73,824	693	2,52,869	-	2,53,561
Civil Construction KP- 4 Office	1,192	-	1,19,68,470	-	1,19,68,470	-	990	-	990
Green Building Consultancy Service KP-4	1	-	2,25,144	-	2,25,144	-	1,118	-	1,118
Boundary Wall 33/11KV KP - 4 Sub/Stn	100	16,91,139	-	-	16,91,139	1,50,268	46,534	-	1,96,802
Control Room Building KP-4	3,282	8,45,59,504	1	-	8,45,59,504	50,37,039	24,01,578	-	74,38,617
Civil Switch Yard Structure KP-4	120	14,72,662	-	-	14,72,662	87,724	41,825	-	1,29,549



Asset Description	Quantity	Gross Block (Opening)	Addition	Retirement	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciation for the year	Depreciation on Retired Assets	Accumulated Depreciation (Closing)
KP-4 Basement Building Structure	5,443	1,96,69,132	1	-	1,96,69,132	5,95,586	5,76,021	-	11,71,607
Civil Building Structure KP-4	3,257	3,72,71,894	-	-	3,72,71,894	11,28,602	10,91,527	-	22,20,129
Civil Work Basement KP-4	4,655	1,95,99,866	-	-	1,95,99,866	5,93,489	5,73,993	-	11,67,481
Mobile Toilet 33/11KV KP-4 S/Stn.	1	4,82,915	-	-	4,82,915	14,623	14,142	-	28,765
Additional Civil Works KP-4 Basement	1,839	89,64,405	ı	-	89,64,405	2,71,444	2,62,527	-	5,33,972
Terrace Floor Roof Truss KP 4	11,247	23,28,927	-	-	23,28,927	70,520	68,204	-	1,38,724
Civil Structure KP 4 Basement	1,597	51,21,724	-	-	51,21,724	1,55,087	1,49,992	-	3,05,080
Aluminium Work KP-4 Office	571	1,01,64,771	-	-	1,01,64,771	3,07,792	2,97,681	-	6,05,472
Fire Hydrant System KP-4 Office	1,301	84,17,873	-	-	84,17,873	2,54,895	2,46,522	-	5,01,417
Architectual Service KP-4 Office	1	28,13,431	-	-	28,13,431	85,191	82,393	-	1,67,584
Elevator KP-4 Office	1	63,55,078	-	-	63,55,078	526	1,91,907	-	1,92,433
Sub-Station Earthing KP-4	13	4,03,230	-	-	4,03,230	31,693	29,129	-	60,822
Chemical Earthing Works at KP-4	171	51,50,091	-	-	51,50,091	4,04,787	3,72,032	-	7,76,819
Supply & Erection of DG Sets at KP-4	4	87,60,863	-	-	87,60,863	6,87,604	6,32,943	-	13,20,548
Generator KP - 4 Office	2	16,25,625	-	-	16,25,625	349	1,27,449	-	1,27,798
Medical Equipment KP- 4 Office	7	-	48,926	-	48,926	-	11	-	11
Wood work Basement KP-4	191	34,73,189	1	-	34,73,189	4,44,586	3,86,753	-	8,31,339
Table Basement KP- 4	19	8,15,082	-	-	8,15,082	1,04,335	90,762	-	1,95,097
Chair Basement KP- 4	64	7,73,849	-	-	7,73,849	99,057	86,171	-	1,85,228
Sofa Set Basement KP-4	6	1,82,129	-	-	1,82,129	23,313	20,281	-	43,594
Floor Distribution Panels KP-4	1	73,961	-	-	73,961	9,467	8,236	-	17,703
Wood work Ground Floor KP-4	832	1,28,26,167	-	-	1,28,26,167	16,41,816	14,28,242	-	30,70,057
Table Ground Floor KP-4	28	11,28,059	1	-	11,28,059	1,44,397	1,25,614	-	2,70,011
Chair Ground Floor KP-4	144	25,82,854	-	-	25,82,854	3,30,619	2,87,610	-	6,18,229
Sofa Set Ground Floor KP-4	8	2,42,024	-	-	2,42,024	30,980	26,950	-	57,931
Electrical Wirings & Fittings GF KP-4	1,224	76,57,782	-	-	76,57,782	9,80,236	8,52,723	-	18,32,959
Woodwork KP- 4 Office	3,223	4,90,38,759	-	-	4,90,38,759	17,157	62,62,250	-	62,79,406



Asset Description	Quantity	Gross Block (Opening)	Addition	Retirement	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciation for the year	Depreciation on Retired Assets	Accumulated Depreciation (Closing)
Table KP - 4 Office	226	1,15,21,763	-	-	1,15,21,763	4,031	14,71,329	-	14,75,360
Chair KP - 4 Office	720	1,18,29,202	-	-	1,18,29,202	4,139	15,10,589	-	15,14,728
Sofa Set KP - 4 Office	86	39,25,988	-	-	39,25,988	1,374	5,01,349	-	5,02,722
Electrical Wirings & Fittings KP - 4	1	4,20,60,452	-	-	4,20,60,452	14,715	53,71,120	-	53,85,835
Woodwork KP- 4 Office	1	-	18,05,112	-	18,05,112	-	632	-	632
Table KP- 4 Office	2	-	40,964	-	40,964	-	14	-	14
Electrical Wirings & Fittings KP- 4 Offi	1	-	37,96,065	-	37,96,065	-	1,328	-	1,328
Air Conditions Low Side Equipment KP4	143	32,67,023	-	-	32,67,023	10,93,177	7,26,065	-	18,19,242
Air Conditions Low Side Equipment KP- 4	207	61,76,473	-	-	61,76,473	20,66,706	13,72,662	-	34,39,368
VRF Based Air- Condition FF KP-4 Office	220	62,15,439	-	-	62,15,439	20,79,745	13,81,322	-	34,61,067
Air Conditions High Side Equipment KP- 4	207	8,79,678	-	-	8,79,678	2,94,349	1,95,500	-	4,89,849
VRF based AC & Toilet Ventila at KP- 4 SF	230	65,10,428	-	-	65,10,428	21,78,451	14,46,881	-	36,25,331
VRF Based Air- Condition BM KP-4 Office	277	64,16,273	-	-	64,16,273	21,46,945	14,25,955	-	35,72,901
Air Conditioners KP- 4 Office	169	4,00,26,417	-	-	4,00,26,417	36,627	1,33,68,823	-	1,34,05,450
Air Conditioners KP- 4 Office	1,152	-	7,62,447	-	7,62,447	-	698	-	698
UPS KP-4 Ground Floor	12	23,50,093	-	-	23,50,093	3,54,156	2,99,391	-	6,53,546
Networking Equipment KP - 4 Office	3,830	24,00,050	-	-	24,00,050	1,973	3,59,712	-	3,61,684
Computers, Servers, UPS Etc. KP - 4	1	16,24,494	-	-	16,24,494	668	2,43,574	-	2,44,242
Networking Equipment KP- 4 Office	430	-	1,24,026	-	1,24,026	-	51	-	51
Total (Rs. Crore)		69.13	1.88	-	71.01	2.57	5.34	-	7.91

3.9.43 The Commission also finds that, for FY 2018-19, the Petitioner have neither provided the Capital investment plan in terms of the Regulation 23A nor they have taken any prior approval of any scheme having capital expenditure greater than INR 10 Crore, from the Commission. On enquiry, the Petitioner submitted that the Commission has already



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approved the same, vide the Multi Year Tariff Order dated 29.11.2017. It seems the Petitioner breaks up its project / scheme into parts to avoid the approvals required as per the above Regulations.

3.9.44 Further, the Regulation 23A of UPERC MYT Regulations, 2014 states that: Quote

## 23 A Capital Expenditure

- a. Capital expenditure shall be considered on scheme wise basis.
- b. For capital expenditure greater than INR 10 Crore, the Distribution Licensee shall seek prior approval of the Commission.
- c. The Distribution Licensee shall submit detailed supporting documents while seeking approval from the Commission.

Provided that supporting documents shall include but not limited to purpose of investment, capital structure, capitalization schedule, financing plan and cost-benefit analysis:

- d. The approval of the capital expenditure by the Commission for the ensuing year shall be in accordance with load growth, system extension, rural electrification, distribution loss reduction or quality improvement as proposed in the Distribution Licensee's supporting documents.
- e. The Commission may also undertake a detailed review of the actual works compared with the works approved in the previous Tariff Order while approving the capital expenditure for the ensuing year.
- f. In case the capital expenditure is required for emergency work, the licensee shall submit an application, containing all relevant information along with reasons justifying the emergent nature of the proposed work, seeking post facto approval by the Commission.
- g. The Distribution Licensee shall take up the work prior to receiving the approval from the Commission provided that the emergent nature of the scheme has been certified by its Board of Directors.



- h. If capital expenditure is less than INR 10 Crore, the Distribution Licensee shall undertake the execution of the plan with simultaneous notification to the Commission with all of the relevant supporting documents.
- i. During the true-up exercise, the Commission shall take appropriate action as is mentioned in Regulation 19.1 of these regulations.
- j. Consumer's contribution towards cost of capital asset shall be treated as capital receipt and credited in current liabilities until transferred to a separate account on commissioning of the assets.

## Unquote

3.9.45 The Commission, from time to time, in its Tariff Orders has directed the Petitioner to submit the Capital investment plan and take prior approval of the schemes greater than INR 10 Crore as per Regulation 23A of the UPERC MYT Regulations, 2014. Further, the Petitioner has claimed an investment of Rs. 125.38 Crore (excluding GNIDA assets) in FY 2018-19, however, the Petitioner did not take prior approval from the Commission for any of the schemes with capital expenditure greater than INR 10 Crore. Accordingly, the Commission has decided to disallow 25% of the Capital investment of NPCL Assets for FY 2018-19.

Table 3-63: Net Impact of disallowance considered in GFA

Particular	Reference	Claimed in True Up of FY 2018-19 (Rs. Crore)	Amount (Rs. Crore)
Opening GFA	А	1,358.32	1,358.33
Addition / Capitalisation (during the year) as per audited accounts	В	125.38	125.38
Deduction / Retirement during the year as per audited accounts	С	4.30	4.30
Closing GFA	D=A+B-C	1479.40	1,479.40
Opening Balance of 132 kV and above assets as per FAR of FY 2018-19	E		83.38
Opening Balance of Vehicles as per FAR of FY 2018-19	F		4.25
Opening Balance of 25% of KP-I and KP-IV assets as per FAR of FY 2018-19	G =(Rs. 34.73 Crore+ Rs. 69.13 Crore)*25%		25.97



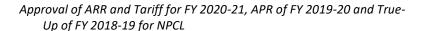
Particular	Reference	Claimed in True Up of FY 2018-19 (Rs. Crore)	Amount (Rs. Crore)
Total Opening Balance considered for Disallowance for FY 2018-19 as per FAR	H=E+F+G		113.60
Addition of 132 kV and above assets as per FAR of FY 2018-19	1		5.80
Addition of vehicles in FY 2018-19 as per FAR of FY 2018-19	J		1.93
Disallowance of 25% of additions after adjustments of item I and J for FY 2018-19	K= (B-(I+J))*25%		20.08
Total addition of GFA considered for Disallowance	L=I+J+K		27.81
Net Opening Balance of GFA	M=A-H		1,244.72
Addition during the year (after all disallowance)	N=B-L		97.57
Retirement during the year	С		4.30
Closing balance of GFA	P=M+N-C		1,337.99

3.9.46 The Gross Fixed Assets after the disallowance are shown in the Table below:

Table 3-64: Gross Fixed Asset after disallowance of 132kV / 220 kV assets and vehicles for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved in True Up FY 2018-19
Opening Balance	1,435.72	1,358.32	1,244.72
Addition during the Year	172.50	125.38	97.57
Retirement during the Year	4.85	4.30	4.30
Closing Balance	1,603.37	1,479.40	1337.99

- 3.9.47 The Commission further observed that the Petitioner for FY 2018-19 has claimed an addition of 315 substation for FY 2018-19. In this regard the Commission sought the details of the same matching with the FAR. The Petitioner only submitted the list of 315 substations.
- 3.9.48 The Commission further observed that the Petitioner has estimated CWIP of FY 2019-20 in which it has included the amount of Rs. 1.28 crore for "Consultancy Service for preparation of DPR and Tender Document for construction of 220KV Substation and Associated 220kV Lines at BZP and KP5, Greater Noida". In this regard the Commission





sought the details of the same for which the Petitioner vide dated September 29, 2020 submitted that:

"It is humbly submitted that the CWIP for FY 2018-19 and FY 2019-20 includes Rs. 1.28 Cr towards "Consultancy Services for preparation of DPR and Tender Document for construction of 220 kV Substation and Associated 220 kV Lines at BZP and KP-5, Greater Noida".

In this regard, we humbly submit that the Work Order no. 4300011507 was issued to M/s Power Grid Corporation of India Ltd. (PGCIL) for the aforesaid work on 29th January, 2018 (i.eFY 2017-18), in line with its earlier submissions in Business plan and ARR petitions, which was much before the Hon'ble Commission's Orders dated 31st October 2018 in respect of RC. Green and Gharbara Substations. Thus, as per the terms of the aforesaid Work Order, an initial payment of Rs. 0.51 Cr. was made on 9th February, 2018 to PGCIL and was included in CWIP for FY 2017-18. Further, on completion of the scope of work during FY 2018-19 as per the work order, the remaining expense of Rs. 0.77 Cr. was incurred during FY 2018-19 and included in CWIP.

Pursuant to the directions of the Hon'ble Commission vide order dated 31st October 2018, the project has been kept in abeyance till the final adjudication of RC Green and Gharbaramatter and hence, the expenditure of Rs. 1.28 Cr continues to remain in CWIP in FY 2018-19 and FY 2019-20."

3.9.49 The Commission has already disallowed the 132kV and above assets, hence the same is been disallowed from the closing CWIP of FY 2018-19. The Commission further observed that the Petitioner in Note 8 of the Audited Accounts of FY 2018-19 has mentioned the capital advances of Rs. 40.63 Crore. In this regard the Petitioner was asked to provide the detail of such advances with respect to the asset for which such advances has been provided and details of the party to which such advances has been given. The Petitioner in this regard submitted the details of capital advances of Rs. 40.63 Crore as shown in the Table below:



Table 3-65: Details of Capital Advances for FY 2018-19 as submitted by the Petitioner

S. No.	Particular	Amount (Rs. Crore)
1	Advance for 5 nos. 33 kV bays at 220/33 kV Substation at Sec- 148, Noida	20.48
2	Advance for construction of LILO from 220 kV Substation Sec- 148 Noida to 220 kV RC Green Substation paid to UPPTCL through GNIDA	14.59
3	Advance for construction of 2nos. 220 kV bays at RC Green Substation paid to UPPTCL through GNIDA	4.53
4	Advance for Power Transformer	0.17
5	Other capital Advances	0.87
	Total	40.63

3.9.50 The Commission has disallowed the amount of Rs. 20.48 Crore paid to UPPTCL from the closing CWIP of FY 2018-19. The details of CWIP is provided in the Table below:

Table 3-66: Details of CWIP computed for FY 2018-19

S. No.	Particular	Reference	Approved (Rs. Crore)
1	Opening CWIP	Α	14.46
2	CWIP claimed for construction of LILO from 220 kV Substation Sec-148 Noida to 220 kV RC Green Substation paid to UPPTCL through GNIDA and construction of 2nos. 220 kV bays at RC Green Substation paid to UPPTCL through GNIDA	В	14.59
	Advance for construction of 2nos. 220 kV bays at RC Green Substation paid to UPPTCL through GNIDA	С	4.53
3	CWIP claimed for Consultancy Service for preparation of DPR and Tender Document for construction of 220KV Substation and Associated 220kV Lines at BZP and KP5, Greater Noida	О	1.28
4	CWIP claimed for 5 nos. 33 kV bays at 220/33 kV Substation at Sec-148, Noida	E	20.48
5	Closing CWIP claimed by the Petitioner	F	58.88
6	Closing CWIP approved for FY 2018-19	G=(F-B-C- D-E)	18.00

3.9.51 The Commission has also observed that the Petitioner has land parcels which are not utilised and has high market rates. The Petitioner is directed to submit the details



- regarding optimum utilisation of all the lands which remain unutilised failing which appropriate treatment may be done.
- 3.9.52 Based on the above, the details of Capital expenditure allowed by the Commission for FY 2018-19 as per the norms specified in UPERC MYT Regulations, 2014 are as shown in the Table below:

Table 3-67: Details of capex for FY 2018-19 as approved by the Commission (Rs. Crore)

Particulars	Reference	Approved vide T.O. 22/01/2019	True Up Petition	Approved in True Up FY 2018-19
Total Additions to Assets (excluding interest capitalisation)	А	168.74	125.38	97.57
Add: Closing CWIP	В	42.30	58.88	18.00
Less: Opening CWIP	С	33.58	33.58	14.46
Total Capex (excluding interest capitalisation)	D=A+B-C	177.46	150.68	101.11
Add: Interest Capitalisation	Е	3.76	0.00	0.00
Total Capex	F=D+E	181.22	150.68	101.11
Less: Consumer Contribution & GNIDA	G	33.73	37.34	37.34
Net Capex	H=F-G	147.49	113.35	63.78
Debt	I=70%of H			44.64
Equity	J=30% of H			19.13

## 3.10 INTEREST AND FINANCE CHARGES

- 3.10.1 The Petitioner stated that interest and Finance Charges covers the following cost elements:
  - a. Interest on Long Term Loans
  - b. Interest on Working Capital
  - c. Interest on Consumer Security Deposits
  - d. Finance Charges
  - e. Carrying Cost of Regulatory Asset.

Each of the above elements are discussed separately below:

#### 3.11 INTEREST ON LONG TERM LOANS

3.11.1 The Petitioner has submitted that the Commission in Tariff Order dated 22<sup>nd</sup> January, 2019 approved the interest on term loan at Rs. 52.36 Crore based on additional debt



requirement of Rs. 99.85 Crore for FY 2018-19, however, based on actual net capital expenditure of Rs. 146.39 Crore and consumer contribution of Rs. 37.34 Crore and stipulated debt equity of 70:30, normative debt is worked out is Rs. 76.33 Crore for FY 2018-19 and accordingly the Petitioner has claimed the Interest on Loan as Rs.45.96 Crore.

3.11.2 Based on the above Capex and Debt arrangement, the summary of interest on Term Loan (normative) for the purpose of funding the capital expenditure for FY 2018-19 is given in the Table below:

Table 3-68: Interest on Term Loan for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Loan Computation	Ref.	Approved Vide T.O. dated 22 January 2019	Actual Based.
1	Gross Normative loan – Opening	а	878.91	834.57
2	Cumulative repayment of Normative Loan upto previous year	b	370.24	380.76
3	Net Normative loan – Opening	c=a-b	508.67	453.81
4	Increase/Decrease due to ACE during the Year	d	99.85	76.33
5	Repayments of Normative Loan during the year	е	60.74	56.6
6	Net Normative loan – Closing	f=c+d-e	547.78	473.54
7	Average Normative Loan*	g=(c+f)/2	528.22	463.68
8	Weighted average Rate of Interest on actual Loans	h	9.91	9.91%
9	Interest on Normative loan	i=g x h	52.36	45.96

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

3.11.3 The provisions for treatment of Interest on Loans as per UPERC (Multi Year Distribution Tariff) Regulations, 2014 are as follows:

Quote

# 27 Treatment of Interest on Loan:

.....

(d) The normative loan outstanding as of April 1 of transition period/control period shall be computed by deducting the cumulative repayment as approved by the



Commission (basis as mentioned below) up to March 31 of current period (year before transition period / control period as applicable) from the gross normative loan.

- (e) The repayment for the transition / control period as applicable shall be deemed to be equal to the depreciation allowed for the year.
- (f) Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered for the transition / control period, as applicable, as per annual depreciation allowed.
- (g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the transition / control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures...

### Unquote

- 3.11.4 The Commission has gone through the interest expenses claimed by the Petitioner for FY 2018-19. The Commission observed that the Opening of net normative loan as claimed by the Petitioner is not equal to the closing balance for FY 2017-18 as approved in the True Up. In this regard the Petitioner submitted that the Commission vide its Tariff Order dated 3rd September 2019, has disallowed the capital expenditure on the project of Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 (changed from earlier Sector-129) to 220/132/33kV RC Green substation amounting to Rs. 19.12 Crore. As the matter is under sub-judice and therefore, the Petitioner while submitting the Petition for truing-up for FY 2018-19, APR for FY 2019-20 and ARR for FY 2020-21 has included the aforesaid expenses for the purpose of computation of normative debts. Thus, the aforesaid difference of Rs. 13.28 Crore is equivalent to 70% of CWIP of Rs. 19.12 Crore pertaining to Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 (changed from earlier Sector-129) to 220/132/33kV RC Green substation for enhancement of upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation being considered by the Petitioner in its Petition.
- 3.11.5 The Commission observed that the Petitioner for does not have any loan for FY 2018-19. In this regard the Regulation 27(g) MYT Regulations, 2014 provides that:



#### Quote

The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the transition / control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures:

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

## Unquote

- 3.11.6 Since there is no actual loan, the interest rate has been considered as allowed by the Commission in the True Up for FY 2017-18.
- 3.11.7 Interest on Loan computation for FY 2018-19 also takes into consideration the values from the True-Up for FY 2017-18. A linking error in the models for FY 2017-18 was found which has affected the opening value of cumulative loan repayment for FY 2018-19. The Commission further observed that the Petitioner in the data gap reply submitted the depreciation of asset created on consumer contribution in which the value of accumulated depreciation opening is considered as Rs. 66.76 Crore, however in FAR for FY 2018-19, the accumulated depreciation opening of FY 2018-19 is considered as Rs. 86.41 Crore. The amount of Rs. 86.41 Crore is considered for further computations. The linking in the model was corrected and the cumulative loan repayment opening (net of consumer contribution) for FY 2018-19 has been computed to be Rs. 304.24 Crore instead of Rs. 370.92 Crore (Rs. 322.40 + Rs. 48.52). The True Up Order dated September 03, 2019 for FY 2017-18 in not being disturbed and the values computed in this Order shall form the basis of True Up of FY 2018-19 and subsequent years.
- 3.11.8 The Interest on Loan as approved by the Commission for the True Up of FY 2017-18 vide Order dated September 03, 2019 is shown in the Table below:



Table 3-69: Interest on Loan as approved by the Commission for FY 2017-18 in Order dated September 03, 2019 (Rs. Crore)

SI. No.	Loan Computation	Formulae	Approved vide TO dtd 30/11/2017	True- Up Petition	Approved upon Truing Up of FY 2017- 18
1	Gross Normative loan – Opening	А	741.66	741.23	731.40
2	Cumulative repayment of Normative Loan upto previous year	В	319.88	332.24	322.40
3	Net Normative Ioan – Opening	C= A-B	421.78	408.99	408.99
4	Increase/Decrease due to ACE during the Year	D	144.33	93.34	79.96
5	Repayments of Normative Loan during the year	E	54.63	44.96	48.52
6	Net Normative loan – Closing	F= C+D-E	511.48	457.37	440.43
7	Average Normative Loan	G = (C+F)/2	466.63	433.18	424.71
8	Weighted average Rate of Interest on actual Loans	Н	10.34%	9.91%	9.91%
9	Interest on Normative loan	I= G x H	48.23	42.94	42.10

3.11.9 Hence, the Interest on Long term loans are approved as per claimed loan portfolio for FY 2018-19 as shown in the Table below:

Table 3-70: Interest on Loan computation for FY 2018-19 (Rs. Crore)

SI. No	Particular	Reference	FY 2017-18 (recomputed for arriving values of FY 2018-19)	Computation for FY 2018- 19
1	Gross Normative Loan Opening	Α	731.40	731.84
2	Cumulative repayment of Normative Loan upto previous year	В	283.02*	304.24**
3	Net Normative Loan-Opening	С	448.38	427.60
4	Loan addition during the year (70% of Net GFA Addition after deducting Consumer Contribution and asset deletion)	D=70% of C	79.06	44.64

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SI. No	Particular	Reference	FY 2017-18 (recomputed for arriving values of FY 2018-19)	Computation for FY 2018- 19
5	Repayments of Normative Loan during the year	Н	46.18	43.49
6	Net Normative loan – Closing	I=F+G-H	482.16	428.76
7	Average Normative Loan	J=(I+F)/2	465.27	428.76
8	Weighted average Rate of Interest on actual Loans	K	9.91%	9.91%
9	Interest on Normative loan	L=K*J	46.12	42.44

<sup>\*(</sup>Rs. 360.25 crores gross accumulated depreciation – Rs. 77.23 Crore accumulated depreciation from consumer contribution)

Table 3-71: Interest on Loan as approved by the Commission for FY 2018-19 (Rs. Crore)

SI.	Particular	Reference	Approved vide T.O.	True	Approved
No	Particular	Keierence	1.0. 22/01/2019	Up Petition	upon Truing up
1	Gross Normative Loan Opening	А	878.91	834.57	731.84
2	Cumulative repayment of Normative Loan upto previous year	В	370.24	380.76	304.24
3	Net Normative Loan-Opening	С	508.67	453.81	427.60
4	Loan addition during the year (70% of Net GFA Addition after deducting Consumer Contribution and asset deletion)	D=70% of C	99.85	76.33	44.64
5	Repayments of Normative Loan during the year	Н	60.74	56.60	43.49
6	Net Normative loan – Closing	I=F+G-H	547.78	473.54	428.76
7	Average Normative Loan	J=(I+F)/2	528.22	463.68	428.18
8	Weighted average Rate of Interest on actual Loans	K	9.91%	9.91%	9.91%
9	Interest on Normative loan	L=K*J	52.36	45.96	42.44

## 3.12 INTEREST ON WORKING CAPITAL

3.12.1 The Petitioner submitted that as per MYT Regulations, 2014, it is allowed interest on Working Capital requirement on the basis of one month's O&M expenses, 60 days of Revenue after netting off Security Deposit received from the Consumers and 40% of the R&M Expenses for 2 months.

<sup>\*\*(</sup>Rs. 390.65 crores gross accumulated depreciation – Rs. 86.41 Crore accumulated depreciation from consumer contribution)



- 3.12.2 The Petitioner submitted that Commission in its Tariff Order dated 22nd January, 2019 has considered weighted average SBI-PLR at 13.68% p.a. for the purpose of allowing Interest on Working Capital for FY 2018-19. However, for the purpose true-up of ARR for FY 2017-18, the Commission in its latest Tariff Order dated 3rd September, 2019 has considered the SBI –PLR prevailing on date of filing of True-up Petition (viz. 26th October, 2018) i.e. 13.70% in line with Regulation 28 of MYT Regulations, 2014.
- 3.12.3 Accordingly, it has considered the SBI-PLR prevailing as on date of preparation of this True-up Petition for FY 2018-19 which is 13.70% for the purpose of computation of interest on working capital for FY 2018-19. Accordingly, the computation of interest on working capital for FY 2018-19 is presented in following Table for the kind perusal and approval of the Commission: -

Table 3-72: Interest on Working Capital for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

Particulars	Approved Vide T.O. Dated 22 January 2019	Actual
O&M expenses for 1 month	6.88	8.07
Two months equivalent of expected revenue	243.81	262.60
Maintenance spares @ 40% of R&M expenses for two month	3.03	2.95
Gross Total	253.72	273.61
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003:		
Opening Balance	208.88	223.47
Received during the year (Net of Refunds)	30	32.34
Closing Balance	238.88	255.81
Average Security Deposit	223.88	239.64
Less: Security Deposit with UPPCL	11.28	11.28
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	212.6	228.36
Net Working Capital	41.13	45.25
Rate of Interest for Working Capital (SBI - PLR)	13.68%	13.70%
Interest on Total Working Capital	5.62	6.20

3.12.4 The Petitioner said that it is pertinent to mention here that while approving the amount of receivables in its Tariff Order dated 22nd January, 2019, the Commission had not considered the Electricity Duty as part of the billed Revenue which ultimately forms part of receivables. However, the Petitioner in its computation has considered the amount of



Electricity Duty as part of the Revenue for computation of two months' receivables as per past practice followed by the Commission in its various Tariff Orders while approving the amount of receivables as part of working capital latest being the Tariff Order dated 3rd September 2019.

- 3.12.5 The Petitioner stated that as per the practice followed by the Commission in its various Tariff Orders, latest being dated 3<sup>rd</sup> September, 2019 in case of the Petitioner, the security deposit of Rs. 11.28 Crore passed on to UPPCL till FY 2005-06 in accordance with past arrangement, has been deducted from the total Security Deposit available with the Petitioner while computing working capital requirement as the same are not available at the disposal of the Petitioner for meeting its working capital requirements.
- 3.12.6 The above Table does not include the amount of Rs. 10.00 Crore. paid to UPPCL based on the Orders of Commission and Hon'ble Allahabad High Court in FY 2006-07 in the matter of providing 10 MVA additional supply of power by UPPCL.

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

3.12.7 As per the UPERC (Multi Year Distribution Tariff) Regulations, 2014, interest rate on the working capital loan shall be equal to the State Bank Advance Rate (SBAR) as on the date of acceptance of Petition for determination of tariff by the Commission. In this regard, the relevant provision of the Regulation 28 of the UPERC (Multi Year Distribution Tariff Regulations), 2014 is reproduced below:
Quote

The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:

- a) O&M expenses for one month.
- b) Two months equivalent of expected revenue.
- c) Maintenance spares @ 40% of R&M expenses for two months.

#### Less:

Security deposits from consumers, if any.

Provided that the interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank Advance Rate (SBAR) as of the



date on which petition for determination of tariff is accepted by the Commission.

Provided further that interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments / addendums & the new regulations made after repeal of the same.

Unquote

3.12.8 As per the provisions of aforesaid Regulations, the Commission for the purpose of computing interest on working capital for FY 2018-19 has considered SBAR (SBI-PLR) as on October 31, 2018 (the date of admittance of Tariff Petition for determination of Tariff for FY 2018-19), i.e., 13.75%.

(Source: <a href="https://www.sbi.co.in/web/interest-rates/interest-rates/benchmark-prime-lending-rate-historical-data">https://www.sbi.co.in/web/interest-rates/interest-rates/benchmark-prime-lending-rate-historical-data</a>) last accessed on 19.11.2020.

- 3.12.9 In the Truing up Petition for FY 2018-19, the Petitioner has considered the security deposit passed to UPPCL amounting to Rs. 11.28 Crore. Such amount has been deducted while computing the total working capital requirement for FY 2018-19, as had been done in previous years.
- 3.12.10 The Commission noticed that the Petitioner while computing two months revenue for Interest on Working capital has considered the revenue as Rs. 1575.60 Crore while as per Note 26 of the Audited Accounts provides the revenue as Rs. 1490.50 Crore. In this the Petitioner submitted the reconciliation for the same as shown in the Table below:

Table 3-73: Reconciliation of Revenue from sale of Electricity as submitted by the Petitioner

SI. No.	Description	Amount (Rs. Cr.)	Remark
1	Revenue from Sale of Electricity	1,575.61	Please refer to Note-26 of Audited
	for FY 2018-19	1,373.01	Accounts
2	Less: Electricity Duty	85.11	Please refer to Note-26 of Audited
	Less. Electricity Duty	65.11	Accounts
3	Net Revenue from Sale of	1,490.50	Please refer to Note-26 of Audited
3	Electricity for FY 2018-19	1,450.50	Accounts

3.12.11 The Commission is of the view that the UPERC (MYT for Distribution Tariff) Regulations, 2014 provides for only revenue for two months and not the electricity duty. The Commission allowed Electricity duty in IoWC for FY 2017-18 under the same regulation



inadvertently. The Commission is not inclined to conduct the True Up of the True Up of FY 2017-18 and so for True-Up of FY 2018-19 wherein the Electricity duty would not be considered while determining revenue for two months. Also, Electricity Duty is the domain of GoUP and is not a part of the ARR or Revenue of the Petitioner in its regulatory accounts.

3.12.12 The Commission has worked out the working capital and interest on working capital for FY 2018-19 as given in Table below:

Table 3-74: Interest on working capital as approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
One Month's O&M Expenses	6.88	8.07	6.07
Maintenance spares @ 40% of R&M expenses for two months	3.03	2.95	2.66
Receivables equivalent to two months of expected revenue	243.81	262.60	248.42
Gross Total	253.72	273.61	257.15
Total Security Deposits by the Consumers reduce the Electricity Act 2003	d by Security Deposit	s under secti	on 47(1)(b) of
Opening Balance	208.88	223.47	223.47
Received during the year	30.00	32.34	32.34
Closing Balance	238.88	255.81	255.81
Less: Security Deposit with UPPCL	11.28	11.28	11.28
Net Security Deposits by the Consumers			
reduced by Security Deposits under section	212.60	228.36	228.36
47(1)(b) of the Electricity Act 2003			
Net Working Capital	41.12	45.25	28.78
Rate of Interest for Working Capital	13.68%	13.70%	13.75%
Interest on Total Working Capital	5.62	6.20	3.96

#### 3.13 INTEREST ON CONSUMER SECURITY DEPOSITS

3.13.1 The Petitioner mentioned that Regulation 21 of the MYT Regulation, 2014 provides that the Petitioner shall pay interest equivalent to the bank rate or more on the consumer security deposits, as may be specified by the Commission. The Commission vide its Tariff Order dated 22<sup>nd</sup> January'2019 has approved the Interest on Security Deposit @ 6.75% p.a. being RBI's Bank Rate prevailing on the 1<sup>st</sup> April'18. Accordingly, the amount of interest payable on security deposit considering RBI's Bank Rate at 6.75% p.a. prevailing



on the 1<sup>st</sup> April, 2018 to consumers during FY 2018-19 is given below in Table for the kind perusal and approval of the Commission:

Table 3-75: Interest on Security Deposit for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

Particulars	Ref.	Approved Vide T.O. dated 22 January 2019	Actual
Opening Balance of Security Deposit	а	208.88	223.47
Addition during the year net of	b	30	32.34
Closing Balance of Security Deposit	c=a+b	238.88	255.81
Average Balance of Security Deposit	d=(a+c)/2	223.88	239.64
Rate of Interest	е	6.75%	6.75%
Interest payable on Security Deposit	f=dxe	15.11	15.09

- 3.13.2 The Petitioner stated that it would like to inform that the interest on consumer security deposit is computed on outstanding balance of each individual customer for the period during which his security deposit was available with the Petitioner and such computation is done by the automated ERP System of the Petitioner (viz. SAP).
- 3.13.3 The Petitioner submitted that the total interest on consumer security deposit for FY 2018-19 on the basis of each individual customer's outstanding security deposit on daily balance basis and the tenure for which the same was outstanding works out to Rs. 15.09 Crore. Needless to mention that the aforesaid interest on security deposit has been duly audited by the Statutory Auditors of the Petitioner with respect to its provision and computation. It is pertinent to mention here that average rate of interest when reverse calculated from interest amount paid to the consumer and average of cumulative security deposit comes at 6.30%, however, the same is not in line with actual interest paid to consumers. Hence, the Commission is requested to kindly consider interest on security deposit actually paid to consumers @ 6.75% amounting to Rs. 15.09 Crore.
- 3.13.4 The Petitioner stated that the interest on security deposit has been paid in accordance with regulations and at the rate as approved by the Commission, it is requested that the actual expense of Rs. 15.09 Crore be allowed in full.

## **Commission's Analysis**

3.13.5 In this regard, the relevant provision of the Regulation 28 of the UPERC (Multi Year Distribution Tariff Regulations), 2014 is reproduced below:

Quote



## Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

.....

Provided further that interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments / addendums & the new regulations made after repeal of the same.

#### Unquote

- 3.13.6 In the Order dated 22 January, 2019, the Commission based on the submission of the Petitioner approved the rate of interest to be paid on security deposits at 6.75% for FY 2018-19. However, as per the provisions of the UPERC (Multi Year Distribution Tariff Regulations), 2014 the applicable interest rate (Bank Rate as on 1st April, 2018) for security deposit is 6.25%. (last accessed on 19.11.2020)

  (Source: https://rbidocs.rbi.org.in/rdocs/Wss/PDFs/5T 0604186B20198AD49E4E78B242B23424 5E327E.PDF)
- 3.13.7 The Commission noticed that the Note 14 mentions net addition during the year in the security deposit as Rs. 30.77 Crore while the Petitioner has claimed Rs. 32.24 Crore. In this regard the Commission sought the detailed justification for the same and should provide the reconciliation with the Audited accounts. The Commission also directed the Petitioner to submit an undertaking that it has paid all the dues pertaining to interest on consumer security deposit for FY 2018-19. In this regard the Petitioner submitted that note 14 of the Audited Annual Accounts shows the details of "Other financial Current Assets" while note 30 of the Audited Annual Accounts reflects the amount of interest paid on Consumer Security Deposit for FY 2018-19 which is equivalent to Rs. 15.09 Cr. Further this is to confirm that it has duly paid interest at the rates approved by the Commission to all its consumers.
- 3.13.8 The Commission further vide mail dated September 21, 2020 asked the Petitioner that as per calculation the Interest on security arrives to Rs. 14.98 Crore, however the Petitioner has claimed Rs. 15.09 Crore. In this regard the Petitioner submitted that the its has paid interest equivalent to RBI Bank Rate prevailing as on 1<sup>st</sup> Apr 2018 i.e. 6.25% on outstanding balance of security deposit of each consumer during the period 1<sup>st</sup> Apr 18 to 31<sup>st</sup> Mar 19. It also submitted that it has been paying interest on security to all its consumers based on the number of days it is holding the security deposit with it. The Petitioner further submitted the details of interest paid as shown in the Table below:



Net Period Interest **Opening** Closing **Average** Addition (in Days) @6.25% **Particulars** f=d x 6.25% В c=a+b d=(a+c)/2е а x e/365 223.47 Apr'18-Jun'18 15.87 239.34 231.41 91 3.61 Jul'18-Sep'18 239.34 2.31 241.65 240.5 92 3.79 Oct'18-Dec'18 241.65 5.75 247.4 244.53 92 3.85 Jan'19-Mar'19 247.4 8.41 255.81 251.61 90 3.88 Total 237.97 32.34 246.05 242.01 365 15.12

Table 3-76: Details on interest on security deposit submitted by the Petitioner

3.13.9 The details of the interest on security deposits Trued-up by Commission for FY 2018-19 are given in the Table below:

Table 3-77: Interest on security deposit as approved by the Commission (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Interest payable on Security Deposit	15.11	15.09	15.09

3.13.10 The Petitioner in a data gap reply submitted that it has actually paid interest of security deposit amounting to Rs. 15.12 Crore, However it has claimed Rs. 15.09 Crore as per Audited Accounts. Hence the same Rs. 15.09 Crore is being allowed for FY 2018-19.

## 3.14 FINANCE CHARGES

3.14.1 The Petitioner stated that it has to incur various finance charges for availing of financial products and services for the purpose of meeting its financial and other business needs. These charges are genuine business expenditure and has been explained in details as under:

## **Loan Processing Charges:**

- 3.14.2 The Petitioner stated that during, FY 2018-19, the Petitioner incurred expenses on renewal of the existing Working Capital Facilities including LC facilities for providing payment security under various Power Purchase Agreements in accordance with their respective PPAs in order to maintain liquidity to meet its short-term financial obligations.
- 3.14.3 The Petitioner further submitted that, based on the existing facilities and the facilities to be tied up for meeting the LC facilities and other Working Capital requirements for the



ensuing year, the Petitioner has incurred processing fee during FY 2018-19 for renewal of working capital facilities as summarized in Table below:-

Table 3-78: Processing Charges for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Financing Activity	Facility Amount	Charges Paid	Charges as % of Facility
1	Fund Based WCF Renewal and CP Issue	90	0.3	0.34%
2	Non- Fund Based WCF Renewal & CP Issue	150	0.51	0.34%
	Total	240	0.81	0.34%

3.14.4 Apart from the above the Petitioner has to incur other financing and ancillary charges which have been elaborated in detail in the subsequent paragraphs:

## **Credit Rating Charges:**

3.14.5 The Petitioner submitted that credit rating of banking facilities (Fund / Non-Fund based) has become imperative under the Basel II Norms. As per these norms, unrated facilities will be financed at least 4.50% higher as per credit adequacy requirements in comparison with rated facilities. In order to comply with the above requirement of RBI and also to save additional 4.50% p.a. interest cost, the Petitioner has been getting its credit rating from India Rating & Research (P) Limited.

### **Collection facilitation charges:**

3.14.6 Continuing its efforts to provide maximum possible facilities to the consumers, the Petitioner started various new initiatives for enabling consumers to make payment via Internet, Payment – kiosks, retail counters at their nearby grocery shop, through NEFT / RTGS etc. Commission has also vide its Order dated 29th May, 2015 directed the Petitioner to provide more avenues to the consumers for payment of electricity dues through Online Mode and has also directed it to bear charges for such service upto an amount of Rs. 4,000/- per transaction. Provisions of these facilities require some expenditure which has been included in Collection Facilitation Charges. Apart from being cost of new initiative these charges are directly related to revenue and with increase in tariff and revenue, there is an increase in these charges.

### **Other Finance Charges:**

3.14.7 The Petitioner submitted that there are other bank charges as well like loan documentation charges, LC Issue Charges, banking charges and other miscellaneous charges etc.



- 3.14.8 The Commission has been allowing the processing fees on all facilities including working capital and other finance charges in its preceding Tariff orders. Thus, it is a well settled principle of allowing finance charges including processing fees on actual paid basis.
- 3.14.9 The summary of the Finance Charges as approved and actually incurred during FY 2018-19 is provided in Table below:-

Table 3-79: Finance Charges for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Financing Activity	Approved Vide T.O. dated 22 January 2019	Actual
1	Processing Fee	1.8	0.81
2	Credit Rating Charges	0.15	0.13
3	Collection Facilitation Charges	0.75	0.61
4	SBLC & Other Finance Charges	1.35	0.03
	Total	4.05	1.58

3.14.10 The Petitioner further submitted that therefore, as explained above, all the charges have been incurred to meet the ongoing funding requirement of the Petitioner and are well within the approved limits. Hence, the Petitioner requested Commission to approve the same in full.

## **Commission's Analysis:**

3.14.11 The Commission noticed that the Petitioner has claimed Rs. 1.58 Crore as Finance charges for FY 2018-19. The Commission verified the same from the audited accounts and hence approves the same as shown in the Table below:

Table 3-80: Finance charges as approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	Approved upon Truing up	
Processing Fee	1.80	0.81	0.81
Credit Rating Charges	0.15	0.13	0.13
Collection Facilitation Charges	0.75	0.61	0.61
LC & Other Finance Charges	1.35	0.03	0.03
Total Finance Charges	4.05	1.58	1.58

### 3.15 TOTAL INTEREST & FINANCE COST.

3.15.1 The Petitioner has submitted the details of total interest and finance charges incurred during FY 2018-19 in the Table below:



Table 3-81: Total Interest and Finance Charges for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Description	Approved Vide T.O. dated 22 January 2019	Actual
1	Interest on Long term loans	52.36	45.96
2	Interest on working capital facilities	5.62	6.20
3	Interest on security deposit	15.11	15.09
4	Finance Charges	4.05	1.58
5	Subtotal	77.15	68.83
6	Carrying Cost of Regulatory Assets	23.13	39.52
7	Total Interest & Finance Charges	100.28	108.35

<sup>\*</sup> Note: Total may not tally due to rounding-off

3.15.2 The Petitioner stated that keeping the above in view and pressing needs of the business, the Commission is requested to approve the above interest and finance charges as claimed.

## **Commission's Analysis**

3.15.3 The summary of Interest and Finance Charges trued-up by the Commission for FY 2018-19 is given in the Table below:

Table 3-82: Summary of Interest and Finance charges as approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Interest on Long term loans	52.36	45.96	42.44
Interest on short term loans/working capital	5.62	6.20	3.96
Finance charges	4.05	1.58	1.58
Interest on security deposit	15.11	15.09	15.09
Total Interest & Finance charges	77.15	68.84	63.07
Less: Interest capitalization	3.76	0.00	0.00
Net Interest & Finance charges	73.38	68.84	63.07

### 3.16 EFFICIENCY GAIN ON LOAN SWAPING

3.16.1 The Petitioner stated that in its continuous endeavour to minimize the cost of borrowing, the Petitioner in preceding years renegotiated various loan facilities by swapping of these loan facilities with new facilities bearing lower cost. Such, swapping of loans resulted in accrual of saving in interest cost to be shared with its consumers.



- 3.16.2 The Petitioner has estimated the accrual of such efficiency gain while preparing MYT ARR Petition for Control Period and has submitted the details for the same and claimed part of the above efficiency gains pertaining to FY 2018-19 in its MYT ARR petition, which has since been approved by the Commission in its Tariff Order dated 22<sup>nd</sup> January, 2019.
- 3.16.3 The Petitioner stated that it has considered the efficiency gains accrued on swapping of loans for FY 2018-19 as already approved by the Commission and shown in Table below:

Table 3-83: Efficiency Gain on Term Loan Swapping for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Bank	Loan Amount	Approved Vide T.O. dated 22 January 2019	Actual
1	ICICI Bank (FY 14)	125	0.03	0.03
2	ICICI Bank (FY 14)	40	0.05	0.05
3	Central Bank of India	75	0.06	0.06
4	ICICI Bank (FY 17)	125	0.01	0.01
5	ICICI Bank (FY 17)	40	0.03	0.03
6	ICICI Bank (FY 17)	100	0.3	0.3
7	Total		0.48	0.48
8	50% Efficiency Gain claimed/approved		0.24	0.24

3.16.4 The Petitioner requested the Commission to allow the above efficiency gains in true-up of ARR for FY 2018-19.

### **Commission's Analysis**

3.15.1 The relevant provisions of the UPERC (Multi Year Distribution Tariff) Regulations, 2014 in this regard are reproduced below:

Quote

### 27 Treatment of Interest on loan

......

The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.



Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval.

## Unquote

- 3.16.5 The Commission sought the detailed computation of saving claimed through loan swapping in Excel with all linkages and related supporting documents from the Petitioner which was submitted by the Petitioner in excel.
- 3.16.6 The Commission while determining the True Up for FY 2017-18 provided that:

  Quote
  - 3.15.2 The Commission enquired from the Petitioner regarding the break- up of Efficiency gains claimed for FY 2017-18 and directed it to submit the same. The Petitioner vide mail submitted the break- up of Efficiency gains claimed for FY 2017-18 as shown in the table below:

Table 3-45: Summary of Efficiency Gain for FY 2017-18 on Refinancing of loan

S.No.	Particulars	Interest Reset/ Loan	Old Interest	Revised Interest	,					ıs (R	?s Cr)			
		Swap	merest	merest	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Total
1	125 Cr	Interest Reset	, , , , , , , , , , , , , , , , , , , ,		0.30	0.60	0.45	0.31	0.16	0.03	-	-	-	1.85
2	ICICI Bank Limited-40 CR	Interest Reset	12.75%	11.75%	0.10	0.21	0.17	0.13	0.09	0.05	0.01	-	-	0.77
3	Cr	Interest Reset			0.42	0.44	0.29	0.12	-	-	-	-	-	1.27
4	Bank of Maharashtra- 55 Cr	Interest Reset	13.50%	12.25%	0.12	0.17	0.11	0.02	-	-	-	-	-	0.42
5	Central Bank of Inida- 80 Cr	Loan Swap	12.00%	10.85%	-	-	0.51	0.36	0.21	0.06	-	-	-	1.14
6	125 Cr	Interest Reset		10.60%	-	-	-	0.02	0.04	0.01				0.06
7	ICICI Bank Limited-40 CR	Interest Reset	11.10%	10.60%	-	-	-	0.02	0.05	0.03	0.01			0.10
8	ICICI Bank Limited- 100 CR	Interest Reset	11.20%	10.60%	-	-	-	0.15	0.40	0.30	0.21	0.11	0.01	1.18

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S.No.	Particulars	Interest Reset/ Loan		Revised Interest		nnua	I Ac	crua	of E	fficie	ency	Gair	ıs (R	s Cr)
		Swap			FY 14	FY 15							FY 22	
9	Yes Bank Ltd- 30 Cr	Loan Swap	12.50%	10.00%	0.14	0.03								
		Total			1.08	1.46	1.54	1.12	0.95	0.48	0.23	0.11	0.01	6.79

Unquote

3.16.7 The Commission observed that for True Up of FY 2018-19, there is no actual loan and the Petitioner has claimed Interest on normative loan (actual loan in FY 2018-19 is zero). Hence the Commission disallows the efficiency gain on loan swapping which will be an additional burden on the consumers.

# 3.17 GROSS FIXED ASSETS (GFA)

3.17.1 The Petitioner stated that based on the submissions under the head of Capital Expenditure in above, the movement of GFA is given in Table below for the approval of the Commission: -

Table 3-84: Gross Fixed Assets for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Description	Approved Vide T.O. dated 22 January 2019	Actual
1	Opening Balance	1,435.72	1,358.32
2	Addition during the Year	172.5	125.38
3	Retirement during the Year	4.85	4.3
4	Closing Balance	1,603.37	1,479.40

<sup>\*</sup> Excluding assets taken over from GNIDA & UPSIDC

3.17.2 It is pertinent to mention here that above additions to the GFA does not include the assets handed over by GNIDA and UPSIDC amounting to Rs. 10.13 Crore. for distribution of electricity to its consumers and maintenance thereof.

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

3.17.3 The Commission has approved the audited GFA based on disallowance of capex of 132kV / 220 kV assets and vehicles as discussed in capex section for truing-up and the same is shown in the Table below:



Table 3-85: Gross Fixed Assets as approved by the Commission for True Up of FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved in True Up FY 2018-19
Opening Balance	1,435.72	1,358.32	1,244.72
Addition during the Year	172.50	125.38	97.57
Retirement during the Year	4.31	4.30	4.30
Closing Balance	1,603.91	1,479.40	1337.99

#### 3.18 DEPRECIATION

- 3.18.1 The Petitioner stated that, depreciation on plants, equipment and installations has been computed under separate categories voltage-wise in accordance with the rates prescribed under the MYT Regulations, 2014. Further, the Depreciation corresponding to the consumer contribution has been reduced from depreciation on above GFA.
- 3.18.2 The Petitioner Submitted the summary of Depreciation in the following Table:

Table 3-86:Depreciation for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Description	Approved Vide T.O. dated 22 January 2019	Actual
1	Depreciation on Gross Fixed Assets	69.59	67.16
2	Less: Depreciation on Consumer	8.85	10.55
3	Net Depreciation	60.74	56.60
4	Average GFA	1519.54	1418.86
5	Weighted Average Depreciation Rate	4.58%	4.73%

3.18.3 The Petitioner submitted that the above-mentioned depreciation of Rs. 56.60 Crore has been computed as per the methodology followed by the Commission in its latest tariff order dated 3<sup>rd</sup> September, 2019. Therefore, this amount may not tally with the depreciation amount as shown in audited accounts for FY 2018-19. The Petitioner has considered the depreciation at the rates as prescribed in Annexure-C of the MYT Tariff Regulation, 2014 on WDV method for finalization of its Audited Accounts for FY 2018-19. It is pertinent to mention here that the Commission in its Tariff Order dated 3<sup>rd</sup> September, 2019 while determining depreciation for truing up of ARR for FY 2017-18 has not considered any depreciation/amortization of land presumably considering the same as freehold land. However, since the Petitioner has acquired lands from GNIDA on leasehold basis, the same need to be amortized over the respective lease period of the



- leasehold land. Therefore, the Petitioner has considered amortization of leasehold land which determining depreciation for the purpose of truing up of ARR for FY 2018-19.
- 3.18.4 The Petitioner requested the Commission to approve the depreciation expenses as submitted.

# **Commission's Analysis**

Quote

3.18.5 The Commission in UPERC MYT Regulations, 2014 has specified the rates to be utilized for the purposes of computing depreciation for different class of assets. The relevant provisions of the UPERC (Multi Year Distribution Tariff) Regulations, 2014 is shown below:

### 26 Treatment of Depreciation

- a) Depreciation shall be calculated for each year of the control period on the written down value of the fixed assets of the corresponding year.
- b) Depreciation shall not be allowed on assets funded by consumer contributions or subsidies / grants.
- c) Depreciation shall be calculated annually on the basis of rates as detailed in Annexure C or as may be notified by the Commission vide a separate order.
- d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.

Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

e) Depreciation shall be charged from the first year of operation of the asset.

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

f) Provision of replacement of assets shall be made in the capital investment plan.

#### Unquote

3.18.6 As regards to depreciation, the Commission noticed that the Petitioner claimed Rs. 56.60 Crore which was hard punched in the Format. In this regard, the Commission sought the



detailed computation for the same. In this regard the Petitioner submitted the same as shown in the Table below:

Table 3-87: Reconciliation of Depreciation as submitted by the Petitioner

SI. No.	Description	Amount (Rs. Cr.)	Remark
1	Depreciation of property, plant and equipment	59.64	Please refer to Note-31 of Audited Accounts
2	Amortisation of intangible assets	3.05	Please refer to Note-31 of Audited Accounts
	Subtotal	62.69	
3	Less: Depreciation on assets acquired from consumer contribution	10.55	Please refer Fixed Asset Register for FY 2018-19
4	Net Depreciation	52.14	

- 3.18.7 The Commission also observed that the Petitioner has claimed depreciation on consumer contribution as Rs. 10.55 Crore and directed the Petitioner to reconcile the same with the Audited accounts which was submitted by the Petitioner.
- 3.18.8 The Commission also asked the Petitioner to submit the detailed computations of the depreciation on the assets added during the year considering the actual date of capitalisation and relevant depreciation rates as per the MYT Regulations, 2014. In this regard the Petitioner submitted that it maintains its Fixed Asset Register in renowned SAP -ERP system. The details of each fixed assets have been entered into the SAP-ERP and the applicable Depreciation Rate, Method & Extent as provided in UPERC Multi Year Tariff Regulations, 2014 has been defined as parameter in the SAP- ERP. Hence, the Depreciation is computed by the SAP-ERP system as per the rates defined in UPERC Multi Year Tariff Regulations, 2014 upto the maximum limit of 90%. The SAP-ERP generates the FAR comprising the Gross Block, Date of Acquisition, Rate of Depreciation, Addition to Gross Block, Assets Retired, Depreciation for the year, Accumulated Depreciation etc. The Petitioner submitted that it prepares its Audited Financial Statement on the basis of such system generated FAR only. The depreciation so arrived at, is being sample checked manually for accuracy. Since, Depreciation is computed by the SAP-ERP on the basis of defined parameters, the detailed computation of depreciation for each and every asset as such cannot be incorporated in MYT Format and a summary thereof is shown in the Revised MYT Formats. The Petitioner added that it has considered the depreciation at the rates as prescribed in Annexure-C of the UPERC MYT Tariff Regulation, 2014 except Solar power generation equipment being depreciated as per the rates and in the manner



prescribed under Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009 and Computer and Computer software are being depreciated at the rate of 30% approved vide the Commission's Tariff Order dated 1st September 2008 on WDV method for finalization of its Audited Accounts for FY 2017-18.

- 3.18.9 The Commission also asked the Petitioner to confirm that cumulative depreciation in FY 2018-19 is less than 90% of GFA for all assets, since assets cannot be depreciated beyond 90% of GFA in accordance with MYT Regulations, 2014. The Petitioner in this regard submitted that in no case depreciation has been claimed in excess of 90% value of the asset.
- 3.18.10 Computation of Depreciation for FY 2018-19 also takes into consideration the values from the True-Up for FY 2017-18. A linking error in the models for FY 2017-18 was found which has affected the opening value of accumulated depreciation for FY 2018-19. The linking in the model was corrected and the opening accumulated depreciation for FY 2018-19 has been computed to be Rs. 415.61 Crore instead of Rs. 380.10 Crore (Rs. 322.40 + Rs. 57.70). The True Up Order dated September 03, 2019 for FY 2017-18 in not being disturbed and the values computed in this Order shall form the basis of True Up of FY 2018-19 and subsequent years.
- 3.18.11 Further since the Commission as discussed earlier has disallowed the capex of all assets of 132 kV / 220 kV and vehicles for FY 2017-18 and FY 2018-19, the accumulated depreciation of Rs. 24.97 Crores as per FAR of FY 2018-19 is also reduced, accordingly the new cumulative opening for accumulated depreciation comes out to be Rs. 390.65 Crores (415.61-24.97). The details of cumulated Depreciation as per FAR considered for the disallowance is shown in the Table below:

Table 3-88: Depreciation of asset disallowed in FY 2018-19

Asset Description	Quantity	Gross Block (Opening)	Addition	Retirement	Gross Block (Closing)	Accumulated Depreciation (Opening)	Depreciation for the year	Depreciation on Retired Assets	Accumulated Depreciation (Closing)
132 kV and above assets	A	83.38	5.8	ı	89.19	21.96	3.88	-	25.84
Vehicles	В	4.25	1.93	0.64	5.54	2.06	0.95	0.46	2.55
KP-I Asset	С	34.73	0.74	-	35.47	1.23	2.13	-	3.36
KP-IV Asset	D	69.13	1.88	-	71.01	2.57	5.34	-	7.91
Total	Е	191.49	10.35	0.64	201.21	27.82	12.3	0.46	39.66
Depreciation to be disallowed	F=A+B+(C+D)*25%					24.97			

3.18.12 Considering the above, the depreciation expenses as approved by the Commission for FY 2018-19 are as provided in the Table below:



Table 3-89: Depreciation as approved by the Commission (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18 (recomputed for arriving values of FY 2018-19)	FY 2018-19
Opening GFA	922.93	1,056.18	1,214.15	1,244.73
Cumulative Depreciation	239.19	295.53	360.25	390.65*
Written Down Opening	683.74	760.65	853.90	854.08
Additions to GFA	135.86	163.63	150.45	97.58
Deductions to GFA	2.62	5.66	6.23	4.31
Closing GFA	816.99	918.62	998.11	947.35
Rate of Depreciation (%)	-	ı	ı	ı
Gross Allowable Depreciation	57.76	64.72	55.36	54.04
Less: Consumer Contribution	(8.20)	(9.41)	(9.18)	(10.55)
Net Allowable Depreciation	49.56	55.31	46.18	43.49

<sup>\*(</sup>Rs. 415.62 Crore- Rs. 24.97 Crores)

## 3.19 RETURN ON EQUITY

3.19.1 The Petitioner stated that as per Regulation 31 of the MYT Regulations, 2014, return on equity shall be allowed @16% on the equity base determined in accordance with the MYT Regulations, 2014. Accordingly, the computation of equity base & Return on Equity for FY 2018-19 based on Audited Accounts is given in Table below:

Table 3-90: Computation of Return on Equity for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Particulars	Ref.	Approved Vide T.O. dated 22	Actual
1	Regulatory Equity Base at the beginning of the year	a	382.73	357.18
2	Asset Capitalized during the year	b	172.5	125.38
3	Equity portion of Assets Capitalised during the year	С	43.36	28.99
4	Regulatory Equity Base at the end of the year	d=a+c	426.09	386.18
5	Return on Opening Regulatory Equity Base @ 16%	e=ax16%	61.24	57.15
6	Return on Addition to Equity Base during the year	f=cx16%/2	3.47	2.32
7	Total Return on Equity	g=e+f	64.71	59.47

3.19.2 The Petitioner requested the Commission to approve the above Return on Equity of Rs. 59.47 Crore for FY 2018-19.



## **Commission's Analysis**

3.19.3 The Petitioner is entitled to earn Return on Equity (RoE) as per Regulation 31 of the UPERC MYT Regulations, 2014. In this regard, the relevant provisions of the Regulations are shown below:

Quote

## 31 Treatment of Return on equity

a) Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

b)

Provided that assets funded by consumer contribution, capital subsidies / grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in these regulations.

b) 16% (sixteen) post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR petition.

## Unquote

- 3.19.4 The Commission observed that the Petitioner has not considered the opening equity as same as closing equity as approved in the True Up for FY 2017-18. In this regard the Commission sought the clarifications for the same. In this regard the Petitioner submitted that the difference in RoE is on account of the capital expenditure on Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 (changed from earlier Sector-129) to 220/132/33kV RC Green substation for enhancement of upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation.
- 3.19.5 Since the 132 kV and above asset, vehicles for FY 2017-18 and FY 2018-19 and 25% of capex claimed for FY 2018-19 is disallowed as discussed, the asset addition is also reduced. Thus, the RoE approved by the Commission for FY 2018-19 is as provided in the Table below:

Table 3-91: RoE as approved by the Commission for FY 2018-19 (Rs. Crore)

Particular	Reference	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Closing Balance of GFA of True Up of FY 2017-18 as per Tariff Order dated September 03, 2019	А			1358.33



## Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

Particular	Reference	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Opening Balance of GFA after disallowance as per Table 3-64	В			1244.72
Difference in GFA	C=A-B			113.60
30% of difference to be disallowed in opening Equity	C*30%			34.08
Closing Regulatory Equity of True Up of FY 2017-18 as per Tariff Order dated September 03, 2019	D			356.26
Regulatory Equity Base to be considered for FY 2018- 19 at the beginning of the year	E=D-C	382.73	357.19	322.18*
Assets Capitalised during the year	F	172.50	125.38	97.57
Consumer Contribution during the year	G			37.34
Equity portion of Assets Capitalised during the year	H=30%of (F-G)	43.36	28.99	18.07
Regulatory Equity Base at the end of the year	I=E+H	426.09	386.18	340.25
Return on Opening Regulatory Equity Base @ 16%	J	61.24	57.15	51.55
Return on Addition to Equity Base during the year @ 16%	К	3.47	2.32	1.45
Total Return on Equity	L=J+K	64.71	59.47	52.99

<sup>\*</sup>Opening is not the same as closing balance due to reduction of disallowances (Rs. 356.26 Crores – Rs.34.08 Crore i.e. 30% of Rs. 113.61 Crores)

#### 3.20 INCOME TAX

3.20.1 The Petitioner submitted that Regulation 32 of MYT Regulations provides for determination of Income Tax to be considered in ARR for Control period. The relevant extract of the regulation is reproduced below:-

### "32. Income Tax

- a) Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. However, tax on any income other than that through its Licensed business shall not be a pass through, and it shall be payable by the Distribution Licensee itself.
- b) The income tax actually payable or paid shall be included in the ARR. The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act 1961 shall be passed on to the consumers.



- c) Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed. However, any tax liability on incentives due to improved performance shall not be considered."
- 3.20.2 The Petitioner mentioned that Income Tax is computed on Profit before taxes which is computed by aggregating Return on equity and tax expense for the year. Accordingly, the Income Tax expense for FY 2018-19 has been computed by grossing up aggregate of tax expense i.e. tax on Return on equity and tax expense for preceding years, at the current tax rate i.e. 34.94% and profit before tax is computed to determine the tax on profit for the year.
- 3.20.3 The Petitioner submitted that considering the above, the Petitioner requests the Commission to approve the income tax liability for FY 2018-19 as shown in Table below:

Table 3-92: Income Tax for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Nature of Tax	Ref.	Approved Vide T.O. dated 22 January 2019	True Up Petition
1	Return on Equity	Α	64.71	59.47
2	Efficiency Gains (consumers share)	В	1	0.24
3	Taxable Return	c=a+b	64.71	59.71
4	Income Tax Rate	D	34.94%	34.94%
5	Total Tax Expense	e=c x d/(1-d)	34.76	32.07

# **Commission's Analysis**

- 3.15.3 The Commission verified the Income Tax expense for the year as per the audited Accounts for FY 2018-19, the same was found to be Rs. 68.24 Crores (Note 33 (b) of Audited Accounts). Further, the Petitioner had submitted the challans of Tax payments along with the Petition, the same were verified and the amount was ascertained to be Rs. 47.72 Crores.
- 3.15.4 The Commission verified the computations for Income Tax claimed for FY 2018-19 and observed that the Petitioner has claimed the normative income tax, based on the return on equity, which is lower than the actual Income tax vis-à-vis challans and audited accounts. Accordingly, the Commission has computed the normative income tax based on the return on equity approved for FY 2018-19 which comes out to be lower than the



Income Tax shown in the Audited accounts, as per challans and as per Petitioner submission. The same is shown in the Table below:

Table 3-93: Income Tax as approved for FY 2018-19 (Rs. Crore)

Particular	Ref.	Approved Vide T.O. dated 22 January 2019	As per Audited Accounts	As per Challans submitted	True Up Petition (claimed)	Approved upon Truing up
Return on Equity	a	64.71			59.47	52.99
Income Tax Rate	b	34.94%			34.94%	34.94%
Total Tax Expense	c=a x b/(1-b)	34.76	68.24	47.72	32.07	28.46

#### 3.21 MISCELLANEOUS EXPENSES

- 3.21.1 The Petitioner submitted that Commission in its Tariff Order dated 22<sup>nd</sup> January'2019 has approved Miscellaneous Expenditure viz. loss on sale of fixed assets at Rs. 1.46 Crore for FY 2018-19 while the actual loss on sale / retirement of these Fixed Assets during FY 2018-19 is Rs. 0.74 Crore, which is claimed as Miscellaneous Expenditure.
- 3.21.2 The Petitioner in its submission stated that Commission has been approving such expenses on actual basis in its preceding Tariff Orders as evident from the following extract of its Tariff Order for FY 2018-19 dated 22<sup>nd</sup> January, 2019:-
  - "3.23.2 Considering that due to fast obsolescence and normal wear and tear, some of the assets are required to be scrapped before their useful life. Hence, the loss on sale of assets incurred due to disposal of such scrap assets is genuine and legitimate business expenditure ......"
- 3.21.3 The Petitioner further stated that in view of the above, the Commission is requested to approve the miscellaneous expenditure of Rs. 0.74 Cr as per the Audited Accounts of the Petitioner for FY 2018-19.

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

- 3.21.4 As regards to the Miscellaneous Expenses, the Commission noticed that the Petitioner has claimed Rs. 0.74 Crore as Loss on sale of Fixed Assets in Miscellaneous expenses. In this regard the Commission sought the following details:
  - i. Name of the Asset.
  - ii. Asset Installation date.



- iii. Useful Life of the Asset.
- iv. Depreciation claimed on the asset till date.
- v. Whether depreciation claimed till 90%.

The Petitioner submitted the reconciliation for the same as shown in the Table below:

Table 3-94: Reconciliation of Loss on Sale of Asset as submitted by the Petitioner for FY 2018-

SI. No.	Description	Amount (Rs. Cr.)	Remark
1	Gross value of Assets disposed/retired	4.30	Please refer to Note-3 of Audited Accounts
2	Less: Accumulated Depreciation on Assets retired	3.23	Please refer to Note-31 of Audited Accounts
	WDV of Assets Retired	1.07	
2	Less: Sale Proceeds	0.33	
3	Loss on Sale of Assets	0.74	

3.21.5 The MYT Regulations, 2014 provides that:

### Quote

# 33 Non-Tariff Income

(a) All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to **profit derived from disposal of assets**, rents, delayed payment surcharge, meter rent (if any), income from investments other than contingency reserves, miscellaneous receipts from the consumers and income to Licensed business from the Other Business of the Distribution Licensee shall constitute Non-Tariff Income of the Licensee.

### Unquote

3.21.6 The Regulation provides for consideration of profit derived from disposal of assets to be considered under Non Tarif Income. Hence the loss derived on disposal of asset is not the part of ARR effectively. Also whenever an asset is retired / scrapped before there useful life, the Commission approves the decapitalisation and also the additional capex for replacement of such asset in the GFA and the same is approved in the ARR. Hence the allowance of such loss on sale of fixed asset will be an additional burden on the consumers. The Commission allowed the said expenditure in True Up of FY 2017-18;



however, the Commission does not intend to disturb the True Up of FY 2017-18. Hence the Commission for the True Up of FY 2018-19 disallows the loss on sale of fixed asset.

### 3.22 PROVISION FOR DOUBTFUL DEBTS

3.22.1 The Petitioner submitted that expenses for Provision for Bad and doubtful debts actually incurred and provided for by the petitioner is provided in Table below:

Table 3-95: Provision for Bad & Doubtful Debts for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Description	Approved Vide T.O. dated 22 January 2019	Actual
1	Receivable from Customers as at the beginning of the year	72.34	71.71
2	Revenue billed for the year	1462.89	1575.6
3	Collection for the year	1369.4	1569.89
4	Receivable from Customers as at the end of the year	165.83	77.43
5	Provision for Bad & Doubtful debts	23.28	13.29
6	Provision as % of Revenue billed	1.59%	0.84%

- 3.22.2 The Petitioner stated that aforesaid bad debts has been determined in accordance with the policy of the Petitioner for provision and write-off of receivable.
- 3.22.3 The Petitioner further stated that dues from consumers which are long outstanding but could not be disconnected because of political or some other reasons are being provided for in the audited books of accounts. These debtors are older than two three years and recovery thereof has become costlier and uneconomical. Further, prolonged litigation process for the purpose of recovery culminate into very high legal costs and colossal waste of precious time of the officials of the Petitioner which otherwise could be used for productive purposes. Thus, after reviewing each and every debtor on case to case basis, these debtors are also provided for based on their chances of recovery, cost-benefit etc.
- 3.22.4 The Petitioner said that electricity distribution business is not only the most challenging segment among generation, transmission and distribution, but also exposed to maximum business risks, because on one hand the purchase of electricity is from few sources and that too through Letter of Credit (L/C) or Bank Guarantee (B/G), on the other hand the sales thereof is on credit to the thousands of customer in various segments from industry to rural and unmetered consumers. Therefore, while converting "electricity" into cash, it is the distribution Petitioner which bears the maximum brunt in terms of bad debts and



- problem of recovery further gets compounded in the prevailing socio-political and economic environment, law and order situation and power deficit scenario.
- 3.22.5 In view of the above, any recovery around 97-98%% of sales should undoubtedly be considered as efficient collection and, therefore, the remaining 2-3% should be provided as bad and doubtful debts. The provision for Bad Debts considered by the Petitioner is still lower.
- 3.22.6 The Petitioner stated that the Commission, in its Tariff Order dated 22<sup>nd</sup> January, 2019 has allowed provision for bad debt @ 1.59%. Thus, amount of Rs.13.29 Crore provided as bad debts in FY 2018-19 is well within the norms of 2% specified in Regulation 29 of the MYT Regulations, 2014 and the Commission has also followed the same while approving the bad debts for FY 2018-19. It requested the Commission to approve the bad debts of Rs. 13.29 Crore which is only 0.84% of the revenue for True-up of ARR for FY 2018-19.
- 3.22.7 The Petitioner further stated that keeping the above in view, the Commission is requested to allow provision for bad debts of Rs. 13.29 Crore as provided for by the Petitioner in full which is within the bad debts approved at Rs. 23.28 Crore vide Tariff Order dated 22<sup>nd</sup> January 2019.
- 3.22.8 The Petitioner submitted that as per the Hon'ble APTEL's judgment the amount of bad debts with respect to electricity duty i.e. Rs. 0.66 Crore has been excluded while claiming the above-mentioned amount towards provision for bad debts.

## Commission's Analysis.

3.22.9 As per Clause 29 of the UPERC MYT Regulations, 2014:

### Quote

Bad and Doubtful Debts shall be allowed as a legitimate business expense with the ceiling limit of 2% of the revenue receivables provided the Distribution Licensee actually identifies and writes off bad debts as per the transparent policy approved by the Commission. In case there is any recovery of bad debts already written off, the recovered bad debt will be treated as other income.

#### Unquote

3.22.10 The Commission noticed that the Petitioner for FY 2018-19 has claimed the Rs. 13.29 Crore as provision for bad debt while Note 32 of the Audited Accounts provides Rs. 8.06



Crore as provision for bad debt. In this regard the Commission asked the Petitioner to clarify for the same and reconcile the details with the Audited Accounts which was duly submitted by the Petitioner as shown in the Table below:

Table 3-96: Reconciliation of Bad Debts as submitted by the Petitioner for FY 2018-19

SI. No.	Description	Amount (Rs. Cr.)	Remark
1	Bad Debts written off	5.90	Please refer to Note-32 of Audited Accounts
2	Provision for Doubtful Debts	8.06	Please refer to Note-32 of Audited Accounts
	Subtotal	13.96	
2	Less: Electricity Duty component not considered in ARR	0.67	Please refer Fixed Asset Register for FY 2018-19
3	Net Bad & Doubtful Debts	13.29	Please refer Form-51 in MYT Formats

- 3.22.11 Thus, bad debts subject to actual write off in the audited books shall be allowed upto 2% of the revenue for the year under consideration. The Petitioner has claimed provision for bad debts for FY 2018-19 at 0.84% of revenue billed during the year as per the transparent policy duly approved by the Commission.
- 3.22.12 The Commission has observed that the total amount for provision for bad debts shown in the books of accounts is Rs 13.96 Crore. The Petitioner has also excluded the amount of bad debts with respect to electricity duty, i.e., Rs. 0.67 Cr while claiming the abovementioned amount of Rs 13.29 Crore towards provision for bad debts.
- 3.22.13 The Commission considers it appropriate that since the Petitioner has made for provision for writing off bad debts on actual basis after taking its management's approval, the baddebts may be trued-up at 0.84% level on revenue approved by Commission. The details of bad-debts trued-up by the Commission for 2018-19 are provided in the Table below:

Table 3-97: Provision for Bad debts as approved for FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Receivable from Customers as at the beginning of the year	72.34	71.71	71.71
Revenue billed for the year	1,462.89	1,575.60	1,575.60*
Collection for the year	1,369.40	1,569.89	1,569.89



Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Gross receivable from customer as at the end of the year	142.55	77.43	64.14
% of Provision	1.59%	0.84%	0.84%
Provision for Bad & Doubtful debts	23.28	13.29	13.29

<sup>\*</sup>Includes Revenue for FY 2018-19 of Rs 1490.50 Cr and Electricity Duty on it of Rs 85.11 Cr.

#### 3.23 CONTINGENCY RESERVE

- 3.23.1 The Petitioner submitted that Regulation 30 of the MYT Regulations, 2014 provides for appropriation of Contingency Reserve upto 0.50% of opening GFA and the Petitioner accordingly had claimed contingency reserve in its MYT ARR Petitions. However, the Commission vide its Tariff Order dated 22<sup>nd</sup> January'2019 has not allowed the provision of contingency reserve to reduce extra burden on the consumers. Keeping, above in view the Petitioner has not made provision for contingency reserve in FY 2018-19 and accordingly not claiming any amount towards the same. The Petitioner submitted that contingency reserve is created to meet the eventualities in the nature of major calamities, act of god etc. and thereby, causing huge loss to the network. In any case, the amount so allocated, can be used with prior permission of the Commission only.
- 3.23.2 The Petitioner requested the Commission to consider the creation of contingency reserve for FY 2018-19.

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

3.23.3 The Commission for the purpose of Truing Up has not considered any contribution to Contingency Reserve for FY 2018-19.

#### 3.24 NON-TARIFF INCOME

3.24.1 The Petitioner stated that non-tariff income includes Income from Statutory Investments, Miscellaneous Receipts from Consumers, Delayed Payment Surcharge and various other Non-Tariff incomes generated by the Petitioner from other businesses. The details of the same for FY 2018-19 as per audited accounts are given in the Table below for kind approval of the Commission:



Table 3-98: Non-Tariff Income for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Particulars	Approved Vide T.O. dated 22 January 2019	Actual
1	Income from Contingency Reserves Investments		0.17
2	Miscellaneous Receipts from Consumers	3.46	1.72
3	Miscellaneous Receipts from other sources		4.2
4	Delayed Payment Surcharge	5.53	5.72
5	Total Non-Tariff Income	8.99	11.81

- 3.24.2 The Petitioner Submitted that other income as shown above excludes income from treasury operations amounting to Rs. 6.40 Crore. as this Income is generated upon the funds accrued through internal resources and not utilised for the purpose of capital expenditure or other operational purposes. Since, this income has been generated out of the utilisation of internal funds of the Petitioner, the same has not been considered as part of ARR.
- 3.24.3 The Petitioner stated that Regulation 33 of the MYT Regulations, 2014 provides for deduction of expenditure incurred for generating/earning Non-tariff income may be reduced from such Income. The extract of the Regulation is provided below for reference of the Commission:
  - "33 Non-Tariff Income

...

Provided further that any expenditure incurred for generating / earning

Non-Tariff Income may be reduced from such income "

- 3.24.4 The Petitioner further stated that expenditure incurred for generating /earning Non-tariff income such as cost of borrowing need to be reduced from such income, since these expenses are not included in determination of borrowing costs and tax expenses as components of ARR.
- 3.24.5 The Petitioner mentioned that Delayed Payment Surcharge accrues when a consumer defaults in payment of bills as per due date which is generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is approximately the number of days



for which a distribution Petitioner is compensated by interest on working capital as per Distribution Tariff Regulations 2006 i.e. 60 days. Thus, it can be concluded that DPS belongs to the period beyond normative period of 60 days for which interest on working capital is not provided in the Distribution Tariff Regulations. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost equivalent to the interest rate applicable for Interest on Working Capital.

3.24.6 The Petitioner further stated that based on the principles laid by the Commission in its various Tariff Orders, Delayed Payment Surcharge has been considered after reducing the cost of funds borrowed for the purpose of funding the deferred receivables which are subsequently recovered along with Delayed Payment Surcharge. Thus, the cost of borrowing in respect of Delayed Payment Surcharge for FY 2018-19 has been computed as given in Table below:

Table 3-99: Cost of Borrowing for DPS for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

Particulars	Reference	Approved Vide T.O. dated 22 January 2019	Actual
Delayed Payment Surcharge Received	a	5.53	5.72
Working Capital Amount Utilisation @ 24% p.a.	b= (a /24%)	30.7	23.83
Applicable Interest Rate for Working Capital Finance (Weighted average SBI - PLR)	С	13.68%	13.70%
Cost of Borrowing for DPS	d=b x c	4.2	3.26

3.24.7 The Petitioner submitted that the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period of 60 days for the purpose of ARR as summarized in Table below:

Table 3-100: Net Non-Tariff Income for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	Particulars	Ref.	Approved Vide T.O. dated 22 January 2019	Actual
1	Non-Tariff Income including DPS	а	8.99	11.81
2	Less: Cost of Borrowing for DPS	b	4.2	3.26
3	Net Non-Tariff Income	c=a-b	4.79	8.55

3.24.8 The Petitioner requested that Net Non-Tariff Income as per Audited Accounts for FY 2018-19 shall be approved by the Commission.



## **Commission's Analysis**

3.24.9 The Commission observed that the Petitioner in its True Up Petition for FY 2018-19 has claimed Non-Tariff Income of Rs. 8.55 Crore excluding Rs. 3.26 Crore towards cost of borrowing of DPS. In this regard the Commission sought the reconciliation of Non-Tariff Income with respect to Audited Accounts from the Petitioner which was duly submitted by the Petitioner as shown in the Table below:

Table 3-101: Reconciliation of Non-Tariff Income as submitted by the Petitioner for FY 2019-

SI. No.	Description	Amount (Rs. Cr.)	Remark
1	Delayed payment charges	5.72	Please refer to Note-26 of
	Delayed payment charges	5.72	Audited Accounts
2	Processing charges	0.32	Please refer to Note-26 of
	Trocessing charges	0.52	Audited Accounts
3	Disconnection and reconnection fees	1.28	Please refer to Note-26 of
	Disconnection and reconnection rees	1.20	Audited Accounts
4	Meter testing charges	0.36	Please refer to Note-26 of
	Weter testing charges	0.50	Audited Accounts
5	Interest on investment & Dividend	0.16	Please refer to Note-27 of
	interest on investment & Dividend	0.10	Audited Accounts
6	Interest on Refund of Transmission	2.39	Please refer to Note-27 of
	Charges	2.39	Audited Accounts
7	Liquidated Damages	0.99	Please refer to Note-27 of
/	Liquidated Damages	0.55	Audited Accounts
8	Other Miscellaneous income	0.6	Please refer to Note-27 of
0	Other Miscellaneous income	0.0	Audited Accounts
9	Non-Tariff Income	11.82	
10	Less: Cost of Financing for DPS	3.26	
11	Net Non-Tariff Income	8.55	

3.24.10 The Commission with regards Miscellaneous receipt of Rs. 1.72 Crore sought the breakup of the same. The Petitioner in this regard submitted the breakup for the same as shown in the Table below:

Table 3-102: Breakup of Miscellaneous Receipt as submitted by the Petitioner

SI. No.	Particulars	Amount
1	Meter testing charges	0.36



SI. No.	Particulars	Amount
2	Liquidated damages recovery	0.99
3	Advertisement & Publicity	0.09
4	Sale of scrap (store)	0.24
5	Cash Discount	0.14
6	Interest on Refund from UPPTCL	2.39
	Total	4.20

## **Financing of Delayed Payment Surcharge**

- 3.24.11 Working capital is the finance which is used to meet all of the short-term expenses of an organisation. These short-term expenses includes mainly purchase of raw material, discharging of short-term debt liability and other day-to-day operating expenses. It is very critical to run any business smoothly & to meet its financial obligations which are due within one year.
  - Further the working capital cycle is the length of time a business takes to convert the total net working capital into cash. This cycle starts with the purchase of raw materials then raw materials are converted into finished goods. These finished goods are sold to the customers and cash are collected from these customers. This cycle completes when this cash is used in creditors paid outs.
- 3.24.12 Similarly, every distribution company also needs working capital to meet its day to day operating expenses. Keeping in view the legitimacy of requirement of working capital, the UPERC made the norms in its MYT, 2019 & earlier Regulations that how much working capital will be needed by a distribution company to run its business and the interest on this working capital which will be allowed in the ARR. The relevant portion of MYT, 2014 & MYT, 2019 Regulations is reproduced below:

Quote

## MYT, 2014

- 28 The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:
- (a) O & M expenses for one month.
- (b) Two months equivalent of expected revenue.
- (c) Maintenance spares @ 40% of the R&M expenses for two months.



Less

Security deposits from consumers, if any.

Provided that the interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank Advance Rate (SBAR) as of the date on which petition for determination of tariff is accepted by the Commission.

Provided further thar interest shall be allowed on consumer security deposits as per the provision on the Electricity Supply Code, 2005 and its subsequent amendments/ addendums and the new Regulations made after repeal of the same.

## MYT, 2019

## 25.2 Distribution Business

- (a) The working capital requirement of the Distribution Business shall cover:
- (i) Operation and maintenance expenses for one month;
- (ii) Maintenance spares at 40% of the R&M expenses for two months; and
- (iii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);

minus

- (iv) Amount held as security deposits from Distribution System Users:
  - Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-Up;
  - (b) Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:
    - Provided that for the purpose of Truing-Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted



- average SBI MCLR (1 Year) prevailing during the concerned Year plus 250 basis points.
- (c) Interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments/addendums and the new Regulations made after repeal of the same.

#### Unquote

- 3.24.13 In the above Regulations, two months equivalent of expected revenue in MYT, 2014 & one and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty) in MYT, 2019 have been taken to calculate the working capital requirement, which means that it is presumed that within the said period, every consumer will pay its electricity bills.
- 3.24.14 However, despite of due date mentioned in the bills, it is seen that ample consumers pay their electricity bills beyond this due date which results the need for additional financing for Interest on Working Capital by the distribution companies and burden of interest on this additional fund. Further, the Delayed Payment Surcharge recovered from the consumers are being shown by the distribution licensee in their P & L Statement, to promote the consumers to pay their bills within the due date and strengthen of cash flow of the distribution companies, the following provisions (which are penal in nature) have been kept in the Rate Schedule of TO for the FY 2019-20 and earlier years':

#### Quote

- 7. SURCHARGE / PENALTY:
- (i) DELAYED PAYMENT:

If a consumer fails to pay his electricity bill by the due date specified therein, a late payment surcharge shall be levied at 1.25% on the dues (excluding late payment surcharge) per month; up-to first three months of delay and subsequently at 2.00% on the dues (excluding late payment surcharge) per month of delay. Late payment surcharge shall be calculated proportionately for the number of days for which the payment is delayed beyond the due date specified in the bill and levied on the unpaid amount of the bill excluding delayed payment surcharge. Imposition of this surcharge is without prejudice to the right of the



Licensee to disconnect the supply or take any other measure permissible under the law.

## 15. Rebate on Payment On or Before Due Date

A rebate at the rate of 1.00% on the RATE shall be given in case the payment is made on or before the due date. However, a rebate at the rate of 5.00% on the RATE shall be given to LMV-5 (Rural) (i.e. PTW Rural Category Agricultural Consumers) category of electricity consumers in case the payment is made on or before due date. The consumers having any arrears in the bill shall not be entitled for this rebate. The consumers who have made advance deposit against their future monthly energy bills shall also be eligible for the above rebate applicable on the RATE.

#### Unquote

3.24.15 Further, despite of recovering Delayed Payment Surcharge from consumers which is also allowed in the ARR, the Petitioner has also claimed the financing cost of this surcharge. On the various queries to prove the legitimacy of this claim the Petitioner replied the followings:

"NPCL in its Petition for True-Up for FY 2018-19 has submitted the following:

#### **33 NON TARIFF INCOME**

33.1 Non-tariff income includes Income from Statutory Investments, Miscellaneous Receipts from Consumers, Delayed Payment Surcharge and various other Non-Tariff incomes generated by the Company from other businesses. The details of the same for FY 2018-19 as per audited accounts are given in the Table-61 below for kind approval of the Hon'ble Commission:-



	Table-61 : Non-Tariff Income for FY 2018-19				
			Rs. Cr.		
Sl. No.	Particulars	Approved	Actual		
1	Income from Contingency Reserves Investments	2.46	0.17		
2	Miscellaneous Receipts from Consumers	3.46	1.72		
3	Miscellaneous Receipts from other sources		4.20		
4	Delayed Payment Surcharge	5.53	5.72		
5	Total Non-Tariff Income	8.99	11.81		

33.2 The other income as shown above excludes income from treasury operations amounting to Rs. 6.40 Cr. as this Income is generated upon the funds accrued through internal resources and not utilised for the purpose of capital expenditure or other operational purposes. Since, this income has been generated out of the utilisation of internal funds of the Company, the same has not been considered as part of ARR.

33.3 Regulation 33 of the MYT Regulations, 2014 provides for deduction of expenditure incurred for generating/earning Non-tariff income may be reduced from such Income. The extract of the Regulation is provided below for reference of the Hon'ble Commission:-

# " 33 Non-Tariff Income

•••

Provided further that any expenditure incurred for generating / earning Non-Tariff
Income may be reduced from such income "

33.4 Thus the expenditure incurred for generating /earning Non-tariff income such as cost of borrowing need to be reduced from such income, since these expenses are not included in determination of borrowing costs and tax expenses as components of ARR.



33.5 In this respect, it is pertinent to mention here that Delayed Payment Surcharge accrues when a consumer defaults in payment of bills as per due date which is generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is approximately the number of days for which a distribution licensee is compensated by interest on working capital as per Distribution Tariff Regulations 2006 i.e. 60 days. Thus, it can be concluded that DPS belongs to the period beyond normative period of 60 days for which interest on working capital is not provided in the Distribution Tariff Regulations. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Hon'ble Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost equivalent to the interest rate applicable for Interest on Working Capital.

33.6 Accordingly, based on the principles laid by the Hon'ble Commission in its various Tariff Orders, Delayed Payment Surcharge has been considered after reducing the cost of funds borrowed for the purpose of funding the deferred receivables which are subsequently recovered along with Delayed Payment Surcharge. Thus, the cost of borrowing in respect of Delayed Payment Surcharge for FY 2018-19 has been computed as given in Table-62 below:-

Table-62: Cost of Borrowing for DPS (FY 2018-19)					
Particulars	Reference	Approved	Actual		
Delayed Payment Surcharge Received	а	5.53	5.72		



Table-62: Cost of Borrowing for DPS (FY 2018-19)				
Particulars	Reference	Approved	Actual	
Working Capital Amount Utilisation @ 24% p.a.	b= (a /24%)	30.70	23.83	
Applicable Interest Rate for Working Capital Finance (Weighted average SBI - PLR)	С	13.68%	13.70%	
Cost of Borrowing for DPS	d=b x c	4.20	3.26	

33.7 Accordingly, the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period of 60 days for the purpose of ARR as summarized in Table-63 below:-

	Table-63: Net Non-Tariff Income (FY 2018-19)				
				Rs. Cr.	
SI. No.	Particulars	Ref.	Approved	Actual	
1	Non-Tariff Income including DPS	а	8.99	11.81	
2	Less: Cost of Borrowing for DPS	b	4.20	3.26	
3	Net Non-Tariff Income	c=a-b	4.79	8.55	

3.24.16 The

Commission in its deficiency dated May 13, 2020 has sought a query as:

"48. The Licensee in its True Up Petition for FY 2018-19 for FY 2018-19 has claimed Non-Tariff Income of Rs. 8.55 Crore excluding Rs. 3.26 Crore towards cost of borrowing of DPS. In this regard the Licensee should reconcile the Non-Tariff Income with Audited Accounts."

# 3.24.17 In this regard the Petitioner submitted that:

"The details of non-tariff income as per audited accounts and its reconciliation with petition is provided here-in-below:



# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

SI. No.	Description	Amount (Rs. Cr.)	Remark		
1	Delayed payment charges	5.72	Please refer to Note-26 of Audited Accounts		
2	Processing charges	0.32	Please refer to Note-26 of Audited Accounts		
3	Disconnection and reconnection fees	1.28	Please refer to Note-26 of Audited Accounts		
4	Meter testing charges	0.36	Please refer to Note-26 of Audited Accounts		
5	Interest on investment & Dividend	0.16	Please refer to Note-27 of Audited Accounts		
6	Interest on Refund of Transmission Charges	2.39	Please refer to Note-27 of Audited Accounts		
7	Liquidated Damages	0.99	Please refer to Note-27 of Audited Accounts		
8	Other Miscellaneous income	0.6	Please refer to Note-27 of Audited Accounts		
9	Net Depreciation	11.82			
10	Less: Cost of Financing for DPS	3.26			
11	Net Non-Tariff Income	8.55			
Tota	Total may not tally due to rounding offs				

w

3.24.18 The Commission in a data gap query dated June 16, 2020 sought the details as:

"In regard to the finance cost on DPS for FY 2018-19, the licensee is required to submit a

month wise detailed explanation with illustration justifying the claim."

# 3.24.19 In this regard the Petitioner submitted the details as:

"It is submitted, that the Petitioner has claimed the financing cost on DPS on normative basis as per the methodology followed hitherto by the Hon'ble Commission.

The Commission is requested to kindly refer to Para 6.15.5 on page no. 67 of its Tariff Order dated 19.10.2012 while approving the revised ARR for FY 2009-10 wherein it has quoted APTELS's judgement w.r.t. cost of borrowing for DPS. The complete extract of the Commission's observation in respect of Delayed Payment Surcharges (DPS) is



reproduced below for the ready reference: -

#### Quote

The Commission has gone through the submissions of the Petitioner. It is to be noted that the delayed payment surcharge is received by the licensee for payment by the consumers beyond two months period while the Distribution Tariff Regulations provide for the working capital with respect to two months period. In connection to the above, reference may be made to judgment dated 30th July 2010, passed by the Hon'ble Appellate Tribunal for Electricity (APTEL) in Appeal no.153 of 2009, wherein it was observed as under:

- "23. In the light of the aspects pointed out on behalf of the Appellant, the reply made on behalf of the State Commission may not be correct for the reasons given below:
- (i) The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers.
- (ii) Admittedly, the late payment surcharge is charged only if the delay is more than normative credit period.
- (iii) Thus, for the period of delay beyond the normative period, the Distribution company has to be compensated with the cost of such additional financing.

.....

25............While fixing the interest rate, the State Commission should have considered the prevalent SBI prime lending rate. Even in the said judgment, the Tribunal has laid down the principle that the rate of carrying cost must be derived from prevalent prime lending rates. As such, this principle has not been followed in this case. According to the Tariff Regulations, the cost of debt has to be determined considering Licensee's proposals, present cost of debt already contracted by the Licensee and other relevant factors viz. risk free returns, risk premium, prime lending rate, etc. Therefore, we deem it appropriate to direct the State Commission to rectify its computation of



financing cost relating to the late payment surcharge and consequently reduce the amount of non-tariff income considered by the State Commission as available for the tariff determination for the FY 2007 - 08 at the prevalent market lending rates."

6.15.6 It is quite apparent that delayed payment surcharge belongs to the period beyond normative period for which the licensee is not compensated at the time of computation of interest on working capital. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission in this order approves to reduce the amount of non-tariff income by the financing costs of DPS.

6.15.7 The financing cost of delayed payment surcharge is computed by the Commission based on the actual DPS for the year. The DPS is grossed up conservatively based on the highest applicable surcharge rate which is 1.5% per month. Further, the financing cost is arrived at on the grossed-up amount and the weighted average SBI PLR rate applicable. The computation of the financing cost for DPS is provided below:

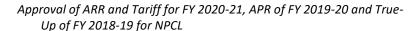
Table 6-22: COST OF BORROWING FOR DPS

Particulars	FY 2009-10
Delayed Payment Surcharge (Rs. Crore)	0.64
DPS grossed up at 1.50% per month or 18% per annum	18%
Amount (Rs. Crores)	3.56
Financing cost @SBI PLR	11.87%
Cost of Borrowing (Rs. Crores)	0.42

6.15.8 The Commission approves the non-tariff income net of financing cost for DPS at Rs. 0.89 Crores in the truing-up for FY 2009 - 10.

## Unquote

From the above, it is apparent that the DPS accrues on receivables outstanding beyond the normative period of 60 days being considered for approving the





normative working capital fund. Accordingly, receivables for more than 60 days on which DPS accrues are funded by the licensee which has also been acknowledged by the Hon'ble Commission in its various previous orders.

Further, it is pertinent to mention that the licensee needs to fund such overdue receivables either through borrowings or from its own sources and in either of cases, it is entitled to be compensated with the cost of financing the same.

The Company in its various submission has highlighted that the banks / non-banking financial institutions (NBFCs) provides funding only up-to 75% of 60 days of debtors and the licensee has to fund such delayed recovery of dues / receivables through Promoters' Equity. It is also pertinent to mention here that the Regulated Equity approved by the Hon'ble Commission till FY 2017-18 is only Rs. 357.18 Cr as compared to Rs 684.78 Cr (net of consumer contribution) in Audited Financial Statements of the Company. From the above, it can be observed that the surplus equity of approx. Rs. 328 Cr is being utilised for funding the business operations of the Company including financing of deferred receivables and in fact is eligible for return at the rate of 16% (post tax). However, the Hon'ble Commission treats such excess equity as debt only (for the purpose of Capex/Working Capital/deferred receivables etc.) and allows only normative interest thereon.

Therefore, existence / non-existence of loans or incurrence of interest cost against such income is not relevant for computation of compensatory normative allowance of cost of funding DPS as such receivables beyond 60 days are always funded through Promoter's equity.

Since the Hon'ble Commission has been approving interest on working capital on normative basis and similarly, the cost of financing DPS has also been approved on normative basis only being computed by grossing up actual DPS for the year on highest applicable surcharge rate i.e. 1.5% per month and applying the normative rate of interest considered for working capital loan i.e. weighted average SBI PLR on principle amount so computed.

We would like to draw the kind attention of the Hon'ble Commission towards the observation made by it in its various Tariff Orders latest being Tariff Order



dt. 22<sup>nd</sup> Jan'19 on Page no. 59. The same is reproduced below for the ready reference of the Hon'ble Commission:-

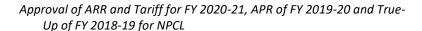
"3.7.7 The Commission is of the view that if the O&M expenses are allowed on the basis of actual O&M expenses as suggested by the Petitioner, there will be no sanctity of fixation of norms in Tariff Regulations. As per the Distribution Tariff Regulations, 2006, some of the elements of ARR are considered on normative basis and the actual expenses under some elements may be higher as compared to approved expenses, while the actual expenses under some elements may be lower as compared to approved expenses."

Thus, the calculation of financing cost of DPS is being considered on normative basis irrespective of the actual interest / return on equity incurred thereon by the Distribution Licensee which may be higher or lower than the normative compensatory allowance. The Hon'ble Commission in all Tariff Orders hitherto has followed the same methodology and approved the financing cost of DPS on normative basis only.

Further, the Hon'ble Commission in its Tariff Order dt. 30<sup>th</sup> Nov'17 while provisionally approving the ARR for FY 2017-18 had also considered the financing cost of DPS on normative basis. Even in its latest tariff order dt. 22<sup>nd</sup> Jan'19 while approving the revised ARR for FY 2018-19, the financing cost of DPS has been considered on normative basis only. Thus, the Hon'ble Commission has already determined the principles of approving various components of ARR while approving MYT petition no. 1146/2016 vide order dated 30<sup>th</sup> Nov'17 and it will not be just and proper to deviate from the established principles at the time of truing-up.

The aforesaid principles have been upheld by APTEL in the matter of Company's appeal no. 174 of 2015 vide judgement dated 2nd June 2016, Page no. 52 of 72, as reproduced below –

"As the Working Capital as well as Interest on Working Capital parameters are being decided based on normative values, actual values for these parameters cannot be taken into consideration while allowing the same in the main petition or at the time of truing up."





It is pertinent to mention here that similar practices are in place in other states e.g. Delhi. DERC in its Distribution Tariff Regulations, December 2011 has notified as follows:

"Non-Tariff Income:

5.35 All incomes being incidental to electricity business and derived by the licensee from sources, including but not limited to profit derived from disposal of assets, rent, net late payment surcharge (late payment surcharge less financing cost of late payment surcharge), meter rent (if any), income from investments, income on investment of consumer security deposit and miscellaneous receipts from consumers shall constitute Non-Tariff income of the licensee:"

However, aggrieved by the treatment of DERC in this respect, NDPL filed an appeal viz. Appeal no.153 of 2009 with Appellate Tribunal for Electricity (APTEL).

APTEL in its judgement dated 30<sup>th</sup> July 2010, decided as follows:

- "23. In the light of the aspects pointed out on behalf of the Appellant, the reply made on behalf of the State Commission may not be correct for the reasons given below:
- (i) The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers.
- (ii) Admittedly, the late payment surcharge is charged only if the delay is more than normative credit period.
- (iii) Thus, for the period of delay beyond the normative period, the Distribution company has to be compensated with the cost of such additional financing.

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25. ............While fixing the interest rate, the State Commission should have considered the prevalent SBI prime lending rate. Even in the said judgment, the Tribunal has laid down the principle that the rate of carrying cost must be derived from prevalent prime lending rates. As such, this principle has not been followed in this case. According to the Tariff Regulations, the cost of debt has to be determined considering Licensee's proposals, present cost of debt already contracted by the Licensee and other relevant factors viz. risk free returns, risk premium, prime lending rate, etc. Therefore, we deem it appropriate to direct the State Commission to rectify its computation of financing cost relating to the late payment surcharge and consequently reduce the amount of non-tariff income considered by the State Commission as available for the tariff determination for the FY 2007-08 at the prevalent market lending rates. Accordingly ordered."

Also, in case of MPERC, the regulations provide that –

## " 39. Late payment Surcharge

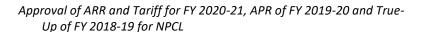
- 39.1 Surcharge as may be prescribed will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculations of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected.
- 39.2 <u>The delayed payment surcharge shall not be considered as income for the purpose of determination of revenue gap between annual revenue requirement and tariff & other income."</u>

In appeal no 223 of 2006, APTEL held as follows –

## "Analysis and Decision:

13. On a consideration of contentions of all parties, we are inclined to agree with the decision of the Commission to not include delayed surcharge revenue in the ARR in view of the fact that the working capital amount has been reduced to the bare minimum, 100% collection is not happening as of now, and therefore, to meet its cash requirements, the Discoms will have to borrow from Banks to compensate for the outstanding payments from consumers."

It is also pertinent to refer to the another judgement of Hon'ble APTEL in the appeal no. 250 OF 2016 & IA NO. 899 OF 2017 in the matter of Adani





Transmission (India) Limited Vs MERC which has dealt the matter in detail and concluded as follows –

"6.16 Also considering provisions of Section 61, it is incumbent on the Respondent Commission not to disregard the determination of tariff following the commercial principles. Considering DPC as Not-tariff Income is clearly against such principle. All the more when there is no explicit Regulation framed under MYT Regulations 2011.

6.17 In view of above, there is no doubt that such treatment to consider DPC as not tariff income is incorrect. Also, in such a situation a pragmatic way to ensure that Principle of Equity prevails would be Appeal No. 250 of 2016 & IA No. 899 of 2017 to not consider DPC as Non-Tariff Income. Accordingly, we decide that DPC shall not be considered as Non-Tariff Income"

Thus, in view of the above, the Commission is kindly requested to approve the financing cost of DPS on normative basis for FY 2018-19."

# 3.24.20 Taking into consideration, the Commission views are that:

- The UPERC MYT Regulations, 2014 do not provide any methodology / provision
  of computing the quantum of DPS & its financing cost, therefore it cannot be
  taken as normative.
- However, seeing the genuineness of the need of financing cost of the DPS if the
  Petitioner has actually incurred the financing of DPS and Petitioner can clearly
  demonstrate by the records, the same can be allowed to the Petitioner.
- If, the Petitioner has put in its equity in financing the DPS, it is to be noted that any excess equity (more than 30%) has already been considered as normative loan and interest has been given on it. Hence, Licensee has already received return of financing cost.
- 3.24.21 Hence, the Commission has disallowed the financing cost of DPS of Rs. 3.26 Crore claimed by the Petitioner for FY 2018-19.
- 3.24.22 Further the Commission observed that the Non-Tariff Income claimed by the Petitioner is



Rs. 11.82 Crore, however the Audited accounts provides the details of Non-Tariff Income of Rs. 18.22 Crore as shown below:

Table 3-103: Details of Non Tariff Income as per Audited Accounts

SI. No.	Description	Amount (Rs. Cr.)	Remark
1	Delayed payment charges	5.72	Note-26 of Audited Accounts
2	Processing charges	0.32	Note-26 of Audited Accounts
3	Disconnection and reconnection fees	1.28	Note-26 of Audited Accounts
4	Meter testing charges	0.36	Note-26 of Audited Accounts
5	Interest on investment & Dividend	0.16	Note-27 of Audited Accounts
6	Interest on Refund of Transmission Charges	2.39	Note-27 of Audited Accounts
7	Liquidated Damages recovery	0.99	Note-27 of Audited Accounts
8	Other Miscellaneous income	0.60	Note-27 of Audited Accounts
9	Interest Income on bank deposits	5.64	Note-27 of Audited Accounts
10	Gain on Sale of Short-Term investments	0.76	Note-27 of Audited Accounts
11	Total Non-Tariff Income	18.22	

3.24.23 Hence, the Commission approves Non-Tariff Income of Rs 18.22 Crore for Truing-up for FY 2018-19, as shown in the Table below:

Table 3-104: Non- Tariff Income for FY 2018-19 approved by the Commission (Rs Cr)

Particular	Approved vide Order dated 22/01/2019	True Up Petition	Approved upon Truing up
Non-Tariff Income including DPS	8.99	11.81	18.22
Less: Cost of Borrowing for DPS	4.20	3.26	-
Net Non- Tariff Income	4.79	8.55	18.22

#### 3.25 REVENUE FROM SALE OF POWER

- 3.25.1 The Petitioner submitted that Commission vide its Tariff Order dated 22<sup>nd</sup> January'19 had approved Sales at 1,853.81 MU and Revenue at Rs. 1,380.33 Crore for FY 2018-19 (excluding Regulatory Surcharge @ 6%) as per the tariffs approved in the Tariff Order dated 22<sup>nd</sup> January, 2019 which were unchanged as compared to earlier Tariff Order dated 30<sup>th</sup> November 2017.
- 3.25.2 The Petitioner during FY 2018-19 has recorded sales of 1850.07 MU reflecting growth of 11.17% over FY 2017-18. Similarly, the billed revenue excluding Regulatory Surcharge has



increase to Rs. 1,407.39 Crore. from Rs. 1,243.67 Crore. in FY 2017-18 recording an increase of 13.16% over last year. The category-wise sales, revenue and average realization for FY 2018-19 are given in the Table below for the kind perusal of the Commission:-

Table 3-105: Category-wise Energy Sales & Revenue for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI.	Catagoni	Sales	Revenue	ABR
No.	Category	(MU's)	(Rs. Crore.)	(Rs./kWh)
1	LMV-1: Domestic Light, Fan & Power	452.36	271.2	6
2	LMV-2: Non Domestic Light, Fan & Power	34.17	36.47	10.67
3	LMV-3: Public Lamps	35.65	29.05	8.15
4	LMV-4: Institutions	14.08	12.08	8.58
5	LMV-5: Private Tube Wells	25.83	4.04	1.57
6	LMV 6: Small and Medium Power	81	79.4	9.8
7	LMV-7: Public Water Works	19.2	19.75	10.29
8	LMV-8: STW and Pumped Canals	0.47	0.46	9.88
9	LMV-9: Temporary Supply	49.03	56.27	11.48
10	HV-1: Non Industrial Bulk Power	217.65	215.31	9.89
11	HV-2: Large and Heavy Power	920.65	683.34	7.42
12	Sub Total	1850.07	1407.39	7.61
13	Regulatory Surcharge		83.11	0.45
14	Total	1850.07	1490.50	8.06

3.25.3 The Commission in its order dated 22<sup>nd</sup> January, 2019 had approved the ABR of Rs. 7.45 per unit against which the Petitioner achieved actual ABR of Rs. 7.61 per unit through rigorous control on meter reading and billing. The SAP-ERP generates the billing register for the purpose of preparation of bills, printing thereof, sales & consumers' ledgers and the Petitioner prepares its Audited Financial Statement on the basis of such system generated sales register only.

# **Commission's Analysis**

3.25.4 The Commission observed that the Petitioner has claimed revenue of Rs. 1407.39 Crore while in the audited accounts the net revenue mentioned is Rs. 1490.50 Crore. In this



regard the Commission asked the Petitioner to reconcile the revenue with the audited accounts which was duly submitted by the Petitioner as shown in the Table below:

Table 3-106: Reconciliation of Revenue as submitted by the Petitioner for FY 2018-19

SI. No.	Description	Amount (Rs. Cr.)	Remark	
1	Revenue from Sale of Electricity for FY 2018-19	1490.50	Please refer to Note-26 of Audited Accounts	
2	Less: Regulatory Surcharge (shown separately)	83.11	Please refer to Note-41 or Audited Accounts	
3	Net Revenue from Sale of Electricity for FY 2018-19	1407.39		

3.25.5 The category-wise approved revenue from sale of power for FY 2018-19 is provided in the Table below:

Table 3-107: Revenue as approved by the Commission for FY 2018-19

Particulars	Sales	Revenue	Average Realisation
	(MU)	(Rs. Crs)	(Rs/kWh)
LMV-1: Domestic Light, Fan & Power	452.36	271.20	6.00
LMV-2: Non Domestic Light, Fan & Power	34.17	36.47	10.67
LMV-3: Public Lamps	35.65	29.05	8.15
LMV-4: Institutions	14.08	12.08	8.58
LMV-5: Private Tube Wells	25.83	4.04	1.56
LMV 6: Small and Medium Power	81.00	79.40	9.80
LMV-7: Public Water Works	19.20	19.75	10.29
LMV-8: STW and Pumped Canals	0.47	0.46	9.79
LMV-9: Temporary Supply	49.03	56.27	11.48
HV-1: Non Industrial Bulk Power	217.65	215.31	9.89
HV-2: Large and Heavy Power	920.65	683.34	7.42
Subtotal	1,850.07	1,407.39	7.61
Regulatory Surcharge		83.11	
Total Sales and Revenue	1,850.07	1,490.50	8.06

#### 3.26 ARR AND REVENUE GAP

3.26.1 Based on above mentioned Revenue, Expenditure and Return on Equity, the Aggregate Revenue Requirement for FY 2018-19 as computed on the basis of the MYT Regulations, 2014 and Commission's Tariff Orders is given in Table below:

Table 3-108: Summary of ARR for FY 2018-19 as submitted by Petitioner (Rs. Crore.)



# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

SI. No.	Particulars	Approved Vide T.O. dated 22 January 2019	Actual
1	Power Purchase Cost	890.3	967.44
2	Transmission Charges	129.71	184.31
3	Employee expenses	29.89	48.81
4	A&G expenses	13.24	12.78
5	R&M expenses	45.4	44.19
6	Interest Charges	77.15	68.83
7	Carrying Cost of Regulatory Asset	23.12	39.52
8	Depreciation	60.74	56.6
9	Taxes (Income Tax & Demand)	34.76	32.07
10	Gross Expenditure	1,304.31	1,454.55
11	Less: Interest & Employee Cost capitalized	9.71	8.99
12	Net Expenditure	1,294.60	1,445.56
13	Add: Provision for Bad & Doubtful Debts	23.28	13.29
14	Add: Miscellaneous Expenses	1.46	0.74
15	Add: Impact of GST	-	3.56
16	Total Expenditure with Provisions	1,319.34	1,463.14
17	Add: Return on Equity	64.71	59.47
18	Add: Efficiency Gains	0.24	0.24
19	Add: Contingency Reserve	-	-
20	Aggregate Revenue Requirement	1,384.28	1,522.85
21	Less: Revenue from Existing Tariff	1,380.33	1,407.39
22	Less: Non-Tariff Income	4.79	8.55
23	Revenue Gap	-0.84	106.92
24	Revenue Gap/ Surplus from Prev. Year	212.02	279.14
25	Less: Revenue from regulatory surcharge	-82.56	-83.11
27	Unamortized Revenue Gap from Preceding years	129.46	196.04
28	Total Revenue Gap carried forward	128.61	302.96



# **Commission's Analysis:**

3.26.2 Based on the above approvals, the summary of the ARR approved for FY 2018-19 is provided in the Table below:

Table 3-109: Summary of ARR as approved by the Commission for FY 2018-19 (Rs. Crore)

Sr. No.	Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
1	Power Purchase Expenses	890.29	967.44	833.91
2	Less: Disallowance in PPC due to excess sales (in unmetered wrt Normative)			(9.64)
2	Transmission Charges (UPPTCL+PGCIL)	129.71	184.31	170.60
3	Employee cost	29.89	48.81	29.61
4	A&G expenses	13.24	12.78	12.32
5	R&M expenses	45.40	44.19	39.89
6	Gross O&M Expenses	88.53	105.78	81.82
7	Total Interest and Finance charges	77.15	68.84	63.07
8	Depreciation	60.74	56.61	43.49
9	Income Tax	34.76	32.07	28.46
10	Gross Expenditure	1,281.17	1,415.04	1211.71
11	Employee cost capitalized	5.95	8.99	8.99
12	Interest capitalized	3.76	-	-
13	A&G expenses capitalized	-	1	-
14	Net Expenditure	1,271.46	1,406.05	1202.72
15	Provision for Bad & Doubtful debts	23.28	13.29	13.29
16	Misc Expenses	1.46	0.74	
17	Impact of GST	-	3.56	
18	Total net expenditure with provisions	1,296.20	1,423.64	1216.01
19	Add: Return on Equity	64.71	59.47	52.99
20	Less: Non-Tariff Income	4.79	8.55	18.22
21	Add: Efficiency Gains	0.24	0.24	
22	Annual Revenue Requirement (ARR)	1,356.35	1,474.80	1250.79
23	Revenue from existing/ revised Tariff	1,462.89	1,407.39	1407.39
25	Revenue Gap/(Surplus)	(106.54)	67.41	(156.60)
26	Revenue Gap/ (Surplus) from Prev. Year	212.02	279.15	278.36
27	Revenue from Regulatory Surcharge		83.11	83.11
28	Carrying cost	23.13	39.53	23.09
29	Net Revenue Gap	128.61	302.96	61.74



# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

# 3.26.3 Analysis on few parameters for percentage are depicted below:

Parameters	FY 2017-18 (Approved) A	FY 2018-19 (Approved) B	% change
Total Sales (MU)	1667.62	1,850.07	10.94%
Revenue from Tariff (Rs. Crore)	1334.36	1,490.50	11.70%
Total Power Purchase (MU)	1812.47	2,010.94	10.95%
Total Power Purchase (Rs. Crore)	837.83	1004.51	19.89%
ARR (Rs. Crore)	1235.31	1,250.79	1.25%
APPC (Rs./kWh) without Transmission (at NPCL Periphery)	4.14	4.15	0.24%
APPC including Transmission (Inter + Intra) (Rs./kWh) (at NPCL Periphery)	4.62	5.00	8.23%
ABR (Rs./kWh)	8.00	8.06	0.75%
ACoS (Rs./kWh)	7.41	6.76	-8.77%



#### 4 ANNUAL PERFORMANCE REVIEW OF FY 2019-20

#### 4.1 INTRODUCTION

- 4.1.1 In this Chapter the Commission has carried out the Annual Performance Review for FY 2019-20 in line with the provisions of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014. The Petitioner vide email dated May 27, 2020 submitted the revised submission for APR of FY 2019-20.
- 4.1.2 Regulation 8.1 of the UPERC Distribution MYT Regulations, 2014 specifies that under the MYT framework, the performance of the Distribution Licensee shall be subject to Annual Performance Review (APR) as shown under:

Quote

- 8. Annual Review of Performance and True Up
- 8.1 Where the aggregate revenue requirement and expected revenue from tariff and charges of a Distribution Licensee are covered under a Multi-Year Tariff framework, such Distribution Licensee shall be subject to an annual review of performance and True Up during the Control Period in accordance with these regulations.

Provided that in case of an excruciating and extra-ordinary circumstance, at any time notwithstanding the Annual Review, the Distribution Licensee may file appropriate application before the Commission.

#### Unquote

4.1.3 The Commission in Tariff Order dated January 22, 2019 issued clarifications regarding the scope of APR as follows:

Quote

......

II. Scope of APR?

In accordance with the provisions of UPERC MYT Regulations (both for DISCOMS and Transco), the scope of APR can be as follows:

The scope of Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue



Requirement and expected revenue from tariff and charges and shall comprise of the following: -

- a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;
- b) Categorization of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors) in accordance with the provisions of Regulations 9 of UPERC MYT Regulations;
- c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;
- d) Computation of sharing of gains and losses on account of controllable factors for the previous year in accordance with the provisions of Regulations 10 of UPERC MYT Regulations;
- e) Parameters/ target monitoring by Commission (for example UDAY scheme and Power for All  $24 \times 7$ , etc.)

# Unquote

- 4.1.4 In accordance with the Distribution MYT Regulations, 2014 and Scope of APR as quoted above, the scope of Annual Performance Review is limited to the revision of estimates for FY 2019-20, if required, based on the audited financial results for the previous year and give effect on this account in the estimates of FY 2020-21.
- 4.1.5 The Commission has not carried out the detailed analysis of various components. The Commission under the provisions of Distribution MYT Regulations, 2014 has revised the APR for FY 2019-20 based on capitalisation approved in True Up of FY 2018-19. The Commission has computed certain expenses for FY 2019-20 based on the revised GFA for FY 2018-19 only to facilitate the computations for FY 2020-21. The Commission has carried out comparison of each component of APR as claimed by the Petitioner with that of the approved values of Tariff Order dated September 03, 2019 for FY 2019-20. The Commission will carry out the detailed prudence check of various components of APR for FY 2019-20 while carrying out the truing up for FY 2019-20.



#### 4.2 NUMBER OF CONSUMERS AND CONNECTED LOAD

4.2.1 The Petitioner has estimated that the number of Consumers and Connected load for FY 2019-20 are 97,682 and 1071.11 MW, respectively, as given in the following Table:

Table 4-1: No. of Consumers and Connected Load submitted by the Petitioner for FY 2019-20 (APR)

Category	No. of Consumers (No.)	Connected Load (MW)
LMV-1: Domestic Light, Fan & Power	87,479	401.81
LMV-2: Non-Domestic Light, Fan & Power	3066	26.55
LMV-3: Public Lamps	295	10.59
LMV-4: Institutions	470	5.01
LMV-5: Private Tube Wells	1,221	5.83
LMV 6: Small and Medium Power	3157	72.12
LMV-7: Public Water Works	216	7.80
LMV-8: STW and Pumped Canals	10	0.12
LMV-9: Temporary Supply	764	22.06
HV-1: Non-Industrial Bulk Power	202	118.76
HV-2: Large and Heavy Power	802	400.47
Total	97,682	1071.11

4.2.2 The Petitioner has submitted that the projection of number of consumers and connected load was based on certain assumptions regarding various factors such as forthcoming development in area, Master Plan of Greater Noida Industrial Development Authority, consumer mix, etc., however, the actual number of consumers and connected load vary because of variations in the aforesaid parameters.

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

4.2.3 The Commission has made a comparison of number of consumers as submitted by the Petitioner in True-Up for FY 2018-19 with the number of consumers submitted for FY 2019-20 as shown in the Table below:

Table 4-2: Category-wise no. of consumers for FY 2019-20 as submitted by the Petitioner

Category	No. of Consumers for FY 2018-19	No. of Consumers for FY 2019-20	Percentage increase / decrease
LMV-1: Domestic Light, Fan & Power	81,390	87,479	7.48 %



## Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

Category	No. of Consumers for FY 2018-19	No. of Consumers for FY 2019-20	Percentage increase / decrease
LMV-2: Non-Domestic Light, Fan & Power	2,922	3066	4.93 %
LMV-3: Public Lamps	206	295	43.20 %
LMV-4: Institutions	675	470	-30.37 %
LMV-5: Private Tube Wells	1,191	1,221	2.52 %
LMV 6: Small and Medium Power	2,933	3157	7.64 %
LMV-7: Public Water Works	198	216	9.09 %
LMV-8: STW and Pumped Canals	10	10	0.00%
LMV-9: Temporary Supply	810	764	-5.68 %
HV-1: Non-Industrial Bulk Power	178	202	13.48 %
HV-2: Large and Heavy Power	721	802	11.23 %
Total	91,234	97,682	7.07 %

4.2.4 It can be observed from above that the number of consumers in LMV-3 category has increased abnormally, however there was decrease in estimation of connected load i.e. 10.26 MW. In this regard the Commission vide a data gap query asked the reasons for variation for the same. The Petitioner in this regard submitted that:

"GNIDA has segregated their single connection for multiple sectors into multiple connection based on respective Sector In-charge. Hence, there is an increase in number of consumers. Also, with the expansion of urbanisation / development of Sectors, the no. of points is increasing, thereby pushing the sales.

Simultaneously, they have also taken the initiative of conversion of sodium bulbs into LEDs resulting into lesser lighting load which in turn is pulling the connected load in totality."

4.2.5 The Commission has also made a comparison of Energy demand (in MW) as submitted by the Petitioner in True- Up of FY 2018-19 along with the Energy demand as submitted by the Petitioner for FY 2019-20, as shown in the Table below:



Table 4-3: Category wise Connected Load (MW) as submitted by the Petitioner for FY 2019-20

Category	Connected Load for FY 2018-19	Connected Load for FY 2019-20	Percentage increase / decrease
LMV-1: Domestic Light, Fan & Power	355.18	401.81	13.13%
LMV-2: Non-Domestic Light, Fan & Power	24.12	26.55	10.07%
LMV-3: Public Lamps	10.41	10.59	1.73%
LMV-4: Institutions	6.61	5.01	-24.21%
LMV-5: Private Tube Wells	5.65	5.83	3.19%
LMV 6: Small and Medium Power	66.82	72.12	7.93%
LMV-7: Public Water Works	7.36	7.80	5.98%
LMV-8: STW and Pumped Canals	0.12	0.12	0.00%
LMV-9: Temporary Supply	22.22	22.06	-0.72%
HV-1: Non-Industrial Bulk Power	99.86	118.76	18.93%
HV-2: Large and Heavy Power	336.38	400.47	19.05%
Total	934.72	1071.11	14.59%

- 4.2.6 The Commission observed that for LMV-3 category, the Petitioner has estimated a decrease in the connected load i.e. 10.26 MW while the estimated number of consumers is on the rise. The Commission sought the justification for the same. In this regard the Petitioner submitted that GNIDA has segregated their single connection for multiple sectors into multiple connection based on respective Sector In-charge. Hence, there is an increase in number of consumers. Also, with the expansion of urbanisation / development of Sectors, the no. of points is increasing, thereby pushing the sales. Simultaneously, they have also taken the initiative of conversion of sodium bulbs into LEDs resulting into lesser lighting load which in turn is pulling the connected load in totality.
- 4.2.7 In this regard, the Petitioner submitted that the Hon'ble Allahabad High Court vide its Order dated February 22, 2019 appended and has observed to consider the electricity connection of Advocate Chambers under LMV I category. Accordingly, the Petitioner has converted the connections of Advocate Chambers in Surajpur District Court previously billed under LMV 4 consumers to LMV I category. Due to the above, the number of connections in LMV-4 category has reduced, however, since the load of such consumers



- is generally less than 5 kW, hence, the connected load and sales has not been impacted significantly during FY 2018-19.
- 4.2.8 The analysis of billing determinants for FY 2019-20 would be carried out during True-Up process subject to prudence check by the Commission.

#### 4.3 ENERGY SALES

4.3.1 The Petitioner has submitted that during FY 2019-20, it has so far witnessed unrestricted peak demand of upto 436 MW and restricted peak demand of 421 MW The sales in industrial category has been lower than estimates owing to various factors like lower consumer demands, global recession etc. However, there has been positive variations in sale to domestic category (including societies) due to higher demand on account of rapidly increasing occupancy of residential dwelling in Greater Noida area.

# **Commission's Analysis:**

4.3.2 The Commission has also made a comparison of Energy demand (in MW) as submitted by the Petitioner in True- Up of FY 2018-19 along with the Energy demand as submitted by the Petitioner for FY 2019-20, as shown in the Table below:

Table 4-4: Energy Sales as submitted by the Petitioner for FY 2019-20 (MU)

Category	Submitted for FY 2018-19	Submitted for FY 2019-20	Percentage increase/ decrease
LMV-1: Domestic Light, Fan & Power	452.36	586.39	29.63 %
LMV-2: Non-Domestic Light, Fan & Power	34.17	37.61	10.07 %
LMV-3: Public Lamps	35.65	33.13	-7.07 %
LMV-4: Institutions	14.08	14.91	5.89 %
LMV-5: Private Tube Wells	25.83	21.73	-15.87 %
LMV 6: Small and Medium Power	81.00	87.41	7.91 %
LMV-7: Public Water Works	19.20	20.54	6.98 %
LMV-8: STW and Pumped Canals	0.47	0.11	-76.60 %
LMV-9: Temporary Supply	49.03	45.69	6.81 %
HV-1: Non-Industrial Bulk Power	217.65	242.80	11.56 %
HV-2: Large and Heavy Power	920.65	990.32	7.57 %
Total	1,850.07	2080.65	12.46 %

4.3.3 From the above Table, the Commission has observed that the Energy Sales for LMV-8 (STW and Pumped Canals) category has decreased by -76.60 %. Further, the Petitioner



**Total** 

- has submitted that during FY 2019-20 it has achieved sales of 2,080.65 MU reflecting growth of 12.46 % over actual sales for FY 2018-19.
- 4.3.4 The Petitioner has submitted that Commission vide its Tariff Order dated 3rd September, 2019, approved the Sales at 2,108.87 MU for FY 2019-20. The Commission has observed that total energy sales as revised by the Petitioner for FY 2019-20 are lower than the energy sales approved by the Commission in its Tariff Order dated September 03, 2019 for FY 2019-20. The category wise sales approved for FY 2019-20 vis-à-vis sales as submitted for FY 2019-20 is shown in the Table below:

Approved Percentage S. Category vide T.O. dtd. **APR Petition** Increase / No. 03/09/2019 Decrease LMV-1: Domestic Light, Fan & 510.43 586.39 14.88 % 1 Power LMV-2: Non-Domestic Light, Fan & 2 37.61 42.86 -12.25 % Power LMV-3: Public Lamps 37.38 -11.37 % 3 33.13 LMV-4: Institutions 24.16 -38.29 % 4 14.91 5 LMV-5: Private Tube Wells 21.73 -18.58 % 26.69 LMV 6: Small and Medium Power 88.04 87.41 -0.72 % 6 7 LMV-7: Public Water Works 23.16 20.54 -11.31 % LMV-8: STW and Pumped Canals 8 0.60 0.11 -81.67 % 9 LMV-9: Temporary Supply 60.44 45.69 -24.40 % HV-1: Non-Industrial Bulk Power 259.79 -6.54 % 10 242.80 11 HV-2: Large and Heavy Power 1,035.31 990.32 -4.35 %

Table 4-5: Category-wise Energy Sales for FY 2019-20 (MU)

4.3.5 From the above table, it can be observed that energy sales for LMV-1 category, has increased. The Commission directed the Petitioner to submit the metering status for the unmetered consumers. In this regard Petitioner submitted that as per the submission given in the Petition in MYT Formats Form 10A, the sale, number of consumers, and connected load for Category LMV-I unmetered category is reducing. The Commission might have mistakenly correlated the same with some other figure.

2,108.87

2080.65

4.3.6 The Commission observed that for LMV-4 category, the Petitioner has estimated a decrease in no. of consumers from FY 2018-19, however it has estimated a higher increase

-1.34 %



- in the sales and connected load. In this regard the Commission sought clarification from the Petitioner.
- 4.3.7 Further, the Commission has observed from the above table that except for LMV-1 category, all other category sales have decreased.
- 4.3.8 The Petitioner should improve on its forecasting techniques and specifically work towards improving the sales for better revenue growth.

#### 4.4 ENERGY BALANCE AND DISTRIBUTION LOSSES

- 4.4.1 The Petitioner has submitted that while the demand of electricity is growing steadily, unfortunately, the power sector is badly affected by "Apollo Syndrome" facing huge commercial losses, representing inefficient utilization of natural resources and consequently, casts unwanted burden on end-use of electricity. The T&D losses vary widely from utility to utility and are over 20% on an average in India against 6-12% in developed countries like US, UK, Germany, France etc. Some of the utilities in India have over 30% T&D losses.
- 4.4.2 The Petitioner has submitted that it has been striving to implement/emulate efficient, resilient, robust, inclusive, tailor-made initiatives to tackle the ever-rising menace i.e. commercial loss, which all distribution utilities are struggling hard to chain. While many initiatives tendered significant results but sometimes most worthy models failed due to the volatile environment, which are beyond the control of the distribution licensee. Some of these issues significantly giving rise to pilferage in Greater Noida area are as follows
  - i) Local Authority restraining the Petitioner from providing electricity connection in unplanned and un-authorized colonies leading to unauthorized tapping of energy. The menace has been quite high in "Doob" area of Greater Noida which is witnessing rapid build-up of colonies considering growing urbanization and all round development. On one side GNIDA is accepting registration of plots while on the other side the NGT is not allowing the Petitioner to lay its network and provide legal connection against the rapidly growing dwelling, resulting into huge T&D losses. Greater Noida being a developing city with many vacant residential premises, has attracted unauthorized occupants in urban areas who also indulge in hooking and tapping of electricity.
  - ii) In villages and unauthorized colonies, due to lack of planned development and no authority for approving "Naksha", at many places, the electrical network is being exploited to such a level where even the electrical poles / transformers are being covered within the boundary / four wall of the houses leading to theft/ pilferage. Due



- to widespread land acquisition in Greater Noida, allocation of certain percentage of land to farmers and development of private colonies and allocation, the above practice is quite frequent and wide spread in Greater Noida Area.
- iii) Increased hours of supply in rural areas i.e. from 12-16 hours to at least 18-22 Hrs in accordance with the State Government directions. In this regard, we would like to bring to the Commission, a letter no. 1686/24-P-3-2018 dated 3rd Aug'18 written by the Principal Secretary (Energy), Govt. of UP wherein the Company has been directed to provide 18 hours of power supply in villages failing which action will be taken against the Company in accordance with the conditions of license of the Company. Therefore, the Company had to further increase power supply in villages leading to higher T&D losses and bad debts due to non-payment of bills.
  - iv) Lowering HT: LT ratio due to rapid growth of LT sales.
  - v) Farmers agitation, poor law & order situation and lack of support from police and administration which are beyond the control of the Petitioner.
  - vi) Not even a single power theft case has been decided on merit by Special Court since its inception in the year 2004. As at March 2019, as many as 6118 cases are lying undecided at the Special Court, while 329 FIRs and 5790 Complaint Cases are pending with the local police owing to their inaction. Due to the inaction of judicial /administrative bodies, as explained above, the enforcement drives conducted by the Petitioner becomes ineffective and toothless.
- 4.4.3 The Petitioner further submitted that it was able to contain T & D loss at 8% by curtailing load in the loss prone areas but with the strict direction to increase power supply in rural areas for at-least 18 hours irrespective of high losses and non-payment of bills, the T&D Loss cannot be contained at 8% level. Further, villagers are adding many of the electrical/electronic items such as air conditioners, large TVs, washing machines, mobile phone, Laptops etc., without paying their electricity dues. This has seriously strained its efforts to contain its losses at 8%.
- 4.4.4 Accordingly, the Energy Balance for FY 2019-20 the Distribution losses as submitted by the Petitioner, are shown in the table below: -

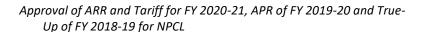


Particulars	Approved in T.O dated September 03, 2019	APR Petition
Energy Sales (MU's)	2108.87	2080.65
Distribution Loss %	8.00%	8.23%
Distribution Loss (MU's)	183.38	186.63
Energy Purchase (MU's)	2292.25	2,267.28

Table 4-6: Energy balance and Distribution Losses estimated for FY 2019-20

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

- 4.4.5 The Commission has observed that in the revised Energy Balance for FY 2019-20, the Petitioner has shown Distribution Loss of 8.23%, which is higher than the approved loss of 8.00%. In this regard the Commission sought the reasons for the same. The Petitioner submitted that in the entire country during the lockdown, till 31<sup>st</sup> May 2020 (as notified till the date of this letter), due to COVID-19, Malls, work places (both private & Government), industries were ordered to remain shut and advisory was issued to private sector organizations to allow their employees and officers to work from home.
- 4.4.6 The above has affected the operations of the Petitioner significantly. The revenue, power purchase and consumer mix has changed all together. The drawl by industries has come to a standstill while that of Urban and Rural Areas is drawing power unrestrictedly resulting into higher LT Sales, Lower HT Sales and Higher T & D losses. The situation becomes all the more grimmer because of restrained movement of Petitioner's personnel and effectively no Loss Control Activities in the fields due to lock-down.
- 4.4.7 The Petitioner submitted that it has been striving to implement/emulate efficient, resilient, robust, inclusive, tailor-made initiatives to tackle the ever-rising menace i.e. commercial loss, which all distribution utilities are struggling hard to chain. While many initiatives tendered significant results but sometimes most worthy models failed due to the volatile environment, which are beyond the control of the distribution licensee. Some of these issues significantly giving rise to pilferage are as follows-
  - (i) Local Authority restraining the Company from providing electricity connection in unplanned and un-authorized colonies leading to unauthorized tapping of energy. The menace has been quite high in Doob area of Greater Noida which is witnessing rapid build-up of colonies considering with growing urbanization and all-round development.





- (ii) Greater Noida being a developing city with many vacant residential premises, has attracted unauthorized occupants in urban areas who also indulge in hooking and tapping of electricity.
- (iii) In villages and unauthorised colonies, due to lack of planned development and no authority for approving "Naksha", at many places, the electrical network is being exploited to such a level where even the electrical poles / transformers are being covered within the boundary / four wall of the houses leading to theft/ pilferage. Due to widespread land acquisition in Greater Noida, allocation of certain percentage of land to farmers and development of private colonies and allocation, the above practice is quite frequent and wide spread in Greater Noida Area.
- (iv) Increased hours of supply in rural areas i.e. from 12-16 hours to atleast 18-22 hrs in accordance with the State Government directions. In this regard, we would like to bring to the attention of the Commission, a letter no. 1686/24-P-3-2018 dated 3rd Aug'18 written by the Principal Secretary (Energy), Govt. of UP, wherein the Petitioner has been directed to provide 18 hours power supply in villages failing which action will be taken against the Petitioner in accordance with the conditions of license of the Petitioner. Therefore, the Petitioner had to further increased power supply in villages. However, it'll result into higher T&D losses and bad debts due to non-payment of bills.
- (v) Earlier, the Petitioner was able to contain T & D loss at 8% by curtailing load in the loss prone areas but with the strict direction to increase power supply in rural areas for at-least 18 hours irrespective of high losses and non-payment of bills, the T&D Loss cannot be contained at 8% level. Further, these villagers are adding many of the electrical/electronic items such as air conditioners, large TVs, washing machines, mobile phone, Laptops etc., without paying their electricity dues. This has seriously strained the Company's efforts to contain its losses at 8%.
- (vi) Lowering of the HT: LT ratio.
- (vii) Farmers agitation, Poor law & order situation and lack of support from police and administration which are beyond the control of the Company
- (viii) Not even a single power theft case has been decided on merit by Special Court since its inception in the year 2004. As at Mar'20, as many as 6,855 cases involving theft of 25 MW approx. load is lying undecided at the Special Court. Not only this,



1,433 FIRs are pending with the local police since long due to their inaction. Due to the inaction of judicial /administrative bodies, as explained above, the enforcement drives conducted by the Company becomes ineffective and toothless.

- 4.4.8 The Petitioner further submitted that Commission is aware that the T&D losses vary widely from utility to utility and are over 20% on an average in India against 6-12% in advance countries like US, UK, Germany, France etc. Some of the utilities in India have over 30% T&D losses. Notwithstanding the above, it is trying its best through regular enforcement drives as well as social intermediation to contain its T&D losses. Therefore, it is submitted that in view of facts and reasons explained as above in respect of increase in losses and considering the high losses being witnessed in the State of Uttar Pradesh and recent impact of COVID-19, the Commission may consider and allow the marginal increase in losses as claimed by the Petitioner.
- 4.4.9 The analysis of Energy Balance and Distribution Loss for FY 2019-20 would be carried out during True-Up process subject to prudence check by the Commission.

### 4.5 POWER PROCUREMENT QUANTUM AND COST

- 4.5.1 **Power Procurement from LTPPA:** During FY 2019-20, the part of the base load of the consumers will be met through duly approved Long-Term Power Purchase Agreement (LTPPA) with Dhariwal Infrastructure Limited (DIL) for 187 MW RTC power (Net 170 MW Power at DIL Plant Bus after 9% Auxiliary Consumption). The Commission in its Tariff Order dated 3rd September, 2019 has considered the availability of 1,177.68 MU power at NPCL's Bus being equivalent to 100% availability.
- 4.5.2 The Petitioner submitted that due to load diversity during certain time blocks in a day, on week-ends / holidays etc. as well as to strictly comply with DSM Regulations, as amended, it has been observed that drawing 100% power is not feasible from DIL. Therefore, it has estimated to procure 1,048.36 MU power from M/s DIL during FY 2019-20 i.e. around 94% of the normative capacity.
- 4.5.3 The Petitioner submitted that the Commission in the Tariff Order dated 3<sup>rd</sup> September, 2019, citing its earlier order dated 5<sup>th</sup> February, 2019 in respect of DIL's MYT Petition for FY 2016-17 to FY 2018-19, provisionally approved the Energy Charge and Capacity Charges for FY 2019-20 at Rs. 1.80/kWh and Rs. 1.90 /kWh respectively (excluding the impact of escalation index, additional coal, income tax and change in law). Therefore, the Petitioner for the purpose of ARR has considered these rates for determination of cost of power to be procured from DIL during FY 2019-20. Accordingly, the Petitioner has estimated cost



- of power from DIL during FY 2019-20 at Rs. 522.47 Cr as against Rs. 470.33 Cr approved in Tariff Order dated 3<sup>rd</sup> September, 2019 excluding transmission charges.
- 4.5.4 The Petitioner added that DIL has filed its True-up Petition for FY 2016-17 to FY 2018-19 on 14th August, 2019 and MYT petition no. 1531 of 2019 for determination of provisional tariff for the control period starting from FY 2019-20 to FY 2023-24 in accordance with UPERC Generation Tariff Regulations 2019 on 20th November, 2019, which are pending before the Commission. Any impact on the power purchase cost pursuant to the order of the Commission on the above Petitions would be consequently claimed by the Petitioner in the ARR / APR/ Truing-up petitions as the case may be.
- 4.5.5 Further, it is pertinent to mention here that the above cost of power purchased from M/s DIL does not include the impact on such cost on account of the followings
  - a) **Petition No. 1319 of 2018** For approval of cost of Additional Coal for FY 2017-18 submitted on 23-04-2018;
  - b) **Petition No. 1318 of 2018** For approval of cost of Additional Coal for FY 2018-19 submitted on 23-04-2018;
  - c) **Petition No. 1438 of 2019** For approval of cost of Additional Coal for FY 2019-20 submitted on 29-03-2019;
  - d) **Petition No. 1440 of 2019** For approval of Cost on account of Change in Law for FY 2016-19 submitted on 29-03-2019;
- 4.5.6 **Power Procurement from MTPPA:** Apart from above, the Petitioner also estimated to procure 653.05 MU power under Medium Term Power Agreement (MTPPA) for 100 MW with PTC India Ltd. which has been approved by the Commission vide its Order dated 31st July, 2018 at estimated cost of Rs. 256.67 Cr as against approved cost of Rs. 268.52 Crore.
- 4.5.7 **Power Procurement from Renewable Sources:** The Petitioner submitted that the Commission issued First Amendment to the RPO Regulations, 2010 on 16th August, 2019 and in the said First Amendment (under Table B), has stipulated the long-term trajectory of minimum quantum of purchase of Renewable power from various renewable sources as given in Table below: -



Table 4-7: Minimum quantum of purchase from renewable energy sources as % age of total energy consumed (in kWh)

	Non-Sola	ar		
Financial Year	Other Non- Solar	НРО	Solar	Total
	Α	b	С	d = a+b+c
2019-20	5	1	2	8
2020-21	6	2	3	11
2021-22	6	3	4	13
2022-23	6	3	5	14
2023-24	7	3	5	15

- 4.5.8 Further, the Commission vide its Order dated August 19, 2019 in Petition No. 12 SM of 2018 directed the Petitioner to provide the Road Map to fulfil the accumulated of RPOs. In compliance to the same the Petitioner filed its affidavit on 9th September, 2019 providing the Road Map for fulfilment of the RPOs.
- 4.5.9 In line with affidavit, the Petitioner submitted that it has made arrangements for meeting its RPO Obligations during FY 2019-20 by procuring Non-Solar Renewable Power and Hydro Power from short term sources.
- 4.5.10 Apart from Non-solar power arrangements, the total installed capacity of the Rooftop Solar in the licensed area of the Petitioner as at 31st March, 2019 is 22.57 MW. It is expected that by the end of FY 2019-20, the likely installed capacity will be 26.57 MW under net metering arrangements.
- 4.5.11 Based on above renewable power arrangement, the estimated status of RPO at end of FY 2019-20 has been estimated and given in Table below: -

Table 4-8: Latest Estimated RPO Status (FY 2019-20) in MU

Туре	Parameter	Nomenclature	Units	FY 2019-20
	Gross energy consumption	Α	MU	2,080.65
Solar	Hydro and Renewable Power Consumption after FY 2016- 17	В	MU	207.50
	Net Energy Consumption	C=A-B	MU	1,873.15
	RPO Target (Solar)	D	%	2%
	RPO Target (Solar)	E=C*D	MU	37.46



# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

Тур	e	Parameter	Nomenclature	Units	FY 2019-20
		Solar Energy Purchased	F	MU	38.27
		Total RPO achieved	G=F/E	%	102%
		Excess RPO Met Carried Forward	Н	MU	38.27
		Shortfall RPO Carried forward	I	MU	-
		REC Purchased	J	MU	-
		Net Status	K=H-I+J	MU	9.79
		Penalties, if any	L	Rs. Crore	
		Gross energy consumption	Α	MU	2,080.65
		Hydro and Renewable Power Consumption after FY 2016- 17	В	MU	207.50
	Other Non-Solar	Net Energy Consumption	C=A-B	MU	1,873.15
		RPO Target (Non Solar)	D	%	5%
		RPO Target (Non Solar)	E=C*D	MU	93.66
		Non-Solar Energy Purchased	F	MU	87.75
		Total RPO achieved	G=F/E	%	94%
		Excess RPO Met Carried Forward	Н	MU	87.75
		Shortfall RPO Carried forward	I	MU	-
Non-Solar		REC Purchased	J	MU	-
		Net Status	K=H-I+J	MU	102.34
		Penalties, if any	L	Rs. Crore	-
		Gross energy consumption	А	MU	2,080.65
		HPO Target (Hydro)	В	%	1%
		HPO Target (Hydro)	C=A*B	MU	18.73
		Hydro Energy Purchased	D	MU	-
	Hydro	Total HPO achieved	E=D/C	%	0%
	Purchase Obligation	Excess HPO Met Carried Forward	F	MU	-
		Shortfall HPO Carried forward	G	MU	-
		REC Purchased	Н	MU	-
		Net Status	I=F-G+H	MU	-



# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

Туре	Parameter	Nomenclature	Units	FY 2019-20
	Penalties, if any	J	Rs. Crore	-

- 4.5.12 The Petitioner requested the Commission to approve the estimated power procurement from renewable sources as estimated by the Petitioner and allow the accumulated deficit RPO of 37.73 MU till FY 2019-20 for meeting the RPOs in subsequent years.
- 4.5.13 **Power Procurement from Short-term Sources**: The Petitioner submitted that during FY 2018-19, price of short-term power had begun to increase as market sensed the possibility of shortage in power availability during impending General / State Assembly elections in FY 2019-20. Therefore, in order to avoid the procurement of power at higher market price during peak season in FY 2019-20, the Petitioner leveraged the Power Banking arrangements to optimise its over-all power purchase cost. The Petitioner submitted that it would draw 163.02 MU power at landed cost of Rs. 5.17/kWh in FY 2019-20, which were banked in FY 2018-19.
- 4.5.14 In view of the above, the power purchase cost vis-à-vis the power purchase cost approved by the Commission vide Tariff Order dated 3rd September, 2019 is given in Table below:

Table 4-9: Power Purchase Cost estimated for FY 2019-20 by the Petitioner

SI. No.	Item	Approved vide T.O dated September 03, 2019		APR Petition			
So	Source of Power Purchase		Rs./kWh	Rs. Cr.	MU's	Rs. /kWh	Rs. Cr.
1	Power Purchase from LT	1,177.68	3.99	470.33	1,048.36	4.62	522.47
2	Power Purchase from MT	746.64	3.60	268.52	653.05	3.93	256.67
3	Power purchase from Traders	228.21	4.67	106.52	356.84	3.91	139.61
4	Power Banking	-	-	-	163.02	5.17	84.23
5	Power Purchase from RE	139.72	4.81	67.17	95.02	5.13	48.76
6	DSM	-	-	-	2.46	46.37	11.42
7	Sale of Energy				(51.49)	2.17	(11.18)
8	Total	2,292.25	3.98	912.52			
9	PGCIL Charges			107.77			109.96
10	UPPTCL Charges			42.64			40.86
11	Total Power Purchase Cost	2,292.25	4.64	1,062.95	2267.28	5.65	1281.72



# **Commission's Analysis**

- 4.5.15 With regards to the power purchase from renewable sources, the Commission observed that the Petitioner in FY 2019-20 for estimation of Renewable sources has claimed Inter State Transmission Loss. The Commission sought the reasons for considering the Transmission Losses for Renewable sources when it is exempted for Renewable purchase made through competitive bidding. In this regard the Petitioner submitted that the power procurement sources for renewable power considered in the APR Petition are other than Solar and Wind Sources which are exempt from inter-state transmission charges and losses. Accordingly, interstate & intra state losses had been considered with respect to power procurement from renewable power sources.
- 4.5.16 The Commission noticed that the Petitioner has estimated Un-schedule Interchange (UI) quantum and cost for FY 2019-20. In this regard the Commission sought the basis for the consideration of UI quantum and cost for FY 2019-20. In this regard the Petitioner submitted that due to diversity of load/consumption and based on the actual variation in power scheduled vis-à-vis drawl and related cost thereof during FY 2018-19 and parts of FY 2019-20, at times it has been observed that power contracted and scheduled in advance becomes surplus than the instant demand and the Petitioner has no option but to sell such excess power on Power Exchanges. It is pertinent to mention that despite various constraints of system and wide, uncertain and volatile changes in demand, the Petitioner has still considered consumption of tie-up power to the extent of 99% and only 1% power has been assumed as surplus which if need arises, will be sold at Power Exchange. The aforesaid estimation is also in line with the power procurement trends in the previous years.
- 4.5.17 The Petitioner submitted that the newly notified DSM Regulations has made the UI rules more stringent and a distribution Licensee has to match its schedule within 6 time blocks otherwise it will have to bear heavy penalties. Thus, it becomes all the more imperative to balance the demand with the tied-up power and sell the surplus power, if any through power exchange in order to keep its drawl within permissible limits of schedule.
- 4.5.18 The Commission noticed that the Petitioner in its power purchase has estimated Rs. 74.71 Crore under power banking. In this regard the Commission asked the Petitioner to provide the details of Energy banking Agreement with the agreement copy. The Petitioner submitted the details of banking as shown in the Table below:



Table 4-10: Details of Power Banking as submitted by the Petitioner as shown in the Table below:

Type of Contract	Energy Purchase at NPCL Bus (MU)	Energy Charges (Rs. Cr.)	PGCIL Charges (Rs. Cr.)	UPPTCL Charges (Rs. Cr.)	Transmission Charges (Rs. Cr.)	Total Cost (Rs. Cr.)
		-				
Power Procured through Banking to be returned in FY 19	14.01	6.60	0.32	0.35	0.67	7.27
Total FY 2017-18	14.01	6.60	0.32	0.35	0.67	7.27
Return of Power Procured through Banking in FY 18	(16.39)	(6.54)	0.37	0.23	0.59	(5.95)
Power Procured through Banking to be returned within FY 19	124.71	0.53	3.25	3.32	6.57	7.10
Return of Power Procured through Banking within FY 19	(137.88)	-	2.73	1.68	4.41	4.41
Power supplied under Banking to be procured in FY 20	(175.34)	(74.71)	4.80	3.01	7.81	(66.91)
Power Banking FY 2018-19	(204.91)	(80.73)	11.14	8.23	19.38	(61.35)
Procurement of Power Banked in FY 19 (Non-Hydro)	102.10	46.70	3.99	2.40	6.40	53.10
Procurement of Power Banked in FY 19 (Hydro)	60.92	28.11	1.78	1.24	3.02	31.13
Power Banking FY 2019-20	163.02	74.81	5.77	3.65	9.42	84.23

- 4.5.19 The Commission has observed that the Power Purchase cost and the Transmission charges has increased with respect to that approved by the Commission in Tariff Order dated September 3, 2019.
- 4.5.20 The Commission will carry out the detailed analysis of Power purchase expenses for FY 2019-20 at the time of truing up, subject to prudence check by the Commission.



# 4.6 OPERATION AND MAINTENANCE EXPENSES (O&M)

- 4.6.1 Operation and Maintenance (O&M) expenses comprises of Employee related costs, Administrative and General (A&G) Expenses and Repair and Maintenance (R&M) expenditure.
- 4.6.2 The Petitioner submitted the details of O&M Expenses for FY 2019-20 as provided in the Table below:

Table 4-11: O&M Expenses as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	Approved in T.O 03.09.2019	APR Petition
Employee Expenses	34.85	56.86
Repair & Maintenance Expenses	49.04	50.48
Administrative and General Expenses	15.63	14.12
Gross O&M Expenses	99.52	121.46
Less		
Employee Expenses capitalized	11.90	10.32
Net O&M Expenses	87.62	111.14

4.6.3 The Petitioner submitted that the Commission in its Tariff Order dated September 3, 2019 has approved the O & M expenses on normative basis in accordance with the Regulations 25 of MYT Regulations, 2014, which is grossly insufficient as compared to likely expenses estimated by the Petitioner. The Petitioner requested the Commission should consider O & M expenses for FY 2019-20 as estimated by the Petitioner owing to following factors which are beyond the control of the Petitioner:

# **Increase in Minimum Wages: -**

- a) All enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages Act 1948 and Government of State of Uttar Pradesh revises minimum wages under the provisions of the Minimum Wages Act, 1948 twice in a year (i.e. with effect from April and October).
- b) The Petitioner submitted that the MYT Regulation, 2014 provides for escalation of normative Employee Cost on the basis of Consumer Price Index (i.e. CPI), however, the resultant escalation is quite insufficient and more important is that the increase in minimum wages are not covered in CPI. Hence, the impact of increase in minimum wages do not get compensated through incremental CPI.



c) The Petitioner has submitted that the Commission observed that the Regulation 29 of MYT Regulation, 2014 provides admissibility of Bad and Doubtful Debts as a legitimate business expense with the ceiling limit of 2% of the revenue receivables in the Tariff. However, the Petitioner has been able to contain the same to 0.94% during the FY 2019-20. This has resulted in huge saving in the Bad and Doubtful Debts which will ultimately pass on to the Consumers. The saving is depicted in the following Table:

Table 4-12: Savings in Provision for Bad Debts (FY 2019-20) (Rs. Crore)

SI. No.	Particulars	U.o.M.	Reference	Latest Estimate
1	Revenue billed for the year	Rs. Cr.	а	1698.87
2	Actual Provision for Bad & Doubtful debts	Rs. Cr.	b	1.06%
3	Provision as % of Revenue billed	%	c= b/a	1.06%
4	Normative Provision for Bad & Doubtful Debt @2%	Rs. Cr.	d=a x 2%	33.98
5	Saving in provision for Bad & Doubtful debts	Rs. Cr.	e=d-b	17.00

h. The Petitioner submitted that from the above table it can be seen that it is able to limit Bad & Doubtful Debts at 1.06% against 2% on account of the fact that the it has deployed additional manpower for recovery of dues from the consumers, prompt billing, aggressive actions against theft, timely action against the defaulters etc. In case, it opts to reduce its manpower to align actual employee cost with the normative employee cost as per MYT Regulations, 2014, it may lead to higher bad debts which will ultimately burden the diligent Consumers. Therefore, the Petitioner should be allowed to recover its employee cost at actual.

# 4.6.4 Recommendation of Sixth /Seventh Pay Commission:

a) With implementation of the Seventh Pay Commission, the average pay of government employees has gone up more than 25% approx. including that of State Governments' employees. This will lead to considerable raise in salary package at entry level as well as higher level of employees in private sector also. In this backdrop, the Petitioner has been facing an uphill task to retain talented and motivated workforce and minimize attrition in the increasingly competitive market with more



and more participation of private sector in the utility segment including electricity distribution. Hence, it is necessary that the compensation structure on one hand meets the expectations of the employees and on the other hand motivates them to strive for superior performance through congruence of individual and organization goals. Therefore, any increase in emoluments given by the Central Pay Commission, will have a direct bearing on the salary and emoluments of the Petitioner's employees so as to retain and motivate them appropriately.

b) Accordingly, the Petitioner requested the Commission to approve the O & M expenses on actuals considering the significant increase in salaries and minimum wages.

### 4.6.5 Other Cost Drivers:

- a) The Petitioner submitted that the Commission, in its various Orders, has time and again acknowledged the performance standards of the Petitioner and also in its Order dated 22nd January'2019 observed that NPCL is the best performing utility in U.P. and having regard to observation of the Commission, the Petitioner has been striving hard to control and optimize its O & M Expense primarily keeping the consumers interest in view.
- b) The Model Regulations provides for benchmarking the O & M Expenses of any Distribution Utility with its peers in the same State or outside State. The Commission in its Tariff Order dated 14th October, 2010 has mentioned that:
  - "22 (j) In relative analysis, performance parameters of other Distribution Licensees within the same state or in other states, shall be considered by the Commission to estimate norms."
- c) The Petitioner submitted that the O & M expenses of the Petitioner are one of the lowest in the country and with considerable growth in the area and aging of assets, it has become imperative for the Petitioner to take additional and timely efforts to meet the upcoming demand growth in the area and to maintain a reliable and efficient power supply. The Petitioner submitted it has already started initiative in this regard which has also been acknowledged by the consultant viz. IMaCS. Therefore, it is submitted that O&M expenses may be allowed in full as estimated by the Petitioner for FY 2019-20.
- d) The Petitioner submitted that it is incurring today is mainly to keep the intense growth potential of the area. The Petitioner submitted that it is preparing its system, processes,



network etc. to keep future demand and growth in mind. Thus, in the aforesaid per unit comparison, though the current cost is already lower, but it will come down further in per unit terms as the demand of the area increases. In-fact, at present, despite being competitive in O & M cost, the volume of the Petitioner is much lesser as compared to other Discoms in the comparison.

# 4.6.6 Capitalization of Employee Cost:

- a) The Petitioner submitted that it has estimated to capitalize an amount of Rs. 10.32 Cr out of the total employee cost of Rs. 56.86 Cr to be incurred during FY 2019-20, as per past practice duly approved by the Commission. In brief, for the purpose of capitalization of employee costs, the Petitioner at the time of execution of project, records actual man hours spent by each engineer/ executive into the system / SAP Software. These hours are then matched with the cost per hour of that employee by the software itself and actual employee cost so incurred, is capitalized along with the specific project. It is pertinent to mention that the entire process of its project/financial accounting is through SAP, and there is least manual intervention in computation of expenses to be capitalized.
- b) These man-hours and cost is duly verified by the Statutory Auditors of the Petitioner in detail and is approved by the Board of Directors of the Petitioner subsequently.
- c) On the basis of the aforesaid policy, approved and followed consistently over the years, the Petitioner submitted to the Commission to approve the capitalization of employee cost at Rs. 10.32 Cr during FY 2019-20.
- d) The Petitioner requested the Commission to approve the net O & M expenses excluding GST component at Rs. 111.14 Cr for FY 2019-20 as estimated subject to truing up in future.

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

4.6.7 With regards to O&M Expenses, the Commission noticed that the Petitioner has estimated employee expenses capitalized as Rs. 10.32 Crore for FY 2019-20. The Commission asked the basis for such estimation. In this regard, the Petitioner submitted that for the purpose of computing the manpower cost incurred for execution of the projects has been following a very scientific approach wherein at the time of execution of projects, actual man hours spent by each engineer / executive are recorded into the system. These hours are then matched with the cost per hour of that employee and actual employee cost so incurred, is capitalized along with the project. It is pertinent to mention



that the entire process of its project/financial accounting is through SAP, and there is least manual intervention in computation of expenses to be capitalized. These man-hours and cost are duly verified by the statutory auditors of the Petitioner in detail and is approved by the Board of directors of the Petitioner subsequently. The Petitioner has been following the aforesaid policy consistently for capitalization of employee expenses which has since been approved by the Commission in its various Tariff Order. Based on above policy, estimated projects and man-hour involved in these projects, it has estimated to capitalize an amount of Rs. 10.32 Crore during FY 2019-20.

- 4.6.8 The Commission vide Tariff Order dated September 3, 2019 had approved O&M expenses for FY 2019-20. The Commission has observed that the revised net O&M expenses submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order dated September 3, 2019. The Commission also observes that there is a huge gap between the same.
- 4.6.9 The Commission sought the detailed computation of each component of O&M Expenses based on normative parameters which the Petitioner has duly submitted.
- 4.6.10 The Commission will carry out the detailed analysis of O&M expenses for FY 2019-20 at the time of truing up, subject to prudence check by the Commission.

#### 4.7 EXPENSES INCURRED DUE TO CHANGE IN LAW- GST

- 4.7.1 The Petitioner submitted that the Central Government has made new Goods & Service Tax (GST) effective from 1st July, 2017 which covers almost all goods and service within its ambit. The new GST has stipulated tax rate of 18% and 28% for most of the goods and services as against Service Tax of 15% and VAT of 14.5%. Apart from above it has also brought in new service under Reverse Charge Mechanism which leads to higher indirect tax burden on service users such as the Petitioner.
- 4.7.2 In respect of above, Regulation 25 (d) and Regulation 9.1 of the MYT Regulation, 2014 is reproduced below:

" 25

....

(d) The expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits etc. in Employee cost etc., shall be excluded from the norms in the trajectory.

.... "



- "9.1. The "uncontrollable factors" shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:
- a. Force Majeure events, such as acts of war, fire, natural calamities, etc.
- b. Change in law;
- c. Taxes and Duties;

,,,,,

- 4.7.3 The Petitioner submitted that from the above Regulation it is evident that Change in Law and introduction of new taxes such as GST shall be excluded from the normative expenses and accordingly need to be considered separately in addition to normal O&M expenses in determination of the ARR of the distribution licensee.
- 4.7.4 The Petitioner submitted that it got the impact analysis of the GST done from M/s Lakshmi Kumaran & Sridharan, Attorney which summarized and brought forth the impact of GST Act as well as rules, notifications, etc., made thereunder, on the distribution of electricity done by the Petitioner, with emphasis on cost of various expenses incurred by the Petitioner pre and post implementation of GST. This Report provided an insight into the indirect taxation system of the country post GST and contained an analysis of the cost increase/decrease to Petitioner after the implementation of GST. Based on this report, the Commission in its Tariff Order dated 3rd September, 2019 approved average incremental rate of GST as 5.88% while approving the True-up of ARR for FY 2017-18.
- 4.7.5 Accordingly, considering, the approved incremental rate of GST at 5.88%, the net impact of GST for FY 2019-20 would be computed is shown in the table below:

Table 4-13: Impact of GST (FY 2019-20) (Rs. Crore)

S. No.	GST Item	Reference	APR Petition
1	Repair & Maintenance Expenses including GST	а	50.48
2	Administrative and General Expenses including GST	b	14.12
3	Net expenses affected by GST	c=a+b	64.60
4	Approved incremental rate of GST	d	5.88%
5	Net impact of GST	e=c x d	3.78



- 4.7.6 The Petitioner requested the Commission to approve such additional GST Expenses on account of the above change in GST in full, over and above the O & M expenses as claimed by the Petitioner.
- 4.7.7 Apart from above, the CBEC vide Circular No. 34/8/2018-GST dated 1st March'18 has clarified that the services as stated below when provided by DISCOMS to consumer are taxable.
  - a) Application fee for releasing connection of electricity
  - b) Rental Charges against metering equipment
  - c) Charges for duplicate bill
  - d) Testing fee for meter/transformer, capacitors etc.
  - e) Labour charges from customer for shifting of service lines
- 4.7.8 Consequently, Directorate General of GST Intelligence (DGGSTI), New Delhi issued a summon u/s 70 of CGST Act on 29th May'18, requesting the Petitioner to produce information on the amounts collected by the Petitioner from 1st July, 2017 to 30th April, 2018 towards abovementioned five services or any other charges collected from the customers over and above the electricity charges for the period.
- 4.7.9 The Petitioner submitted that it filed the detailed reply in response to summon and also filed a writ petition before Hon'ble Allahabad High Court on 24th July'18 and challenged above Circular issued by Department of Revenue and summon issued by DGGSTI. Since, the matter before Hon'ble Allahabad High Court is still pending, the Petitioner in the meantime has filed an intervention petition on 13th November, 2019 in respect of the same matter already pending before the Hon'ble Supreme Court in the case of Torrent Power Ltd. wherein the Department has filed an appeal against the judgement of Hon'ble Gujrat High Court being given in favour of Torrent Power Ltd.
- 4.7.10 Further taking abundant precaution and without prejudice to the Petitioner's rights and contentions with respect to above writ and intervention petitions, the Petitioner has started to levy GST on above services from October, 2018 onwards.
- 4.7.11 Therefore, depending on the outcome of the above-mentioned writ and intervention petitions, the Petitioner in future may become liable to pay GST on above services in respect of the duration when GST was not levied on such service.
- 4.7.12 However, pending final adjudication of the matter, the amount payable cannot be ascertained at this stage, therefore, the Petitioner has not claimed the same in this APR Petition and it shall claim so on actual basis at an appropriate time.



# **Commission's Analysis:**

4.7.13 The Commission observed that the Petitioner has considered the net impact of GST of Rs.3.78 Crore. The Commission will carry out the detailed analysis of these expenses for FY 2019-20 at the time of Truing-Up.

#### 4.8 CAPITAL EXPENDITURE

4.8.1 The Petitioner submitted that in its APR Petition no. 1349/2018 dated 20th July, 2018 for FY 2017-18 had revised the estimate for Capital Expenditure for FY 2019-20 due to changes in Network Planning owing to various factors like consumer demand, GNIDA planning and other factors beyond its reasonable control. The Commission vide its Tariff Order dated 3rd September, 2019 approved such revised Capital Expenditure for FY 2019-20. The Petitioner estimated the capital expenditure for FY 2019-20 as shown in the Table below:

Table 4-14: Capital expenditure as estimated by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	FY 20	19-20
Scheme wise	Investment	Capitalisation
New Connection	18.89	18.89
Replacement Stock	4.46	4.46
Metering	0.73	0.73
33/11 kV Substation	72.94	72.94
33 kV Network Development	12.23	12.23
11 kV Network Development	18.23	18.23
LT Network Development	14.63	14.63
Network at Villages	6.16	6.16
Network Renovation	2.28	2.28
Process System Automation	7.44	7.44
Civil Works & Office Infrastructure Facility	15.65	15.65
IT Projects	7.05	7.05
Tools & Testing Equipment and Vehicles	1.98	1.98
Demand Side Management	-	-
Land	25.99	25.99
Misc/Contingent Works	-	-
Interest / Expense Capitalisation	-	-
Salary Capitalisation	-	-
CWIP Movement	(35.96)	
Total including Interest and Employee Cost capitalised (A)	172.70	208.66
Employee Cost Capitalised (B)	9.00	9.00



# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

Particulars	FY 2019-20	
Scheme wise	Investment Capitalisation	
Interest Expenses Capitalised (C)	-	-
Total (D= A - B - C)	163.70	199.66
Asset not belonging to Discoms (E)		-
Total (F= D+E)	163.70	199.66

- 4.8.2 Since, there is no significant change in the network planning after the Capital Expenditure approved by the Commission vide its Tariff Order dated September 3, 2019 the Petitioner submitted that it has considered Capital Expenditure at the same values for APR of FY 2019-20 except impact of salary capitalization and Closing Work in Progress as explained in following paragraphs.
- 4.8.3 The Petitioner, in its MYT Petition no. 1145 of 2016 and 1146 of 2016 for the control period from FY 2017-18 to FY 2019-20, had sought approval of the Commission for below mentioned augmentation works for efficient and reliable power supply to the consumers of Greater Noida:
  - a) Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 to 220/132/33kV RC Green substation for enhancement of upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation.
  - Cost of addition of 5 nos. 33kV bays (GIS) at 400 kV Substation at Sector-148,
     Noida under ETD-1 for the purpose of distribution of electricity in Greater Noida area;
- 4.8.4 Accordingly, as demanded by UPPTCL, the Petitioner paid Rs. 19.12 Cr for construction of 220kV LILO lines during FY 2017-18 under deposit scheme. Since the work was under progress even as on 31st March, 2019, the Petitioner included the above amount in CWIP of FY 2017-18 as well as closing CWIP of FY 2018-19.
- 4.8.5 Further, the Commission vide its Tariff Order dated 3rd September, 2019 has disallowed the CWIP of Rs. 19.12 Cr while truing-up the ARR for FY 2017-18 on the sole premise that the aforementioned cost was towards the construction of 220 kV RC Green Substation and its associated 220kV lines subject to the final decision of the Hon'ble Appellate Tribunal in the Appeal filed by the Petitioner which is still under sub-judice.
- 4.8.6 The relevant extract of the aforementioned Order dated 3rd September, 2019 is reproduced herein below for reference:



"3.8.17 The Commission observed that the Petitioner has claimed Rs.19.12 Cr for construction of 220KV sub-station at RC Green and associated 220 kV line to NPCL which is against the Commission's aforesaid decision. Since the work is yet to be completed by UPPTCL, the same has been included in closing CWIP of FY 2017-18 by the Petitioner.

"3.8.18 Although, the mater is sub-judice in APTEL, the Commission finds its appropriate to disallow this amount from the closing CWIP subject to final decision of APTEL in this matter. The Petitioner is directed to apprise the Commission about the matter during True-Up of FY 2018-19."

- 4.8.7 In this respect the Petitioner submitted that it has paid the abovementioned amount of Rs. 19.12 Cr to UPPTCL for the purpose of "Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 (changed from earlier Sector-129) to 220/132/33kV RC Green substation for enhancement of upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation" as against "construction of 220 kV sub-station at RC Green and associated 220 kV line to NPCL" being inadvertently considered by the Commission.
- 4.8.8 Therefore, the Petitioner has filed a Review Petition no. 1512/2019 on 3rd October, 2019 before the Commission for rectification of ex-facie error apparent in its Tariff Order dated 3rd September, 2019 which has since been admitted vide order dated 2nd December, 2019.
- 4.8.9 The aforesaid review Petition is yet to be decided and therefore, the Petitioner in line with its submissions in the aforesaid review petition, has considered the above mentioned CWIP of Rs. 19.12 Cr as forming part of the Capital Expenditure for FY 2017-18 for the purpose of preparation of this APR Petition. Accordingly, the Petitioner has considered the impact of such CWIP on the opening balances of Normative Term Loan, Equity Base and Regulatory Asset etc. for FY 2019-20.
- 4.8.10 Apart from the above, during FY 2018-19, as demanded by UPPTCL, the Petitioner has paid Rs. 20.11 Cr towards the cost of 5 nos. 33kV bays (GIS) at 400 kV Substation at Sector-148, Noida under ETD-1 for the purpose of distribution of electricity in Greater Noida area under deposit scheme.
- 4.8.11 As per Regulation 21.1 of the MYT Regulations, 2014, the capital expenditure is required to be funded in the Debt-Equity ratio of 70:30. Accordingly, based on capex for FY 2019-20, the details of the funding of the aforesaid capital expenditure of Rs. 208.66 Cr is given in the Table below:



Table 4-15: Capital Expenditure Funding as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	Approved in T.O 03/09/2019	APR Petition
Total Additions to Assets (excluding interest capitalisation)	190.50	208.66
Add: Closing CWIP	0.00	22.92
Less: Opening CWIP	18.30	58.88
Less: Asset retired		7.87
Total Capex (excluding interest capitalisation)	172.20	164.82
Add: Interest Capitalisation	4.22	0.00
Total Capex	176.41	164.82
Consumer Contribution	23.92	24.65
Net Capex	152.49	140.18
Debt @ 70%	106.74	98.12
Equity @ 30%	45.75	42.05

# Commission's Analysis:

- 4.8.12 The Commission has observed that the Net capex estimated by the Petitioner for FY 2019-20 is Rs. 140.18 Crore as against Rs. 152.49 Crore approved by the Commission in its Order dated September 03, 2019.
- 4.8.13 The Commission sought the detailed project / scheme wise breakup of work with the details of Work Order issued and the status of work completed. The Petitioner submitted that based on the current situation due to outbreak of COVID-19, it has revised its capex plan for FY 2020-21 to Rs. 195.20 Cr from the earlier Rs. 220 Cr. The scheme wise breakup of the same has been submitted in the MYT Formats Form- F19B. Further, the actual project wise break-up dependent on various factors like availability of land, manpower, equipment, consumer demand etc. will be submitted in the form of Fixed Asset Register at the time of filing True-up petition for FY 2019-20.
- 4.8.14 Since the work is under progress as on date of filing of this Petition, the aforesaid amount of Rs. 19.12 Cr and Rs. 20.11 Cr (revised to Rs. 20.48 Crore by the Petitioner in its later submission) has been included in the closing CWIP of FY 2018-19 and FY 2019-20. The Commission sought the query for the details for the same. In this the Petitioner submitted that:



"The Petitioner, in its MYT Petition no. 1145 of 2016 and 1146 of 2016 for the control period from FY 2017-18 to FY 2019-20, had sought approval of the Commission for below mentioned augmentation works for efficient and reliable power supply to the consumers of Greater Noida:

- a) Construction of 220 kV LILO connecting 400 kV Substations at Pali, Greater Noida and Sector-148 to 220/132/33kV RC Green substation for enhancement of upstream capacity & reliability to evacuate upto 400 MW power of R C Green Substation
- b) Cost of addition of 5 nos. 33kV bays (GIS) at 400 kV Substation at Sector-148, Noida under ETD-1 for the purpose of distribution of electricity in Greater Noida area;"
- 4.8.15 Accordingly, as demanded by UPPTCL, the Company paid Rs. 19.12 Cr for construction of 220kV LILO lines during FY 2017-18 under deposit scheme. Since the work was under progress on 31st March, 2019, the Company included the above amount in the closing balance of CWIP for FY 2017-18 as well as FY 2018-19.
- 4.8.16 With regard to the expenditure of Rs. 20.11 Cr (revised to Rs. 20.48 Crore by the Petitioner in its later submission), it is submitted that as demanded by UPPTCL, the Company has paid the said amount of Rs. 20.11 Cr (revised to Rs. 20.48 Crore by the Petitioner in its later submission) towards the cost of 5 nos. 33kV bays (GIS) at 400 kV Substation at Sector-148, Noida under ETD-1 for the purpose of distribution of electricity in Greater Noida area under deposit scheme and the same has been capitalised in the books of account of the Company in FY 2019-20 being the owner of the said asset.
- 4.8.17 The Petitioner further submitted the details of capex during FY 2019-20 as shown in the Table below:

Table 4-16: Details of Capex during FY 2019-20 as submitted by the Petitioner (Rs. Crore)

SI. No.	Substation Detail	Cost (Rs. Crore)
1	Construction of 33/11KV KP-5 S/s.	5.16
2	Construction of 33/11KV XU-3 S/s.	5.66
3	Construction of 33/11KV Omega-1 S/s.	7.72



SI. No.	Substation Detail	Cost (Rs. Crore)
4	Augmentation of 33/11KV Chi-IV S/s.	1.21
5	Augmentation of 33/11KV ESS-10 KP-5 S/s.	1.13
6	Augmentation of 33/11KV ESS-2 KP-5 S/s.	1.15
7	Augmentation of 33/11KV Delta - 2 S/s.	1.1
8	Augmentation of 33/11KV Delta - 3 S/s.	1.62
9	Augmentation of 33/11KV Hathewa S/s.	1.2
10	Augmentation of 33/11KV IT City S/s.	1.15
11	Augmentation of 33/11KV Zeta-1 S/s.	1.22
12	Construction of 33KV SMART Switching Station at KP-2	2.28
13	Construction of 33KV SMART Switching Station at KP-3	2.29
14	Other ancillary works	0.42
15	Cost of 5 nos. 33 kV bays at 220/33 kV Substation at Sec-148, Noida paid to UPPTCL	20.48
16	Construction of LILO from 220kV Substation Sec-148 Noida to 220 kV RC Green Substation paid to UPPTCL through GNIDA	14.59
17	Cost of 2 nos. 220kV bays at RC Green Substation paid to UPPTCL through GNIDA	4.53
	Total	72.94

4.8.18 The Commission has in the True Up chapter of this Order has observed that the Distribution Licensee cannot own, operate 132 kV and above assets. The Commission has removed the cost of 5 no. of 33 kV bays at 220 /33 kV Substation at Sec-148, Noida paid to UPPTCL of Rs. 20.48 Crore and Rs. 19.12 Crore for 132kV and above assets from the capitalisation of FY 2019-20. Also, the Petitioner estimated the details of CWIP for FY 2019-20 in which Rs. 1.28 Crore was kept for Consultancy Service for preparation of DPR and Tender Document for construction of 220KV Substation and Associated 220kV Lines at BZP and KP5, Greater Noida. The same should also be removed from the closing CWIP of FY 2019-20. The detailed analysis of capital investment for FY 2019-20 would be carried out during True-Up process subject to prudence check by the Commission. The details of CWIP for FY 2019-20 is shown in the Table below:

Table 4-17: Details of CWIP for FY 2019-20

S. No.	Particular	Reference	Computed (Rs. Crore)
1	Opening CWIP	Α	18.00
2	Closing CWIP claimed by the Petitioner	В	22.92
3	CWIP claimed for Consultancy Service for preparation of DPR and Tender Document for construction of 220KV	С	1.28



S. No.	Particular	Reference	Computed (Rs. Crore)
	Substation and Associated 220kV Lines at BZP and KP5,		
	Greater Noida		
6	Closing CWIP considered for FY 2019-20	D=B-C	21.64

4.8.19 The Commission will carry out the detailed analysis of these expenses for FY 2019-20 at the time of Truing-Up.

#### 4.9 INTEREST & FINANCE CHARGE

- 4.9.1 Interest and Finance Charges covers the following cost elements
  - Interest on Long Term Loans
  - Interest on Working Capital
  - Interest on Security Deposits
  - Carrying Cost of Regulatory Asset

### 4.10 INTEREST ON LONG TERM LOANS

- 4.10.1 The Petitioner submitted that the Commission in its Tariff Order dated 3rd September, 2019 has approved the interest on term loan at Rs. 51.97 Cr based on additional debt requirement of Rs. 86.34 Cr for FY 2019-20.
- 4.10.2 Based on capital expenditure of Rs. 164.82 Cr and consumer contribution of Rs. 24.65 Cr. and stipulated debt equity of 70:30, normative debt worked out to Rs. 98.12 Cr. for FY 2019-20. Based on the Capex and Debt arrangement, the summary of Interest on Term Loan (normative) for the purpose of funding the capital expenditure for FY 2019-20 is given in the table below:

Table 4-18: Computation of Interest on Term Loan as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particular	Ref.	Approved in T.O dated September 03, 2019	APR Petition
1	Gross Normative Ioan – Opening	а	924.59	910.91
2	Cumulative repayment of Normative Loan upto previous year	b	428.26	437.37
3	Net Normative loan – Opening	c=a-b	496.34	473.54
4	Increase/Decrease due to ACE during the Year	d	86.34	98.12
5	Repayments of Normative Loan during the year	e	64.99	60.21



SI. No.	Particular	Ref.	Approved in T.O dated September 03, 2019	APR Petition
6	Net Normative loan – Closing	f=c+d-e	517.68	511.45
7	Average Normative Loan*	g=(c+f)/2	507.01	492.50
8	Weighted average Rate of Interest on actual Loans	h	10.25%	9.91%
9	Interest on Normative loan	i=g x h	51.97	48.82

- 4.10.3 The Petitioner submitted that the opening balances of normative loans are the closing balances of Term Loans as considered in True-up petition for FY 2018-19 being submitted along-with this Annual Performance Review petition and impact of CWIP of Rs. 19.12 Cr as discussed above, while and repayments have been considered as equivalent to the depreciation in accordance with Regulation 27(e) of the MYT Regulation, 2014.
- 4.10.4 Further, Regulation 27 (g) of MYT Regulations, 2014 provides as follows:
  - "27 g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the transition / control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures:

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable."

- 4.10.5 The Petitioner submitted that since it does not have Term Loan outstanding as on date of filing this APR Petition, therefore in accordance with above regulation, the weighted average interest for FY 2017-18 has been considered for determination of normative interest on term loan for FY 2019-20.
- 4.10.6 Accordingly, the Petitioner has submitted that total interest on Term Loan based on latest estimate comes at Rs. 48.82 Cr, which is submitted for the approval of the Commission.

# **Commission's Analysis:**

4.10.7 The Commission has observed that the Petitioner has considered the last available weighted average interest rate as approved by the Commission in the True Up for FY 2017-18 in the Tariff Order dated September 3, 2019.



4.10.8 The analysis of the Interest on Loan for FY 2019-20 would be carried out during Truing Up.

#### 4.11 INTEREST ON WORKING CAPITAL

- 4.11.1 The Petitioner submitted that as per MYT Regulations, 2014, the interest on Working Capital requirement is allowed on the basis of one month's O&M expenses, 60 days of Revenue after netting off Security Deposit received from the Consumers and 40% of the R&M Expenses for two months.
- 4.11.2 The Petitioner submitted that the Commission in its Tariff Order dated 3rd September, 2019 has considered SBI-PLR prevailing on the date of Tariff Order viz. 13.80% p.a. for the purpose of allowing Interest on Working Capital. However, as on date of preparation of the APR Petition, the prevailing SBI PLR is 13.58% and the same has been considered for the purpose of APR of FY 2019-20.
- 4.11.3 Accordingly, the computation of interest on working capital for FY 2019-20 in accordance with Regulation 28 of MYT Regulations, 2014 is shown in the Table below:

Table 4-19: Interest on Working Capital as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	Approved in the T.O dated September 03, 2019	APR Petition
O&M expenses for 1 month	7.30	9.26
Two months equivalent of expected revenue	282.14	297.81
Maintenance spares @ 40% of R&M expenses for two month	3.27	3.37
Gross Total	292.71	310.44
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003		
Opening Balance	253.47	255.81
Received during the year (Net of Refunds)	30.00	4.30
Closing Balance	283.47	260.11
Average Security Deposit	268.47	257.96
Less: Security Deposit with UPPCL	11.28	11.28
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	257.19	246.68
Net Working Capital	35.52	63.76
Rate of Interest for Working Capital (SBI - PLR)	13.80%	13.58%



Particulars	Approved in the T.O dated September 03, 2019	APR Petition
Interest on Total Working Capital	4.90	8.66

- 4.11.4 The Petitioner submitted that as per the practice followed by the Commission in its various Tariff Orders, latest being dated 3rd September, 2019, the security deposit of Rs. 11.28 Cr passed on to UPPCL till FY 2005-06 in accordance with past arrangement, has been deducted from the total Security Deposit available with the Petitioner while computing working capital requirement as the same are not available at the disposal of the Petitioner for meeting its working capital requirements.
- 4.11.5 The Petitioner submitted that the above Table does not include the amount of Rs. 10.00 Cr. paid to UPPCL based on the Orders of Commission and Hon'ble Allahabad High Court in FY 2006-07 in the matter of providing 10 MVA additional supply of power by UPPCL which is pending before the Hon'ble Supreme Court of India.

# **Commission's Analysis:**

- 4.11.6 The Commission has observed that the interest on working capital as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated September 3, 2019.
- 4.11.7 The analysis of the Interest on Working Capital for FY 2019-20 would be carried out during Truing-Up.

### 4.12 INTEREST ON CONSUMER SECURITY DEPOSIT

4.12.1 Regulation 21 of the MYT Regulation, 2014 provides that that the licensee shall pay interest equivalent to the bank rate or more on the consumer security deposits, as may be specified by the Commission. The Commission vide its Tariff Order dated 3rd September, 2019 has approved the Interest on Security Deposit @ 6.50% p.a. Accordingly, based on the RBI's Bank Rate prevailing on the 1st April, 2019 i.e. 6.50% p.a. as also approved by the Commission, the interest payable on security deposit from consumers during FY 2019-20 is shown in the Table below:

Table 4-20: Interest on Security Deposit as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	Ref.	Approved vide T.O dated September 03, 2019	APR Petition
Opening Balance of Security Deposit	a	253.47	255.81



Particulars	Ref.	Approved vide T.O dated September 03, 2019	APR Petition
Addition During the year net of refund	b	30.00	4.30
Closing Balance of Security Deposit	c=a+b	283.47	260.11
Average Balance of Security Deposit	d=(a+c)/2	268.47	257.96
Rate of Interest	е	6.50%	6.50%
Interest payable on Security Deposit	f=dxe	17.45	16.77

4.12.2 Since, the interest on security deposit has been determined in accordance with MYT Regulations, 2014 it is requested that the estimated expense of Rs. 16.77 Crore be considered in review of ARR for FY 2019-20.

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

- 4.12.3 The Commission has observed that the Petitioner has considered the RBI's Bank Rate of 6.50% per annum., for computation of rate of interest payable on security deposit from consumers during FY 2019-20.
- 4.12.4 The Commission has observed that the revised interest on security deposits as shown by the Petitioner is lower than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20.
- 4.12.5 The analysis of the Interest on Security Deposit for FY 2019-20 would be carried out during Truing-Up.

#### 4.13 FINANCE CHARGES

- 4.13.1 The Petitioner submitted that it has to incur various finance charges for availing of financial products and services for the purpose of meeting its financial and other business needs. These charges are genuine business expenditure and has been explained in details as under:
  - (i) Loan Processing Charges: The Petitioner submitted that it has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year. During, FY 2019-20, it submitted that it has incurred expenses on renewal of the existing Working Capital Facilities including LC facilities for payment security of Power Purchase Agreements in accordance with their



respective terms of agreement and issuance Commercial Paper to facilitate shortterm funding of regulatory asset and working capital requirement.

- 4.13.2 Apart from the above the Petitioner submitted that it has to incur other financing and ancillary charges which have been elaborated in detail in the subsequent paragraphs:
  - a) Credit Rating Charges: Credit rating of banking (Fund / Non-Fund based) facilities has become imperative under the Basel II Norms. As per these norms, unrated facilities will be financed at least 4.50% higher as per credit adequacy requirements in comparison with rated facilities. In order to comply with the above requirement of RBI and also to save additional 4.50% p.a. interest cost, the Petitioner has been getting its credit rating from India Rating & Research (P) Limited.
  - b) Collection facilitation charges: Continuing its efforts to provide maximum possible facilities to the consumers, the Petitioner submitted that it has started various new initiatives for enabling consumers to make payment via Internet, Payment kiosks, retail counters at their nearby grocery shop, through NEFT / RTGS etc. Commission has also vide its Order dated 29th May, 2015 directed the Petitioner to provide more avenues to the consumers for payment of electricity dues through Online Mode and has also directed it to bear charges for such service upto an amount of Rs. 4,000/- per transaction. Provisions of these facilities require some expenditure which has been included in Collection Facilitation Charges. Apart from being cost of new initiative these charges are directly related to revenue and with increase in tariff and revenue, there is an increase in these charges.
  - c) Other Finance Charges: There are other bank charges as well like loan documentation charges, LC Issue Charges, banking charges and other miscellaneous charges etc. It is pertinent to mention here that the Ministry of Power vide its order no. 23/22//2019-R&R dated 28th June, 2019 mandated every Distribution Licensee to open a letter of credit for desired quantum of power in favour of the Generating Company. The relevant extract of the order is reproduced below for reference of the Commission.
    - "i. In accordance with Section 28 (3) (a) the NRLDC & RLDC shall despatch power only after it is intimated by the Generating Company and /Distribution



Companies that a Letter of Credit for the desired quantum of power has been opened and copies made available to the concerned Generating Company."

- 4.13.3 The Petitioner submitted that it will have to incur additional expenses to issue Letter of Credit in favour of Generating Companies.
- 4.13.4 The Petitioner submitted that it has estimated such expense to be incurred during FY 2019-20 for such charges which is submitted for approval of Commission.
- 4.13.5 Therefore, based on above the Petitioner requested the Commission to approve the Finance Charges for FY 2019-20 as summarized in the Table below:-

Table 4-21: Finance Charges submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Financing Activity	Approved vide T.O dated September 03, 2019	APR Petition
1	Processing Fee	1.30	
2	Credit Rating Charges	0.07	
3	Collection Facilitation Charges	0.75	
4	SBLC & Other Finance Charges	0.08	
	Total	2.20	1.74

# **Commission's Analysis**

4.13.6 The Commission sought the breakup of Finance Charges of Rs. 1.74 Crore as claimed by the Petitioner for the APR of FY 2019-20. In this regard the Petitioner submitted the detailed breakup of Finance Charges as shown in the Table below:

Table 4-22: Details of Finance charges as submitted by the Petitioner (Rs. Crore)

SI. No.	Particulars	Cost (Rs. Crore)
1	Processing Fee on Fund and Non Fund based working capital facilities	0.78
2	Credit Rating Charges	0.07
3	Collection Facilitation Charges on digital payments in accordance with the directions of the Hon'ble Commission	0.81
4	SBLC & Other Finance Charges	0.09
	Total	1.74



- 4.13.7 The Commission has observed that the revised total Finance Charges for FY 2019-20 are Lower than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20.
- 4.13.8 The analysis of Finance charges for FY 2019-20 would be carried out during Truing-Up.

### 4.14 TOTAL INTEREST AND FINANCE COST

4.14.1 As discussed above, the details of total interest and finance charges estimated for FY 2019-20 is given in the Table below:

Table 4-23: Total Interest and Finance charges as submitted for FY 2019-20 (Rs. Crore)

SI. No.	Description	Approved vide T.O dated September 03, 2019	APR Petition
1	Interest on Long term loans	51.97	48.82
2	Interest on working capital	4.90	8.66
3	Interest on security deposit	17.45	16.76
4	Finance Charges	2.20	1.74
5	Subtotal	76.52	75.99
6	Less: Interest Capitalisation	4.22	
7	Total Interest & Finance Charges	72.30	75.99

# **Commission's Analysis:**

- 4.14.2 The Commission has observed that the revised total Interest and finance cost for FY 2019-20 are significantly higher than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20.
- 4.14.3 The analysis of Interest and Finance charges for FY 2019-20 would be carried out during Truing-Up.

# 4.15 GROSS FIXED ASSETS (GFA) AND DEPRECIATION

4.15.1 The Petitioner submitted that the computation of GFA for FY 2019-20 which is shown in the Table below:

Table 4-24: Gross Fixed Assets as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Description	Approved vide T.O dated September 03, 2019	APR Petition
1	Opening Balance	1,525.98	1,479.40
2	Addition during the Year	194.71	208.66
3	Retirement during the Year	5.15	7.87



SI. No.	Description	Approved vide T.O dated September 03, 2019	APR Petition	
4	Closing Balance	1,715.54	1,680.19	
* Excluding assets taken over from GNIDA & UPSIDC				

- 4.15.2 The Petitioner submitted that the above additions to the GFA does not include the assets handed over by GNIDA & UPSIDC for distribution of electricity to its consumers and maintenance thereof.
- 4.15.3 Further, Depreciation on plants, equipment and installations has been computed under separate categories voltage-wise in accordance with the rates prescribed under the MYT Distribution Tariff Regulations, 2014. Further, depreciation for FY 2019-20 has been computed as per the methodology followed by the Commission in its latest Tariff Order dated 3rd September, 2019.
- 4.15.4 The Petitioner submitted that it is pertinent to mention here that the Commission in its Tariff Order dated 3rd September, 2019 while determining depreciation for truing up of ARR for FY 2017-18 has not considered any depreciation/amortization of land presumably considering the same as freehold land. However, since the Petitioner has acquired lands from GNIDA on leasehold basis, the same need to be amortized over the respective lease period of the leasehold land. Therefore, the Petitioner has considered amortization of leasehold land while determining depreciation for the purpose of APR for FY 2019-20.
- 4.15.5 The summary of Depreciation as submitted by the Petitioner for FY 2019-20 is shown in the table below:

Table 4-25: Depreciation as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particular	Approved vide T.O dated September 03, 2019	APR Petition
1	Depreciation on Gross Fixed Assets	75.23	72.94
2	Less: Depreciation on Consumer Contribution	10.23	12.72
3	Net Depreciation	64.99	60.21
4	Average GFA	1620.76	1579.79
5	Weighted Average Depreciation Rate	4.64%	4.62%

### **Commission's Analysis**



- 4.15.6 The Commission has observed that the revised closing balance of GFA as shown by the Petitioner is lower than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20.
- 4.15.7 The Petitioner has submitted that Depreciation on plant, equipment and installations has been computed under separate voltage-wise categories in accordance with the rates prescribed under the Distribution MYT Regulations, 2014.
- 4.15.8 The analysis of Depreciation for FY 2019-20 would be carried out during Truing-Up.

#### 4.16 MISCELLANEOUS EXPENSE

4.16.1 The Petitioner submitted that the Commission in its Tariff Order dated 3rd September, 2019, has approved Miscellaneous Expenditure viz. loss on sale of fixed assets at Rs. 1.55 Crore for FY 2019-20. The Petitioner has considered loss on sale / retirement of these Fixed Assets during FY 2019-20 as Rs. 1.82 Crore.

## **Commission's Analysis**

4.16.2 The analysis of Miscellaneous Expenses for FY 2019-20 would be carried out during Truing-Up.

# 4.17 PROVISION FOR DOUBTFUL DEBTS

- 4.17.1 The Petitioner submitted that the Commission in its Tariff Order dated 3rd September, 2019 has allowed provision for bad debt of Rs. 25.44 Cr being 1.50% of the revenue which is within the norms of 2% specified in Regulation 29 of the MYT Regulations, 2014.
- 4.17.2 The estimate of the bad debts in accordance with the policy of the Petitioner for FY 2019-20 is as provided in Table Below: -

Table 4-26: Provision for Bad & Doubtful Debts as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Description	Approved vide T.O dated September 03, 2019	APR Petition
1	Provision for Bad & Doubtful debts	25.44	17.00

### **Commission's Analysis**

4.17.3 The Commission has observed that the revised Provision for Bad & Doubtful Debts as shown by the Petitioner is lower than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20.



4.17.4 The analysis of Provision of bad debts for FY 2019-20 would be carried out during Truing-Up.

#### 4.18 INCOME TAX

4.18.1 The Petitioner submitted that Regulation 32 of MYT Regulations, 2014 provides for determination of Income Tax to be considered in ARR for Control period. The relevant extract of the regulation is reproduced below:-

#### "32. Income Tax

- a) Income Tax, if any, on the Licensed business of the Distribution Licensee shall be treated as expense and shall be recoverable from consumers through tariff. .....
- b) The income tax actually payable or paid shall be included in the ARR. The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act 1961 shall be passed on to the consumers.
- c) Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed. However any tax liability on incentives due to improved performance shall not be considered"
- 4.18.2 It is pertinent to mention here that Income Tax is computed on Profit before taxes which is computed by aggregating Return on equity and tax expense for the year. Accordingly, the tax liability for FY 2019-20 has been computed by grossing up aggregate of tax expense i.e. tax on Return on equity and tax expense for preceding years, at the current tax rate i.e. 25.17 % and profit before tax is computed to determine the tax on profit for the year.
- 4.18.3 Considering the above, the Petitioner requested the Commission to approve the income tax liability for FY 2019-20 as shown in Table below: -

Table 4-27: Income Tax as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Ref.	Approved vide T.O dated September 03, 2019	APR Petition
1	Return on Equity	а	67.71	65.93
2	Efficiency Gains (consumers share)	b	-	0.12
3	Taxable Return	c=a+b	67.71	66.05
4	Income Tax Rate	d	34.94%	25.17 %

# Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

SI. No.	Particulars	Ref.	Approved vide T.O dated September 03, 2019	APR Petition
5	Total Tax Expense	e=c x d/(1-d)	36.37	22.21

### **Commission's Analysis**

- 4.18.4 The Commission has observed that the revised Total Tax Expense as shown by the Petitioner is lower than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20.
- 4.18.5 The analysis of Income Tax for FY 2019-20 would be carried out during Truing-Up.

#### 4.19 CONTINGENCY RESERVE

4.19.1 The Petitioner submitted that Regulation 30 of the MYT Regulations, 2014 provides for appropriation of Contingency Reserve upto 0.50% of opening GFA and the Petitioner accordingly had claimed contingency reserve in its MYT ARR Petition. However, the Commission vide its Tariff Order dated 3rd September, 2019 has not allowed the provision of contingency reserve to reduce extra burden on the consumers. However, it submitted that contingency reserve is created to meet the eventualities in the nature of major calamities, act of god etc. and thereby, causing huge loss to the network. In any case, the amount so allocated, can be used with prior permission of the Commission only. Therefore, the Petitioner has considered creation of contingency reserve for FY 2019-20 as per the MYT Tariff Regulations, 2014 as shown in Table below: -

Table 4-28: Contingency Reserve as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	APR Petition
1	Contribution to Contingency Reserve	Nil

# **Commission's Analysis**

4.19.2 The Commission has noted the same.

### 4.20 RETURN ON EQUITY

4.20.1 The Petitioner submitted that as per Regulation 31 of the MYT Regulations, 2014, return on equity shall be allowed @16% on the equity base determined in accordance with the MYT Regulations, 2014. Accordingly, the computation of equity base & Return on Equity for FY 2019-20 is given in Table below: -



Table 4-29: Computation of Return on Equity as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Ref.	Approved vide T.O dated September 03, 2019	APR Petition
1	Regulatory Equity Base at the beginning of the year	а	398.07	386.18
2	Asset Capitalized during the year	b	194.71	208.66
3	Equity portion of Assets Capitalised during the year	С	50.19	51.81
4	Regulatory Equity Base at the end of the year	d=a+c	448.26	437.99
5	Return on Opening Regulatory Equity Base @ 16%	e=ax16%	63.69	61.79
6	Return on Addition to Equity Base during the year @16%	f=cx16%/2	4.01	4.14
7	Total Return on Equity	g=e+f	67.71	65.93

# **Commission's Analysis:**

4.20.2 The Commission has observed that the Computation on Return on Equity (RoE) as shown by the Petitioner is lower than that approved by the Commission vide Tariff Order dated September 3, 2019 for FY 2019-20. The analysis of return on equity for FY 2019-20 would be carried out during Truing-Up.

### 4.21 EFFICIENCY GAIN ON LOAN SWAPPING

- 4.21.1 In its continuous endeavour to minimize the cost of borrowing the Petitioner in preceding years renegotiated various loan facilities by swapping of these loan facilities with new facilities bearing lower cost. Such, swapping of loans resulted in accrual of saving in interest cost to be shared with its consumers.
- 4.21.2 The Petitioner has estimated the accrual of such efficiency gain while preparing MYT ARR Petition for Control Period and has submitted the details for the same and claimed part of the above efficiency gains in its MYT ARR petition, which has since been approved by the Commission in its tariff order dated 30th November, 2017, 22nd January, 2019 and 3rd September, 2019.
- 4.21.3 Accordingly, the Petitioner has considered the efficiency gains accrued on swapping of loans for FY 2019-20 as already approved by the Commission and shown in Table below:



Table 4-30: Efficiency Gain on Term Loan Swapping as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Bank	Loan Amount	APR Petition
1	ICICI Bank (FY 17)	125	0.01
2	ICICI Bank (FY 17)	40	0.01
3	ICICI Bank (FY 17)	100	0.21
4	Total		0.24
5	50% Efficiency Gain claimed		0.12
6	Approved vide T. O. dt. 3 <sup>rd</sup> Sep-19		0.12

# **Commission's Analysis:**

4.21.4 The analysis of efficiency gains for FY 2019-20 would be carried out during Truing-Up.

# 4.22 NON-TARIFF INCOME

4.22.1 The Petitioner submitted that the non-tariff income includes income from statutory investments, miscellaneous receipts from consumers, delayed payment surcharge and various other non-tariff incomes generated by the Petitioner from other businesses. The details of such income estimated for FY 2019-20 is given in the Table below:

Table 4-31: Non-Tariff Income as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Approved vide T.O dated September 03, 2019	Estimated for FY 2019-20
1	Income from Investments other than Contingency reserves	2.47	0.13
2	Miscellaneous Receipts from consumers	3.47	1.41
3	Miscellaneous receipts		2.83
4	Delayed Payment Surcharge	5.25	4.96
5	Total Non-Tariff Income	8.72	9.35

4.22.2 The Petitioner submitted that Regulation 33 of the MYT Regulations, 2014 provides for deduction of expenditure incurred for generating/earning Non-tariff income may be reduced from such Income. The extract of the Regulation is provided below for reference of the Commission:

" 33 Non-Tariff Income

•••



Provided further that any expenditure incurred for generating / earning Non-Tariff Income may be reduced from such income "

- 4.22.3 Thus the expenditure incurred for generating /earning Non-tariff income such as cost of borrowing need to be reduced from such income, since these expenses are not included in determination of borrowing costs and tax expenses as components of ARR.
- 4.22.4 In this respect, it is pertinent to mention here that Delayed Payment Surcharge accrues when a consumer defaults in payment of bills as per due date being generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is approximately the number of days for which a distribution licensee is compensated by interest on working capital as per Distribution Tariff Regulations 2006 i.e. 60 days. Thus, it can be concluded that DPS belongs to the period beyond normative period of 60 days for which interest on working capital is not provided in the Distribution Tariff Regulations. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost equivalent to the interest rate applicable for Interest on Working Capital.
- 4.22.5 Accordingly, based on the principles laid by the Commission in its various Tariff Orders, Delayed Payment Surcharge has been considered after reducing the cost of funds borrowed for the purpose of funding the deferred receivables which are subsequently recovered along with Delayed Payment Surcharge. Thus, the cost of borrowing in respect of Delayed Payment Surcharge for FY 2019-20 has been computed as given in Table below: -

Table 4-32: Cost of Borrowing for DPS as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	Approved vide T.O dated September 03, 2019	APR Petition
Cost of Borrowing for DPS	3.02	2.81



4.22.6 Accordingly, the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period of 60 days for the purpose of APR as summarized in Table below: -

Table 4-33: Net Non-Tariff Income as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	Reference	Approved vide T.O dated September 03, 2019	APR Petition
Non-Tariff Income including DPS	а	8.72	9.35
Less: Cost of Borrowing for DPS	b	(3.02)	(2.81)
Net Non-Tariff Income	c=a-b	5.70	6.54

# **Commission's Analysis**

4.22.7 With regards to Non-Tariff Income, the Commission observed that the Petitioner has estimated Rs. 2.83 Crore as miscellaneous receipt. In this regard the Commission sought the basis of such estimation with the head wise detail of it. The Petitioner submitted the revised detail as shown in the Table below:

Table 4-34: Details of Miscellaneous receipt as submitted by the Petitioner for FY 2019-20

SI. No.	Particulars	Amount (Rs. Cr.)
1	Liquidated Recovery Charges	0.54
2	Cash Discounts	0.59
3	Advertisement Charges	0.14
4	Consultancy Charges	1.21
	Sale of scrap materials	0.35
	Total	2.83

- 4.22.8 The Commission has observed that the total revised Non-Tariff Income as submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order dated September 3, 2019.
- 4.22.9 The analysis of Non-Tariff Income for FY 2019-20 would be carried out during Truing-Up.

#### 4.23 REVENUE FROM SALE OF ENERGY

4.23.1 The Petitioner has submitted that during FY 2019-20, it has recorded sales of 2080.65 MU reflecting growth of 11.60% over FY 2018-19. Similarly, the billed revenue excluding Regulatory Surcharge has increased to Rs. 1,649.96 Crore reflecting growth of 17.24%



over FY 2018-19. The revised category-wise sales, revenue and average realization for FY 2019-20 as submitted by the Petitioner are given in the Table below:

Table 4-35: Revenue for FY 2019-20 submitted by the Petitioner

Particulars	Sales	Revenue	Average Realisation
	(MU)	(Rs. Crs)	(Rs/kWh)
LMV-1: Domestic Light, Fan & Power	586.39	370.99	6.33
LMV-2: Non Domestic Light, Fan & Power	37.61	40.50	10.77
LMV-3: Public Lamps	33.13	28.63	8.64
LMV-4: Institutions	14.91	12.62	8.46
LMV-5: Private Tube Wells	21.73	3.94	1.81
LMV 6: Small and Medium Power	87.41	87.57	10.02
LMV-7: Public Water Works	20.54	22.33	10.87
LMV-8: STW and Pumped Canals	0.11	0.22	19.33
LMV-9: Temporary Supply	45.69	54.82	12.00
HV-1: Non Industrial Bulk Power	242.80	248.88	10.25
HV-2: Large and Heavy Power	990.32	779.45	7.87
Subtotal	2,080.65	1,649.96	7.93
Regulatory Surcharge		48.91	
Total Sales	2,080.65	1,698.87	8.17

## **Commission's Analysis**

4.23.2 The analysis of Revenue for FY 2019-20 would be carried out during Truing-Up.

## 4.24 ARR AND REVENUE GAP

4.24.1 Based on above mentioned Revenue, Expenditure and Return on Equity, the Aggregate Revenue Requirement for FY 2019-20 as computed on the basis of the MYT Regulations, 2014 and Commission's Tariff Orders is given in Table below: -

Table 4-36: Summary of ARR for FY 2019-20 as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	Approved in T.O 03.09.2019	APR Petition
1	Power Purchase Expenses	912.54	1,130.89
2	Transmission Charges (UPPTCL+PGCIL)	150.41	150.83
3	Employee cost	34.85	56.86



Sr.	Particulars	Approved in	APR Petition
No.		T.O 03.09.2019	
4	A&G expenses	15.63	14.12
5	R&M expenses	49.04	50.48
6	Gross O&M Expenses	99.52	121.46
7	Interest charges	76.52	75.99
8	Depreciation	64.99	60.21
9	Contingency Reserve	-	-
10	Income Tax	36.37	22.21
11	Gross Expenditure	1,340.35	1,561.59
12	Employee cost capitalized	11.90	10.32
13	Interest capitalized	4.22	-
15	Net Expenditure 1,324.23		1,551.27
16	GST Impact	1.94	3.78
17	Provision for Bad & Doubtful debts	25.44	17.00
18	Miscellaneous Expenses	1.55	1.82
19	Total net expenditure with provisions	1,353.15	1,573.88
20	Add: Reasonable Return / Return on Equity	67.71	65.93
21	Less: Non-Tariff Income	5.70	6.54
22	Add: Efficiency Gains due to re-	0.13	0.42
22	structuring of loans	0.12	0.12
23	Annual Revenue Requirement (ARR)	1,415.28	1,633.39
24	Revenue from Existing Tariff (excluding	1652.65	1 640 06
24	Regulatory Surcharge	1653.65	1,649.96
25	Revenue Gap/(Surplus)	(238.37)	(16.56)
	Revenue from Regulatory Surcharge	39.16	48.91
26	Revenue Gap/ (Surplus) from Prev. Year	204.62	302.96
27	Carrying cost	9.59	39.07
28	Net Revenue Gap/ (Surplus)*	(63.32)	276.55

<sup>\*</sup> The interest capitalisation was not subtracted from the Gross Expenditure in the Tariff Order for FY 2019-20 dated September 03, 2019 due to a linking error, which has now been incorporated in the above table.

# **Commission's Analysis:**

4.24.2 The Commission has observed that the revised Aggregate Revenue Requirement for FY 2019-20 as submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order dated September 3, 2019. The Commission also observes that the Total Revenue Gap carried forward for FY 2019-20 is Rs. 276.55 Crore.



4.24.3 The analysis of Annual Revenue Requirement (ARR) for FY 2019-20 would be carried out during Truing-Up.

## 4.25 CARRYING COST

- 4.25.1 The Petitioner submitted that the Regulation 35 of MYT Regulations, 2014 provides for allowance of carrying cost on regulatory assets. Accordingly, the Commission, in its Tariff Order dated 3rd September, 2019 has allowed carrying cost of regulatory asset at weighted average monthly compounded SBI-PLR and approved carrying cost of Rs. 9.90 Cr for FY 2019-20.
- 4.25.2 Based on the same principles, the carrying cost of Regulatory Asset created and subsequent recoveries till FY 2019-20 is given in the Table below: -

Table 4-37: Carrying cost as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

SI. No.	Particulars	Ref.	Approved vide T.O dated September 03, 2019	APR Petition
1	Regulatory Assets at the beginning of Year	А	204.62	302.96
2	Regulatory Assets amortised from Regulatory Surcharge	В	(39.16)	(48.91)
3	Addition to Regulatory Assets during the year	С	(234.18)	(16.57)
4	Closing Regulatory Assets (before Carrying cost for the year)	d=a+b+c	(68.71)	237.47
5	Average Regulatory Asset	e=(a+d)/2	67.95	270.22
6	Applicable Interest Rate for Working Capital Finance (Weighted average SBI - PLR)	f	13.68%	13.58 %
7	Monthly Compounded Rate	g	14.57%	14.64%
8	Carrying Cost of Regulatory Asset	h=e x g	9.90	39.07

## **Commission's Analysis:**

4.25.3 The analysis of Annual Revenue Requirement (ARR), Revenue Gap and corresponding carrying cost for FY 2019-20 would be carried out during Truing-Up.



# 5 AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2020-21

#### 5.1 INTRODUCTION

- 5.1.1 The Commission in earlier chapters of this Order has undertaken Truing- Up for FY 2018-19 based on the audited accounts and APR for FY 2019-20. The Petitioner submitted that the Novel Coronavirus (COVID-19) pandemic has exponentially increased in the last couple of months, this was not imagined by anyone when the Petition concerning ARR for FY 2020-21 was submitted on December 27, 2019. The same has been recognized by the Commission in its letter on dated May 13, 2020.
- 5.1.2 The Petitioner added that the State Government has issued notifications declaring COVID-19 as an epidemic and ordered a complete lockdown of the State with several restrictions on movement by the residents, including ceiling State borders. The impact has gone to the extent that even malls, work places (both private & Government), industries have been ordered to remain shut and advisory has been issued to private sector organizations to allow their employees and officers to work from home. Non-adherence to these notifications will be penalized under Indian Penal Code, 1860. Additionally, the Hon'ble Prime Minister Narendra Modi on 24 March 2020 directed the entire country to be on lockdown, till May 31, 2020.
- 5.1.3 The above has affected the operations of the Petitioner significantly. The revenue, power purchase and consumer mix has changed all together. The drawl by industries has come to a bare minimum while that of Urban and Rural Areas is drawing power unrestrictedly resulting into higher LT Sales, Lower HT Sales and Higher T & D losses. The situation has become all the more grim because of restrained movement of the Petitioner personnel and effectively no Loss Control Activities in the fields. The Collections have nose-dived, putting strain on the banking facilities and thereby increasing the interest burden.
- 5.1.4 Under such volatile and uncertain circumstances, the projections of sales, power purchase cost, capital expenditure and other expenses is not possible at all. Nevertheless, in order to comply with the directions of the Commission, the revised estimates of Annual Revenue Requirement for FY 2020-21 were submitted by the Petitioner.
- 5.1.5 In this Chapter, the Commission has discussed in detail each component of ARR for FY 2020-21.

#### 5.2 BILLING DETERMINANTS

5.2.1 The Petitioner has submitted that the Regulation 5.5 of MYT Regulations, 2019 in respect of forecast of expected revenue states as:



- "5.5 The forecast of expected revenue from Tariff shall be based on the following:
- (a) In the case of a Transmission Licensee, estimate of ARR or estimates of Transmission Capacity allocated to Transmission System Users, as appropriate;
- (b) In the case of a Distribution Licensee, estimate of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution System Users;

Provided that the Distribution Licensee shall submit relevant details of category/ subcategory wise Number of Consumers, Connected load and Energy Sales projections, status of metering, feeder level/ distribution transformer metering, diversity factor for various category of consumers taking seasonality into consideration, etc., for each Distribution Licensee area;

- (c) Existing and proposed Tariff as on the date of filing of the Petition."
- 5.2.2 The Petitioner submitted that based on various efforts made by the State Government to attract new investments in the region and plans made by the Development Authority concerning new Industries, Commercial and Domestic projects. The summary of billing determinants as submitted by the Petitioner as shown in the Table below:

Table 5-1: Summary of billing determinants as submitted by the Petitioner for FY 2020-21

SI. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,02,185.00	439.62	597.25
2	LMV-2: Non Domestic Light & Fan & Power	3,584.00	29.24	30.33
3	LMV-3: Public Lamps	262.00	10.27	32.94
4	LMV-4: Institutions	521.00	7.05	12.34
5	LMV-5: Private Tube Wells	1,190.00	5.95	22.95
6	LMV 6: Small and Medium Power	3,465.00	80.07	69.29
7	LMV-7: Public Water Works	217.00	8.02	22.23
8	LMV-8: STW and Pumped Canals	10.00	0.12	0.18
9	LMV-9: Temporary Supply	804.00	22.97	37.65
10	Electric Vehicle Charging (LMV-11)	89.00	8.23	6.15
11	HV-1: Non Industrial Bulk Power	221.00	119.58	178.34
12	HV-2: Large and Heavy Power	842.00	466.50	688.85
13	Total	1,13,390	1,197.62	1,698.49



# Commission's Analysis:

- 5.2.3 The Commission has already deliberated on the Billing determinants for the Control Period FY 2020-21 to FY 2024-25 and approved the Billing determinants in the Business Plan Order dated November 26, 2020.
- 5.2.4 The billing determinants approved for FY 2020-21 are shown in the Table below:

Table 5-2: Approved Billing Determinants for FY 2020-21

SI. No.	Category	No. of consumers	Connected Load (MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	96,886	446.09	636.51
2	LMV-2: Non Domestic Light & Fan & Power	3,373	29.24	33.57
3	LMV-3: Public Lamps	295	10.59	33.13
4	LMV-4: Institutions	521	5.95	13.91
5	LMV-5: Private Tube Wells	1,239	5.95	22.94
6	LMV 6: Small and Medium Power	3,465	80.07	78.67
7	LMV-7: Public Water Works	226	8.62	22.23
8	LMV-8: STW and Pumped Canals	10	0.13	0.18
9	LMV-9: Temporary Supply	804	23.16	37.65
10	Electric Vehicle Charging (LMV-11)	89	8.23	6.15
11	HV-1: Non Industrial Bulk Power	221	130.63	218.52
12	HV-2: Large and Heavy Power	863	431.75	899.49
13	Total	107,992	1,180.41	2,002.96

#### 5.3 ENERGY BALANCE AND DISTRIBUTION LOSSES

- 5.3.1 The Petitioner submitted that despite several path-breaking initiatives, due to socioeconomic environment prevailing in the State and more particularly in villages in Greater
  Noida, where load has grown much faster as compared to increase in overall demand in
  Greater Noida Area, it has become arduous and daunting task for the Petitioner to contain
  T&D losses at 8%.
- 5.3.2 The Petitioner submitted that it is compelled to project T&D loss trajectory at 9.03% for FY 2020-21. It requested the Commission to consider the ground realities and approve the T&D losses as projected by the Petitioner, subject to truing up on actual as per audited accounts. The revised Distribution Losses for FY 2020-21 are as shown in the Table below:

1867.12



SI. **Particulars** U.o.M. **Projected** No. **Proposed Energy Sales** MU 1698.49 1 2 **Distribution Losses** % 9.03% 3 **Distribution Losses** MU 168.63

ΜU

**Energy Requirement** 

Table 5-3: Energy Balance submitted by the Petitioner for FY 2020-21

## **Commission's Analysis**

5.3.3 The Commission has already deliberated on the Distribution Loss Trajectory of the Petitioner for the Control Period FY 2020-21 to FY 2024-25 and approved the Distribution Loss Trajectory for the Petitioner in the Business Plan Order dated November 26, 2020. Accordingly, the distribution loss approved for FY 2020-21 is shown in the Table below:

Table 5-4: Approved Energy Balance and Distribution Loss for FY 2020-21

SI. No.	Particulars	U.o.M.	Petition	Approved
1	Energy Sales	MU	1698.49	2,002.96
2	Distribution Losses	%	9.03%	7.92%
3	Distribution Losses	MU	168.63	172.28
4	Energy Purchase	MU	1867.12	2,175.23

5.3.4 It can be observed from the table above that the Petitioner has claimed energy purchase of 1867.12 MU while after approved distribution losses of 7.92% and sales of 2002.96 MUs, the total approved energy purchase is 2175.23 MU.

## 5.4 POWER PROCUREMENT

- 5.4.1 The Petitioner submitted that it has planned to meet the above energy requirement for FY 2020-21 from the following sources:
  - a. Long Term Power Purchase Agreement for 187 MW with M/s Dhariwal Infrastructure Ltd. as per the PPA approved by the Commission vide its order dated 20<sup>th</sup> April, 2016.
  - b. Medium Term Power Purchase Agreement under discussion for 64.8 MW Hydro Power from Govt. of Himachal Pradesh (GoHP) out of its share in 3x180 MW Chamera-I Hydroelectric Power Station for an initial period of 13 months, extendable for another 2 years, on medium term basis subject to the approval of the Commission.
  - c. Long Term Power Purchase Agreement for 1 MWp Solar power with Greater Noida Industrial Development Authority (GNIDA) as per the PPA approved by the



Commission vide its Order dated 14<sup>th</sup> July 2015.

- d. Long Term Power Purchase Agreement for 10 MW Wind power with PTC India Limited singed on 27<sup>th</sup> June, 2017 under the MNRE Scheme for Setting up of 1000 MW ISTS connected Wind Power Projects for which the Solar Energy Corporation of India Ltd. (SECI) was identified as the "Nodal Agency" for selection of bidder.
- e. Proposed agreement to procure 25 MW (Approx.) Small Hydro Power for a period of 35 years on long term basis subject to the approval of the Commission.
- f. To meet remaining Renewable Power Obligations by procurement of power from Bilateral Traders/ by setting-up 8-10 MWp solar plant by the Petitioner in Greater Noida.
- g. To meet remaining energy requirement during Peak Hours and exigencies, if any through Short Term/ Medium Term / power exchanges.
- 5.4.2 The Petitioner submitted that it invited bids for procurement of the power on DEEP Portal through Reverse Auction in the following time blocks on short term basis:

SI. No.	Period	Hours	Quantum (MW)
1	1 <sup>st</sup> April, 2020 to 31 <sup>st</sup> October, 2020 (Except Sundays)	00:00- 02:00	100
2	1 <sup>st</sup> April, 2020 to 31 <sup>st</sup> October, 2020 (Except Sundays)	19:00- 24:00	100

- 5.4.3 Based on the reverse auction conducted on 5th December 2019, the Petitioner submitted that it signed the power purchase agreements as follows:
  - i) 50 MW power from 00:00-02:00 from M/s Adani Enterprises Limited at Rs. 4.50/kWh landed at NPCL Periphery from Apr-Sep'19;
  - ii) 100 MW power from 19:00-24:00 Hours from M/s Arunachal Pradesh Power Corporation Private Limited (M/s APPCPL) at Rs. 4.89/kWh landed at NPCL Periphery from Apr-Oct'19;
- 5.4.4 In addition to the above, considering the likely demand, it also decided to procure 50 MW power during 06:00-19:00 Hours from the L1 bidder i.e. M/s APPCPL at Rs. 4.55/kWh landed at NPCL Periphery for the period commencing from Apr'19 to Oct'19 in order to optimize its power procurement cost.
- 5.4.5 Accordingly, the Petitioner signed Power Purchase Agreement for supply of aforesaid power. The Petitioner submitted that the balance energy requirement of FY 2020-21 will be met through power procurement from IEX / competitive bidding / traders at



competitive prices. The Petitioner submitted that it has since signed a tripartite power purchase agreement for procurement of 64.8 MW hydro power on 17th December, 2019 with Govt. of Himachal Pradesh and M/s APPCPL.

5.4.6 The Petitioner submitted the details of RPO for FY 2020-21 as shown in the Table below:

Table 5-5: Details of RPO as submitted by the Petitioner for FY 2020-21

Ту	ре	Parameter	Nomenclature	Units	FY 2020-21
		Gross energy consumption	Α	MU	1,698.49
		Hydro and Renewable Power Consumption after FY 2016-17	В	MU	289.29
		Net Energy Consumption	C=A-B	MU	1,409.20
		RPO Target (Solar)	D	%	3%
		RPO Target (Solar)	E=C*D	MU	42.28
	i	Solar Energy Purchased	F	MU	38.17
Sol	ar	Total RPO achieved	G=F/E	%	102%
		Excess RPO Met Carried Forward	Н	MU	0.71
		Shortfall RPO Carried forward	I	MU	-
		REC Purchased	J	MU	-
		Net Status	K=H-I+J	MU	10.49
		Penalties, if any	L	Rs. Crore	
		Gross energy consumption	Α	MU	1,698.49
		Hydro and Renewable Power Consumption after FY 2016-17	В	MU	289.29
		Net Energy Consumption	C=A-B	MU	1,409.20
		RPO Target (Non Solar)	D	%	6%
		RPO Target (Non Solar)	E=C*D	MU	84.55
	Other	Non Solar Energy Purchased	F	MU	30.41
	Non-Solar	Total RPO achieved	G=F/E	%	36%
Non-Solar		Excess RPO Met Carried Forward	Н	MU	-
		Shortfall RPO Carried forward	1	MU	63.24
		REC Purchased	J	MU	-
		Net Status	K=H-I+J	MU	39.09
		Penalties, if any	L	Rs. Crore	-
		Gross energy consumption	А	MU	1,698.49
	Hydro	HPO Target (Hydro)	В	%	2%
	Purchase	HPO Target (Hydro)	C=A*B	MU	28.18
	Obligation	Hydro Energy Purchased	D	MU	-
		Total HPO achieved	E=D/C	%	0%



Туре	Parameter	Nomenclature	Units	FY 2020-21
	Excess HPO Met Carried	Е	MU	
	Forward	Г	IVIU	-
	Shortfall HPO Carried forward	G	MU	18.73
	REC Purchased	Н	MU	-
	Net Status	I=F-G+H	MU	(18.73)
	Penalties, if any	J	Rs. Crore	-

5.4.7 Based on the above arrangement, the Power Purchase cost submitted for FY 2020-21 is shown in the Table below:

Table 5-6: Power Purchase quantum and cost as submitted by the Petitioner for FY 2020-21

SI.	Item		Projected	
No.	D 1 1 C 1 (2411)		4067.42	
1	Retail Sales (MU's)		1867.12	
2	Losses		9.03%	
3	Power Purchase (MU's)		1698.49	
	Source of Power Purchase	MU's	Rs./kWh	Rs. Cr.
4	Power Purchase from LT	1,110.51	5.36	595.75
5	Power Purchase from MT	257.30	4.67	120.20
6	Power Purchase from Traders	487.76	4.12	201.14
7	Power Purchase from RE	32.01	3.83	12.25
8	DSM / UI	(20.16)	1.00	(2.02)
9	<b>Gross Power Purchase</b>	1,867.41	4.97	927.32
10	Intra-state Trans. Charges			35.48
11	Inter-state Trans. Charges			108.83
12	<b>Total Power Purchase Cost</b>	1,867.41	5.74	1,071.64

## **Commission's Analysis**

# **Power Purchase from Long Term Source**

5.4.8 The Commission has observed that the Petitioner has projected Long Term Power purchase from DIL of Rs 595.75 Crore (excluding Transmission charges) at Rs 5.36/kWh (at NPCL Periphery) wherein the fixed charges are considered as Rs 2.17/kWh and Energy charges are considered as Rs 3.18/kWh. The Commission also observed that the cost of power purchase from DIL has been considered along with approx. Rs. 0.25/kWh on account of additional coal.



5.4.9 The Commission in MYT Order dated November 30, 2017 approved long term power from DIL for FY 2019-20 at Rs 4.12/kWh. Further, the Commission vide Order dated February 05, 2019 disposed of MYT Petition No. 1235 of 2017 in the matter of determination of Tariff for DIL for FY 2016-17 to FY 2018-19, and approved provisional tariff wherein the fixed charges are approved as Rs 1.90/kWh and Energy Charges are fixed as Rs 1.80/kWh for FY 2018-19. The relevant extract of the aforesaid Order is quoted below: Quote

Table-2: Comparison of Fixed charges as approved in PPA vs claimed by the Petitioner (Rs./kWh)

Particulars	As per Fixed Charges approved in PPA	As claimed in the MYT Petition	Revised submission as per capital cost as on Cut off date	Fixed Charges considering Refinancing Cost claimed in FY 2017-18	Fixed Charges approved by the Commission
FY 2016-17	2.11	2.08	2.05	2.05	2.05
FY 2017-18	2.06	2.02	1.94	1.99	1.99
FY 2018-19	2.02	1.95	1.90	1.90	1.90
Levelized Fixed Tariff (25 years)	1.93	1.93	1.86	1.87	1.87

Table-3: Comparison of Energy charges as considered order for approval of PPA vs claimed by the Petitioner (Rs./kWh)

Particulars	As considered in approval of PPA	As claimed in the MYT Petition	Revised submission as per capital cost as on Cut off date	Energy Charges approved by the Commission
FY 2016-17	1.65	2.177	1.65	1.65
FY 2017-18	1.72	2.177	1.72	1.72
FY 2018-19	1.80	2.177	1.80	1.80
Levelized Fixed Tariff (25 years)	2.21	2.34	2.21	2.21

Note: The escalation rate of CERC has been considered as applicable till 31.03.2014, which is subject to true up.

Unquote



5.4.10 The Commission in the aforesaid Order also observed that the Tariff approved above will be subject to True up on provisions based on the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014. The relevant extract of the aforesaid Order is quoted below for reference:

Quote

4.2.14 The tariff approved above shall be subject to true up provisions based on the Tariff Regulations 2014. The Petitioner shall be required to submit all relevant details including actual figures on coal quality (GCV as received basis tested at plant) corresponding to each FY in the entire control period certified by an independent agency of repute for scrutiny of the Commission while truing up."

Unquote

5.4.11 The Commission in the aforesaid Order directed that the Tariff approved above shall remain effective till further Orders. The relevant extract of the Order is quoted below:

Quote

#### 5. IMPLEMENTATION OF ORDER

5.1 This order shall be reckoned to have come into effect from respective 01<sup>st</sup> day of each year of the for the Multi Year Tariff period of FY 2016-17 to FY 2018-19 and **shall remain effective till further order**. DIL is entitled to raise the bills as per this order with necessary adjustments if any on receivable/ refundable.

Unquote

- 5.4.12 Also, the Commission vide its Suo-moto Order dated May 30, 2019, decided to extend the applicability of UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 with effect from April 01, 2019 and ordered that Tariff during FY 2019-20 shall remain as determined by the Commission under UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 on provisional basis subject to the adjustment with interest.
- 5.4.13 Further the Commission vide its Order dated May 11, 2020 provided that: Quote



"While this being so, due to lockdown caused by outbreak of ongoing Covid-19 pandemic, the Commission is not able to take up matters for hearing. But, as these projects are continuously generating electricity and that the same is being sold to the UPPCL, an Order to continue Status-quo is necessitated for the said electricity being sold to UPPCL. Therefore, it is ordered that Provisional Tariff for next six months from the date of this Order i.e. during the period 1st April'20 to 31st Oct'20 shall remain as determined by the Commission through various orders respective to these existing projects under the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 subject to adjustment with applicable interest, if any."

## Unquote

- 5.4.14 Since, there is no further Order in this regard, the Commission finds it appropriate to provisionally consider the rates of fixed and energy charges as stipulated by the Commission in the aforesaid Order for FY 2018-19, which will be subject to the Truing up of DIL for the respective year.
- 5.4.15 The Commission for projection of quantum for FY 2020-21 has considered the same Inter-State Transmission Loss as projected by the Petitioner. The Commission has considered Intra-State Transmission Loss as approved for UPPTCL for FY 2020-21 dated November 10, 2020 in Petition No. 1515 of 2020 & 1571 of 2020 i.e. 3.40%.

Table 5-7: Power Purchase from Long Term Source as approved by the Commission for FY 2020-21

Sour ce	MU at Ex- bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crs)	Energy Charges (Rs. Crs)	Amount (Rs. Crs)	Transmissi on charges of PGCIL (Rs. Crore)	Transmissi on Charges of UPPTCL (Rs. Crore)	Total Trans. Chgs (Rs. Crs)	Total (in Rs. Crore)
	Α	В	С	D	E	F=C*1.9 /10	G=C*1.8/10	H=G+F	1	J=0.2378*E /10	K=J+I	L=H+K
DIL	1,198.23	3.90%	1151.50	3.40%	1112.35	218.79	207.27	426.06	70.45	26.45	96.90	522.95

#### **Power Purchase from Medium Term Source**

5.4.16 The Commission vide its Order dated February 28, 2020 in Petition No. 1552 of 2020 approved power procurement from Medium Term from two sources such as 50 MW from Department of Power, Gov.t of Arunachal Pradesh and 25 MW from Department of Power, Gov.t of Nagaland at rate of Rs. 5.46/kWh.

5.4.17 The Commission has considered the same rate for approval i.e. for FY 2020-21 as shown in the Table below:

Table 5-8: Medium Term of 50 MW approved for FY 2020-21 from Department of Power,
Govt. of Arunachal Pradesh

Source	MU at Ex-bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Government of AP. Medium term	186.13	2.83%	3.40%	174.72	38.90	38.90	77.80	12.17	4.15	16.32	94.12	5.39

Table 5-9: Medium Term of 25 MW approved for FY 2020-21 from Department of Power, Govt. of Nagaland

Source	MU at Ex- bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Government of Nagaland. Medium term	88.83	3.27%	3.40%	83.01	18.52	18.52	37.04	6.31	1.97	8.28	45.32	5.46

#### **Power Purchase from Renewable Source**

5.4.18 As regards cost of purchase of power from renewable sources, the Commission observed that the licensee has submitted to procure 1 MW solar power from GNIDA and 10 MW wind power through PTC. The Commission vide its Order dated July 14, 2015 approved rate of Rs. 7.06/kWh for power procurement of solar PV power from GNIDA for 10 years. Also, the Commission vide its Order dated January 01, 2018 approved the procurement of 10 MW wind power through PTC at the rate of Rs. 3.53/kWh including the trading margin of Rs. 0.07/kWh at NPCL Periphery. The Commission has computed the cumulative shortfall in Solar and Non-Solar RPO till FY 2018-19 in the chapter on True UP for FY 2018-19 in this Order. The Commission has computed the Solar, Non-Solar and Hydro cumulative surplus / shortfall till FY 2020-21 in line with the obligation specified in UPERC (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment) Regulations, 2019 as shown in the Table below:



Table 5-10: RPO Computation for FY 2020-21

S.No	Particular	Reference	Quantum (MU)
1	Total Sales for FY 2020-21	Α	2002.95
2	Hydro Purchase during the year	В	257.73
3	Net Power Sale for RPO computation	C=A-B	1745.23
4	Total Obligation for the year (%)		
5	Solar (%)	D	3%
6	Non Solar (%)	E	6%
7	HPO Obligation for the year (%)	F	2%
8	Total Obligation for year		
9	Solar (MU)	G=D*C	52.36
10	Non Solar (MU)	H=E*C	104.71
11	HPO Obligation for the year (MU)	I=F*C	34.90
12	Total Obligation for the year (MU)	J=G+H+I	191.97
13	Total RPO Fulfilled during the year		
14	Solar	k	1.58
15	Non Solar	L	30.46
16	Hydro	M	-
17	Total RPO to be fulfilled	N=K+L+M	32.04
18	Balance Obligation to be fulfilled in FY 20-21	O=P+Q+R	159.93
19	Solar	Р	50.78
20	Non Solar	Q	74.25
21	Hydro	R	34.90

Table 5-11: Status of RPO Obligations to be met during FY 2020-21

RE Power	Opening Unfulfilled Obligation (FY 2020-21)	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2020-21)
Solar	66.29	52.36	1.58	117.07
Non-Solar	80.46	104.71	30.46	154.71
HPO	18.73	34.90		53.64
Total	165.49	191.97	32.04	325.42

5.4.19 The Commission has considered that the Petitioner should fulfill its complete RPO obligation for FY 2020-21. Accordingly, apart from the RPO obligation being met during



the year by the Petitioner, the Commission has considered that the remaining shortfall of Rs. 325.42 MUs to be met by the Petitioner at the same price (weighted avg) at which the existing renewable purchase is being met. The Power purchase from renewable sources approve for FY 2020-21 is as under:

Table 5-12: Approved renewable energy for FY 2020-21

Source	MU at Ex-bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (in Rs. Cr)	Energy Charges (in Rs. Cr)	Amount (in Rs. Cr)	PGCIL Charges (Rs. Cr)	UPPTCL charges (Rs. Cr)	Total Transmission (Rs. Cr)	Total (in Rs. Cr)	Per Unit Cost
Wind Power	31.54	0.00	3.40%	30.46	-	11.13	11.13	-	0.72	0.72	11.86	3.89
GNIDA LT Solar Power	1.58	0.00	0.00	1.58	-	1.11	1.11	-	-	-	1.11	7.06
Power Purchase to meet RPO obligation	336.87	0.00	3.40%	325.42	-	124.57	124.57	-	7.74	7.74	132.30	4.07

#### **Power Purchase from Short-Term Source**

5.4.20 The Commission vide its Order dated March 05, 2020 in Petition No. 1546 of 2020 approved the procurement of short-term procurement through Deep portal by the Petitioner. The approved the short-term power procurement as shown in the Table below:

Table 5-13: Approved short-term power for the Petitioner vide Order dated March 05, 2020

S. No.	Bidder	Period	Duration (Hrs.)	Quantum (MW)	Rate at NPCL Bus (Rs./kWh)	PPA dated
1	M/s Adani Enterprises Ltd.	1st April 2020 to 30th September 2020 (Except Sundays)	00.00 to 02.00	50	4.50	20.12.2019
2	M/s Arunachal Pradesh Power Corporation (P) Limited	1st April 2020 to 31st October 2020 (Except Sundays)	19.00 to 24.00	100	4.89	26.12.2019



5.4.21 The Commission for FY 2020-21 has considered the same rate as per above mentioned Order. The approved power purchase for short term for FY 2020-21 as per above mentioned Order is shown in the Table below:

Table 5-14: Approved short-term power from APPCPL and Adani Enterprises for FY 2020-21

Source	MU at Ex- bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (in Rs. Cr)	Energy Charges (in Rs. Cr)	Amount (in Rs. Cr)	PGCIL Charges (Rs. Cr)	UPPTCL charges (Rs. Cr)	Total Transmission (Rs. Cr)	Total (in Rs. Cr)	Per Unit Cost
APPCL	46.00	2.36%	3.40%	43.39	-	18.92	18.92	1.23	1.03	2.26	21.18	4.88
Adani Enterprises	5.19	2.36%	3.40%	4.89	-	1.92	1.92	0.16	0.12	0.28	2.20	4.49

- 5.4.22 The Commission also noticed that the Petitioner for FY 2020-21 has projected 439.56 MU (at NPCL periphery) from Inter State Power from Trader/Generator/ Banking. The Commission observe that the single-part variable cost of purchase from Power Exchange at the average RTC rate of N2 region for FY 2020-21 for six months (April to September) is Rs. 2.49 per kWh. The Commission observe that considering the average RTC rate of Rs. 2.49/ kWh the landed cost of purchase from exchange for Uttar Pradesh comes at Rs. 3.23/kWh. This landed cost includes the UPPTCL Transmission charges approved for FY 2019-20 i.e. Rs. 0.1848/kWh. However, the Commission for FY 2020-21 has approved the UPPTCL Transmission charges of Rs. 0.2378/kWh vide Order dated November 10, 2020. Hence the difference is added to arrive at the net power purchase from Exchange i.e. Rs. 3.28/kWh.
- 5.4.23 This arrangement is provisionally considered by the Commission FY 2020-21. However, the Petitioner shall ensure that purchase of power is made on most competitive rate as per market condition. The power purchase from Power Exchange (s) for FY 2020-21 which may be approved is shown in the Table below:

Table 5-15: Power Purchase from Power Exchange approved by the Commission for FY 2020-21

Source	MU at Ex-bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (in Rs. Cr)	Energy Charges (in Rs. Cr)	Amount (in Rs. Cr)	PGCIL Charges (Rs. Cr)	UPPTCL charges (Rs. Cr)	Total Transmission (Rs. Cr)	Total (in Rs. Cr)	Per Unit Cost
Power Purchase from Exchange	423.47	2.36%	3.40%	399.42	-	105.44	105.44	16.20	9.50	25.70	131.14	3.28



5.4.24 The detail computation for above procurement of short-term power is shown in the Table below:

Table 5-16: Computation of Short-term Power Purchase for FY 2020-21

Particular	Reference	Quantum (MU)
Energy at NPCL Periphery	A	399.45
Intra-State Transmission Loss (%)	В	3.40%
Energy at UP Periphery	C=A(1-B)	413.51
Inter-State Transmission Loss (%)	D	2.36%
Energy at Ex-bus	E=C/(1-D)	423.51
Energy Charges without Transmission Cost (Rs. Crore)	F=E*Avg. RTC rate for six months (Rs. 2.49/kWh)	105.45
Energy Charges with Transmission Cost	G=A*3.23(Landed cost at UP Periphery from IEX website)	129.02
Total Transmission cost (Rs. Crore)	H=G-F	23.57
Total UPPTCL Cost (Rs. Crore)	I=A*Rs. 23.87/10	9.50
Total PGCIL Cost (Rs. Crore)	J=H-(A*0.1845/10) -Rs. 0.1845 is included in the landed cost	16.20
Total Cost including transmission (Rs. Crore)	K=F+I+J	131.15
Per Unit Cost (Rs./kWh)	K/A*10	3.28

- 5.4.25 As regards unscheduled Interchange transactions amounting to Rs (2.02) Cr as claimed by the Petitioner for FY 2020-21, the Commission is of the view that these charges cannot be projected while approving the ARR and need to be considered based on actuals at the time of truing up. Hence, the Commission has not approved these charges and the same shall be considered at the time of Truing Up based on actuals subject to prudence check.
- 5.4.26 Since, the Commission has allowed distribution losses of 7.92% for FY 2020-21 as against 9.03% claimed by the Petitioner, the quantum of power purchase (MU) approved by the Commission for FY 2020-21 is more than that projected by the Petitioner. Hence, the transmission charges approved by the Commission are adjusted as per the quantum of power approved for FY 2020-21 that is more than that claimed by the Petitioner.



- 5.4.27 The Commission while computing the Intra- State transmission charges for FY 2020-21 has considered the transmission tariff of Rs 0.2378/kWh and transmission losses of 3.40% for FY 2020-21 as approved by the Commission vide Tariff Order of UPPTCL dated November 10, 2020, in the matter of determination of transmission tariff for FY 2020-21.
- 5.4.28 The Commission will carry out the detailed analysis of actual power purchase vis-a-vis approved power purchase at the time of truing up of FY 2020-21. Accordingly, the power purchase quantum and cost as approved by the Commission for FY 2020-21 and as projected by the Petitioner is as shown in the Table below:

Table 5-17: Approved power purchase for FY 2020-21

	Cl	aimed in Petitio	on			Approved	for FY 20	20-21		
	Energy at NPCL Periphery (MU)	Rate at NPCL Periphery (excluding transmission) (Rs. /kWh)	Total Cost excluding Transmission (Rs. Crore)	Energy at NPCL Periphery (MU)	Total Cost excluding Transmissi on (Rs. Crore)	Rate at NPCL Periphery (excluding transmission) (Rs. /kWh)	PGCIL Cost (Rs. Crore)	UPPTCL (Rs. Crore)	Total Cost including Transmission (Rs. Crore)	Rate at NPCL Periphery (Rs. /kWh)
	Α	B=C/A*10	С	D	E	F=E/D*10	G	Н	1	J=I/D*10
Long Term Power (from DIL)	1,110.51	5.36	595.75	1112.35	426.06	3.83	70.45	26.45	522.95	4.70
Medium Term MTPPA (PTC India Ltd)	257.30	4.67	120.20	257.74	114.85	4.46	18.47	6.12	139.44	5.41
Medium Term Power- RTC (50MW) Govt. of AP	164.75	4.60	75.75	165.02	73.48	4.45	11.42	3.92	88.82	5.38
Medium Term Power- Non RTC (25MW) Govt. of AP	4.86	4.46	2.17	4.87	2.17	4.46	0.37	0.12	2.66	5.46
Medium Term Power- Non RTC (25MW) Govt. of AP	4.82	4.46	2.15	4.83	2.155	4.46	0.37	0.11	2.64	5.46
Medium Term Power- RTC (25MW) Govt. of Nagaland	73.23	4.17	35.83	73.36	32.74	4.46	5.57	1.74	40.05	5.46
Medium Term Power- Non RTC (25MW) Govt. of Nagaland	4.84	4.17	2.16	4.85	2.16	4.45	0.37	0.12	2.65	5.46
Medium Term Power- Non RTC (25MW) Govt. of Nagaland	4.80	4.17	2.14	4.81	2.14	4.45	0.37	0.11	2.62	5.45
Power Purchase from Short-Term source	487.48	4.12	201.14	447.70	126.28	2.82	17.59	10.65	154.52	3.45
APPCPL (19-24 Hrs)	43.32	4.37	18.92	43.39	18.92	4.36	1.23	1.03	21.18	4.88
Adani Enterprise (00- 02 Hrs)	4.88	3.94	1.92	4.89	1.92	3.93	0.16	0.12	2.2	4.50
Inter State Power - from Trader / Generator	439.29	4.10	180.30							
Power Exchanges				399.42	105.44	2.64	16.2	9.5	131.14	3.28
Power Purchase from RE	31.99	3.83	12.25	357.46	136.81	3.83	-	8.46	145.27	4.06



	CI	aimed in Petitio	on		Approved for FY 2020-21					
	Energy at NPCL Periphery (MU)	Rate at NPCL Periphery (excluding transmission) (Rs. /kWh)	Total Cost excluding Transmission (Rs. Crore)	Energy at NPCL Periphery (MU)	Total Cost excluding Transmissi on (Rs. Crore)	Rate at NPCL Periphery (excluding transmission) (Rs. /kWh)	PGCIL Cost (Rs. Crore)	UPPTCL (Rs. Crore)	Total Cost including Transmission (Rs. Crore)	Rate at NPCL Periphery (Rs. /kWh)
	Α	B=C/A*10	С	D	E	F=E/D*10	G	Н	I	J=I/D*10
GNIDA (Solar)	1.58	7.06	1.11	1.5768	1.11	7.04	0	0	1.11	7.06
Renewable Power (Non-Solar)										
Renewable Power (Wind Power)	30.41	3.66	11.13	30.46	11.13	3.65	0	0.72	11.86	3.89
RPO Adjustments of past year				325.42	124.57	3.83	0	7.74	132.3	4.07
Subtotal	1887.28	4.92	929.34	2175.23	804.01	3.70	106.5	51.68	962.18	4.42
UI	-20.16	1	-2.02	-	-					
Total Power Purchase Cost (excluding Transmission)	1,867.12	4.97	927.32	2,175.23	804.01	3.70	106.5	51.68	962.18	4.42
Total Transmission Charges			144.32							
Transmission Charges of PGCIL			108.83		106.5					
Transmission Charges of UPPTCL			35.48		51.67					
Total Power Purchase Cost	1,867.12	5.74	1,071.64	2175.23	962.18	4.42			962.18	4.42
Per Unit Charge (Rs./kWh)			5.74						4.42	

Table 5-18: Appropriation of approved power purchase for FY 2020-21

	Claim	ed		Approved	
Month	Allocation of Approval Power Purchase (MU) ex Bus	Allocated Power Purchase (NPCL bus)	Allocation of Approval Power Purchase (MU) ex Bus	Allocation of Approval Power Purchase (MU) NPCL Bus	Allocated Approved Power Purchase Cost (Rs. Crore)
Apr	93.48	87.10	108.13	101.47	44.89
May	135.52	126.27	156.76	147.11	65.07
June	156.38	145.71	180.89	169.76	75.09
July	179.51	167.26	207.64	194.86	86.19
Aug	197.64	184.16	228.61	214.55	94.90
Sept	215.26	200.57	249.00	233.67	103.36
Oct	173.05	161.24	200.17	187.85	83.09
Nov	154.01	143.50	178.14	167.18	73.95



	Claim	ed	Approved				
Month	Allocation of Approval Power Purchase (MU) ex Bus	Allocated Power Purchase (NPCL bus)	Allocation of Approval Power Purchase (MU) ex Bus	Allocation of Approval Power Purchase (MU) NPCL Bus	Allocated Approved Power Purchase Cost (Rs. Crore)		
Dec	172.33	160.57	199.33	187.06	82.75		
Jan	173.81	161.95	201.05	188.68	83.46		
Feb	168.93	157.40	195.40	183.37	81.11		
Mar	183.93	171.38	212.75	199.66	88.32		
Total	2,003.83	1,867.12	2,317.86	2,175.23	962.18		

## 5.5 O&M EXPENSES

5.5.1 The Petitioner submitted that the Regulation 45 of the MYT Regulations, 2019 states as: Quote

"45 Operation and Maintenance Expenses

....

- (b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency again/loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the commission. However if the True-Up values (without efficiency again/loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency again/loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed.
- (c) The Average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the middle year and shall be escalated year on year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years upto FY 2019-20"

Unquote



5.5.2 The Petitioner submitted that based on methodology as provided in Regulation 45 (a) to (e) of MYT Regulations, 2019, the average of trued up values of last five (5) financial years i.e. FY 2013-14 to FY 2017-18 for determining values of employee costs, A & G Expenses and R&M Expenses for the middle year i.e. FY 2015-16 is provided in Table below:

Table 5-19: Trued up values of O&M Expenses as submitted by the Petitioner Rs. Crore)

SI. No.	Particulars	FY 13- 14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	Average Normative (FY 15-16)
1	Employee Expenses	13.11	15.31	18.16	22.37	26.37	19.06
2	A&G Expenses	5.99	7.00	8.30	10.22	12.05	8.71
3	R & M Expenses	20.13	23.51	27.88	34.34	40.48	29.27
4	O&M Expenses	39.23	45.81	54.33	66.93	78.91	57.04
5	Exp. Capitalised	(3.57)	(5.13)	(6.90)	(12.32)	(10.34)	(6.90)
6	Net O&M Expenses	35.66	40.68	47.43	54.61	68.57	50.14

5.5.3 The Petitioner submitted that further in line with the norms mentioned in Regulation 45 (c), aforesaid middle year (i.e. FY 2015-16) values of each component of O&M expenses is further escalated to determine the normative expenses till base year i.e. FY 2019-20 as shown in Table below:

Table 5-20: Computation of Normative O&M Expenses for Base year as submitted by the Petitioner (Rs. Crore)

S.		Trued-Up O& (Without E Gains/	fficiency	Normative	Normative	Normative	Normative
3. N	Particulars	FY 2013-14	FY 2014-15	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
0	Particulars			h=	i=	j=	k=
		(a)	(b)	g*(1+escalati	h*(1+escalati	i*(1+escalati	j*(1+escalation
				on factor for	on factor for	on factor for	factor for FY
				FY 2016-17)	FY 2017-18)	FY 2018-19)	2019-20)
1	Employee Expenses	13.11	15.31	19.75	20.35	21.41	22.76
2	A&G Expenses	5.99	7.00	9.03	9.30	9.78	10.40
3	R & M Expenses	20.13	23.51	30.32	31.24	32.87	34.94
4	Gross O&M Expenses	39.23	45.81	59.10	60.90	64.07	68.10
5	Expenses Capitalised	(3.57)	(5.13)	(12.32)	(10.34)	(8.99)	(10.32)
6	Net O&M Expenses	35.66	40.68	46.78	50.55	55.08	57.79

5.5.4 The Petitioner submitted that Regulation 45.3 of the MYT Regulations, 2019 are reproduced below as:

"Provided that Interest and Finance charges such as Credit Rating charges,



collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses."

5.5.5 The Petitioner submitted that all Banks including State Bank of India, price their loans (both term as well as working capital) on their pre-determined ROI (Return on Investment) basis. When these loans are sanctioned/renewed, as a standard practice followed by every banks, the overall interest cost is charged in two parts (like electricity tariff) viz.:

Finance Charge /Upfront Fees – Normally fixed in terms of percentage of loan amount sanctioned/renewed.

Interest Charges – Fixed or Benchmarked with certain Market norms like MCLR / PLR/ RoI of Treasury Securities which is reviewed at regular intervals.

- 5.5.6 The Petitioner submitted that the borrower has no option not to agree to pay such finance charges to the bank. Assuming that same bank may agree not to levy finance charges, then the same would be added in the interest cost to maintain its overall ROI. In addition to the above, finance charges are also levied on various other facilities given by them i.e. Letter of credit, collection of payments, etc. Thus, finance charges are indispensable for all borrowers of loans from banks.
- 5.5.7 It further added that such charges are driven by the volume of business-like sales, power purchase, debtors, consumer security deposit etc. and is nowhere dependent on inflation rates as has been proposed to be increased in the MYT regulations 2019.
- 5.5.8 The Petitioner further submitted that also incurs various finance charges for availing of financial products and services for the purpose of meeting its financial and other business needs. These charges are genuine business expenditure and has been explained in details as under:
  - (a) Loan Processing Charges: The Petitioner submitted that it has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year. During, FY 2020-21, the Petitioner will incur expenses on renewal of the existing Working Capital Facilities including LC facilities for payment security of Power Purchase Agreements in accordance with their respective terms of agreement and issuance Commercial Paper to facilitate short-term funding of regulatory asset and working capital requirement. Therefore, based on the existing facilities and the facilities to be tied up for meeting the LC facilities and other Working Capital requirements for the ensuing year.



- 5.5.9 The Petitioner submitted that apart from Apart from Loan Processing Charges, it also has to incur other financing and ancillary charges which have been elaborated in detail in the subsequent paragraphs:
  - (a) **Credit Rating Charges:** Credit rating of banking (Fund / Non-Fund based) facilities has become imperative under the Basel II Norms. As per these norms, unrated facilities will be financed at least 4.50% higher as per credit adequacy requirements in comparison with rated facilities. In order to comply with the above requirement of RBI and also to save additional 4.50% p.a. interest cost, the Petitioner has been getting its credit rating from India Rating & Research (P) Limited.
  - (b) Collection facilitation charges: Continuing its efforts to provide maximum possible facilities to the consumers, the Petitioner submitted that it started various new initiatives for enabling consumers to make payment via Internet, Payment kiosks, retail counters at their nearby grocery shop, through NEFT / RTGS etc. The Commission has also vide its order dated 29<sup>th</sup> May, 2015 directed the Petitioner to provide more avenues to the consumers for payment of electricity dues through Online Mode and has also directed it to bear charges for such service upto an amount of Rs. 4,000/- per transaction. Provisions of these facilities require some expenditure which has been included in Collection Facilitation Charges. Apart from being cost of new initiative these charges are directly related to revenue and with increase in tariff and revenue, there is an increase in these charges.
  - (c) Other Finance Charges: There are other bank charges as well like loan documentation charges, LC Issue Charges, banking charges and other miscellaneous charges etc. It is pertinent to mention here that the Ministry of Power vide its order no. 23/22//2019-R&R dated 28<sup>th</sup> June, 2019 mandated every Distribution Licensee to open a letter of credit for desired quantum of power in favour of the Generating Company. The relevant extract of the order is reproduced below for reference of the Commission.
    - "i. In accordance with Section 28 (3) (a) the NRLDC & RLDC shall despatch power only after it is intimated by the Generating Company and /Distribution Companies that a Letter of Credit for the desired quantum of power has been opened and copies made available to the concerned Generating Company."
- 5.5.10 Thus, in FY 2020-21, the Petitioner will have to incur additional expenses to issue Letter of Credit in favour of Generating Companies.



- 5.5.11 The Petitioner submitted that the Commission has been approving such expenses as per audited annual accounts from time to time in its various Tariff Orders, recent being Tariff Order dated 3<sup>rd</sup> September, 2019. In-fact, as mentioned above, some of the charges like collection charges on digital modes of collection are being incurred in pursuance of the directions of the Commission e.g. no charges from consumers making payment through net-banking of an amount upto Rs. 4,000/-.
- 5.5.12 Thus the above expenses are completely different and nor comparable with the expenses which forms part of the A&G Expenses and hence the Petitioner requested the Commission to not to club with the finance charges with A&G Expenses.
- 5.5.13 Similarly, the Delayed payment surcharge accrues when a consumer defaults in payment of bills as per due date being generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is more than the number of days for which a distribution Petitioner is compensated by interest on working capital as per MYT Regulations, 2019 i.e. 45 days. Hence, DPS belongs to the period beyond normative period and for 45 days for which interest on working capital is not provided in the Distribution Tariff Regulations. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost at relevant SBI-PLR. Consequently, it may be concluded that the financing cost of Delayed Payment Surcharge is nothing but interest on the money arranged/provided by the Discom to fund delayed payment of electricity dues by the Consumers and has no similarity with nature of other A&G Expenses.
- 5.5.14 In view of the above, the Petitioner requested not to include the above finance charges in determination of base year normative O&M Expenses and the same should be allowed separately. Accordingly, the Petitioner has not included the above-mentioned Finance Charges and Financing Cost of DPS in the computation of Average A & G Expenses for 5 years and claimed the separately as have been approved by the Commission hitherto.

## **Normative Employee Expenses**

5.5.15 Regulation 45.1 of the MYT Regulations, 2019 provides for determination of normative employee expenses, as reproduced below:



"Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by the provisions for expenses beyond the control of the licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears, Interim Relief, etc.:

 $EMP_N = EMP_{N-1}X$  (1+CPI inflation)

Where:

**EMP**<sub>N</sub>: Employee expense for the n<sup>th</sup> year;

**EMP**<sub>N-1</sub>: Employee expense for the  $(n-1)^{th}$  year;

CPI inflation is the average of the Consumer price Index (CPI) for Immediately preceding three financial years"

5.5.16 Accordingly based on Regulation, the Petitioner submitted the normative employee expenses for FY 2020-21 as shown in the Table below:

Table 5-21: Normative Employee Expenses as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	Emp. Exp. for Base Year (FY 2019-20)	CPI Inflation	Emp. Exp. for Ensuing Year (FY 2020-21)
	a	b	c=a x (1+b)
Normative Emp. Expense	22.76	5.35%	23.98

## **Administrative & General Expenses:**

5.5.17 The Petitioner submitted that Regulation 45.3 of MYT Regulations, 2019 provides the methodology for determination of normative A&G expenses, as shown below:

"A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:

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

Where:

 $A\&G_n$ : A&G expense for the  $n^{th}$  year;  $A\&G_{n-1}$ : A&G expense for the  $(n-1)^{th}$  year;



WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:"

5.5.18 Accordingly, considering the norms as mentioned above, the Petitioner submitted the normative A&G expenses for FY 2020-21 as shown in the Table below:

Table 5-22: Normative A&G Expenses as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	A&G Exp. for Base Year (FY 2019-20)	WPI Inflation	A&G Exp. for Ensuing Year (FY 2020-21)
	Α	b	c=a x (1+b)
Normative A&G Expense	10.40	2.96%	10.71

## **Repair and Maintenance Expense:**

5.5.19 The Petitioner submitted that Regulation 45.2 provides the methodology for determining normative Repair and Maintenance expenses as shown below :-

"Repair and Maintenance expense shall be calculated as per the following formula:

 $R&M_n=R&M_{n-1}$  (1+ WPI inflation)

Where:

*R&M<sub>n</sub>: Repairs & Maintenance expense for n<sup>th</sup> year;* 

 $R\&M_{n-1}$ : Repairs & Maintenance expense for the  $(n-1)^{th}$  year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years."

5.5.20 Accordingly considering the norms above as mentioned above, the Petitioner submitted the normative R&M Expenses for FY 2020-21 as shown in the Table below:

Table 5-23: Normative R&M Expenses as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	R&M Exp. for Base Year (FY 2019-20)	WPI Inflation	R&M Exp. for Ensuing Year (FY 2020-21)	
	а	b	c=a x (1+b)	
Normative R&M Expense	34.94	2.96%	35.98	



5.5.21 The summary of normative O&M Expenses as computed by the Petitioner on the basis of methodology provided in Regulation-45 of MYT Regulations, 2019 as compared to preceding years is provided in Table below:-

Table 5-24: Summary of O&M Expenses as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

SI. No.	Financial Year	Nature	Employee Expenses	A&G Expenses	R & M Expenses	Gross O&M Expenses	Expenses Capitalised	Net O&M Expenses
1	FY 2015-16	Trued-up	18.16	8.30	27.88	54.33	(6.90)	47.43
2	FY 2016-17	Trued-up	22.37	10.22	34.34	66.93	(12.32)	54.61
3	FY 2017-18	Trued-up	26.37	12.05	40.48	78.91	(10.34)	68.57
4	FY 2015-16	Normative	19.06	8.71	29.27	57.04	(6.90)	50.14
5	FY 2016-17	Normative	19.75	9.03	30.32	59.10	(12.32)	46.78
6	FY 2017-18	Normative	20.35	9.30	31.24	60.90	(10.34)	50.55
7	FY 2018-19	Normative	21.41	9.78	32.87	64.07	(8.99)	55.08
8	FY 2019-20	Normative	22.76	10.40	34.94	68.10	(10.32)	57.79
9	FY 2020-21	Normative	23.98	10.71	35.98	70.66	(9.00)	61.66

- 5.5.22 The Petitioner submitted that it may be seen from the above table that the O&M Expenses as determined on the basis of norms provided in Regulation-45 of MYT Regulations, 2019 is highly skewed and is not reflective of the actual business parameters. It requested the Commission that O&M Expenses if computed on the basis of above norms for FY 2017-18 would only Rs. 50.55 Cr as against trued up O&M Expenses of Rs. 68.57 Cr i.e. lower by 26%.
- 5.5.23 The Petitioner submitted that since, the O & M expenses determined on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019, is grossly insufficient as compared to likely expenses estimated by the Petitioner. It requested that the Commission should consider O & M expenses for FY 2020-21 as estimated by the Petitioner owing to following factors which are beyond the control of the Petitioner:

## **Increase in Minimum Wages:**

(a) All enterprise, associations, partnership, body corporates etc. are bound by the provisions of Minimum Wages Act 1948 and Government of State of Uttar Pradesh revises minimum wages under the provisions of the Minimum Wages Act, 1948 twice in a year (i.e. with effect from April and October). The comparative revised minimum wages of U.P. during FY 2019-20 is provided in Table below:



Class of labour	As on 1st April'13	w.e.f. 1st Apr'19	w.e.f. 1st Oct'19	% increase in C over A
	Α	В	С	D
Unskilled	4,975.86	8,012.73	8,278.94	66.38%
Semi-skilled	5,672.48	8,814.00	9,106.83	60.54%
Skilled	6,296.38	9,873.00	10,201.09	62.02%

Table 5-25: Minimum Wages in State of UP

- 5.5.24 The Petitioner submitted that the minimum wages has a direct and substantial impact on most of the components of O & M expenses e.g. Breakdown gang, security charges, job costing of various repair assignments. Further, as lower cadre staff are governed by the provisions of the Minimum Wages Act-1948, increase in minimum wages also leads to consequent cascading effect on remuneration of senior cadre employees as well. As the Hon'ble Commission is aware that all enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages Act 1948 and the Petitioner has no option but to comply with the same. Therefore, impact of the changes in minimum wages is beyond the control of the Petitioner and cannot be subsumed within normative employee cost.
- 5.5.25 It is also pertinent to mention here that although the MYT Regulation, 2014 provides for escalation of normative Employee Cost on the basis of Consumer Price Index (i.e. CPI), however, the resultant escalation is quite insufficient and more important is that the increase in minimum wages are not covered in CPI. Hence, the impact of increase in minimum wages do not get compensated through incremental CPI.
- 5.5.26 The Petitioner submitted that the Regulation 46 of MYT Regulations, 2019 provides admissibility of Provision for Write-off of Bad and Doubtful Debts as a legitimate business expense with the ceiling limit of 2% of the revenue receivables in the tariff. However, the Petitioner has been able to contain the same to within 1-1.25% in past 2-3 years. This results in huge saving in the Bad and Doubtful Debts which will ultimately pass on to the Consumers. The saving is depicted in the Table below:

Table 5-26: Savings in Provision for Bad Debts as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

SI. No.	Particulars	U.o.M.	Ref.	Projected	
1	Revenue billed for the year	Rs. Cr.	а	1,437.34	



SI. No.	Particulars	U.o.M.	Ref.	Projected
2	Estimated Provision for Bad & Doubtful debts	Rs. Cr.	b	14.37
3	Provision as % of Revenue billed	%	c= b/a	1%
4	Normative Provision for Bad & Doubtful Debt @2%	Rs. Cr.	d=a x 2%	28.75
5	Saving in provision for Bad & Doubtful debts	Rs. Cr.	e=d-b	14.37

5.5.27 The Petitioner submitted that it is able to limit Bad & Doubtful Debts at 1% against 2% on account of the fact that the Petitioner has deployed additional manpower for recovery of dues from the consumers, prompt billing, aggressive actions against theft, timely action against the defaulters etc. In case, the Petitioner opts to reduce its manpower to align actual employee cost with the normative employee cost as per MYT Regulations, 2019, it may lead to higher bad debts which will ultimately burden the diligent Consumers. Therefore, the Petitioner requested that it should be allowed to recover its employee cost at actual.

## **Recommendation of Sixth / Seventh Pay Commission:**

- 5.5.28 The Petitioner submitted that with implementation of the Seventh Pay Commission, the average pay of government employees has gone up by more than 25% approx. including that of State Governments' employees. This will lead to considerable raise in salary package at entry level as well as higher level of employees in private sector also. In this backdrop, the Petitioner has been facing an uphill task to retain talented and motivated workforce and minimize attrition in the increasingly competitive market with more and more participation of private sector in the utility segment including electricity distribution. Hence, it is necessary that the compensation structure on one hand meets the expectations of the employees and on the other hand motivates them to strive for superior performance through congruence of individual and organization goals. Therefore, any increase in emoluments given by the Central Pay Commission, will have a direct bearing on the salary and emoluments of the Petitioner's employees so as to retain and motivate them appropriately.
- 5.5.29 The Petitioner submitted that the Commission has been approving the impact of change in pay scales as recommended and approved by various pay Commission to all State



Discoms on actual basis. The Petitioner requested the Commission to approve the O & M expenses on actuals considering the significant increase in salaries and minimum wages.

#### Other cost Drivers

- 5.5.30 The Petitioner submitted that regarding the distribution losses, due to weak and deficient manpower with local administration the law and order situation is very poor in the Greater Noida area with frequent and violent incidence occurring in the area. The administration or police personnel seldom finds time for attending to the complaints of pilferages/manhandling of the equipment's like transformer, cable etc. of the Petitioner. This in turn pressurize the expenditure on frequent breakdown and repair, resulting into more Repair and Maintenance expenses.
- 5.5.31 The Petitioner further submitted that to sustain the existing low cost operation without compromising with service and safety standards. Therefore, the denial of justified expenses allowance to the Petitioner would jeopardise the operational efficiency achieved by the Petitioner over past 26 years. There is an urgent need for imminent allocation of higher O&M Cost to enable the Petitioner to maintain and improve upon the service standards and prepare itself for growing requirement of the consumers servicing.
- 5.5.32 The Petitioner further submitted that all these expenses have been duly audited by Statutory Auditors and approved by the Board of Directors of the Petitioner. These expenses are allowed in full not only in the Companies Act, 2013 but also in the Income Tax Act, 1961. Hence, these expenses are genuinely and appropriately incurred towards the operations of the Petitioner, and therefore, should be allowed in full.

## **Capitalization of Employee Expense:**

5.5.33 The Petitioner has estimated to capitalize an amount of Rs. 9.00 Cr out of the estimated employee cost of Rs. 64.70 Crore to be incurred during FY 2020-21, as per past practice duly approved by the Commission. In brief, for the purpose of capitalization of employee costs, the Petitioner at the time of execution of project, records actual man hours spent by each engineer/ executive into the system / SAP Software. These hours are then matched with the cost per hour of that employee by the software itself and actual employee cost so incurred, is capitalized along with the specific project. It is pertinent to mention that the entire process of its project/financial accounting is through SAP, and there is least manual intervention in computation of expenses to be capitalized.



- 5.5.34 The Petitioner further submitted that these man-hours and cost is duly verified by the Statutory Auditors of the Petitioner in detail and is approved by the Board of Directors of the Petitioner subsequently.
- 5.5.35 On the basis of the aforesaid policy, approved and followed consistently over the years, the Petitioner requested the Commission to consider the estimated capitalization of employee cost at Rs. 9.00 Cr during F Y 2020-21.
- 5.5.36 The Petitioner requested the Commission to approve the net O & M expenses at Rs. 137.08 Crore for FY 2020-21 as shown in the Table below:

Table 5-27: O&M Expenses as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

SI. No.	Particulars	Normative	Projected	
1	Repair & Maintenance	35.98	62.74	
2	Employees Expenses	23.98	64.70	
3	Admin. & General Expenses	10.71	18.64	
4	Total O&M Expenses	70.66	146.08	
5	Employee Cost Capitalised	(9.00)	(9.00)	
6	Net O&M Expenses	61.66	137.08	

## **Commission's Analysis**

5.5.37 The Commission observed that the Petitioner has projected the O&M expenses for FY 2020-21 considering the actual O&M expenses for previous years. However, the Regulations 45 (b) of MYT Regulations, 2019 provides as follows:

#### Quote

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed.

## Unquote



- 5.5.38 As per the above, the Petitioner has to consider the last five available Trued-Up values. The Commission in this Tariff Order has carried out the Truing-Up for FY 2018-19, therefore the average of Trued-up values of past five years from FY 2014-15 to FY 2018-19 have been considered for computation of O&M.
- 5.5.39 Further, first proviso of Regulation 45.3 of UPERC MYT Regulations, 2019 stipulates that the Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges have to be considered a part of A&G expenses. The relevant extract is provided below:

Quote

## 45.3 Administrative and General Expenses

A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses:

A&Gn= A&G n-1 (1+ WPI inflation)

Where:

A&Gn: A&G expense for the nth year;

A&Gn-1: A&G expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1)th year will be FY 2019-20 which is also the base year.

## Unquote

5.5.40 The Finance charges has been considered as part of the A&G expenses as per the above said Regulation. As regards financing of delayed payment charges, since the Commission has already deliberated for the same in True-Up chapter for this Order, the same is not considered while approving the norms for O&M expenses for FY 2020-21.



5.5.41 The Commission has first arrived at the mid-year i.e. FY 2016-17 value of each component of the O&M Expenses based on the average of last 5 Trued-Up values of FY 2014-15 to FY 2018-19 and the Computation of Norms for O&M Expenses of FY 2020-21 is provided in the table below: (owing to the details provided and size of the Table it is split into two):

Table 5-28: Normative O&M Expenses for FY 2019-20 (Rs. Crore)

Sr. No.	Particulars	True	Average expenses for past 5 years= Mid-year FY 2016-17					
		FY 2014-	FY 2015-	FY 2016-	FY 2017-	FY 2018-	FY 2016-17	
		15	16	17	18	19	2020 27	
1	Employee Expenses	13.50	15.54	17.69	26.37	29.61	20.54	
2	R & M Expenses	19.85	22.86	26.01	38.78	39.77	29.48	
3	A&G Expenses	5.91	6.80	7.74	11.54	12.32		
4	Finance Charges	4.02	3.07	1.71	1.64	1.58		
	Net A&G Expenses	9.93	9.87	9.45	13.18	13.90	11.27	
5	(3+4)							
	Gross O&M Expenses	39.26	45.20	51.44	76.69	81.82	61.29	
6	(1+2+5)							
7	Expenses Capitalised				(10.34)	(8.99)		
	Net O&M Expenses	39.26	45.20	51.44	66.35	72.83		
8	(6-7)							

5.5.42 Further, the average of past 5 years, provides a Mid-Year value (FY 2016-17) of each component of O&M expenses as shown in above table. The same is escalated year on year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20. Accordingly, the Commission, has computed the O&M expenses of the base year which shall be escalated at Inflation/Escalation rate notified by Labour Bureau, Govt. of (http://labourbureau.gov.in/LBO indexes.htm) and Economic Advisor Govt. of India (https://eaindustry.nic.in/) respectively for different years. The Commission has computed the WPI, CPI inflation rate as follows:

Table 5-29: Inflation Index for FY 2020-21 as approved by the Commission

Approval of ARR and Tariff for FY 2020-21, APR of FY 2019-20 and True-Up of FY 2018-19 for NPCL

FY	IN	INFLATION RATE			60:40	Average of previous 3 Years		
	WPI (Base 2011)	CPI (Base 2001)	WPI	СРІ	60:40 Index	Index Inflation	WPI	СРІ
FY 2013-14	112.46	236.00	5.20%	9.68%	186.58	8.57%		
FY 2014-15	113.88	250.83	1.26%	6.29%	196.05	5.07%		
FY 2015-16	109.72	265.00	-3.65%	5.65%	202.89	3.49%		
FY 2016-17	111.62	275.92	1.73%	4.12%	210.20	3.60%		
FY 2017-18	114.88	284.42	2.92%	3.08%	216.60	3.05%		
FY 2018-19	119.79	299.92	4.28%	5.45%	227.87	5.20%	2.96%	5.35%
FY 2019-20	121.80	322.50	1.68%	7.53%	242.24	6.31%		

- 5.5.43 Accordingly, in terms of Regulations, the Employee Expenses for FY 2020-21 are computed by escalating the base year (FY 2019-20) employee expenses by average CPI inflation of last 3 years. The A&G Expenses (including Finance Charges) and R&M Expenses for FY 2020-21 are computed by escalating the base year (FY 2019-20) by average WPI inflation of last 3 years. The Commission for FY 2020-21, has computed the Employee Expense capitalisation by considering the average of last three years or claimed, whichever is higher.
- 5.5.44 The O&M Expenses approved for the Petitioner for FY 2020-21 is shown in the Table below:

Table 5-30: O&M Expenses for FY 2020-21 as approved by the Commission (Rs. Crore)

S.N o.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Average of previous 3 years CPI and WPI		FY 2020-21
		(f) (Average of last 5- year Gross O&M expenses)	g = f*(1+escalati on factor 3.05% for FY 2017-18)	h= g*(1+escalat ion factor 5.20% for FY 2018-19)	i= h*(1+escalat ion factor 6.31% for FY 2019-20)	WPI	СРІ	Normative k= j*(1+average of 3 previous years escalation factor)
1	Employee Expenses	20.54	21.17	22.27	23.67		5.35%	24.94
2	A&G Expenses (with FC)	11.27	11.61	12.21	12.98	2.96%		13.37
3	R & M Expenses	29.48	30.38	31.96	33.97	2.96%		34.97
4	Gross O&M Expenses	61.29	63.15	66.44	70.62			73.28



		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	previou	age of s 3 years nd WPI	FY 2020-21
S.N o.	Particulars	(f) (Average of last 5- year Gross O&M expenses)	g = f*(1+escalati on factor 3.05% for FY 2017-18)	h= g*(1+escalat ion factor 5.20% for FY 2018-19)	i= h*(1+escalat ion factor 6.31% for FY 2019-20)	WPI	СРІ	Normative k= j*(1+average of 3 previous years escalation factor)
5	Less: Employee Expenses Capitalisation							9.00
6	A&G Expenses Capitalisation	-	-	-	-	-	-	-
7	Net O&M Expenses							64.28

#### 5.6 IMPACT OF GOODS AND SERVICE TAX

- 5.6.1 The Petitioner submitted that the Central Government has made new Goods & Service Tax (GST) effective from 1st July, 2017 which covers almost all goods and service within its ambit. The new GST has stipulated tax rate of 18% and 28% for most of the goods and services as against Service Tax of 15% and VAT of 14.5%. Apart from above it has also brought in new service under Reverse Charge Mechanism which leads to higher indirect tax burden on service users such as the Petitioner.
- 5.6.2 Considering the above, the Petitioner got the impact analysis of the GST done from M/s Lakshmikumaran & Sridharan, Attorney which summarized and brought forth the impact of GST Act as well as rules, notifications, etc., made thereunder, on the distribution of electricity done by the Petitioner, with emphasis on cost of various expenses incurred by the Petitioner pre and post implementation of GST. This Report provided an insight into the indirect taxation system of the country post GST and contained an analysis of the cost increase/decrease to Petitioner after the implementation of GST.
- 5.6.3 Based on this report, the Commission in its Tariff Order dated 3rd September, 2019 approved average incremental rate of GST as 5.88% while approving the True-up of ARR for FY 2017-18. However, as explained in paragraph-9 above, the Normative O&M Expenses for Base Year FY 2019-20 are determined on the basis of CPI and WPI based escalation of O&M Expenses for Mid-Year FY 2015-16 when GST was not applicable. Therefore, the above referred GST impact of 5.88% is not entirely considered in normative O&M Expenses for FY 2020-21 determined on the basis of Regulation 45 of the MYT Regulations, 2019. Since it is not feasible to compute the quantum of shortfall of GST



impact in normative O&M Expense determined as per Regulation- 45 of the MYT Regulation, 2019, the Petitioner has not included any amount on this account in ARR for FY 2020-21, however without prejudice, the Petitioner shall claim so on actual basis at an appropriate time.

- 5.6.4 Apart from above, the CBEC vide Circular No. 34/8/2018-GST dated 1st March'18 has clarified that the services as stated below when provided by DISCOMS to consumer are taxable.
  - i. Application fee for releasing connection of electricity
  - ii. Rental Charges against metering equipment
  - iii. Charges for duplicate bill
  - iv. Testing fee for meter/transformer, capacitors etc.
  - v. Labour charges from customer for shifting of service lines
- 5.6.5 Consequently, Directorate General of GST Intelligence (DGGSTI), New Delhi issued a summon u/s 70 of CGST Act on 29th May'18, requesting the Petitioner to produce information on the amounts collected by the Petitioner from 1st July, 2017 to 30th April, 2018 towards abovementioned five services or any other charges collected from the customers over and above the electricity charges for the period.
- 5.6.6 The Petitioner submitted that it filed the detailed reply in response to summon and also filed a writ petition before Hon'ble Allahabad High Court on 24th July'18 and challenged above Circular issued by Department of Revenue and summon issued by DGGSTI. Since, the matter before Hon'ble Allahabad High Court is still pending, the Petitioner in the meantime has filed an intervention petition on 13th November, 2019 in respect of the same matter already pending before the Hon'ble Supreme Court in the case of Torrent Power Ltd. wherein the Department has filed an appeal against the judgement of Hon'ble Gujrat High Court being given in favour of Torrent Power Ltd.
- 5.6.7 Further taking abundant precaution and without prejudice to the Petitioner's rights and contentions with respect to above writ and intervention petitions, the Petitioner has started to levy GST on above services from October, 2018 onwards.
- 5.6.8 Therefore, depending on the outcome of the above-mentioned writ and intervention petitions, the Petitioner in future may become liable to pay GST on above services in respect of the duration when GST was not levied on such service.
- 5.6.9 However, pending final adjudication of the matter, the amount payable cannot be ascertained at this stage, therefore, the Petitioner has not claimed the same in this ARR Petition and it shall claim so on actual basis at an appropriate time.



5.6.10 The Petitioner submitted the Impact of GST as shown in the Table below:

Table 5-31: Impact of GST as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Reference	Projected
1	Impact of GST	а	To be claimed later

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

5.6.11 The Commission will appropriately deal the same at the time of True-Up.

#### 5.7 CAPITAL EXPENDITURE

- 5.7.1 The Petitioner submitted that Regulation 18 the MYT Regulation, 2019 provides for treatment of Capital Cost for the purpose of determination of tariff. The extracts of relevant regulation are re-produced here below: -
  - "18. Capital cost for a capital investment Project shall include:
    - (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, as admitted by the Commission after prudence check;
    - (b) capitalised initial spares subject to the ceiling rates stipulated in these Regulations;
    - (c) expenses incurred by the Licensee on obtaining right of way, as admitted by the Commission after prudence check;
    - (d) additional capital expenditure determined under Regulation 19;
    - (e) Incidental expenditure during construction including apportioned expenditure on relevant components of O&M

      Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost;
    - (f) gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation, as admitted by the Commission after prudence check ... "
- 5.7.2 The Petitioner submitted that based on above Regulation and based on its Network Planning, it has submitted its Capital Expenditure for Control Period FY 2020-21 to FY 2024-25 in its Business Plan. Accordingly, as provided in detail in the Petition for the Business Plan, the proposed Capital Expenditure for FY 2020-21 is summarised in Table below.



Table 5-32: Proposed Capital Expenditure as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21		
Scheme wise	Investment	Capitalisation	
New Connection	35.10	35.10	
Replacement Stock	4.80	4.80	
Metering	5.11	5.11	
33/11 kV Substation	18.10	18.10	
33 kV Network Development	13.23	13.23	
11 kV Network Development	20.92	20.92	
LT Network Development	14.64	14.64	
Network at Villages	8.30	8.30	
Network Renovation	3.70	3.70	
Process System Automation	11.06	11.06	
Civil Works & Office Infrastructure Facility	21.33	21.33	
IT Projects	15.18	15.18	
Tools & Testing Equipment and Vehicles	5.41	5.41	
Demand Side Management	3.00	3.00	
Land	6.33	6.33	
Misc/Contingent Works	-	-	
Interest / Expense Capitalisation	-	-	
Salary Capitalisation	9.00	9.00	
CWIP Movement	-20.00		
Total including Interest and Employee Cost capitalised (A)	175.20	195.20	
Employee Cost Capitalised (B)	9.00	9.00	
Interest Expenses Capitalised (C)	-	-	
Total (D= A - B - C)	166.20	186.20	
Asset not belonging to Discoms (E)		-	
Total (F= D+E)	166.20	186.20	

Table 5-33: Details of Capex for New Connection scheme as projected by the Petitioner for FY 2020-21

S. No.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
1	New Connection				



S. No.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	132 kV	Nos.	1	10,00,000	0.10
	33 kV	Nos.	24	6,31,261	1.52
	11 kV	Nos.	100	3,21,200	3.21
	LTCT with transformer	Nos.	400	1,37,287	5.49
	3 Phase LT	Nos.	1,500	25,142	3.77
	Single Phase LT	Nos.	5,000	8,166	4.08
	Conversion of Single point to Multipoint	Nos.	5,000	15,390	7.69
	New Societies Individual Connection	Nos.	6,000	15,390	9.23
	Assets taken over from GNIDA	LS	1	1,00,00,000	1.00
	Sub-Total				36.10

Table 5-34: Details of capex projected for Replacement schemes by the Petitioner for FY 2020-21

S. No.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Replacement of Meter				
	3 Phase 4 Wire HT	Nos.	150	7,651	0.11
	3 Phase 4 Wire LTCT	Nos.	50	7,064	0.04
	3 Phase 4 Wire LT Whole Current	Nos.	1,200	7,020	0.84
	1 Phase 2 Wire LT Whole Current	Nos.	1,200	1,760	0.21
	GPRS Modem	Nos.	100	7,186	0.07
2	Sub-Total				1.28
	Replacement of Instrument Transformers				
	11 kV	Nos.	100	4,500	0.05
	33 kV	Nos.	15	15,000	0.02
	11 kV Composite CTPT	Nos.	10	32,000	0.03
	33 kV Composite CTPT	Nos.	5	80,000	0.04
	Sub-Total				0.14
	Replacement of Network in Village				-



S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Replacement of 11kV Lines				-
	Replacement of existing conductor by ACSR DOG	Ckt kM	3	2,50,000	0.08
	Replacement of existing conductor/ cable by HT ABC	Ckt kM	7	7,50,000	0.53
	Replacement of LT Lines		-		-
	Replacement of existing OH LT AB cable with 120 sqmm LT ABC	Ckt kM	6	4,50,000	0.27
	Replacement of existing service cable	kM	50	1,00,000	0.50
	Sub-Total				1.37
	Replacement/ Installation of Network in Urban & Industrial Area				-
	Replacement of Feeder Pillar				-
	Main Feeder Pillar	Nos.	10	1,54,091	0.15
	Sub Feeder Pillar	Nos.	10	1,07,888	0.11
	Replacement of conductor of 11kV lines				-
	Replacement of existing old, worn out HT ABC by New HT ABC	Ckt kM	3	7,50,000	0.23
	Replacement of existing old, worn out ACSR Dog conductor with New ACSR Dog conductor	Ckt kM	3	2,50,000	0.08
	Replacement of 33kV lines				-
	Replacement of existing ACSR Dog conductor by ACSR Panther conductor	kM	1	4,36,600	0.04
	Sub-Total				0.61
	Replacement of Poles				-
	STP	Nos	20	27,435	0.05
	PCC	Nos	30	6,577	0.02
	Sub-Total				0.07
	Replacement of Transformer				-



S. No.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	400 kVA (3-Ph)	Nos.	3	9,88,732	0.30
	250 kVA (3-Ph)	Nos	3	5,85,860	0.18
	100 kVA (3-Ph)	Nos	30	2,16,165	0.65
	25 kVA (3-Ph)	Nos	10	2,10,165	0.21
	Sub Total				1.33
	Total				4.80

Table 5-35: Details of capex projected for Metering by the Petitioner for FY 2020-21

S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Energy Audit				
	33 kV Metering with Composite CTPT & AMR	Nos.	5	1,34,692	0.07
	11 kV Metering with Composite CTPT & AMR	Nos.	25	68,163	0.17
	LTCT Metering of Transformers	Nos.	1,000	11,842	1.18
	Sub-Total				1.42
	Other Metering Initiatives				-
	Upgradation of Meters				-
3	HT Meters	Nos.	60	6,510	0.04
	LT Meters	Nos.	5,000	6,715	3.36
	33kV Instrumentation Transformers	Nos.	25	15,000	0.04
	11kV Instrumentation Transformers	Nos.	50	4,500	0.02
	LT CT	Nos.	200	1,000	0.02
	Modems	Nos.	200	6,968	0.14
	Prepaid Meters	Nos.	50	10,500	0.05
	New Generation Meter	Nos.	20	12,000	0.02
	Sub-Total				3.69
	Total				5.11



Table 5-36: Capex projected for Distribution system by the Petitioner for FY 2020-21

S. No.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs.)
	33/11 kV Substation				
	33 kV Switching SubStation with GIS	Nos.	2	5,57,60,071	11.15
4	Conversion of Transformer House to Substation with GIS	Nos.	1	2,70,08,835	2.70
	Load Augmentation of Substation		1	1,25,00,000	1.25
	Switching Station	Nos.	1	3,00,00,000	3.00
	Total				18.10

Table 5-37: Capex projected for 33 kV Network Development by the Petitioner for FY 2020-21

S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	33 kV Network Development				
	33 kV Overhead Mains with ACSR Panther	Ckt kM	1	26,95,922	0.27
	33 kV Underground Mains with 400 sqmm Cable	Ckt kM	15	24,85,008	3.73
	Installation of Load Break Switch	Nos.	15	3,50,000	0.53
5	Isolator Installation with Structure	Nos.	30	1,67,985	0.50
	Interconnection between 33kV Substations and feeder evacuation from 33kV Substation with 400sqmm cable	Ckt kM	15	24,85,008	3.73
	Feeder construction with 33kV UG 400 Sqmm Cable for Power Evacuation from 220KV Substation	Ckt kM	15	24,85,008	3.73



S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Strengthening of 33kV Lines with new conductor, insulators & channels	Ckt kM	5	15,00,000	0.75
	Total				13.23

Table 5-38: Capex projected for 11 kV Network Development by the Petitioner for FY 2020-21

S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	11 kV Network Development				
	11 kV Overhead Lines				
	Overhead Lines with ACSR Dog	Ckt kM	8	13,24,096	0.99
	Overhead Lines with HT ABC	Ckt kM	5	18,35,717	0.92
	11 kV Underground Mains				-
	11 kV UG Mains with 300 sqmm cable	Ckt kM	15	14,37,722	2.16
	11 kV UG Mains with 150 sqmm cable	Ckt kM	10	9,39,758	0.94
	11 kV RMU Installation	Nos.	20	10,37,019	2.07
6	Installation of 11 kV Load Break Switch	Nos.	10	1,75,000	0.18
	Isolator Installation with Structure	Nos.	15	1,36,235	0.20
	New Transformer				
	Installation with structure				
	400 kVA (3-Ph)	Nos.	20	10,12,887	2.03
	250 kVA (3-Ph)	Nos.	25	6,09,601	1.52
	100 kVA (3-Ph)	Nos.	150	2,42,684	3.64
	25 kVA (3-Ph)	Nos.	100	2,14,626	2.15
	16 kVA (3-Ph)	Nos.	50	1,67,089	0.84
	16 kVA (1-Ph)	Nos.	10	1,27,846	0.13
	Power evacuation and feeder construction from new 33/11kV substations	kM	15	14,37,722	2.16



S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	UG mains with 300Sqmm Cable				
	Strengthening of 11kV Feeder with new conductor, insulators & channels	kM	20	5,00,000	1.00
	Total				20.92

Table 5-39: Capex projected for LT Network Development by the Petitioner for FY 2020-21

S. No.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	LT Network				
	Development				
	LT Underground Mains				
	LT UG Mains with 300 sqmm Cable	kM	12	11,21,980	1.35
	LT UG Mains with 150 sqmm Cable	kM	25	7,06,148	1.77
	LT UG Mains with 95 sqmm Cable	kM	10	5,32,776	0.53
7	OH Lines with LT ABC	kM	12	7,81,710	0.94
,	Installation of Feeder Pillar				
	Main Feeder Pillar	Nos.	250	1,54,091	3.85
	Sub Feeder Pillar	Nos.	300	1,07,888	3.24
	Transformer Feeder Pillar / LT Panel	Nos.	100	1,34,840	1.35
	Strengthening of LT lines with new conductor, ABC	kM	50	3,25,000	1.63
	Total				14.64



Table 5-40: Capex projected for Network at Villages by the Petitioner for FY 2020-21

S. NO.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Network at Villages				
	11 kV Lines	kM	10	18,35,717	1.84
	LT Lines	kM	30	7,81,710	2.35
8	LT Services				
	3 Phase LT	Nos.	500	25,142	1.26
	Single Phase LT	Nos.	3,500	8,166	2.86
	Sub-Total				8.30

Table 5-41: Capex projected for process / system automation by the Petitioner for FY 2020-21

S. NO.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	PROCESS / SYSTEM AUTOMATION				
	Smart Substations and SCADA/DMS/OMS enhancement	-			
	Smart Substation Implementation Initiatives				
9	Substation Automation System viz, RTU System, integration of numerical relays, MFMs, battery charger, RTCC etc. and integration with SCADA system:  1. RTU System at new Substations 2. Upgradation / replacement of existing SAS/ RTU System 3. Provide telemetry data at SLDCs as per regulatory requirement	Qty	3	8,50,000	0.26



S. NO.	Description	иом	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Smart Substation functionalities viz, Fire Alarm, Suppression, Access Control, surveillance, smart electric fencing, rodent repallant system, smart UPS, WLD system, PA system etc.	Qty	5	20,00,000	1.00
	Upgradation and Integration work like NIFPS, AVR, TMU, wireless CTs, OLTC, Power Quality, condition monitoring etc.	LS	1	4,00,000	0.04
	SCADA monitoring of switching stations at consumer premises	Qty	5	2,00,000	0.10
	Sub-Total				1.40
	SCADA/DMS/OMS enhancement: Development, Scalablity and Integration activities on SCADA, DMS & OMS system with new platforms	LS	1	1,20,00,000	1.20
	Implementation of BMS/OMS Facilty/Smartgrid Lab	LS	1	55,00,000	0.55
	Upgradation/Development of Communication Systems	LS	1	75,00,000	0.75
	Field Area Network Automation	LS	1	1,35,00,000	1.35
	Smart Grid Initiatives	LS	1	3,71,42,000	3.71
	Business Continuity of GIS and associated Processes	LS	1	70,90,000	0.71
	New Initiatives in GIS	LS	1	95,00,000	0.95
	Implementation of CCTV based Surveillance System	LS	1	44,00,000	0.44
	Group Total				11.06



Table 5-42: Capex projected for Civil works & office Infrastructure Facility by the Petitioner for FY 2020-21

S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Civil Works & Office Infrastructure Facility				
	Boundary wall for new plots for 33/11kV substations	Location	2	55,00,000	1.10
	Boundary wall of 11/0.4 kV Txr Houses	Location	50	14,00,000	7.00
	Civil works at Transformer House	LS	1	1,20,00,000	1.20
	Civil works of 33/11kV Substation	LS	2	3,25,00,000	6.50
10	KP-4 control room Expansion Civil Works	Nos.	0.20	18,00,00,000	3.60
	KP-5 Customer care civil work	Nos.	1	-	
	Fencing	Location	-	-	
	Misc Electrical works	LS	50	1,85,658	0.93
	Misc Civil works	LS	1	50,00,000	0.50
	Vehicle for Operation Purpose (4 Wheelers)	Nos	1	50,00,000	0.50
	Vehicle for Operation Purpose (2 wheeler)	Nos.	20	12,00,000	2.40
	Other Office facility	LS	1	50,00,000	0.50
	Total				24.23

Table 5-43: Capex projected for IT projects by the Petitioner for FY 2020-21

S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	IT Projects				
	Implementation of Software Applications	LS	1	7,84,99,998	7.85
11	Upgrading of Hardware Infrastructure Capacity	LS	LS	86,00,000	0.86
	Upgrading of Networking Infrastructure	LS	LS	1,20,00,000	1.20
	Purchase of Computers, Peripherals & Accessories	LS	LS	1,25,00,000	1.25



S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Purchase of Software Licenses	LS	LS	4,02,00,000	4.02
	Total				15.18

Table 5-44: Capex projected for Tools and Testing equipment by the Petitioner for FY 2020-21

S. No.	Description	UOM	Quantity	Unit Cost (Rs.)	Total (Rs. Crore)
	Tools & Testing				
	Equipment				
	Meter Testing	LS	1	50,00,000	0.50
	Equipment		<b>-</b>	30,00,000	0.50
	Transformer Testing	LS	1	20,00,000	0.20
	Equipment		-	20,00,000	0.20
12	Testing Equipment	LS	1	1,30,50,000	1.31
	Material handling				
	equipment / Testing	LS	1	50,00,000	0.50
	Lab equipment				
	Metering Control				
	Room for Multi Point	LS	_	-	-
	Societies				
	Total				2.51

Table 5-45: Capex projected for Demand supply Management by the Petitioner for FY 2020-21

S. No.	Description	иом	Unit Cost (Rs.)	Total (Rs. Crore)
	<b>Demand Supply Management</b>			
	Roof-top Solar Panels			
	Small Solar Plants in Villages	LS		3.00
	Energy Management Initiatives	LS		
	Peak Load Management	LS		
13	Energy Storage	LS		
	Energy Management System Implementation	LS	3,00,00,000	
	Solar Pumps	LS		
	Distribution of CFL	LS		
	Distribution of Solar lanterns in rural areas	LS		



S. No.	Description	UOM	Unit Cost (Rs.)	Total (Rs. Crore)
	Promotion of Energy Saving / Reduction of Electricity Wastage	LS		
	Total	LS		3.00

Table 5-46: Capex Projected for Land Registration charges, Stamp Duty by the Petitioner for FY 2020-21

S. No.	Description	UOM	Unit Cost (Rs.)	Total (Rs. Crore)
14	Land (Registration charges, Stamp Duty etc.)	LS	3,16,25,000	6.33

- 5.7.3 The Petitioner submitted that the Capital Expenditure as submitted in Business Plan did not include the impact of capitalisation of expenses incurred during construction. Therefore, for the purpose of preparation of ARR for FY 2020-21 it has estimated the expenses to be capitalised during construction and has included the same in Capital Expenditure for FY 2020-21.
- 5.7.4 The Petitioner submitted that Regulation 20.1 of the MYT Regulations, 2019 provides the treatment for financing of the Capital Expenditure incurred by Licensee. The relevant extract of the Regulation 20.1 is provided herein below for reference:

#### " 20. Debt-Equity Ratio

20.1 For a capital investment Scheme declared under commercial operation on or after April 1, 2020, 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 18**, after making appropriate adjustment of Assets funded by Consumer Contribution/ Deposit Works/ Capital Subsidies/ Grant subject to prudence check for determination of Tariff:

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

...."



5.7.5 The Petitioner further submitted that based on regulations, the funding plan for Capital Expenditure for FY 2020-21 would be as provided in Table here below:

Table 5-47: Funding of capital expenditure as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	Ref.	Projected
Addition to GFA	а	195.20
Add: Closing CWIP	b	2.92
Less: Opening CWIP	С	22.92
Capital Expenditure	d=a+b-c	175.20
Add: Interest & Salary Capitalisation	e	-
Less: Assets Retired	f	(5.90)
Net Capex	g=d+e-f	169.30
Consumer Contribution	h	14.55
Capex to be financed	i=g-h	154.75
Debt - 70%	j=i x 70%	108.32
Equity- 30%	k=h x 30%	46.42

## **Commission's Analysis:**

# 5.7.6 The MYT Regulations, 2019 provides as under:

Quote

- 18 Capital Expenditure/ Cost and Capital Structure
- 18.1 Capital cost for a capital investment Project shall include:
- (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, as admitted by the Commission after prudence check;
- (b) capitalised initial spares subject to the ceiling rates stipulated in these Regulations;
- (c) expenses incurred by the Licensee on obtaining right of way, as admitted by the Commission after prudence check;
- (d) additional capital expenditure determined under Regulation 19;
- (e) Incidental expenditure during construction including apportioned expenditure on relevant components of O&M:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost;



(f) any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation, as admitted by the Commission after prudence check:

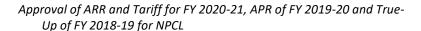
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- 19 Additional Capitalisation
- 19.1 The capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date, may be admitted by the Commission subject to prudence check:
- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 18;
- (iv) Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law; and
- (v) Change in law or compliance of any existing law

Provided that the details of works included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the Petition for determination of final Tariff after the date of commercial operation.

- 19.2 The capital expenditure, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:
- (i) Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments, etc.;
- (iv) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
- (v) Any additional capital expenditure which has become necessary for efficient operation





Provided that the claim shall be substantiated with the technical justification duly supported by documentary evidence like test results carried out by an independent agency in case of deterioration of assets, damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

- (vi) Any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, batteries, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, which has become necessary for successful and efficient operation of Transmission System; and
- (vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required:

Provided that any expenditure, which has been claimed under Renovation and Modernisation or repairs and maintenance under O&M expenses, shall not be claimed under Additional Capitalisation.

19.3 Impact of additional capitalisation on Tariff, if any, shall be considered during Tariff determination proceedings.

....

## 44 Capital Investment Plan

44.1 The Distribution Licensee shall submit a detailed Capital Investment Plan, financing plan and physical targets for each year of the Control Period for meeting the requirement of growth in number of consumers, strengthening and augmentation of its distribution network, meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval, as a part of the Business Plan:

Provided that in case of non-submission of the Capital Investment plan by the Distribution Licensee for a year of the Control Period, the Commission may disallow the Capital expenditure for that year.

- 44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.
- 44.3 The Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required including but not limited to the information such as number of distribution sub-stations, consumer sub-stations, transformation capacity in



MVA and details of distribution transformers of different capacities, HT:LT ratio as well as distribution line length showing the need for the proposed investments, alternatives considered, cost / benefit analysis and other aspects that may have a bearing on the Tariff for retail supply of electricity and the Wheeling Charges:

Provided that the Distribution Licensee shall submit separate details of Capital Investment Plan for each Distribution Franchisee area within its Licence area.

### Unquote

- 5.7.7 The Commission observed that there were certain schemes estimated by the Petitioner which have a capital outlay greater than Rs. Ten Crore. The Commission analysis query vide dated May 13, 2020 was asked from the Petitioner, that it shall segregate the identified Project/scheme wise capex plan along with tentative cost under the following categories:
  - to meet the requirement of load growth (new / augmentation)
  - refurbishment and replacement of equipment
  - reduction in distribution losses
  - improvement of voltage profile
  - improvement in quality of supply
  - system reliability
  - metering
  - communication and computerization
  - any other category (please specify)
- 5.7.8 The Petitioner in response to the above query vide dated June 22, 2020 submitted that:

  "The requisite details as desired have already been submitted to the Commission vide

  Annexure-9 to our reply letter dated 29th May, 2020 against the 2nd Deficiency Note

  dated 13th May 2020."
- 5.7.9 Further, the Petitioner submitted that the proposed capital expenditure has been classified as under—
  - A) EHV Schemes
  - B) Distribution schemes
  - C) System augmentation
  - D) System improvement
  - E) Schemes for loss reduction



- F) Metering schemes
- G) Capacitor
- H) SCADA / DMS etc
- I) Miscellaneous
- 5.7.10 With respect to the projects costing above Rs. 10 crores (Reference Regulation 44.2 of MYT Regulations, 2019), a query was sought from the Petitioner that it is directed to provide the following information (for each project separately):
  - Detailed methodology for estimating expenditure for each project of the capital expenditure schemes with components and costing and related documents i.e. detailed project reports (DPR), work orders, tenders issued for the projects and the schemes planned to be taken up.
  - Necessity for the project:
  - Whether the proposed capital investment is necessary to set up the infrastructure to meet normal load growth or to reach new consumers or for increasing administrative efficiency?
  - Whether equipment's proposed to be replaced are operating close to their rated capacities and equipment's are required to reduce the load on the existing equipment's to prolong its life, to increase the reliability of the system and to facilitate the creation of back up facility during scheduled maintenance operation?
  - Whether it meets at least the near future demand growth projections?
  - Technical justification:
  - The single line diagram for the proposed schemes duly differentiating the existing schemes vis-à-vis the newly proposed schemes?
  - Whether the scheme meets design & planning criteria in keeping with prevailing norms and standards?
  - Whether the replacement of old equipment is necessary and, if so, whether the existing equipment has outlived its normal life span?
  - Whether the proposed investment would improve the reliability of supply? (The reasons for procurement with justification must be given.)
  - Whether the investment is necessary for reduction in distribution losses?
  - Urgency:
  - Whether the capacity planned is commensurate with demand growth
  - Is it possible to defer the investment for its optimization?
  - Alternatives: