

Asset	GL No	Asset Description	Quantity	Additions	Per Unit Cost	Cost as per Cost data book 2016
19004623	21403	12 Mtr Long STPole	2	42,16,817	2108409	
19004624	21403	12 Mtr Long ST Pole	3	91,63,025	3054342	13620

2.2.218 He submitted the following observations:

- As per Cost data book 2016, the Commission allowed 11Mtr long ST Pole, however, the Petitioner has shown 12-meter-Long STP Pole which is contradictory to cost data book and also a non-compliance.
- Commission's approved cost of 11-meter-Long ST Pole is Rs.13620/unit as Annexure-22 of cost data Book but the Petitioner purchase price of 12-meter-Long ST Pole is the range of Rs.2108409 /unit to Rs.3054342/unit and such variation on a similar item is not possible.
- It may be possible that the amount mentioned by the Petitioner belongs to some other assets which were disallowed by the Commission or may be because of a forged entry.
- 2.2.219 Therefore, he requested the Commission that this is a matter of serious concern, as huge lapses are being highlighted. It is important to point out that previous years true ups need to be re-opened and are again scrutinized for such lapses and all such amounts shall be recovered from the Petitioner.
- 2.2.220 Based on the reply of the Licensee, he submitted that the Licensee has installed 12meter poles however the Commission has not approved 12meter poles. Also, the Licensee has not installed galvanized poles which are cheaper than the usual ones. He added that the O&M cost towards galvanized poles has to be much lower than normal poles as it has high life.
- 2.2.221 Shri Rama Shanker Awasthi further based on the reply of the Licensee has submitted that it appears from a detailed perusal of the Petitioner's filing that each of the capitalised expenses, the Petitioner has capitalised at extremely high value. However, when the Objector sought justification of such high costs, the Petitioner has neither provided the correct referencing of these assets, nor has it provided the correct base figures as approved by the Commission. The Commission has approved the cost data book from which the licensees need to take the cost whenever capex is done. However, the Licensee in its latest filing has not justified or explained any differences on asset procured vis a vis prices approved.



2.2.222 Shri Rama Shanker Awasthi submitted the following information regarding the ACSR Dog Conductor, as provided below:

Table 2-46: Details of ACSR Dog Conductor as submitted by the Objector

Asset	GL No	Asset Description	Quantity	Additions	Per Unit Cost	Cost as per Cost data book 2016 (Annexure-13)
20002063	21404	ACSR Dog Conductor	30	9,54,703	31823	
20002067	21404	ACSR Dog Conductor	90	19,74,749	21942	68.76
20002125	21404	ACSR DFog Conductor	30	5,59,746	18658	

- 2.2.223 He submitted the following observations:
 - Commission's approved cost of ACSR DOG Conductor is Rs.68.76/unit as per Annexure-13 of cost data Book. However, the Petitioner purchased ACSR Dog Conductor in the price range of Rs.18,658 per unit to Rs.31,823 per unit and such variation on a similar item is not possible.
- 2.2.224 Based on the reply of the Licensee, he submitted that the Petitioner vide the asset register has submitted that in respect of the Asset No. 20002063, there are 30 units of Dog Conductors. However, from the perusal of table for Asset No. 20002063 as provided by the Petitioner at Annexure 11 of its response, there are a total of more than 8414 units of Conductors 135 Rabbit conductors that are being capitalised under the Asset No. 20002063. Therefore, there is a clear discrepancy in this regard and one of the figures provided by the Petitioner is wrong. The Licensee has utilized insulated & PVC shethed Dog conductor 11kV of 1372 mtr which is not an item approved by the Commission and hence the same shall be disallowed. He added that WDV on the inflated cost of the assets as claimed by the Licensee after the expiry of the useful life of the asset would naturally be much higher as compared to the WDV on the approved cost of the assets that has been prescribed by the Commission vide its Cost data book. This difference is also significant and needs to be accounted for by the Commission.
- 2.2.225 Shri Rama Shanker Awasthi submitted that some assets were capitalised at zero value. It is submitted that If the value is zero, there is no need to capitalise the asset. He also mentioned that GFA preparation is shady and even statutory audit is a complete sham

Assets



at the Petitioner. He has submitted the assets capitalised at zero value in the table below:

Asset **Capitalized** Asset **GL No Asset Category** Capex Quantity Additions Description Date Insulator Transmission & **NPCL** 19004406 21403 Hardware for 31-03-2018 10 0 Distribution Assets HT 8.5 m long PCC **NPCL** Transmission 19004408 31-03-2018 21405 62 0

Table 2-47: Details of Assets capitalised at zero value

2.2.226 Further, he submitted that the Petitioner has stated SAP as shield to show transparency, however, in light of the above observation, it seems to be a complete "inefficient & malicious system" for consumers. This is a matter of serious concern and requested the Commission to investigate this matter by an internal committee of the Commission.

Pole for LT

Distribution

- 2.2.227 Altogether, he requested the Commission to set up an internal investigating committee to look into all the malpractices. It is submitted that the investigating committee should also examine whether the Work Orders issued for all the work to the various Firms / Companies are in place or not. The required certification / approvals of the Firms / Companies from various Govt. departments such as Labour Dept., Electricity Safety Inspector, among others should also be scrutinized. The actual verification of the work done shall also be done by the Committee. If any discrepancies are found, forensic audit shall be done for all the expenses made by the Petitioner.
- 2.2.228 Further, he requested the Commission that this is a matter of serious concern, as huge lapses are being highlighted. It is important to point out that previous years true ups need to be re-opened and are again scrutinized for such lapses and all such amounts shall be recovered from the Petitioner and his prayers are follows:
 - The Petitioner has created surplus capex in an illegal manner and based on this increased capex, the Petitioner have claimed ROE at the rate of 15.50%, depreciation, O&M and A&G Expenses on the surplus capex.
 - In the light of the above-mentioned deficiencies, serious illegalities & non compliances, a high-level investigation is required on all previous years' GFA.
 - The Petitioner has been doing non-compliance of Cost Data Book, and is overcharging the amount on all the assets, which attracts action and penalty under section 142 of



The Electricity Act, 2003 without prejudice of disallowance of the capitalisation/capex.

- The Commission may seek clarification from the Petitioner on the technical requirement of using higher side cables.
- It requested to the Commission to direct the Petitioner to provide Objector the data for the last 10 years of fixed asset register. The objector will carry out similar analysis on Assets Capitalization by the Petitioner and submit the finding before the Commission.
- 2.2.229 Based on the reply of the Licensee, he submitted that the Licensee has installed several cables of higher capacity at lower voltage profile. This is done to increase GFA to obtain higher depreciation, ROE, and O&M. He added that the Licensee has over and above the cost of the cable included the cost of pipes, clamps, jolting kits, nuts bolts, earthing rods etc and all the paraphernalia that is required for construction of a line or a substation along with the cost of asset as capex. The Petitioner has included the costs of 5 transformers of erection which is Rs. 9629 and the cost of supervision which is around Rs. 5413 in the cost of the Asset No. 14001495 as capex. It can be observed that Supervision Cost towards capitalisation of employee salary is added at 56% of installation cost which is done to avoid disallowance of 'Employee Expenses' under Operation and Maintenance expenses. It is case of double incidence of recovery from the consumers as for an expense which should have been disallowed, Petitioner has very cleverly diverted it to capital expenditure so as it can continue to claim for years depreciation, RoE & tax and O&M on such sham capital expenses.
- 2.2.230 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted the following observations regarding the capitalisation of assets at higher cost, as provided below:
 - 90% of transformers are consumer funded and at a much higher cost
 - All items are capitalised at much higher cost than market value.
 - The asset no 14001496, eight 25 kVa transformers are capitalised at Rs 20.48 lac i.e. each transformer at Rs 2.56 Lac
 - The asset no 14001482, six 100 kVa transformer are capitalised at Rs. 1.02 Crore i.e. Rs 17.06 lac each.
 - The asset no- 21004533, 18 meters of 3c x 300 Sqmm cable is capitalised at Rs 61.18 Lac i.e. Rs 3.4 lac per meter which is almost 500 times of market value
- 2.2.231 Accordingly, Capital Expenditure should be allowed only 10% of GFA provided by the Petitioner. The Commission should appoint an independent consultant to study Capital Expenditure of the Petitioner on following account:
 - Whether Capital expenditure was technically required.



- For a peak demand of 475 MW, 33kV consumption is 55%. Thus, Capital expenditure for T&D network for 33/11kV Substation, 11kV, 11/0.4kV and LT is required only for 225 MW. Against this 33/11kV substation capacity is 693 MVA. For 11kV, demand is 25% i.e. 120 MW. Thus, LT demand is only 100-110 MW, but 11/0.4kV capacity is 643 MVA. The technical aspect needs to be studied before approval of Capital Expenditure of the Petitioner.
- More than Rs. 55 Crore in IT project and Automation project is much higher. It needs to be deeply analysed including any advantage it is providing before approval by the Commission.

B. Petitioner's Response

2.2.232 As regards to the objection of Shri Rama Shanker Awasthi, the Petitioner submitted that it is required to establish an efficient distribution network for providing 24x7 power supply to its consumers as per their demand and cost of each and every asset is capitalized in the Fixed Assets Register (FAR). This activity is totally different than the recovery of cost from consumers as "Consumer Contribution" for providing new service connections as per the Cost Data Book, hence not comparable. The Petitioner also submitted that the Fixed Asset Register is created in accordance with the actual work executed as per the Work Orders issued and material consumed from time to time for the purpose of providing service which may be to one single consumer or many consumers altogether. Hence, the cost so capitalized against one Asset No. comprises of a number of materials and labour cost which cannot be compared with "Line Charges" as per Cost Data Book being recovered from the consumers. Further, it was submitted that the Objector has chosen certain fixed assets from the entire Fixed Asset Register and computed per unit cost from the total cost of such asset (which inter-alia includes the value of other assets as well) and compared the same with the cost prescribed under the Cost Data Book. The Petitioner further added that it has submitted the details of various items capitalised against the cost of one such fixed asset, which clearly depicts that a number of items are included in the cost of one such fixed asset and thus, the per unit cost so computed is completely misplaced when compared with the actual cost incurred with respect to such LT Substations, HT Substations, Cables, Conductors and Poles vis-à-vis the charges prescribed in the Cost Data Book. The Petitioner has submitted the comparison of costs incurred during FY 2018-19 on LT Substations, HT Substations, Cables, Conductors and Poles by the Petitioner vis-à-vis charges prescribed in the Cost Data Book for the kind perusal of the Commission. It is further mentioned that the costs contained in the Cost Data Book are based on cost incurred by UPPCL during FY 2014-15 / 2015-16 which is almost 3 years prior to FY 2018-19:



Table 2-48: Comparison of cost of LT Substations

	Comparison of Cost of LT Substations						
S. No.	LT Substation Capacity	Cost as per Cost Data Book-2016 in Rs.	NPCL Cost of Procurement during FY 2018-19 in Rs.				
1	25 kVA	1,31,800	1,03,451				
2	63 kVA	1,94,290	Not Procured				
3	100 kVA	2,26,310	2,12,077				
4	250 kVA	5,62,744	5,80,432				
5	400 kVA	Not Provided	10,12,740				

Table 2-49: Comparison of Cost of HT Substations

	Comparison of Cost of HT Substations							
S. No.	HT Substation Capacity	Cost as per Cost Data Book-2016 in Rs. Lakh	NPCL Cost of Procurement during FY 2018-19 in Rs. Lakh					
1	3 MVA	108.09	Not Procured					
2	5 MVA	134.94	Not Procured					
3	8 MVA	161.3	Not Procured					
4	10 MVA	166.48	Not Procured					
5	12.5 MVA	Not Provided	101.74					

Table 2-50: Comparison of Cost of cables and Conductors

	Comparison of Cables and Conductors						
S. No.	Item Description	Cost Per meter as per Cost Data Book-2016 in Rs.	NPCL Cost of Procurement Per meter during FY 2018-19 in Rs.	Remarks			
1	11kV 3C x 150 sq.mm. Cable	Not Provided	807				



Comparison of Cables and Conductors								
S. No.	Item Description	Cost Per meter as per Cost Data Book-2016 in Rs.	NPCL Cost of Procurement Per meter during FY 2018-19 in Rs.	Remarks				
2	11kV 3C x 300 sq.mm. Cable	1,644	1,266					
3	33kV 3C x 300 sq.mm. Cable	1,644	1,733					
4	33kV 3C x 400 sq.mm. Cable	Not Provided	2,083					
5	ACSR Dog Conductor without insulation	69	72					
6	ACSR Dog Conductor with insulation	Not Provided	127	Insulated Cable to prevent transient tripping due to Vegetation				
7	11 Mtr. STP Pole	13,620	Not Procured	Non-Galvanized				
8	12 Mtr. STP Pole#	Not Provided	20,366	60-micron Galvanized Poles				
9	13 Mtr. STP Pole#	Not Provided	29,177	60-micron Galvanized Poles				
# To m	# To maintain height of at-least 8 meter. from ground level in city area							

2.2.233 Further, the Petitioner mentioned about the report of Benchmark Study carried out in FY 2016-17 by M/s Feedback Infra in compliance to the directions of the Commission. The report, which has already been submitted to the Commission, not only benchmarks the operational performance and quality of power supply with national and international Discoms, but also compares the financial and capital cost parameters. From the report, it can be seen that the Capital Cost of the Petitioner are least when compared with other UP State Discoms. Also, for compliance of Regulation 21.4 of MYT Regulation, 2014 and Accounting Standards, the value equivalent to Consumer Contribution is allocated to the assets relating to new service connection like Meters, Service Lines, Poles etc. Further, the Petitioner does not claim any depreciation, interest and Return on Equity on such assets for the purpose of determination of ARR. It is mentioned that the cost of transformers is not recovered from the Consumers as



- mentioned by the Objector, however, since the transformer cost is also capitalized in FAR along-with other assets relating to new service connection like Meters, Service Lines, Poles etc., the Objector has made an erroneous and misleading interpretation that the transformer cost are also recovered from the consumers. Therefore, the Petitioner submitted that there are no serious lapses as alleged by the Objector.
- 2.2.234 As regards to the objection regarding the zero valued capitalised asset, the Petitioner submitted that the Objector has incorrectly and wrongly stated that the Petitioner has capitalized some assets at zero value. The Objector deliberately omitted the values shown under opening balances of these assets, against which no additions were made during the year, hence shown as zero. Thus, sweeping allegations levelled by the Objector against the Petitioner such as "inefficient and malicious system", "huge lapses" and "set-up an internal investigating committee to looking into all the malpractices" are completely false.
- 2.2.235 Further, the Petitioner reproduced the correct table with all relevant details for the perusal of the Commission, as shown in the Table below:

Extract of FAR for FY 2018-19 Amount in Rs. Gross Gross Asset Asset Asset Quantity Block Addition Retirement Block Number **Description** Category (Opening) (Closing) Transmission Insulator and 19004406 10 2,69,382 2,69,382 Distribution Hardware System for HT Transmission 8.5 m long & 19004408 **PCC Pole** 62 22,82,766 0 22,82,767 Distribution for LT System

Table 2-51: Extract of FAR or FY 2018-19

2.2.236 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that the construction of 33/11 kV Substations are done based on the area development plan of the GNIDA and also to cater the increase in localized demand. Lands for 33 kV Substations are allotted by the GNIDA based on its Master Plan for the development of the identified area. It is mentioned that the Petitioner constructs 33/11 kV Substation initially with one 12.5 MVA Power Transformer with the provision of second



Transformer in future as per the standard design with N - 1 reliability. Since the initial load of the newly developed Sectors / area is comparatively less, the MVA capacity as reflected would be more for some time. It is also to be noted that the peak demands of the different consumer categories are not concurrent and accordingly, it is observed that the peak load of LT consumers, mainly domestic & commercial, street lights, tube wells etc., used to be around 230 - 250 MW resulting 50% to 80% loading on the transformers. Further, it was submitted that the Petitioner has already provided detailed justification for all Capital Expenditure in Petition No. 1541 of 2019 dated December 27, 2019 as well as in the Petitioner's reply vide letter no. P-77A/ 2020/001 dated May 27, 2020 and Email dated June 22, 2020 respectively in response to the deficiency notes raised by the Commission vide letter no. UPERC/Secy/D(Tariff) 20-087 dated May 13, 2020 and letter no. UPERC/Secy/D(Tariff) 20-241 dated June 16, 2020.

2.2.237 As regards to the objections, the Petitioner did not submit any reply.

C. Commission's View

2.2.238 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

DEPRECIATION

A. Comments/Suggestions of the Public

2.2.239 Shri Rama Shanker Awasthi submitted that the cost of the retired assets for FY 2018-19 are booked at an inflated price, and is shown in the Table below:

S. No	Asset No	GL No	Asset	Asset Value	Depreciation value	WDV Rs.
1	14000641	21303	25kVA Transformer	70239	63215	7024
2	14000734	21303	25kVA Transformer	46845	41689	5156
3	14000576	21303	100kVA Transformer	72609	65348	7261
4	14000649	21303	100kVA Transformer	157018	141316	15702

Table 2-52: Cost of the retired assets for FY 2018-19

2.2.240 He submitted that capitalization of assets at an inflated price would result in a higher amount of depreciation claimed and it's also possible that higher depreciation will reduce the profit on sale/ retirement of assets. Further, the Petitioner has stated SAP as a shield to show transparency, however, it seems to be a complete "inefficient & malicious system" for consumers. Therefore, he requested the Commission to allow depreciation only after proper scrutiny of all assets entered into "Fixed Assets Register" prepared by the Petitioner. The depreciation should only be allowed after deducting



the refund amount of 220 KV, 132 KV substations and excess amount charged in all assets other than approved by commission in different cost data book from time to time. He further requested the Commission to analyse all such manipulative practices in the creation of GFA and claiming of depreciation. Further, the True up, APR and ARR in the present petition should only be allowed after analysing every aspect of the submission.

2.2.241 Based on the reply of the Licensee, he submitted that the Petitioner while claiming deprecation in respect of its assets has not been able to disclose when did which of its assets were declared to have achieved the COD and became part of its distribution network. In the absence of these details, it is not possible for the Petitioner to give an accurate figure of the depreciation that it is entitled to with justification for the same. In the absence of such justifications, the Hon'ble Commission ought not to allow any claims for depreciation as the claims are vitiated due to complete and utter lack of evidence that supports such claims.

B. Petitioner's Response

2.2.242 The Petitioner submitted that it has provided Depreciation in accordance with applicable UPERC (Terms & Conditions for Determination of Distribution Tariff) Regulations 2006, MYT Regulations 2014 and MYT Regulations, 2019 and has already submitted all requisite details to the Commission.

C. Commission's View

2.2.243 The allegations of the objector will need investigation, however such investigation cannot be part of the present proceedings of determination of ARR and Tariff for FY 2020-21 and may be dealt vide a separate Petition in this matter.

BAD AND DOUBTFUL DEBTS

A. Comments/Suggestions of the Public

- 2.2.244 Shri Rama Shanker Awasthi submitted that the Petitioner has shown collection efficiency at 100% for FY 2018-19 and in the same year the Petitioner has claimed Bad and Doubtful debts as Rs. 13.29 Crore, which in itself contradicts with each other. Therefore, he requested the Commission to disallow the claim for Bad & Doubtful debt in the true up for FY 2018-19. He further requested that in the previous years, the Petitioner has shown 100% collection efficiency and has got approved Bad & Doubtful debts to the tune of Rs. 15.64 Crore and 15.60 Crore for FY 2016-17 & FY 2017-18 respectively from the Commission. It is requested that previous years' true -up must be re-opened, and refund shall be adjusted in the true up for FY 2018-19.
- 2.2.245 Based on the reply of the Licensee, he submitted that while on hand the Petitioner has claimed its collection efficiency to be at the level of around 99.8%, it has quite



contrary to its own tall claims of recovery has asked for an allowance of a complete 2% of revenue as bad and doubtful debt. In view of the above it is clear that 2% is the ceiling limit upto which the part of revenue receivable can be allowed to the Petitioner as bad and doubtful debt. However, for that the Petitioner has to justify the same by providing the details of those debts that the Petitioner had to write off due to its inability to recover the same despite its best efforts. Therefore, to that extent the bad and doubtful debts are intended to be given on actuals with a ceiling limit on the same of 2%. The Petitioner has although claimed the complete 2% as bad and doubtful debt, it has conveniently glossed over the requirement of providing the details to justify such a claim, which is a necessary prerequisite in terms of this Commission own regulations.

B. Petitioner's Response

2.2.246 The Petitioner submitted that for the purpose of computing the collection efficiency, the revenue billed is adjusted with the opening and closing balance of debtors. Since, as per Accounting Standards and Schedule-III of the Companies Act, 2013, the value of debtors is being reported after reducing the provision for bad and doubtful debts, hence, the collection efficiency so computed at 99.64% is inclusive of provision for bad and doubtful debts for FY 2018-19. The Petitioner also submitted that it has been able to contain bad debts around 1% of the revenue as against 2% allowed as per Regulation 29 of MYT Regulation, 2014. However, the Objector fails to appreciate the same which further shows his gross bias against the Petitioner for the reasons best known to him.

C. Commission's View

2.2.247 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

MANAGEMENT AND OPERATION PERFORMANCE

- a) Increase in Momentary Average Interruption Frequency Index
- A. Comments/Suggestions of the Public
- 2.2.248 Shri Rama Shankar Awasthi submitted that in form P 14 submitted by the Petitioner, the average interruption index has increased for the period FY 2016-17 to FY 2018-19 from 0.38 to 0.56. On the contrary, huge expenditures are claimed under O&M expenses and Capex head, promising increased network efficiency and availability. He requested the Commission to look into the matter and direct the Petitioner to submit the cost benefit analysis of all capex that has been done to improve network efficiency and availability.
- 2.2.249 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that as per Form P 14, average interruption index is gone up from FY 2016-17 to FY 2018-19 from 0.38 to 0.56 in spite of huge expenditures under O&M expenses



and GFA. He requested the commission to disallow capital expenditures and O&M expenses for increasing MAIFI. He also mentioned that the Management of the Petitioner should be instructed to take training from institute like NPTI for learning proper maintenance of T&D network. Further, he submitted that the Petitioner has recruited unprofessional employees and they are showing high salary to them for such third-class performance.

B. Petitioner's Response

- 2.2.250 The Petitioner submitted that increment in transient tripping on overall system level that affecting MAIFI is due to improper Relay Setting Co-ordination between EHV Grid Substations, i.e. 220 kV RC Green & 132 kV Surajpur Substations, and 33 kV Substations of the Petitioner. Since relay settings of emanating 33 kV feeders from both the Substations (RC Green & Surajpur) have been done by UPPTCL at minimum level, i.e. I>> 1600 A with 0 sec delay & 1400 A with delay of 0.08 sec (in case of some feeders at RC Green), relays for downstream feeders in Petitioner's distribution network need to be set at a lower fault current, i.e. 1000 A with 0 sec delay, to restrict the fault at downstream only, leading to increase in tripping in case of transient fault.
- 2.2.251 The Petitioner also mentioned that whenever fault is occurring with fault current more than 4.8 KA at 11 kV level, 33 kV feeders emanating from 132 kV Surajpur / 220 kV RC Green are tripping along with the linked downstream 11 kV outgoing feeders at 33/11 kV Substation of the Petitioner or in case of 33 kV fault, it trips along with 33 kV outgoing feeders at 33 kV Switching Station of the Petitioner. Such tripping due to improper relay settings at EHV level has resulted in increase in MAIFI.
- 2.2.252 It was further submitted that, technically, any Circuit Breaker takes minimum 0.08 sec. (Relay Operating Time 0.02s + Lock out Relay 0.01s + Master Relay 0.01s + Circuit Breaker Opening Time 0.04s) to operate and isolate the fault. Since setting of DMT relay is done in time coordination, it is recommended to provide the time delay for both DMT I>> & DMT Ie>> more than 0.08 sec so that the nuisance tripping can be avoided at 33 kV feeders emanating from 220 kV RC Green and 132 kV Surajpur Substations and fault can be isolated with tripping of 11 kV or 33 kV downstream feeders of the Petitioner.
- 2.2.253 Further, the Petitioner regularly communicate with UPPTCL to amend the Relay setting accordingly for all 33kV emanating feeder from 220 kV RC Green & 132 kV Surajpur Substation, so that fault can be cleared at Petitioner's substation level only & frequent nuisance tripping of upstream breakers (33 kV Surajpur & RC Green) can be avoided. Relay settings of some of the feeders have been amended by UPPTCL and the Petitioner is confident that MAIFI will be improved once all the relays are suitably set as mentioned above.



C. Commission's View

- 2.2.254 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - b) Increase in no. of consumer complaint
 - A. Comments/Suggestions of the Public
- 2.2.255 Shri Rama Shanker Awasthi submitted that the Petitioner in form P 14, shows that percent of consumer complaints has increased from 23.6% to 30.6% for the period FY 2016-17 to FY 2018-19. On the contrary, huge expenditures are claimed under R&M expenses and Capex head, promising improved consumer services and efficient billing practices. Therefore, he requested the Commission to look into the matter and direct the Petitioner to explain the reason for such an increase in consumer complaints.
- 2.2.256 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that Form P 14 shows increased consumer complaint for FY 2016-17 to FY 2018-19 i.e. from 23.6% to 30.6%. He also enquired why huge expenditures are done on R&M expenses and new T&D network when they cannot provide better consumer services.
- 2.2.257 It was further submitted that number of complaints received per year to total number of consumers reached to 30.60%. It is recommended that Commission restrict Salary to KMP at Rs 1.0 Cr and Cars allotted to them. Similarly, salaries of other employees be brought at 30% without any luxury car. It will act as fighting factor to provide best of services and they will perform better. With salaries in crores and luxury car, the Petitioner's employees have no motivation to perform or to bring any results. Also, all employees beyond 60 years of age should be disallowed at full salary.

B. Petitioner's Response

- 2.2.258 It is submitted that in June 2018, the Petitioner substantially revamped its existing 24x7 Call Center facility increasing number of communication channels of IVRS and call center executives etc. Due to above, more numbers of calls have been logged and attended in the system, therefore reflecting higher numbers. However, at the same time, complaints have been resolved with-in the timeline mentioned in the SOP of Electricity Supply Code 2005 by Commission.
- 2.2.259 As regards to the objection of Shri Rama Shanker Awasthi, the Petitioner further resubmitted that in the prescribed RTF viz. P-14, the ratios from FY 2014-15 to FY 2017-18 has been computed based on the revenue and costs trued-up by the Commission vide various Tariff Orders from time to time while the same for FY 2018-19 are based on audited annual accounts which is yet to be trued-up. Similarly, the ratios for FY 2019-20 and FY 2020-21 are provided as per the latest estimated / projection for the respective years. Hence, the ratios from FY 2014-15 to FY 2017-18(based on trued-up)



numbers) cannot be compared with the ratios for FY 2018-19, FY 2019-20 and FY 2020-21 (based on actual/ projected numbers). Nevertheless, detailed justification of employee expenses has already been provided in Chapter 9 petition.

C. Commission's View

- 2.2.260 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - c) Meter capex and Meter defective ratios
 - A. Comments/Suggestions of the Public
- 2.2.261 Shri Rama Shanker Awasthi submitted that the Petitioner in form P 14, shows that meter defective and damage ratio has improved over the years, which is an improvement. However, contrary to this, in the capitalization plan, the meter capex has increased, which points to a genuine question of whether meter replacement is being done, irrespective of whether it is defective meters or not. Therefore, he requested the Commission to look into the matter and direct the Petitioner to explain the reason for such an anomaly.

B. Petitioner's Response

2.2.262 The Petitioner submitted that the Capex on metering as referred to by Objector is towards the installation of meter for new connection, replacement of post-paid meter with prepaid meter, main/check meters at distribution transformers, Group Meters etc. Further, the Petitioner submitted that the detailed justification for capital expenditure has been provided in Petition No. 1541 of 2019 dated December 27, 2019 as well as in the Petitioner's reply vide letter no. P-77A/ 2020/001 dated May 13, 2020 and Email dated June 22, 2020 respectively in response to the deficiency notes raised by the Commission vide letter no. UPERC/Secy/D(Tariff) 20-087 dated May 13, 2020 and letter no. UPERC/Secy/D(Tariff) 20-241 dated June 16, 2020.

C. Commission's View

- 2.2.263 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - d) Employee cost per unit of retails sales
 - A. Comments/ Suggestions of the Public
- 2.2.264 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that the employee cost per unit of retails sales has increased by 214% from FY 2016-17 to FY 2018-19. He submitted that employee cost as a percentage of total cost increased from 1% in FY 2017-18 to 3% in FY 2018-19. He also submitted that this happens when either salaries are increased multifold to same people or recruitment of many people at one go and, in any case, for the parameters of operational performance, the ratio should have decreased from 1 to 0.9 and not increased to 3%. He further



submitted that the Petitioner should optimize salary disbursal, must review its manpower requirement, so that employees who have become redundant should be transferred to other group companies. The Petitioner should provide details of employees directly or indirectly who have superannuated but still kept on Job as such employees should be paid a consultant fee at maximum 50% of their salary when they attained 60 years age, should be applicable to all cadres. He submitted that the Petitioner should take consultant services from HR experts to shed the flab and also, they should carry out Activity Based Costing Analysis (ABC analysis) so that if a Job position Requirement can be achieved at a cost of Rs. 1.0 Cr per annum, then paying Rs 6.0 Cr from Consumer account is not justifiable.

2.2.265 He submitted that the employee cost per unit of retail sales has increased from 7 paisa to 22 paisa from FY 2016-17 to FY 2018-19 i.e. 3 times, and is evident to the fact that the Petitioner management is splurging money to provide unreliable supply and unprofessional consumer services. He further submitted that they have increased contractual engagement of professional services at high cost too. It all indicates high level of mismanagement and diversion of funds.

B. Petitioner's Response

2.2.266 The Petitioner submitted that the observation of the objector is incorrect and misleading as may be seen from the following Table showing Employee Cost per unit of Sales over last six years: -

Comparison of Employee Expenses								
S. No.	Actual Emp Sales No. FY Exp. (Net)				Emp Exp./Sales	YoY Increase		
		Rs. Cr.	MU	Rs. / Unit	Rs. / Unit			
1	2014-15	17	1,310	0.13				
2	2015-16	21	1,377	0.15	17%			
3	2016-17	26	1,500	0.17	13%			
4	2017-18	34	1,668	0.2	16%			
5	2018-19	40	1,850	0.22	7%			
6	2019-20	47	2,081	0.22	4%			

Table 2-53: Comparison of Employee Expenses

- 2.2.267 Therefore, the Petitioner submitted that the findings of the Objector are incorrect and false.
- 2.2.268 The Petitioner further resubmitted that in the prescribed RTF viz. P-14, the ratios from FY 2014-15 to FY 2017-18 has been computed based on the revenue and costs trued-up by the Commission vide various Tariff Orders from time to time while the same for FY 2018-19 are based on audited annual accounts which is yet to be trued-up. Similarly, the ratios for FY 2019-20 and FY 2020-21 are provided as per the latest estimated /



projection for the respective years. Hence, the ratios from FY 2014-15 to FY 2017-18(based on trued-up numbers) cannot be compared with the ratios for FY 2018-19, FY 2019-20 and FY 2020-21 (based on actual/ projected numbers). Nevertheless, detailed justification of employee expenses has already been provided in Chapter 9 of the Petition.

C. Commission's View

- 2.2.269 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - e) Drastic increase in interruption due to problem in LT supply
 - A. Comments/Suggestions of the Public
- 2.2.270 Shri Rama Shanker Awasthi submitted that the Petitioner in form p6, interruption due to problems in LT supply in FY 2018-19 has increased over the preceding years. This implies a poor level of service being provided by the Petitioner in its area of operation where the Petitioner creates huge capex/investment in T&D network, IT projects and Process Automation system. He requested the Commission to direct the Petitioner to submit clarification in this regard because it is a matter of great concern and needs scrutiny and due to deteriorating performance requires deduction of amount and to compensate consumers of the Petitioner. He requested to the Commission to direct the Petitioner to submit clarification in this regard.
- 2.2.271 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that the increase in interruption shows poor workmanship of the Petitioner and the Petitioner's management should be instructed to appoint professional employees and terminate services of employees who are providing poor services to consumers. Further, he submitted that the Petitioner should also pay compensation as per Performance of Standards to consumers.

B. Petitioner's Response

2.2.272 The Petitioner submitted that data's regarding Consumer Complaints, interruption due to problem in LT supply is shown in P5 format and not in P6. It is submitted that the volume of complaints increased by merely 14% in FY 2018-19 over FY 2017-18. Further, it is submitted that the reliability index remained more than 98% both at feeder and consumer level.

C. Commission's View

2.2.273 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



f) Electrical Accidents

A. Comments/Suggestions of the Public

2.2.274 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that in P 12 there are 3 fatal accidents and Management of the Petitioner must provide details of accident; how it happened, who was responsible department head, what punishment is sanctioned to department head, what compensation has been awarded to deceased family. He requested the Commission that the Petitioner should not be allowed to include such compensation in O&M and in fact it should be from their RoE. He also submitted that the Petitioner must provide explanation regarding how it is reducing accidents when they have done shabby installations.

B. Petitioner's Response

- 2.2.275 The Petitioner submitted that the referred unfortunate incident occurred in March, 2019 which was duly reported to Directorate of Electrical Safety (DoES) and also, the corrective measures taken by the Petitioner are already provided in Format-P-12 of MYT Formats for APR of FY 2019-20 and reproduced here-in-below for reference: -
 - Safety Audit has been made a mandatory / routine activity along with propagation of safety awareness at every Consumer Meet.
 - 15 telephone lines with IVR Facility have been provided at our call center, where any distress call can be logged automatically. Further, separate number has been provided to report emergencies, fire events etc.
 - Patrolling of the feeders /lines are being done on weekly basis to arrest discrepancies, if any in the system.
 - Installation of locks on all feeder pillar boxes.
 - Erection of boundary wall of suitable height along with fencing of all pocket sub-stations handed over by GNIDA.
- 2.2.276 The Petitioner further submitted that compensations were paid to the family of the deceased in accordance with the UPPCL's official circular no. 4095/ 2016 19 dated October 13, 2016. (Compensation Claims due to electrical accidents to Humans). The compensation amount has not been claimed under O&M expenses.

C. Commission's View

- 2.2.277 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - g) Operating expenses / Revenue from Sale of power
 - A. Comments/Suggestions of the Public
- 2.2.278 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that ratio of operating expense to revenue from sale of power should not be



allowed to increase from 5% to 7%. He further submitted that the Petitioner is highly inefficient & unprofessional and if Commission allow this to continue, the Petitioner will surely become Indian Railways or Indian Airlines in few years. It is suspected that a lot of money is utilised by management to become inefficient at consumer expenses.

B. Petitioner's Response

2.2.279 The Petitioner further resubmitted that in the prescribed RTF viz. P-14, the ratios from FY 2014-15 to FY 2017-18 has been computed based on the revenue and costs trued-up by the Commission vide various Tariff Orders from time to time while the same for FY 2018-19 are based on audited annual accounts which is yet to be trued-up. Similarly, the ratios for FY 2019-20 and FY 2020-21 are provided as per the latest estimated / projection for the respective years. Hence, the ratios from FY 2014-15 to FY 2017-18(based on trued-up numbers) cannot be compared with the ratios for FY 2018-19, FY 2019-20 and FY 2020-21 (based on actual/ projected numbers). Nevertheless, detailed justification of employee expenses has already been provided in Chapter 9 of the petition.

C. Commission's View

- 2.2.280 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - h) Store's Inventory/1000 Km of distribution lines
 - A. Comments/Suggestions of the Public
- 2.2.281 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that in 2 years, Store's Inventory/1000 Km of distribution lines is increased by 20%. He submitted that when network is so highly underloaded, then where is the need of stores inventory. Therefore, the Petitioner shall reduce it by 20% from FY 2016-17 levels.

B. Petitioner's Response

2.2.282 The Petitioner submitted that it maintains reasonable level of inventory to provide 24x7 reliable power supply as well as energizing new service connections, load augmentation, timely repairs & maintenance etc. The consumption pattern and lead time of procurement are also guiding factors for maintaining inventory.

C. Commission's View

- 2.2.283 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.
 - i) Energy Sales (MU) per Employee
 - A. Comments/Suggestions of the Public
- 2.2.284 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad



submitted that with heavy investment in network, IT and Automation, Energy sales in MU per employee should be increased at least by 30% and keeping it same indicates increasing inefficiency in the Petitioner employees.

B. Petitioner's Response

2.2.285 The Petitioner further resubmitted that in the prescribed RTF viz. P-14, the ratios from FY 2014-15 to FY 2017-18 has been computed based on the revenue and costs trued-up by the Commission vide various Tariff Orders from time to time while the same for FY 2018-19 are based on audited annual accounts which is yet to be trued-up. Similarly, the ratios for FY 2019-20 and FY 2020-21 are provided as per the latest estimated / projection for the respective years. Hence, the ratios from FY 2014-15 to FY 2017-18(based on trued-up numbers) cannot be compared with the ratios for FY 2018-19, FY 2019-20 and FY 2020-21 (based on actual/ projected numbers). Nevertheless, detailed justification of employee expenses has already been provided in Chapter 9 of the petition.

C. Commission's View

2.2.286 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

NEW SERVICE CONNECTION

A. Comments/Suggestions of the Public

2.2.287 Shri Rama Shanker Awasthi submitted that as per data submitted by the Petitioner in form p 16, it shows no new service connections were released for a 6-month period in FY 2019-20 i.e. October 19 to March 20. He also mentioned that it appears that incorrect reporting is being done, and is a matter of serious concern. Therefore, he requested the Commission to direct the Petitioner to explain the above deficiency. Further, he mentioned that the Petitioner must provide the list of pending connections as on date for analysis. He also requested the Commission to have scrutiny by engaging a consumer survey in their area. He further submitted that the Petitioner ask for many documents for providing electricity connections and is requested to the Commission to kindly direct the Petitioner to provide domestic connection on application form and first page of property document only. For industry and commercial connections also, paper documents requirements should be minimized.

B. Petitioner's Response

2.2.288 The Petitioner filed its petition on December 27, 2019 accordingly the data provided in Form P 16 for FY 2019-20 was for new connections up-to September 30, 2019. This does not mean that the new connections were not given from October-2019 to March-2020 as alleged by the Objector again with malicious intention.



C. Commission's View

2.2.289 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

INCOME TAX PROVISIONS

A. Comments/Suggestions of the Public

2.2.290 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that a total of Rs 176.39 are allowed in excess on tax provisions. He submitted that as per MYT Regulations, ROE post tax does not allow tax liability of company by income tax department which can be due to many reasons. He also submitted that for FY 2020-21, Rs 69.69 Crore is the RoE and Rs 24.35 Crore is the tax liability whereas the Petitioner has shown Rs 37.44 Crore as taxes which means Rs 13.09 Crore is sought in excess. He mentioned that the Petitioner should also provide for previous years whether the Petitioner has actually paid this much amount as taxes to Income Tax department. He has also submitted the details of tax provision provided by the Petitioner, as shown in the table below:

Table 2-54: Details of tax provision as submitted by the Objector

		Past years			APR	Control Period
		FY 2016-17	FY 2017-18	FY 18-19	FY 2019-20	FY 2020-21
S.No.	Particulars	Trued- Up	Trued- Up	Claimed	Revised Estimates	Projected
Α	Income of FY	97.41	100.16	91.78	88.26	107.13
	Less:					
	Income exempt from taxation					
	Credits for carry forward of losses	-6.42				
	Income from Incentives					
	Net Taxable Income	90.99	100.16	91.78	88.26	107.13
	Tax Rate	34.61%	34.61%	34.94%	25.17%	34.94%
	Tax Amount	31.49	82.25	32.07	22.21	37.44
	Tax Demand	-	80.1	-	-	-
	Total Tax	31.49	162.35	32.07	22.21	37.44
	Depoist by Challan1					
	Depoist by Challan2					
	Sub-total					
В	Return on Equity	48.07	54.64	59.71	66.05	69.69
	Tax Rate	34.61%	34.61%	34.94%	25.17%	34.94%
	Tax Amount	25.44	28.92	32.07	22.21	37.44
	Tax Demand	6.05	121.65	-	-	-

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

		Past years			APR	Control Period
		FY 2016-17	FY 2017-18	FY 18-19	FY 2019-20	FY 2020-21
S.No.	Particulars	Trued- Up	Trued- Up	Claimed	Revised Estimates	Projected
	Total Tax	31.49	150.57	32.07	22.21	37.44
	Tax Recoverable from Consumers	31.49	150.57	32.07	22.21	37.44
	(Lower of A or B)	31.49	150.57	32.07	22.21	37.44
	Taxes as per MYT Regulations	16.64	18.91	20.86	16.62	24.35
	Excess Taxes Allowed	14.85	131.66	11.21	5.59	13.09
						176.39

B. Petitioner's Response

2.2.291 The Petitioner submitted that the challans in respect of income tax paid by the Petitioner are submitted to the Commission for verification based on which the same is approved. For FY 2020-21, the Petitioner will submit the challans for the income tax paid for verification and approval.

C. Commission's View

2.2.292 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

IMPACT OF COVID

A. Comments/ Suggestions of the Public

2.2.293 Shri Rama Shankar Awasthi submitted that in times of such economic distress, precipitated by the pandemic and other factors, the need for bringing down power purchase expenditures is even more critical. The impacts of the ongoing COVID-19 pandemic are likely to linger for the financial year ahead and will continue to affect demand recovery and the consumer's ability to pay. Therefore, he requested the Commission, to factor in the above factors while deciding the ARR and Tariff for FY 2020-21.

B. Petitioner's Response

2.2.294 The submitted that it has already revised its ARR for FY 2020-21 wherein the overall projected demand has been downwardly revised to 1867 MU as against 2499 MU originally projected and submitted on December 27, 2019. Thus, the revised demand projections are lower by 25% approximately.



C. Commission's View

2.2.295 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

SUPPLY HOURS

A. Comments/Suggestions of the Public

2.2.296 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that the Petitioner has provided 18-24 hours supply to LMV-5 and LMV-8 consumers against directive of 10 hours. He submitted that for revenue computation, LMV-5 and 8 consumption should be prorated for 10 hours for subsidy tariff and balance should be considered at cost of service as deemed revenue.

B. Petitioner's Response

2.2.297 The Petitioner submitted that the Principal Secretary (Energy), Govt. of UP vide letter no. 1686/24-P-3-2018 dated 3rd Aug'18 directed the Petitioner 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. Accordingly, the Petitioner is complying the above direction of the Govt. of UP. and submitting the monthly report on power supply position in Greater Noida to the office of the Principal Secretary (Energy), the Copy of such monthly reports are also marked to the Commission. It is clarified that the directives are for minimum supply hours and not for supplying power for more hours.

C. Commission's View

2.2.298 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

ADDITION OF NEW TRANSFORMERS

A. Comments/Suggestions of the Public

2.2.299 Shri Rama Shanker Awasthi has submitted the details of numbers and MVA capacity of power transformers and distribution transformers over the years, as shown in the table below:

Table 2-55: Details of power transformers and distribution transformers

Particulars	FY 2017-18	FY 2018-19	FY 2020-21			
Power Transformers						
Numbers	70	70	84			
MVA capacity	693	693	880			



Particulars	FY 2017-18	FY 2018-19	FY 2020-21			
Distribution Transformers						
Numbers	6211	6526	7056			
MVA capacity	610	643	688			

2.2.300 He has submitted that the MVA ratio of power transformer and distribution transformer in FY 2017-18 and FY 2018-19 was almost 1:1 which is proposed to be increased to 1:2 in a year's time. He submitted that the peak demand is provided only 475 MW and whereas 33kV load as per energy shown and connected consumer load shown is almost 50% and therefore for 240 MW of 11kV & LT load the Petitioner already have 693 MVA capacity. He further submitted that the Petitioner do not require even a single power transformer in FY 2020-21 or FY 2021-22 but a sudden surge has been observed in proposed power transformer MVA capacity addition for FY 2020-21, which is not commensurate with the Distribution transformers MVA capacity. Therefore, he requested the Commission to disallow the proposed excess expenditure on power transformers as this excess expenditure results in increased capex, and Return on Equity for the Petitioner, which further translates to increased tariff for end consumers. He further requested to direct the Petitioner to explain the basis for such excess power transformer capacity addition.

B. Petitioner's Response

2.2.301 The Petitioner submitted that the MVA Ratio of the Power Transformers and Distribution Transformers in FY 2017-18 was 1.14 which became 1.24 in FY 2019-20 and projected to be 1.26 in FY 2020-21, as given in the Table below:

Table 2-56: Details of transformers

Details of Transformers						
Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21		
Power Transformers						
Numbers	70	70	80	84		
MVA capacity (A)	693	693	818	868		
Distribution Transformers						
Numbers	6211	6526	6753	7056		
MVA capacity (B)	610	643	658	688		



Details of Transformers						
Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21		
MVA Ratio (A / B)	1.14	1.08	1.24	1.26		

- 2.2.302 Thus, the MVA ratio of the power transformers vis-à-vis distribution transformers is not 1:2 as incorrectly and wrongly stated by the Objector. The construction of 33/11 kV Substations are done based on the area development plan of the GNIDA and also to cater the increase in localized demand. Lands for 33 kV Substations are allotted by the GNIDA based on its Master Plan for the development of the identified area. The Petitioner submitted that it constructs 33/11 kV Substation initially with one 12.5 MVA Power Transformer with the provision of second Transformer in future as per the standard design with N 1 reliability. Since the initial load of the newly developed Sectors / area is comparatively less, the MVA capacity as reflected would be more for some time.
- 2.2.303 It is also submitted that the Petitioner adopts High Voltage Distribution System (HVDS) in case of LT Industries and PTW connections. The Petitioner has also standardized distribution transformer ratings, for e.g. 100 kVA transformer is installed for LT consumers having up to 50 kW load and 10 kVA & 25 kVA transformers are installed for PTW connections having 5 / 7.5 HP & 10 HP load respectively. Also, it was submitted that since GNIDA establishes basic electrical network in the newly developed sectors/areas with the standard transformer capacity of 400 kVA for Urban, which is subsequently handed over to the Petitioner for O&M, the Petitioner adopted the same network design while further upgrading the network due to increase in the load.
- 2.2.304 Further, the Petitioner submitted that the peak demand of the different consumer categories is not concurrent and accordingly, it is observed that the peak load of LT consumers, mainly domestic & commercial, street lights, tube wells etc. recorded around 230 250 MW resulting 50% to 80% loading on the transformers. The Petitioner submitted that the Objector is deft at creating sensation by misrepresenting the data without properly understanding and analyzing the information to mislead the Hon'ble Commission.

C. Commission's View

2.2.305 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



TRIPPING DETAILS

A. Comments/Suggestions of the Public

2.2.306 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that 1170 tripping on 24 feeders are shown in Format P8, i.e. 4 tripping per feeder per month at 33KV, which for LT consumer add in excess to tripping of 11kV feeder and tripping of distribution transformer. He also submitted that there is no one to monitor such operational performance and consumers in industry are forced to invest heavily in storage capacity despite of paying for gold-plated inflated T&D network.

B. Petitioner's Response

- 2.2.307 The Petitioner submitted that increment in transient tripping on overall system level that affecting MAIFI is due to improper Relay Setting Co-ordination between EHV Grid Substations, i.e. 220 kV RC Green & 132 kV Surajpur Substations, and 33 kV Substations of the Petitioner. Since relay settings of emanating 33 kV feeders from both the Substations (RC Green & Surajpur) have been done by UPPTCL at minimum level, i.e. I>> 1600 A with 0 sec delay & 1400 A with delay of 0.08 sec (in case of some feeders at RC Green), relays for downstream feeders in Petitioner's distribution network need to be set at a lower fault current, i.e. 1000 A with 0 sec delay, to restrict the fault at downstream only, leading to increase in tripping in case of transient fault.
- 2.2.308 The Petitioner also mentioned that whenever fault is occurring with fault current more than 4.8 KA at 11 kV level, 33 kV feeders emanating from 132 kV Surajpur / 220 kV RC Green are tripping along with the linked downstream 11 kV outgoing feeders at 33/11 kV Substation of the Petitioner or in case of 33 kV fault, it trips along with 33 kV outgoing feeders at 33 kV Switching Station of the Petitioner. Such tripping due to improper relay settings at EHV level has resulted in increase in MAIFI.
- 2.2.309 It was further submitted that, technically, any Circuit Breaker takes minimum 0.08 sec. (Relay Operating Time 0.02s + Lock out Relay 0.01s + Master Relay 0.01s + Circuit Breaker Opening Time 0.04s) to operate and isolate the fault. Since setting of DMT relay is done in time coordination, it is recommended to provide the time delay for both DMT I>> & DMT Ie>> more than 0.08 sec so that the nuisance tripping can be avoided at 33 kV feeders emanating from 220 kV RC Green and 132 kV Surajpur Substations and fault can be isolated with tripping of 11 kV or 33 kV downstream feeders of the Petitioner.
- 2.2.310 Further, the Petitioner regularly communicate with UPPTCL to amend the Relay setting accordingly for all 33kV emanating feeder from 220 kV RC Green & 132 kV Surajpur Substation, so that fault can be cleared at Petitioner's substation level only & frequent nuisance tripping of upstream breakers (33 kV Surajpur & RC Green) can be



avoided. Relay settings of some of the feeders have been amended by UPPTCL and the Petitioner is confident that MAIFI will be improved once all the relays are suitably set as mentioned above.

C. Commission's View

2.2.311 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

TRANSFORMER FAILURE

A. Comments/Suggestions of the Public

2.2.312 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that in addition to failure of 93 transformers in FY 2018-19, they have not included the figure of retiring transformers which are more than 30 in numbers. He also submitted that Transformer failure only happens when there is no R&M, but they have taken 500 employees and Crores of rupees in R&M by private agency to maintain substations.

B. Petitioner's Response

2.2.313 The Petitioner submitted that the Objectors has hypothetically assumed the loading of DT's capacity and is attempting to mislead the Commission. The loading of transformers cannot be seen by comparing the number of transformers with peak load of the Discom. The load utilization of each transformer depends on the load of the consumers being serviced through such transformer which is affected by the type of area, consumer density and load diversity etc. It is submitted that during FY 2018-19, 93 transformers were damaged which is only 1.43% of the total transformers. However, out of 93 damaged transformers, 76 were damaged in villages mainly due to bypassing / damaging of the LT protection system and only 17 transformers failed in urban & industrial areas.

C. Commission's View

2.2.314 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

LOOPHOLE IN ELECTRICITY BILLING SYSTEM

A. Comments/Suggestions of the Public

2.2.315 Shri Pramod Kumar Vishwakarma submitted that in the existing system in bill generation, the demand violation is monitored automatically and if the demand is violated for three continuous months, then the system will automatically increase the load of that particular domestic connection. He submitted that this clause of three continuous months normally does not meet or fulfill in North India as heavy loads are



being used continuously for only two months; either in summer or in winters and thus the load of the houses is not increased automatically. He also submitted that as a result of this loophole, the distribution infrastructure is not upgraded to cater the increased load of the summers and winters. He further submitted that this results in causing low voltages and breakdown of cables, insulators & transformer and also cause loss of money for the electricity department and the government. Therefore, he proposed that if demand is violated in any household in any day, then the load should be increased automatically and heavy fine should be instituted or the bill should be charged with new upgraded load fixed demand charges for upcoming months. Further, he submitted that this increased demand should be noted by the concerned electricity department and accordingly the distribution system should be charged with new upgraded to raised demand immediately. He also added that if the demand of any particular household is less than the fixed demand, charges to be reduced accordingly for that particular month.

B. Petitioner's Response

2.2.316 The Petitioner submitted that it is pertinent to mention that the summer season in fact starts from March and continues till June at least. Thereafter, due to high humidity, high consumption continues intermittently till September / October. Further, it is submitted that the Petitioner carries out load assessment of all LT consumers based on their actual load utilisation during April to June. A notice is issued to the defaulting consumers to apply for enhancement of load along with payment of necessary charges as per cost data book. Also, it was submitted that once the consumers apply, the load is enhanced immediately. However, in case if no reply is received, the load is increased by charging the applicable amount in their monthly bills.

C. Commission's View

2.2.317 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

POWER FACTOR DROP

A. Comments/Suggestions of the Public

2.2.318 Shri Harish Joneja, Sr. Vice President & Chairman Electricity Committee, NOIDA Entrepreneurs Association, submitted that they could not set things right at their factories due to the sudden announcement of lockdown. He submitted that even the Capacitors were not switched off, which leads to high electricity bill without even consuming the electricity. He further submitted that only light and fan were used by the guard during this period. Therefore, he requested the Commission to consider this situation sympathetically and help the Industry which is already suffering heavy



financial losses due to lockdown by allowing the billing for the lockdown on actual basis and also disregard the Power Factor drop.

2.2.319 He also submitted that due to the lockdown 11,000 industrial entities are getting affected. In this regard, there is no guide lines from electricity department in directing the industries. Due to lockdown, industries were closed and are facing acute financial crisis and industrialist are not able to bear the load of electricity bills. Therefore, he is requesting that during lockdown period, electricity bill should be considered as per kWh reading and direct the electricity department to do so.

B. Petitioner's Response

2.2.320 The Petitioner kindly submitted that billing on kVAH based Tariff is being done as per Rate Schedule approved by the Commission vide its Tariff Orders latest being September 03, 2019. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly. Also, the Petitioner submitted that Commission may kindly decide suitably.

C. Commission's View

2.2.321 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

CHARGING DEMAND CHARGES AND ELECTRICITY DUTY ONLY ON ACTUAL RECORDED DEMAND

A. Comments/Suggestions of the Public

2.2.322 Shri Sanjay Kumar Sapra, DGM -Administration & Facilities, M/s Inter Globe Education Service Limited, requested the Commission to salvage their struggling business by charging the demand charges and electricity duty only on the actual recorded demand instead of Billable demand.

B. Petitioner's Response

2.2.323 The Petitioner kindly submitted that Demand Charges are being billed as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. Further, Electricity Duty is being levied and collected based on directions provided by Government of Uttar Pradesh latest being notification no. 1845/XXIV-P-3-2012 dated September 13, 2012. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.

C. Commission's View

2.2.324 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



FIXED CHARGES RELIEF

A. Comments/Suggestions of the Public

2.2.325 Shri Harsh Shrotriya, requested the Commission to share the order of the electricity fixed charge relief to the consumers for one month who paid their dues by June 30, 2020 with the Petitioner as the Petitioner is unaware of the same.

B. Petitioner's Response

2.2.326 The Petitioner kindly submitted that Fixed Charges are being billed as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.

C. Commission's View

2.2.327 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

REMMISSION IN FIXED CHARGE

A. Comments/Suggestions of the Public

- 2.2.328 Srimati Pramila Agrawal, M/s Arvind Academy, requested the Commission to charge demand charge on actual load consumption instead of minimum charge from March 20 till lockdown of the educational institutions. She also submitted that the LMV-4 categories are not given the relaxations which were given to the Commercial and Industrial consumers.
- 2.2.329 Shri Vishnu Bhagwan Agarwal, Chairman, M/s ASSOCHAMUP requested the Commission to charge the electricity bill for the actual units consumed without any minimum charges.
- 2.2.330 Industrial Consumers (Indian Industries Association, Udyog Bandhu and Laghu Udyog Baharti) have given a representation to NPCL for waiving off the fixed charges similar to the waiver being granted by UPPCL (for LMV-2, LMV-6, HV-1 and HV-2 categories), billed during the lockdown period.

B. Petitioner's Response

2.2.331 As regards to the submission of Srimati Pramila Agarwal, the Petitioner kindly submitted that Demand Charges are being billed as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.



- 2.2.332 As regards to the submission of Shri Vishnu Bhagwan Agarwal, the Petitioner kindly submitted that Fixed Charges are being billed and recovered as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. Further, Electricity Duty is being levied and collected based on directions provided by Government of Uttar Pradesh latest being notification no. 1845/XXIV-P-3-2012 dated September 13, 2012. The consumers of the Petitioner as well as Industry Associations are also requesting for waiver of fixed charges and increased kVAh consumption against kWh consumption due to low power factor. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.
- 2.2.333 As regards to the representation made by the Industrial Consumers, the petitioner has submitted that the bills have been raised as per the Tariff approved by the Commission and any relaxation / waiver therein can be given only if approved and directed by the Commission.

C. Commission's View

2.2.334 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

PREPAID METERS

A. Comments/Suggestions of the Public

- 2.2.335 Shri Vishnu Bhagwan Agarwal, Chairman, ASSOCHAMUP, submitted that despite legal provisions, the Petitioner is not installing prepaid meters nor allowing the consumers to install the same which leads to very heavy loss to Consumers and Industrial Production.
- 2.2.336 Shri Sunil Pandey submitted that prepaid meter cost must be reduced below Rs. 5000.

B. Petitioner's Response

- 2.2.337 As regards to the objection of Shri Vishnu Bhagwan Agarwal, the Petitioner submitted that based on the request of the consumers the prepaid meters are installed by the Petitioner.
- 2.2.338 As regards to the objection of Shri Sunil Kumar Pandey The Consumer is requesting that the Company should charge below Rs. 5,000/- for metering (for conversion from Single Point to Multi Point connection) as against Rs. 15,000/- plus GST approved by the Commission.

C. Commission's View

2.2.339 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



ELECTRICITY DUTY

A. Comments/Suggestions of the Public

2.2.340 Shri Vishnu Bhagwan Agarwal, Chairman, ASSOCHAMUP requested the Commission to waive electricity duty when GST has come into force and also to refund the excess deposited.

B. Petitioner's Response

2.2.341 The Petitioner submitted that Fixed Charges are being billed and recovered as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. Further, Electricity Duty is being levied and collected based on directions provided by Government of Uttar Pradesh latest being notification no. 1845/XXIV-P-3-2012 dated September 13, 2012. The consumers of the Petitioner as well as Industry Associations are also requesting for waiver of fixed charges and increased kVAh consumption against kWh consumption due to low power factor. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.

C. Commission's View

2.2.342 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard. As submitted by the Petitioner, the Electricity Duty is solely in the purview of GoUP.

FIXED CHARGES

A. Comments/Suggestions of the Public

2.2.343 Shri Vishnu Bhagwan Agarwal, Chairman, ASSOCHAMUP, requested the Commission to waive fixed charges for 6 months till the Pandemic situation normalizes.

B. Petitioner's Response

2.2.344 The Petitioner kindly submitted that Fixed Charges are being billed and recovered as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. Further, Electricity Duty is being levied and collected based on directions provided by Government of Uttar Pradesh latest being notification no. 1845/XXIV-P-3-2012 dated September 13, 2012. The consumers of the Petitioner as well as Industry Associations are also requesting for waiver of fixed charges and increased kVAh consumption against kWh consumption due to low power factor. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.

C. Commission's View

2.2.345 The Commission has taken note of the objections/suggestions made by the



stakeholders and the reply of the Licensee in this regard.

DEDUCTION OF OTHER CHARGES

A. Comments/Suggestions of the Public

- 2.2.346 Shri Ghananand Shukla, Mahagun Mywoods enquired about the status of NPCL Order dated August 20, 2020 pertaining to deduction of Charges other than Prepaid Electricity from Energy Meter by the Builder. He submitted that apart from Electricity, Builder cannot deduct any charges other charges i.e. common area maintenance charges, vending charges, etc. from the prepaid meters installed permanently installed for measuring electricity supply. Further, he submitted that the Builder didn't separated the electricity charges even after the NPCL order and keep on continuing the scam and requested to share the status.
- 2.2.347 Victoryone Central Residents submitted that Intellect Project did not remove/delink CAM charges even after issuing the notice regarding the same.

B. Petitioner's Response

- 2.2.348 As regards to the objection of Shri Ghananand Shukla, the Petitioner submitted that, through its letter dated August 20, 2019 referred by the objector, vide its letters no. COMM/ FY 19-20/TARIFF/103 dated 13th Sep'19 and COMM/ FY 19-20/GH/100 dated 11th Dec'19 asked the Builder / RWA/ AOA to strictly comply with the Tariff Orders and Guidelines issued by the Commission. Due to non-response from the Builder / RWA/ AOA, the Company vide its letter dated 9th Jul'20 again directed as follows:
 - To ensure electricity is distributed at no profit no loss basis;
 - To delink CAM charges, Water Charges, Club Charges etc. from the Pre-paid Meters;
 - To get their accounts audited by Charted Accountants and to make available the same to the end Consumers/Residents;
 - Provide information concerning Total No. of Flats, Load sanctioned to each flat, Rate of Fixed Charges being charged to Flat Owners, Rate of Energy Charges being charged to Flat Owners, Total Fixed Charges received from Apr to Jun 2020, Total Energy Charges received from April to June 2020 and status of Audited Accounts for FY 2018-19 and FY 2019-20.
 - The Builder vide its letter dated September 22, 2020 submitted its reply addressing the complaint of Mr. Shukla.
- 2.2.349 As regards to the objection by Victory one Central Residents , the Petitioner submitted that with respect to complaints received from Residents, the Company vide its letter dated 27th Aug'20 had directed M/s Intellect Projects Limited to delink/ decouple CAM charges from Electricity Meter which has been confirmed by them vide their letter



dated 11th Sep'20.

C. Commission's View

2.2.350 The Commission has taken note of the Comments of the Stakeholder and reply of the Petitioner.

DOCUMENTS IN SECURED PDF

A. Comments/Suggestions of the Public

- 2.2.351 Shri Rama Shanker Awasthi submitted that the Petitioner has provided details in a secured PDF, which is not readable as it contains the details in a very small font size and therefore, conducting analysis was a tedious task, which is actually favorable to the Petitioner. However, he has reproduced some pdf (of FY 2018-19) into excel formats in order to bring out the serious issue for the consideration of the Commission. He also submitted that if the Petitioner transactions were transparent, they would not adopt such serpentine practice. He further submitted that the excel sheet can be provided for further analysis to the Commission. He also requested the Commission to direct the Petitioner to provide the documents in workable excel formats in future.
- 2.2.352 Based on the reply of the Licensee, he submitted that the tariff filing forms and the data placed on record by the Petitioner has been provided in pdf format which is barely legible and not searchable or readable as well. This causes a lot of issues in terms of securitising the various details provided. From whatever data that could be scrutinised by the Objector from the data that has been provided in the pdf format, the issues herein above have been identified by the Objector. It would not be farfetched to suggest that if the data is provided in the form of excel sheets, as it is prepared and retained by the Petitioner, it would not only help the Commission and the consumers in scrutinising this data, but shall also help in identifying the issues in a more expeditious and efficient manner.

B. Petitioner's Response

2.2.353 The Petitioner submitted that the complete information was uploaded on the website of the Petitioner in downloadable format as per the directions of the Commission.

C. Commission's View

2.2.354 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard. The Commission directs the Petitioner that while filing ARR/ Tariff Petition, it shall upload on its website the Petitions filed before the Commission along with all regulatory filings, information, particulars and related documents, which shall be signed digitally and in searchable pdf formats along with all excel files.



2.2.355 DIVERSION OF NPCL RESOURCES

A. Comments/Suggestions of the Public

2.2.356 Shri Rama Shanker Awasthi submitted that it has come to the knowledge from the market sources that CESC owned franchisee in Rajasthan are managed by the Petitioner management and is required to be investigated whether same works to same contractors are being given both at Greater Noida and at Rajasthan. He submitted that, it is doubtful that Contractors who are working both at the Petitioner and Rajasthan are paid some amount in the Petitioner's work orders to compensate their losses on work orders in Rajasthan. Further, he submitted that the resources at NPCL greater Noida are doubted being diverted to Rajasthan, thereby their GFA/capex claims appear to be shady and dubious. Therefore, he requested the Commission to direct the Managing Director of the Petitioner to give an affidavit to this statement to the Commission and for any such illegal act he must be personally responsible.

B. Petitioner's Response

2.2.357 The Petitioner submitted that the CESC, CESC Rajasthan (Distribution Franchisee) and the Petitioner engaged in power generation and distribution business are RPSG Group companies. For sharing of knowledge and best practices, these Companies not only interact with each other but also with other leading companies like Tata Power, BSES etc. There is no question of diversion of resources from any one company to the other company as alleged. Like legal and professional firms, suppliers of materials, the Contractors are also working simultaneously in many companies. It is their prerogative and decision to work with any company on their respective mutually agreed terms. For example, the contractors which are working with Tata Power, BSES distribution business may also be working with Torrent Power, CESC, NPCL etc.

C. Commission's View

2.2.358 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

STATISTICS OF NETWORK

A. Comments/Suggestions of the Public

2.2.359 Shri Avadhesh Kumar Verma, Chairman, M/s U.P Rajya Vidyut Upbhokta Parishad submitted that the Petitioner has shown coincident demand i.e. connected load of 800 MW and supply at 33kV is 52-55% which is fed by UPPTCL's substation. He submitted that this Coincident demand at 11kV and LT is 400 MW and peak demand at the rate of 60% LF is 240 MW. He enquired how the Petitioner is allowed to have 33/11kV Station capacity at 818 MVA i.e. 770 MW including 95% Power factor and is more than 3 times of required peak demand. He submitted that the Distribution transformer capacity is



stated at 688 MVA (654 MW at 95% PF) in FY 2020-21. At LT, demand of the Petitioner cannot be more than 100-110 MW and is almost 6 times. He submitted that the Petitioner should optimize capacity of distribution transformer. He also submitted that even for 10 kW of new connection, the Petitioner charge full DP structure making estimate in lacs whereas it should be provided maximum at Rs 22000 in Industry / institute area. He also submitted that for any consumer asking load 30 kW, estimate goes in lacs as they charge 100 kVA transformer as they don't have 63 kVA transformers as shown in GFA of FY 2018-19. Therefore, he requested the Commission to not allow any capex on DTs for next 10 years and also to save new consumers or other LT consumers from such high estimates by the Petitioner.

B. Petitioner's Response

2.2.360 The Petitioner is duty bound under the provisions of the Electricity Act, 2003 to provide electricity supply to its consumers on demand. The Petitioner's licensed area is spread over 335 sq. kms. and sparsely inhabited barring some areas.

Further, the Petitioner quoted clause 4.2 (b) of the ESC 2005 states as follows: -

- "(b) The Licensee shall meet the cost for strengthening / up gradation of the system to meet the enhanced demand of the existing consumers as well as future growth in demand. Such expenditure shall be allowed to be recovered from the consumers through tariff subject to financial prudence check by the Commission."
- 2.2.361 Also, it was submitted that the ESC 2005 mandates the distribution licensee to strengthen and upgrade its system to meet the enhanced demand of not only the existing and prospective consumers but also for future growth in demand. Accordingly, the Petitioner is required to establish an efficient distribution system to meet the demand of its existing and prospective consumers as well as growth in demand every year.
- 2.2.362 The Petitioner also submitted that the construction of 33/11 kV Substations are done based on the area development plan of the GNIDA and also to cater the increase in localized demand. Lands for 33 kV Substations are allotted by the GNIDA based on its Master Plan for the development of the identified area. It is mentioned that the Petitioner constructs 33/11 kV Substation initially with one 12.5 MVA Power Transformer with the provision of second Transformer in future as per the standard design with N 1 reliability. Since the initial load of the newly developed Sectors / area is comparatively less, the MVA capacity as reflected would be more for some time.
- 2.2.363 Further, it is to be noted that the peak demands of the different consumer categories are not concurrent and accordingly, it is observed that the peak load of LT consumers



(mainly domestic & commercial, street lights, tube wells etc.) used to be around 230 – 250 MW resulting 50% to 80% loading on the transformers.

2.2.364 The Petitioner added that the report of "Load Forecasting and Network Planning" carried out in FY 2016-17 by M/s Feedback Infra in compliance to the directions of the Commission that has already been submitted to the Commission, comprises not only the load forecasting for Petitioner's licensed area from FY 2017-18 to FY 2026-27, but also the Network Planning to meet such forecasted load over the same period. Accordingly, for the purpose preparing Capital Expenditure Plan for the Control Period, the Petitioner has relied on both the sales projections of the Petitioner and the study report conducted by M/s Feedback Infra. The detailed justification for Capital Expenditure Plan has already been provided in the Business Plan for MYT Control Period FY 2020-21 to FY 2024-25.

C. Commission's View

2.2.365 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

DUE DATE EXTENSION

A. Comments/Suggestions of the Public

2.2.366 Shri Vishnu Bhagwan Agarwal, Chairman, ASSOCHAMUP requested the Commission to extend the due date for payment in pending bills up to 30-6-2020.

B. Petitioner's Response

2.2.367 The Petitioner kindly submitted that Fixed Charges are being billed and recovered as per Rate Schedule approved by the Commission in its Tariff Orders latest being September 03, 2019. Further, Electricity Duty is being levied and collected based on directions provided by Government of Uttar Pradesh latest being notification no. 1845/XXIV-P-3-2012 dated September 13, 2012. The consumers of the Petitioner as well as Industry Associations are also requesting for waiver of fixed charges and increased kVAh consumption against kWh consumption due to low power factor. In case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.

C. Commission's View

2.2.368 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



NEXUS WITH BUILDERS

A. Comments/Suggestions of the Public

2.2.369 Shri Avadhesh Kumar Verma submitted that there is a nexus between the Petitioner and the builders as the Petitioner is providing connection at low voltage to the consumers whereas the builders are providing connection to the consumers at high voltage and both are earning from the consumers.

B. Petitioner's Response

2.2.370 The Petitioner submitted that the comment by the objector that the Petitioner has a nexus with the Builders is false and baseless. Also, the Petitioner added that if there is any specific complaint, the same may be brought to the knowledge of the Petitioner for appropriate action, as may be required.

C. Commission's View

2.2.371 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

NPCL SUPPLYING POWER IN PVVNL'S AREA AND PVVNL SUPPLYING POWER IN NPCL'S AREA

A. Comments/Suggestions of the Public

2.2.372 Shri Avadhesh Kumar Verma submitted that the Petitioner is providing power supply to two institutions in PVVNL'S area whereas PVVNL is providing power supply to the areas of the Petitioner.

B. Petitioner's Response

2.2.373 The Petitioner mentioned that the connections to M/s Supertech Up-country, M/s Galgotia University and M/s Noida International University were energised long back as PVVNL did not have its network in the said area, whereas, PVVNL has been granting electricity connections in Petitioner's area despite availability of Petitioner's network from the beginning. It was submitted that as per information available to the Petitioner, a list of details of such connections has been provided. The Petitioner from time to time has requested PVVNL to hand-over Petitioner's Consumers and 33/11 kV Ithera Substation to the Petitioner as well as take-over their above-mentioned consumers from a mutually agreed cut-off date. The Petitioner further submitted that it has not received any appropriate response from PVVNL, therefore, this matter has been brought to the kind attention of Chairman, UPPCL, Managing Director, Director (Commercial), Chief Engineer (Commercial), Chief Engineer (Distribution) Noida, Superintending Engineer (EUDC-2 Noida) of PVVNL and the Commission through various correspondence resting with letter no. E-9/86 dated 10.08.2020. The Petitioner has also submitted a copy of the same for the reference of the Commission.



C. Commission's View

2.2.374 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

OTS SCHEME

A. Comments/Suggestions of the Public

2.2.375 Shri Avadhesh Kumar Verma, submitted that government is providing OTS Scheme to domestic rural and agriculture consumers where 100 % interest is waived off by the DISCOMs for the past several years. He further submitted that it will be unfair to the consumers who are paying bills on time. He added that, an arrangement shall be done for the domestic (urban and rural) and agriculture consumers, those who are paying regularly, that if any consumer is not able to pay for any four months out of 12 months, then that consumer shall not be charged late payment surcharge for those four months. And this arrangement will be applicable to only those consumers who have paid regularly for 8 months in that financial year. The consumers who are regularly paying for 12 months, they shall be given rebate of 10 to 15% in the last month of the financial year.

B. Petitioner's Response

2.2.376 The Petitioner submitted that in case, any relief / relaxation is granted by the Commission, the Petitioner will implement the same accordingly.

C. Commission's View

2.2.377 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

IMPROPER REPLIES

A. Comments/Suggestions of the Public

2.2.378 Shri Rama Shanker Awasthi submitted that the Petitioner has not been providing complete replies to the objections provided every year. He requested the Commission to provide a time bound window opportunity to the public at large and objectors to submit counter replies to reply to the objections in order to make the public consultation meaningful and effective.

B. Petitioner's Response

2.2.379 The Petitioner has not submitted the reply for the Petitioner Objection.

C. Commission's View

2.2.380 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



CONVERSION TO MULTI POINT CONNECTION

A. Comments/Suggestions of the Public

2.2.381 Shri Sunil Kumar Pandey submitted that why there is not an easy mechanism to give Multi point connection at Builder Apartment & Gated societies where single point connection are running as of now.

B. Petitioner's Response

2.2.382 The Petitioner submitted that it is following the procedure for conversion from Single Point to Multi- Point as prescribed by the Hon'ble Commission vide 13th amendment to the Electricity Supply Code 2005. The said procedure has been further explained / clarified to the Consumers.

C. Commission's View

2.2.383 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.

MISCELLENEOUS

A. Comments/Suggestions of the Public

2.2.384 IRWO Palm Court Flat Owners Association, Rail Vihar submitted that it does not deal with Electricity Distribution for individual flats and it is dealt by NPCL. It is submitted that the details pertaining to individual flats must be with NPCL as Electricity supply is provided by NPCL under their individual contract. Further, it is submitted that collection of amounts from all flat is being taken by NPCL.

B. Petitioner's Response

2.2.385 As regards to the objection of IRWO Palm Court Flat Owners Association, the Petitioner submitted that it was in receipt of various complaints from several societies regarding non-compliance of the Commission's Tariff Order dated 3rd Sep'19. Hence, the Company vide General Notice dated 11th Dec'19 directed all the societies of Greater Noida for strict compliance of the aforesaid Tariff Order. Indian Railway Welfare Organisation ("IRWO") vide its letter dated 26th Dec'19 replied to the aforesaid notice confirming that it is complying with aforesaid Tariff Order of the Commission, a copy of which was also marked to the Commission.

C. Commission's View

2.2.386 The Commission has taken note of the objections/suggestions made by the stakeholders and the reply of the Licensee in this regard.



3 TRUE UP FOR FY 2018-19

3.1 BACKGROUND

3.1.1 NPCL have sought the final truing up of expenditure and revenue for FY 2018-19 based on actual expenditure and revenue as per audited accounts. In this section, the Commission has analysed all the elements of actual revenue and expenses for FY 2018-19 and has undertaken the truing up of expenses and revenue after prudence check of the data made available by the Petitioner.

3.2 INDEPENDENT AUDIT FOR FY 2018-19

3.2.1 The Independent auditor has submitted the details for True-Up of FY 2018-19. The observations made by the auditor have been taken into consideration while determining the True-Up of FY 2018-19.

3.3 NUMBER OF CONSUMERS AND CONNECTED LOAD

3.3.1 The Petitioner has submitted that the Commission in its Tariff Order for FY 2018-19 dated 22nd January, 2019 approved the No. of Consumers and Connected Load for FY 2018-19 at 87,806 and 986.22 MW respectively, based on the submissions made by the Petitioner, while, as per Audited Accounts, the actual number of Consumers and Connected Load are 91,234 and 934.60 MW, respectively, as shown in the Table below:

Table 3-1: No. of consumers and connected load for FY 2018-19 as submitted by the Petitioner

SI. No.	Category	No. of Consumers	Connected Load (MW)
1	LMV-1: Domestic Light, Fan & Power	81,390	355.18
2	LMV-2: Non-Domestic Light, Fan & Power	2,922	24.12
3	LMV-3: Public Lamps	206	10.41
4	LMV-4: Institution	675	6.61
5	LMV-5: Private Tube Wells	1,191	5.65
6	LMV 6: Small and Medium Power	2,933	66.82
7	LMV-7: Public Water Works	198	7.36
8	LMV-8: STW and Pumped Canals	10	-
9	LMV-9: Temporary Supply	810	22.22
10	HV-1: Non-Industrial Bulk Power	178	99.86
11	HV-2: Large and Heavy Power	721	336.38
	Total	91,234	934.60
	For FY 2017-18	82,231	832.37
	Growth over previous year	10.95%	12.28%

3.3.2 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, Central / State Govt. schemes like "Saubhagya" scheme etc., however, the actual number of consumers and connected load has varied because of variations in the aforesaid parameters.

3.4 ENERGY SALES

- 3.4.1 The Petitioner has submitted that in FY 2018-19, it recorded unrestricted peak demand of 374 MW against which it was able to supply 355 MW power due to restrictions imposed by UPPTCL/UPSLDC on transmission of power to Greater Noida area. In effect, the Petitioner was hindered from achieving higher sales levels it would otherwise have achieved.
- 3.4.2 The Petitioner has submitted that the approved sales of 1853.81 MU were computed based on various assumptions regarding various factors like free and uninterrupted import of power, supply hours, load shedding hours, power factor, consumption under various time blocks etc., however, the actual sales and revenue vary because of variations in the parameters, based on actual consumption and supply conditions.
- 3.4.3 The Petitioner has submitted that during FY 2018-19, it has recorded sales of 1850.07 MU reflecting growth of 11.17% over FY 2017-18. The actual category-wise sales for FY 2018-19 is shown in the Table below:

Table 3-2: Category-wise Energy Sales for FY 2018-19 submitted by the Petitioner (MU)

SI.	Catogory	Approved in Order	True Up
No.	Category	dated 22 Jan, 2019	Petition
1	LMV-1: Domestic Light, Fan & Power	494.68	452.36
2	LMV-2: Non-Domestic Light, Fan & Power	36.39	34.17
3	LMV-3: Public Lamps	32.50	35.65
4	LMV-4: Institutions	17.41	14.08
5	LMV-5: Private Tube Wells	31.7	25.83
6	LMV 6: Small and Medium Power	78.18	81.00
7	LMV-7: Public Water Works	20.39	19.20
8	LMV-8: STW and Pumped Canals	0.75	0.47
9	LMV-9: Temporary Supply	45.16	49.03
10	HV-1: Non-Industrial Bulk Power	205.06	217.65
11	HV-2: Large and Heavy Power	891.58	920.65
	Sub Total	1853.80	1850.07
	For FY 2017-18		1667.60
	Growth over previous year		10.94%



Commission's Analysis:

- 3.4.4 The Commission observed the Petitioner for LMV-3 has submitted the actual no. of consumers were 206 while as approved in the True Up of FY 2017-18, the actual no. of consumers were 20. Similarly, for LMV-8 in FY 2017-18 the actual No. of consumer was 1, while in the True Up Petition for FY 2018-19 it has submitted the no. of consumers as 10. The same was enquired from the Petitioner which further submitted that LMV 3 category belongs to consumers of Public Lighting. Due to internal reallocation of responsibilities, GNIDA has segregated one connection for multiple sectors into multiple connection based on respective Sector In-charge. Hence, there are increase in number of consumers. Similarly, the category of LMV 8 belongs to consumers of State Tube Wells, Panchayat Raj Tube Wells and Pumped Canals, who have also reconfigured their connections based on the physical assessment carried out in the field. Hence, there is an increase in the number of connections.
- 3.4.5 The Commission observed that the actual energy sales for FY 2018-19 is lower by 3.73 MUs than the energy sales approved for FY 2018-19 by the Commission vide Tariff Order dated January 22, 2019. The energy sales in FY 2018-19 represents a growth of 10.94 % over the energy sales in FY 2017-18. The Commission approves the actual energy sales at 1850.07 MU.
- 3.4.6 The category-wise energy sales approved for FY 2018-19 is shown in the Table below: Table 3-3: Category wise Sales for FY 2018-19 as approved by the Commission (in MU)

SI. No.	Category	Approved In T.O Dated 22.01.2019	True Up Petition	Approved upon Truing up
1	LMV-1: Domestic Light, Fan & Power	494.68	452.36	452.36
2	LMV-2: Non-Domestic Light, Fan & Power	36.39	34.17	34.17
3	LMV-3: Public Lamps	32.50	35.65	35.65
4	LMV-4: Institutions	17.41	14.08	14.08
5	LMV-5: Private Tube Wells	31.7	25.83	25.83
6	LMV 6: Small and Medium Power	78.18	81	81
7	LMV-7: Public Water Works	20.39	19.2	19.2
8	LMV-8: STW and Pumped Canals	0.75	0.47	0.47
9	LMV-9: Temporary Supply	45.16	49.03	49.03
10	HV-1: Non-Industrial Bulk Power	205.06	217.65	217.65
11	HV-2: Large and Heavy Power	891.58	920.65	920.65
	Sub Total	1853.80	1850.07	1850.07



3.4.7 The category-wise number of consumers, connected load and energy sales approved / Trued- Up for FY 2018-19 are shown in the Table below:

Table 3-4: Category wise No. of Consumers, Connected Load & Energy Sales as approved for FY 2018-19

SI. No.	Category	No. of consumers	Connected Load (MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	81,390.00	355.18	452.36
2	LMV-2: Non-Domestic Light, Fan & Power	2,922.00	24.12	34.17
3	LMV-3: Public Lamps	206.00	10.41	35.65
4	LMV-4: Institutions	675.00	6.61	14.08
5	LMV-5: Private Tube Wells	1,191.00	5.65	25.83
6	LMV 6: Small and Medium Power	2,933.00	66.82	81
7	LMV-7: Public Water Works	198.00	7.36	19.2
8	LMV-8: STW and Pumped Canals	10.00	-	0.47
9	LMV-9: Temporary Supply	810.00	22.22	49.03
10	HV-1: Non-Industrial Bulk Power	178.00	99.86	217.65
11	HV-2: Large and Heavy Power	721.00	336.38	920.65
	Sub Total	91,234.00	934.60	1850.07

- 3.4.8 The external auditor pointed in its report that there were 2527 unmetered consumers in LMV-1 category, 706 in LMV-5 category and 10 in LMV-8 category. However, the Petitioner vide email dated November 18, 2020 submitted that there were 2527 unmetered consumers under LMV-1 category as at March 2018 and the auditors might have mistakenly taken the number as the number of consumers as at Mar-19 as against actual number of consumers at 2426. Hence, the actual number of unmetered consumers as at Mar-19 were 2426. Further, the Petitioner submitted that for LMV-8 category during FY 2018-19, all the connections of State Tubewells were converted into metered connections and hence, the earlier 1 no. unmetered connection in LMV-8 category was converted into 10 metered connections. The esteemed auditors might have mistakenly mentioned 10 consumers under unmetered category as against metered category.
- 3.4.9 The Commission observed that the Petitioner have overbooked Sales in the unmetered categories with respect to the norms of sales approved by the Commission for the unmetered categories vide Order dated 09th December, 2016 in suo-moto proceedings in the matter of "Revision of consumption norms for unmetered category of consumers". As per this Order the consumption norms were applicable for 5 State Discoms which cover almost the whole State irrespective of regional and demographic variations and other variable parameters and as NPCL is also part of the State (NPCL) and shares boundaries with Discoms, hence it is assumed that the same norms can be



safely applied for NPCL also. The Commission has computed the excess sales booked by Petitioner, based on the above discussed normative consumption norms as under:

Norm kWh Per **Excess** Connected Total kWh Per kW per month Sales load/ Sales as per No. of Energy kW per consumers booked/ Category **NPCL** contracted Norms consumers Sales month (approved vide Sales demand approved (MU) consumers order dated under (MW) 9.12.16) booked Dom: Rural Schedule 2426 9.32 5.39 16.27 251.50 144 6.95 LMV 1 (unmetered) PTW: Rural Schedule 706 3.33 20.28 507.25 137.49 5.50 14.78 LMV 5 (unmetered) 21.73 Total

Table 3-5: Norms for NPCL for Sales

3.4.10 For the purpose of truing up, the Commission is not allowing the excess sales of 21.73 MUs booked under the unmetered categories and the corresponding treatment of the same has been done in the power purchase section. Accordingly, the Commission has approved the actual Sales of 1828.33 (1850.07-21.73) MUs and billing determinants i.e. No. of consumers and connected load (kW) as actuals, for FY 2018-19.

3.5 ENERGY BALANCE AND DISTRIBUTION LOSS

- 3.5.1 The Petitioner has submitted that 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.
- 3.5.2 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 with growing urbanization and allround 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) The Petitioner submitted that 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, the above practice is quite frequent and wide spread in Greater Noida Area.
- iii) The Petitioner submitted that hours of supply in rural areas has been increased i.e. from 12-16 hours to at least 18-22 Hrs in accordance with the State Government directions. In this regard, it submitted that it has been directed to provide 18 hours power supply in villages failing which action will be taken against it in accordance with the conditions of license of the Petitioner. Therefore, it had to further increase power supply in villages. However, it'll result into higher T&D losses and bad debts due to non-payment of bills.
- iv) Lowering of HT: LT ratio due to rise in LT consumers.
- 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 on March 2019, as many as 6118 cases were lying undecided at the Special Court while 329 FIRs and 5790 Complaint Cases were pending with the local police owing to their inaction. Further, due to such inaction of judicial / administrative bodies, as explained above, the enforcement drives conducted by the Petitioner also becomes ineffective and toothless.
- 3.5.3 The Petitioner has submitted that earlier 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, 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 Petitioner's efforts to contain its losses at 8%.



- 3.5.4 The Petitioner has 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, the Commission may consider and allow the marginal increase in losses as claimed by the Petitioner.
- 3.5.5 Notwithstanding the above, the Petitioner has submitted that it is trying its best through regular enforcement drives as well as social intermediation and has been able to contain T&D losses at 8.15% for FY 2018-19. Accordingly, the Distribution Losses as per Audited Accounts for FY 2018-19 are shown in the table below:

Table 3-6: Energy balance and distribution losses for FY 2018-19 as submitted by the Petitioner

Particulars	Approved in T.O. dated 22.01.2019	Actual
Energy Sales (MU's)	1853.81	1850.07
Distribution Loss %	8.00%	8.15%
Distribution Loss (MU's)	161.20	164.10
Energy Purchase (MU's)	2015.01	2014.17

3.5.6 The Petitioner has requested 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, the Commission may consider and allow the marginal increase in losses as claimed by the Petitioner and approve the actual quantum of power purchase of 2014.17 MU during FY 2018-19 in full.

Commission's Analysis:

- 3.5.7 The Commission observed that the Petitioner has mentioned energy purchase at distribution periphery as 2014.17 MU, however the monthly energy account (T-D interface points) issued by the SLDC for the Month of March 2019 dated 22/05/2019 mentions the same as 2010.92 MU. The Commission also noticed that the UPPTCL in its True Up filing for FY 2018-19 has mentioned the Energy handled at NPCL periphery as 2010.92 MU. The Commission in this regard sought the reasons for such variance for the same. The Petitioner in this regard submitted that energy balance mentioned in the Petition is inclusive of energy procurement from consumers through Net Metering, Captive Solar Plant installed at the roof-top of the Petitioner as well as the energy procured from the PPA entered with GNIDA for supply of 1 MW Solar power duly approved by the Commission which is not included in the energy account issued by SLDC.
- 3.5.8 The Commission further sought the detailed energy balance table including the Intra and Inter-State Transmission losses which the Petitioner provided as shown in the Table below:



Table 3-7: Energy Balance as submitted by the Petitioner for FY 2018-19

Particulars	Formulae	Actual (Mus)
Energy purchased from outside the State at		1,762.74
Gen ex- Bus (MU)	Α	1,702.74
Inter- State losses (%)	В	3.46%
Total Energy from outside the state at State		1,701.71
Periphery (MU)	C=A-(A*B)	1,/01./1
Intra- State losses (%)	D	3.75%
Energy at Discom periphery (MU)	E=C-(C*D)	1,637.84
Energy purchased directly at Discom		376.33
periphery (MU)*	F	3/0.33
Total Energy at Discom periphery (MU)	G=E+F	2,014.17
*Includes energy having delivery point at NPC	CL Bus	

- 3.5.9 It can be observed from the above Table that total Energy purchased by the Petitioner at ex-bus is 1762.74 MU. Intra-State transmission losses have been computed as 3.75% while, Inter-State transmission losses (PGCIL losses) are considered as 3.46%. After grossing off all the losses the energy required at Discom periphery by the Petitioner is 2010.92 MU and corresponding to the Total Sales is 1850.07 MU.
- 3.5.10 The Commission in Tariff Order dated January 22, 2019 approved the Distribution Losses of 8.00% for FY 2018-19. The actual Distribution Losses claimed by the Petitioner for FY 2018-19 comes to 8.15%, which is higher than the losses approved by the Commission. Considering the submissions made by the Petitioner, the Commission for the purpose of Truing Up for FY 2018-19 approves the same Distribution Losses as approved by the Commission in its Tariff Order dated January 22, 2019 as shown in the Table below:

Table 3-8: Approved Energy Balance for FY 2018-19

Particulars	Approved vide T.O. 22/01/2019	True Up Petition	Approved upon Truing up
Energy Sales (MU)	1,853.81	1,850.07	1,850.07
Distribution Loss %	8.00%	8.15%	8.00%
Distribution Loss including EHV losses (MU)	161.20	164.10	160.88
Energy Purchase at Discom Periphery (MU)	2,015.01	2,014.17	2,010.92



3.5.11 The actual Loss of FY 2018-19 as submitted by the Petitioner are as under:

Name of Discom	Energy at Discom Periphery	Sales	Actual Distribution Loss	Distribution Losses as Approved in Tariff Order dt.22.01.2019	Distribution Losses Claimed
	(MU)	(MU)	(%)	(%)	(%)
NPCL	2014.17	1850.07	8.15%	8.00%	8.15%

3.5.12 As computed in previous section, it is observed that by increasing the sales of Unmetered categories (LMV-1, LMV-5), the Petitioner has, not only claimed excess power purchase cost, but also, suppressed the actual distribution losses for the year. Taking into consideration the same, the loss computation comes out to be as follows:

Particulars	Energy at Discom Periphery (MU)	Sales (MU) approved after reducing excess sales booked under unmetered categories	Actual Distribution Loss computed (%)
NPCL	2014.17	1828.33	9.23%

3.5.13 From the above, it has been observed that the Petitioner have suppressed the actual distribution losses for the year FY 2018-19 by 1.08%.

3.6 POWER PURCHASE

- 3.6.1 The Petitioner has submitted that Commission in its Tariff Order dated January 22, 2019 has approved Power Purchase quantum and cost at 2015.01 MU and Rs. 1,020.01 Crore respectively.
- 3.6.2 The Petitioner submitted that in FY 2018-19 it recorded unrestricted peak demand of up-to 374 MW however it was able to draw power only up-to 355 MW due to the restrictions imposed by UPPTCL/UPSLDC on transmission of power to Greater Noida area. Although UPPTCL upgraded Bulk Transmission Agreement (BPTA) to 400 MW on 17th January, 2018, yet it signed Connection Agreement for 355 MW only and thereby limited the drawl of power by the Petitioner up to 355 MW.
- 3.6.3 The Petitioner has submitted that the total quantum of energy procured during FY 2018-19 was 2,014.17 MUs which includes power procured from Renewable Sources and Captive generation.
- 3.6.4 As regards the power procurement from LTPPA, the petitioner has submitted that on 26th September, 2014, the Petitioner signed a Power Purchase Agreement ("PPA") with of M/s Dhariwal Infrastructure Limited (hereinafter referred to as "DIL") for supply of 187 MW Power from Unit II of the plant. The said PPA has been approved by the Commission, vide its Order dated April 20, 2016, read with Order dated January 15, 2016. Thereafter, M/s DIL, on 6th September, 2017, filed Multi Year Tariff (MYT)



Petition No. 1235 for the control period FY 2016-17 to FY 2018-19, to determine Generation Tariff in accordance with the provisions of the approved PPA. The Commission after holding various hearings and considering the submissions of M/s DIL vide its Order dated 5th February 2019 approved the generation tariff for the period of FY 2016-17 to FY 2018-19 of M/s DIL.

- 3.6.5 The Petitioner has submitted that during FY 2018-19 it has met majority of the load of the consumers through LTPPA with M/s DIL which supplied 187 MW (Net 170 MW at DIL Plant Bus after 9% Auxiliary Consumption) RTC power. The Petitioner procured 1,086.15 MU power from M/s DIL during FY 2018-19.
- 3.6.6 The Petitioner has submitted that the Commission while approving the tariff of power from M/s DIL in its Tariff Order for FY 2016-17 to FY 2018-19 dated 5th February, 2019 observed as follows:

On scrutiny of the computation of levelized tariff it was observed that the levelized tariff has been computed based on the projected values of Energy Charges, PGCIL Charges, PGCIL Losses and Discounting Factor etc. The levelized tariff submitted by DIL at UP Periphery is as follows:-

Table-1: COMPARISON OF LEVELIZED TARIFF SUBMITIED BY DIL

Capital Cost (Rs. Crore)	Levelized Fixed Charges	Levelized Energy Charges	POC Charges	POC Losses	Total Levelized
1941	Rs. 1.93/kWh	Rs.2.21/kWh	Rs. 0.49/kWh	Rs. 0.16/kWh	Rs. 4.79/kWh
1927.65	Rs. 1.88/kWh	Rs.2.21/kWh	Rs. 0.49/kWh	Rs. 0.16/kWh	Rs. 4.74/kWh
1903.58	Rs. 1.86/kWh	Rs.2.21/kWh	Rs. 0.49/kWh	Rs. 0.16/kWh	Rs. 4.73/kWh

- 3.6.7 The Petitioner has further submitted that the Commission in Tariff Order dated 5th February, 2019, also observed that any claim on account of change in law and additional procurement of coal shall be dealt separately and decided the Fixed Charges and Energy Charges in the following manner:
 - "4.2.7 The Comparison of levelized tariff has been done based on the capital cost as on cut of date and additional capitalization proposed by the petitioner beyond the cutoff date. The effect of variations allowed by the Commission over and above the levelized tariff as per Order dated 15.01.2016 and 20.04.2016 viz. CERC Index, change in law and actual variation in interstate transmission charges have accordingly been excluded in above comparison.
 - 4.2.8 From above, it can be observed that the levelized tariff submitted by the petitioner is within the value of levelized tariff of Rs. 4.79/kWh at UP Periphery.
 - 4.2.9 The tariff at UP periphery shall have following components:-



Fixed Charges

Energy Charges

Inter State transmission Losses

Inter State transmission Charges

4.2.10 From above, it can be observed that the PGCIL charges and losses are beyond the control of the Petitioner, hence are to be reimbursed to the Petitioner as per actuals. The only fixed component is the fixed charges (treatment of energy charge is discussed subsequently). Therefore, the fixed charges shall be approved as follows:-

If levelized Fixed Charge claimed by Petitioner <= Rs. 1.93/kWh then the fixed charges as claimed by the Petitioner shall be approved

If levelized Fixed Charge claimed by Petitioner >Rs. 1.93/kWh, then the fixed charges shall be limited so that the levelized fixed charges does not exceed Rs 1.93/kWh.

4.2.11 It is observed from the petitioner's submission on computation of levelized tariff considering the capital expenditure of Rs. 1903.58 Crore (as on cut-off date) and the actual interest on loan for FY 2016-17 to FY 2018-19, that the levelized fixed charge is less than Rs 1.93/kWh (i.e. Rs. 1.86/kWh).

Therefore, the Commission has approved the fixed charges as submitted by the Petitioner considering the capital cost of Rs. 1903.58 crore.

4.2.12 A Comparison of the Fixed charges approved by the Commission with the PPA vis-à-vis claimed by the Petitioner and approved by the Commission in this Order is as follows:-

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	1.9	1.9	1.9
Levelized Fixed Tariff (25 years)	1.93	1.93	1.86	1.87	1.87

Note:

- 1. Revised submission is considered based on the capital cost of Rs. 1903.58 crore.
- 2. The levelized fixed charges has been computed based on CERC issued discounting rate of 13.10% applicable till 31.03.2014 (CERC stopped giving



discounting factor for computation of levelised tariff after change in bidding documents), and financial principles (i.e. Escalation in O&M Expense, Interest on Working Capital, Depreciation, Return on Equity and Interest on Loan) as per UPERC Tariff Regulations, 2014.

- 3. The Petitioner has vide its response to the queries raised by the Commission in Deficiency Note 2 dated 2-5-2018 stated that it has incurred one-time cost towards the fees and charges of Rs.9.67 Crore. associated with refinancing of domestic loan relating to the Unit 2 (300 MW). The Petitioner in terms of Regulation 25 (i) (e) has claimed to recover Rs. 6.03 Crore. in FY 2017-18 apportioned to the contracted capacity of 187 MW (Gross) from Unit 2 of the project. Since the 2/3rd of the benefit of reduction in rate of interest arising out of refinancing has been passed on to the Procurer, the one-time refinancing cost has been approved as claimed in FY 2017-18.
- 4. During approval of the PPA, estimated capital cost of Rs.1941 Crore. was considered. However, the Petitioner has vide its response to the queries raised by the Commission in Deficiency Note 2 dated 02.05.2018, submitted a total capital expenditure of Rs. 1927.65 Crore. with Rs. 1903.58 Crore. incurred on cash basis as on cut-off date of the project i.e. 31-3-2017 with further additional capitalisation of Rs. 10.50 Crore. and Rs. 13.57 Crore. (projected) on cash basis during FY 2017-18 and 2018-19 respectively. The Petitioner is directed to submit such claim for additional capital expenditure during truing up in terms of the Regulations.
- 5. The Petitioner has vide its response to the queries raised by the Commission in Deficiency Note 2 dated 02.05.2018 proposed to recover income tax in terms of Regulation 9 from the Beneficiary as and when such liability is incurred subject to the ceiling limit as prescribed therein. The Petitioner is directed to make such claim with the Procurer as and when such liability is incurred with evidence of payment.
- 6. The aforesaid approved rates for recovery of fixed charges are computed on the basis of NAPAF of 85%, subject to adjustments if any, in terms of Regulation 27 of UPERC Generation Tariff, 2014.
- 4.2.13 Further, with regard to approval of energy charge, it is observed that he Petitioner has claimed energy charge based on quality of coal as per third party test analysis at plant. Energy charge on account of change in law and additional coal procured other than FSA Coal, will be dealt by the Commission separately vide Commission's Order 19.02.2018. On the FSA Grade coal, the Commission had already taken a view in the order dated 20.04.2016 read with Order dated 15.01.2016 while approving the PPA. Accordingly, the commission approves the energy charge same as approved in PPA considering allowable variation in CERC escalation rates and as per Tariff Regulations 2014. Any claim with regard to



additional energy charge on account of change in law and additional procurement of coal shall be dealt separately.

- 4.2.14 The tariff approved above shall be subject to true up provisions based on the Tariff Regulations 2014. DIL will 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."
- 3.6.8 The Petitioner has submitted that the cost of power from LTPPA for FY 2018-19 has been provided on the basis of bills received by the Petitioner from M/s DIL in accordance with the aforesaid order in Audited Accounts for FY 2018-19. Thus, the total cost of power provided in Audited Accounts is Rs. 515.61 Crore (for 1086.15 Mus) as against Rs. 516.97 Crore (for 1170.54 Mus) approved by the Commission vide Tariff Order dated January 22, 2019.
- 3.6.9 The Petitioner has further stated that as per the directions of the Commission, M/s DIL has filed its True-up Petition for FY 2016-17 to FY 2018-19 before the Commission on 14th August, 2019, thus the cost of power provided in the Audited Accounts for FY 2018-19 is subject to the True-up Order of the Commission and the same will be adjusted in the year in which the True-up Order is received.
- 3.6.10 The Petitioner mentioned here that the above cost of power purchased from M/s DIL does not include the impact of such cost on account of the followings
 - i. **Petition No. 1319 of 2018** Petition towards cost of Additional Coal for FY 2017-18 submitted on 23-04-2018;
 - ii. **Petition No. 1318 of 2018** Petition towards cost of Additional Coal for FY 2018-19 submitted on 23-04-2018;
 - iii. **Petition No. 1440 of 2019** Petition towards Cost on account of Change in Law for FY 2016-19 submitted on 29-03-2019;
- 3.6.11 The Petitioner has submitted that it also procured 250.09 MU power under Medium Term Power Purchase Agreement (MTPPA) entered into with PTC India Ltd duly approved by the Commission vide Order dated 31st July, 2018. In accordance with the provisions of approved PPA, the cost of power procured during FY 2018-19 under MTPPA comes at Rs. 3.55/kWh as against approved Rs. 3.57/kWh.
- 3.6.12 Further, the Petitioner has submitted that in order to meet its RPO Obligation till FY 2018-19 as well as considering the availability of Renewable power at reasonable cost, the Petitioner has in aggregate procured 310.37 MU non-solar renewable power through open access.



- 3.6.13 The Petitioner further submitted that, during FY 2018-19, it has procured 1.26 MU solar power from GNIDA and generated 0.35 MU solar power from the solar generation plants at the rooftops of its office buildings. Apart from the above, the Petitioner has also granted several connections under the net-metering policy approved by the Commission in its Roof-top Solar PV Regulation 2015 which have generated 26.42 MU power during FY 2018-19 including 4.10 MU procured by the Petitioner from such net metering consumers.
- 3.6.14 Consequent to above-mentioned Renewable Power purchase, the cumulative RPO position at end of FY 2018-19 is provided in the following table:

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation
Solar	43.76	12.77	28.04	28.49
Non-Solar	231.95	63.83	310.37	-14.59
Total	275.71	76.59	338.4	13.9

Table 3-9:RPO Status for FY 2018-19 as submitted by the Petitioner

- 3.6.15 Apart from the Long-Term and Medium-Term Power, the Petitioner has also procured
 551.69 MU power in short term from Open Access at a weighted average cost of Rs.
 4.54/ kWh during FY 2018-19, which is well within the rate of Rs. 4.76/ kWh approved
 by the Commission for FY 2018-19 in its Tariff Order dated 22nd January'2019.
- 3.6.16 The Petitioner submitted that during FY 2018-19, in order to optimise the power purchase during off-peak hours / seasons and also to avail the benefit of surplus power via-a-vis demand during certain hours / days, the Petitioner leveraged the Power Banking arrangements to optimise its over-all power purchase cost. Some of the power banked during FY 2017-18 was availed during FY 2018-19 while some of the surplus power tied-up for FY 2018-19 was banked to be availed during summers of FY 2019-20 wherein the prices may be higher considering impending General Assembly elections and State Assembly elections. Accordingly, out of above-mentioned 551.69 MU power procured from short-term sources; the Petitioner utilised 204.91 MU towards Power Banking.
- 3.6.17 The Petitioner has further submitted that it is not possible to exactly estimate the day-ahead power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond the control of the Petitioner e.g. volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc., the power tied-up during such time if remained unused, may need to be sold through power exchange / bilateral contracts either by Petitioner directly or through power trading companies to optimize its power purchase cost. During FY



- 2018-19, the Petitioner had to sell 22.40 MU at Power Exchange out of the total procured short-term power of 551.69 MU.
- 3.6.18 The Petitioner further submitted that during FY 2018-19 the net over-drawl in Deviation Settlement Mechanism (DSM) was 37.46 MU against which an amount of Rs. 30.72 Crore has been determined as payable with respect to sign change deviation as per the provisions of 4th Amendment to CERC's DSM Regulation, 2014.
- 3.6.19 The Petitioner said that, in respect of the Power Banking and DSM over-drawl/under-drawl, the Commission in its Tariff Order dated 22nd January, 2019 has observed as follows:-
 - "5.4.7. As regards unscheduled Interchange transactions amounting to Rs. 4.34 Crore and Power Banking charges amounting to Rs. 3.51 Crore as claimed by the Petitioner, 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."
- 3.6.20 In addition to above, the Petitioner has also incurred transmission charges of Inter-State and Intra-State Transmission network aggregating to Rs. 184.31 Crore during FY 2018-19 as against Rs. 129.71 Crore approved by the Commission.
- 3.6.21 Based on the Audited Accounts for FY 2018-19, the actual Power Purchase Cost for FY 2018-19 vis-à-vis provisionally approved by the Commission vide Tariff Order for FY dated 22nd January, 2019, is given in Table below for approval of the Commission: -

Table 3-10: Power Purchase Cost for FY 2018-19 as submitted by Petitioner

SI. No.	Item	• •	ed Vide T.O January 201		Actual			
1	Retail Sales (MU's)		1853.81			1850.07		
2	Losses		8.00%			8.15%		
3	Power Purchase (MU's)		2,015.01			2014.17		
	Source of Power Purchase	MU's	Rs./kWh	Rs. Crore.	MU's	Rs./kWh	Rs. Crore.	
4	Power Purchase from LT	1,170.54	4.42	516.97	1,086.15	4.75	515.61	
5	Power Purchase from MT	246.84	3.57	88	250.09	3.55	88.74	
6	Power Purchase from Short term Sources:	315.71	4.76	150.28	324.39	5.04	163.62	
i	Open Access Power				551.69	4.54	250.22	
ii	Power Banking				-204.91	3.94	-80.73	
iii	Sale of surplus off-peak power at IEX				-22.4	2.62	-5.87	

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.	Item		ed Vide T.O January 201		Actual				
7	Power Purchase from RE	281.44	4.80	135.04	316.08	168.76			
8	DSM	-	-	-	37.46	-	30.72		
	Total	2,015.01	4.42	890.30	2,014.17	967.44			
9	PGCIL Charges			88.06			141.94		
10	UPPTCL Charges			41.65			42.36		
11	Total Power Purchase Cost	2,015.01	5.06	1,020.01	2,014.17	5.72	1,151.75		

3.6.22 Accordingly, the Petitioner submitted that the total Power Purchase Cost considered for True-up is Rs. 1,151.75 Crore including transmission charges. The Petitioner requested the Commission to approve the actual Power Purchase Cost of Rs. 1,151.75 Crore in full for FY 2018-19 as per the Audited Accounts.

Commission's Analysis:

- 3.6.23 Based on the above Trued-Up Energy Balance for FY 2018-19, the power purchase requirement as worked out by the Commission is 2010.92 MU.
- 3.6.24 The Commission observed that the Petitioner has claimed total power purchase cost of Rs. 1151.79 Crore, which includes the Transmission Charges of Rs. 184.31 Crore (as provided in Appendix-2 Tariff formats APR 20). However, Note 28 of the Audited Accounts provides the details as Rs. 980.60 Crore for Energy Charges and Rs. 171.19 Crore as Transmission Charges. Justification was sought from the Petitioner for the difference and reconciliation of the same. The Petitioner submitted that:

"This is to clarify that the Company has entered into the medium term PPA with M/s PTC for supply of 100 MW from 1st Dec 2018 to 31st March 2020 based on the L1 Tariff landed at NPCL-bus. The aforesaid agreement was duly approved by the Commission vide order dated 31st July, 2018. From the above, it may be seen that the tariff for power supplied by M/s PTC is inclusive of Inter-state and Intra State Transmission charges for which payment was being made to M/s PTC and UPSLDC respectively. Thus, in the audited accounts, the Power purchase cost is inclusive of Inter-state Transmission charges paid to M/s PTC India Limited.

While, in the Tariff formats, for the purpose of better understanding and comparison amongst the various sources of power, the inter-state Transmission charges of Rs. 13.13 Cr are segregated from energy cost and included under the inter-state transmission charges separately. It may be seen that in both the documents, the total power purchase cost including



Transmission charges are same. Hence, it is only a matter of presentation of information and there is no difference in the total power purchase cost."

Power procurement from Long-term sources

3.6.25 The Petitioner for FY 2018-19 has submitted that it has procured 1086.15 MU from DIL during FY 2018-19 for which the total cost claimed is Rs. 641.13 (including Transmission) Crore. The details of power purchase approved for FY 2018-19 vis-à-vis claimed by NPCL for FY 2018-19 is shown in the Table below:

Table 3-11: Power Purchase from Long Term Source (DIL) as submitted by the Petitioner

Sourc e	MU at Ex-bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charg es (in Rs. Crs)	Per Unit Fixed cost (NPCL Bus)	Energy Charges (in Rs. Crs)	Per Unit Energy cost (NPCL Bus)	Power Purchas e Cost (in Rs. Crs)	Total Trasmis sion Charges (Rs. Crs)	Total Power Purcha se Cost (Rs. Crs)	Total Per Unit Cost
DIL	1,175.37	3.99%	3.75%	1,086.15	251.90	2.31	263.71	2.42	515.61	125.53	641.13	5.90

3.6.26 The Commission in the matter of "Fixation of Tariff for supply of 187 MW from 300 MW Unit 2 of Dhariwal Infrastructure Limited to Noida Power Company Limited for the Tariff Period FY 2016-17 to FY 2018-19" in its Order dated February 05, 2019 in Petition No. 1235 of 2017 provided that:

Quote

- 4.2.1 The Commission approved the PPA vide Order dated 20.04.2016 read with Order dated 15.01.2016. In the said Order the Commission approved the fixed charges based on the estimated capital cost of Rs. 1941 Crore with a levelized tariff of Rs. 4.79/kWh at U.P Periphery.
- 4.2.9 The tariff at UP periphery shall have following components:
- (i) Fixed Charges
- (ii) Energy Charges
- (iii) Inter State transmission Losses
- (iv) Inter State transmission Charges
- 4.2.10 From above, it can be observed that the PGCIL charges and losses are beyond the control of the Petitioner, hence are to be reimbursed to the Petitioner as per actuals. The only fixed component is the fixed charges (treatment of energy



charge is discussed subsequently). Therefore, the fixed charges shall be approved as follows:

- If levelized Fixed charges claimed by Petitioner <=Rs. 1.93/kWh then the fixed charges as claimed by the Petitioner shall be approved.
- If levelized Fixed charges claimed by the Petitioner > Rs. 1.93/kWh, then the fixed charges shall be limited so that the levelized fixed charges does not exceed Rs. 1.93/kWh.

Unquote

3.6.27 The Commission vide a data gap query sought the details:

"Accordingly, the cost of power from LTPPA for FY 2018-19 has been provided on the basis of bills received by the Company from DIL in accordance with the aforesaid order in Audited Accounts for FY 2018-19. Thus, the total cost of power provided in Audited Accounts as per the bills raised by M/s DIL is Rs. 515.61 Cr as against Rs. 516.97 approved by the Hon'ble Commission vide Tariff Order dated 22nd January 2019.

In this regard, NPCL should provide the monthly bills for procurement of power from DIL in FY 2018-19."

- 3.6.28 The Petitioner in response to the query submitted the summary of bills and copies of sample bills of DIL.
- 3.6.29 The Commission observed sudden variations in FY 2018-19 power purchase from DIL wherein sudden very high / low values have been noticed which seem to be abnormal. The Petitioner in this regard submitted that:
 - "a) In Sep'18, DIL took shutdown for annual maintenance from 17.09.2018 to 30.09.2018 due to which the power off-take was lesser during the month, though in accordance with the terms of the PPA, the Company paid the capacity charge at Normative Availability and full transmission charges to PGCIL as per Transmission Service Agreement. It is pertinent to mention that the Long-Term Transmission charges are paid to PGCIL at 100% LTOA capacity i.e. 170 MW, irrespective of the actual off-take by the beneficiaries.
 - b) Subsequent to the MYT Order dated 05.02.2019, M/s DIL raised bills for arrears towards the differential tariff amounting to Rs. 60.76 Cr for FY'2016-17 to FY'2018-19. The above amount was included in the power purchase cost in the month of Mar'19.



c) Further, as already submitted vide reply dated 29th May 2020, as per LTPPA with M/s DIL for supply of 170 MW power, LTA has been granted by PGCIL (CTU) in two parts, viz., 58 MW in existing system and the balance 112 MW in Champa-Kurukshetra Pole-1. Accordingly, the PoC bills for applicable transmission charges were raised by PGCIL to DIL (being the long-term applicant) on monthly basis. The monthly amount, so billed, is being reimbursed by NPCL as per the terms of the LTPPA.

From November 2018 onwards, PGCIL also started raising monthly PoC bills for 170 MW LTA from Existing line in addition to 112 MW from Champa-Kurukshetra line which resulted into higher PoC bill than the previous average monthly bill in accordance with CERC Order dated 22.02.2018 in Petition No. 13/TT/2017 determining HVDC charges pertaining to Champa-Kurukshetra Pole-1 line. As per the aforesaid Order, Hon'ble CERC approved sharing of HVDC charges for Champa-Kurukshetra Pole-1 line as per Regulation 11 (4)(3) (iii) instead of 11 (4)(3)(i) of the Sharing Regulations 2010. Consequently, transmission charges for the period Nov'18 to Mar'19 increased by Rs. 23.80 Cr.

Subsequently, on the Review Petition filed by PGCIL & Other beneficiaries on the above erroneous treatment of sharing of HVDC transmission charges under Regulation 11(4)(3)(iii) instead of 11(4)(3)(i) of Sharing Regulations 2010, the Hon'ble CERC vide its Order dated 31.07.2019 allowed the above Review Petition and directed PGCIL to refund the excess LTA charges to the beneficiaries in FY 2019-20."

- 3.6.30 The Commission has taken the note of the same, but the Petitioner did not submit the bills of Arrear. The Commission for the True Up for FY 2018-19 has not considered the said amount and will take into consideration after the True Up of DIL.
- 3.6.31 The Petitioner further vide mail dated September 24, 2020 submitted the details of Long Term Power Purchase from DIL as shown in the Table below:

Table 3-12: Computation of Charges for DIL at rates approved in T.O dated February 05, 2019 as submitted by the Petitioner

SI. No.	Particulars	Ref.	U.o.M.	FY 19	FY 20	FY 21
1	Tied-up Capacity	Α	MW	187	187	187
2	Less: Auxiliary Consumption @9%	b= a x 9%	MW	16.83	16.83	16.83
3	Total Capacity Availability	c=a-b	MW	170.17	170.17	170.17
4	Normative Capacity Availability @ 85%	d=c x 85%	MW	144.64	144.64	144.64
5	Energy Generation from 1 MW per year	E	MU	8.76	8.78	8.76
6	Normative Energy Availability	f= d x e	MU	1,267.09	1,270.56	1,267.09



SI. No.	Particulars	Ref.	U.o.M.	FY 19	FY 20	FY 21
7	Capacity Charges per Unit	G	Rs./kWh	1.90	1.90	1.90
8	Capacity Charges Payable on Normative Availability	h= f x g	Rs. Cr.	240.75	241.41	240.75
9	Actual Energy Available at Ex-Bus	1	MU	1,175.37	1,130.46	1,198.23
10	Less: Inter State Loss	J	MU	49.01	43.40	46.73
11	Actual Energy Available at NR	k=i-j	MU	1,126.36	1,087.06	1,151.50
12	Capacity Charge corresponding to Actual Energy available at NR	l=k x g	Rs. Cr.	214.01	206.54	218.79

- 3.6.32 It can be seen that the per unit cost of power for DIL at NPCL bus has increased vis-à-vis approved in Tariff Order dated January 22, 2019 for FY 2018-19. Further, since the True-Up of DIL Petition has not yet been finalized, the fixed and energy charges of Rs.1.90/kWh and Rs. 1.80/kWh respectively as approved in Order dated February 05, 2019 in Petition No. 1235 of 2017 has been considered for FY 2018-19 in this Order. The effect of True-up shall be considered as and when it happens.
- 3.6.33 For True Up for FY 2018-19, the Commission has considered the quantum at UP periphery for computation of fixed and energy charges of DIL by considering the same Inter-State transmission losses as submitted by the Petitioner. The Intra-State Transmission Losses are considered same as approved in True Up of FY 2018-19 for UPPTCL vide Order dated November 10, 2020. The effect of True-up shall be considered as and when it happens. The Transmission charges are approved as per actuals. Accordingly, the Long-Term power from DIL (including Transmission cost) for FY 2018-19 approved as shown in the Table below:

Table 3-13: Power purchase from Long Term source as approved for True Up of FY 2018-19

Sour ce	MU at Ex- bus	Inter State Loss (%)	Intra State Loss (%)	Quantu m at UP Periphe ry (MU)	MU at NPCL bus	Fixed Charge s (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	Transmissio n charges of PGCIL (Rs. Crore)	Transmissi on Charges of UPPTCL (Rs. Crore)	Total (Rs. Crore)	Per Unit Rate
	А	В	С	D	E	F=D*1. 9/10	G=D*1.8 /10	H=G+F	-	J	L=J+l+ H	M=L/ D*10
DIL	1,175.37	4.17%	3.57%	1126.34	1,086.15	214.01	202.74	416.74	104.15	21.38	542.2 7	4.81

Power procurement from Medium Term source:

3.6.34 The Petitioner vide its Petition No. 1325 of 2018 sought the adoption of tariff and approval of agreement for procurement of 100 MW Power through DEEP Portal. The Commission vide its Order dated July 31, 2018 in the Petition No. 1325 / 2018 has approved the same as shown in the Table below:



Source	Power Gene Limited lo	r Project (Unit II) of SKS ration (Chhattisgarh) ocated at Raigarh, hattisgarh
Quantum at NPCL Periphery (MW)		100
Cost of Generation (Rs./kWh)	А	1.64
Cost of Transmission charges (Rs./kWh)	В	0.65
Cost of Transmission Losses	С	0.32
Total Tariff at NPCL periphery (Rs./kWh)*	D=(A*2) + B+C	4.25

3.6.35 The details of Medium-term Power purchase with Transmission as submitted by NPCL is shown in the Table below:

Table 3-14: Power procurement for Medium Term for FY 2018-19 as submitted by the Petitioner

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
MTPPA- (PTC India Ltd.)	250.09	0.00%	0.00%	250.09	37.21	51.52	88.74	13.13	4.84	17.97	106.71	4.27

- 3.6.36 The Commission vide it Order dated July 31, 2018 in the Petition No. 1325/2018 has provided that:
 - "6. Petitioner has justified the aforesaid medium term power of 100 MW for the period mentioned herein above. Since the rates have been discovered through electronic portal of the agency designated by Govt. of India, the Commission adopts the all inclusive rate of Rs. 4.25 per /kWh at NPCL Periphery for the aforesaid power."
- 3.6.37 The Commission observed that the Petitioner has claimed the power purchase of 250.09 MU for Medium Term at the rate of Rs. 4.27/kWh. The Commission in additional data gap sought the details related to Medium term power purchase for which the detail was provided by the Licensee as shown in the table below:

Table 3-15: Power procured from M/s SKS power Generation through PTC during True Up for FY 2018-19

Source	Thermal Power of SKS Powe (Chhattisgarh) at Raigarh, Chh	Limited located	Claimed by NPCL in True UP for FY 2018-19
Quantum at NPCL Periphery (MW)		100	250.09



Source	of SKS Pow (Chhattisgarh	Thermal Power Project (Unit II) of SKS Power Generation (Chhattisgarh) Limited located at Raigarh, Chhattisgarh			
Cost of Generation (Rs./kWh)	Α	3.28	3.23		
Cost of Transmission charges (Rs./kWh)	В	0.65	0.69		
Cost of Transmission Losses	С	0.32	0.32		
Total Tariff at NPCL periphery (Rs./kWh)*	D= A+B+C	4.25	4.24		
*Note: 1) Availability from SKS during FY'2019-20	was 79.38%.				

²⁾ Transmission charges are to be paid as per actual in terms of the PPA dated 06.04.2018, hence the variation.

3.6.38 The Petitioner also submitted that in the reply that:

"Apart from the above, SKS Generation has claimed an amount of Rs. 20.68 Cr towards transmission charges and reimbursement of electricity duty, taxes etc. for the term of MTPPA i.e. Dec 2018 to Mar 2020 which has been included in the cost of power procured from SKS Generation. In this regard, M/s SKS has also filed a petition before the Hon'ble CERC on 18.02.2020 pressing its aforesaid claim. The petition is yet to be admitted. "

3.6.39 The Petitioner further vide email dated September 15, 2020 submitted the details of duty charges for FY 2018-19 and FY 2019-20 as shown in the Table below:

Table 3-16: Details of Charges for Medium Term Source as submitted by the Petitioner

Particulars	Ref	FY 20)18-19	FY 20	19-20
Energy Imported in MU at NPCL Bus (as per Tariff Formats)			250.0851		653.0521
		Rs. Cr.	Rs./kWh	Rs. Cr.	Rs./kWh
Energy & Capacity Charges	а	80.73	3.2283	219.18	3.3563
Cost of Energy Lost in transmission	b	8.00	0.32	20.98	0.32
Energy Cost	C=a+b	88.73	3.5483	240.16	3.6775
PGCIL Charges	d	12.41	0.4963	47.34	0.7249
UPPTCL Charges	е	4.84	0.1935	11.61	0.1778
Landed Cost (before additional Claims)	f=c+d-e	105.99	4.2381	299.11	4.5802
Add: Additional Claim for:-					
Energy Charges (FY 2018-19)	g	-	-	5.42	
Energy Charges (FY 2019-20)	h	-	-	11.09	
Subtotal	i=g+h	-	-	16.51	0.25
Transmission charges	j	0.72	0.0288	3.46	0.0529
Total Additional Claim	k=i+j	0.72	0.0288	19.97	0.3057
Landed Cost (As per Tariff Formats)	l=f+k	106.71	4.2669	319.07	4.8859



- 3.6.40 The Commission is of the view that any charges over and above the approved tariff of Rs. 4.25/kWh cannot be allowed to be passed on to the consumers. Further, since the claim of the Petitioner with respect to Duty charges is still in dispute, the same is not being considered in this True Up Order for FY 2018-19.
- 3.6.41 Further, the Commission has considered lower of the two i.e. claimed vs approved for each components of tariff for approval of procurement of power from Medium Term source. The medium-term power procurement from SKS power generation for FY 2018-19 is approved as shown in the Table below:

Table 3-17: Approved Medium-term purchase for FY 2018-19

Supplier's Name	MU Imported at NPCL	Fixed Charges (Rs. Crs)	Energy Charges (Rs. Crs)	Amount (Rs. Crs)	Transmission charges of PGCIL (Rs. Crore)	Transmission Charges of UPPTCL (Rs. Crore)	Total Trans. Chgs (Rs. Crs)	Total (Rs. Crore)	Per Unit Cost (Rs. /kWh)
	Α	B=1.615*A/10	C=1.615*A/10	D=B+C	E=0.65*A/10	F=0.32*A/10	G=E+F	H=G+D	I=H/A*10
MTPPA- (PTC India Ltd.)	250.09	40.39	40.39	80.78	16.26	8.00	24.26	105.04	4.20

Power procurement from Renewable sources:

3.6.42 The Commission in its UPERC (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment) Regulations, 2019 provided the RPO Obligation to be met by the Licensee as shown in the Table below:

Voor	Minimum quantum of purchase from renewable energy sources as % of total energy consumed (in kWh)			
Year	Non-Solar	Solar	Total	
	1	2	3=1+2	
2018-19	5.00	1.00	6.00	

Table 3-18: RPO details as submitted by NPCL for FY 2018-19

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation
Solar	43.76	12.77	28.04	28.49
Non-Solar	231.95	63.83	310.37	(14.59)
Total	275.71	76.59	338.40	13.90

3.6.43 The Commission vide its Order dated November 15, 2018 approved the RPO Target as shown in the Table below:



Table 3-19: RPO Target approved by the Commission vide its Order dated November 15, 2018

S. No.	Particulars	Expected RE Procurement 31.03.2019	Power by
1	Non-Solar Power RE Obligation to be completed till 31.03.2019		301.74
а	Achieved till 31.8.2018		147.38
b	planned as per available contracts during 1.9.2018 to 31.3.2019		141.72
С	Planned to procure on day-ahead basis according to demand during 1.9.2018 to 31.3.2019		12.64
2	Solar		57.72
a.	Solar Power-GNIDA during FY 18-19		1.24
b	Solar Power-GNIDA during FY 18-19		23.90
С	Solar Power- Captive Plants during FY 18-19		0.40
d.	Solar Power-STOA from Inter-State sources (From Oct18 to Mar 19 during 09-18 hrs)		32.18
3	Total		359.46

3.6.44 The Commission subsequently amended the UPERC (Promotion of Green Energy through Renewable Purchase Obligation), 2010 vide notification No. UPERC/Secy/Regulation/10-787 dated August 16, 2019. The Commission through this Regulation introduced Hydro Power Obligation which provides that:

"Provided that from FY 2016-17, the Renewable Purchase Obligations shall be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power (not covered under HPO)"

3.6.45 The Commission observed that the Petitioner for MPPL (Non-Solar) has claimed 0.07% as Inter State Transmission Loss. The Ministry of Power vide its Order No. 23/12/2016-R&R dated February 13, 2018, the inter-State transmission charges losses and charges are waived off for Solar and wind sources of Energy. In this regard the Commission sought the reasons for consideration of transmission losses for the same. The Petitioner in this regard submitted that:

"This is to clarify that as per MoP Order No. 23/12/2016 – R&R, the non-solar power procured from MPPL was exempt from inter-state transmission charges and losses and accordingly, the Company has not claimed any transmission charges or losses with respect to the aforesaid power. The Hon'ble Commission may kindly refer to RTF "PPC FY 19" which shows 0.07 MU as transmission loss against the total procurement of 97.78 MU equivalent to 0.0% of the total power procured. The aforesaid difference of



0.07 MU is because of rounding off differences in the REA accounting and has been shown under transmission losses."

3.6.46 The Petitioner through an Affidavit dated June 21, 2019 submitted the details of RPO as shown in the Table below:

Table 3-20: RPO accrued & fulfilled upto FY 2017-18 and balance carried forward as at FY 2017-18 as submitted by the Petitioner

Description	Reference	MU
Total sales from FY 10-11 till FY 17-18	а	9,627.30
Non RE and RE Hydro Power Procured		
Non RE Hydro Procured	b	1221.42
RE Hydro Power Procured	С	165.41
Total Hydro (RE and Non RE Power)	d=b+c	1386.83
Solar Power Procured		
Renewable Power Solar & Net Metering	е	8.96
Total Solar (RE and Net metering)	f=e	8.96
Net Power Sale for RPO computation	g=a-d-f	8231.51
Total Obligation upto FY 2017-18		
Solar	h	72.03
Non Solar	i	397.36
Total Obligation upto FY 2017-18	j=h+i	469.39
Total Obligation fulfilled upto FY 2017-18		
Solar	k	28.28
Non Solar	I	165.41
Total Obligation fulfilled upto FY 2017-18	m=k+l	193.69
Balance RPO upto FY 2017-18		
Solar (plus Shortfall) (minus Surplus)	n=h-k	43.76
Non Solar (plus Shortfall) (minus Surplus)	0=i-l	231.95
Net Balance RPO upto FY 2017-18 c/f	p=n+o	275.71

Table 3-21: RPO accrued & fulfilled in FY 2018-19 and balance carried forward as at FY 2018-19 as submitted by the Petitioner

Description	Reference	MU
Projected Sales	Α	1850.07
Non RE and RE Hydro Power Procured		
Non RE Hydro Power Procured	В	257.48
RE Hydro Power Procured	С	310.37
Total Hydro (RE and Non RE Power)	d=b+c	567.85
Solar Power Procured		
Renewable Power Solar & Net Metering	E	5.72
Total Solar (RE and Net Metering)	f=e	5.72
Net Power Sale for RPO computation	g=a-d-f	1,276.50
Total Obligation (%) for the Year		
Solar	Н	1.00%



Description	Reference	MU
Non Solar	l	5.00%
Total Obligation (MU) for the Year		
Solar	j=g*h	12.77
Non Solar	k=g*h	63.83
Total Existing /Proposed Obligation for the Year	L=j+k	76.60
Obligations to be fulfilled in the current year for previous		
years		
Solar	M	43.76
Non Solar	n	231.95
Net Balance RPO	o=m+n	275.71
Total Obligation met as per present arrangements		
Solar	Р	28.04
Non Solar	Q	310.37
Total RPO to be met as per Current PPAs	r=p+q	338.41
Balance Obligation to be met for the year / previous years		
from future PPAs/ REC		
Solar Shortfall /(Surplus)	s=j+m-p	28.49
Non Solar Shortfall /(Surplus)	t=k+n-q	-14.59
Total RPO to be met from future PPAs/ REC	u=s+t	13.90

3.6.47 The Commission asked the Petitioner to provide the monthly bills and agreements for power purchase made through MPPL (Solar). In this regard the Petitioner submitted the details as shown in the Table below:

Table 3-22: Summary of Power Purchase made through MPPL (Solar) as submitted by the Petitioner for FY 2018-19

SI. No.	PPA Source Location	Delivery Point	Energy at Delivery Point	Transmission Losses	Energy at NPCL Bus	Energy Charges	Transmission Charges	Total Cost
			MU	MU	MU	Rs. Cr.	Rs. Cr.	Rs. Cr.
1	Manipur	NR	1.20	0.07	1.13	0.58	0.06	0.64
2	Mizoram	NPCL	25.61	0.00	25.61	14.09	0.10	14.19
3	Himachal	NPCL	71.04	0.00	71.04	37.58	0.00	37.58
	Total		97.85	0.07	97.78	52.24	0.16	52.41

3.6.48 Further the Commission sought the details of Hydro power purchase from FY 2010-11 to FY 2017-18 which the Petitioner duly submitted. In this regard, the Commission considering the hydro power purchase from FY 2016-17 and FY 2017-18, has computed the RPO obligation met for FY 2017-18. The balance left at FY 2017-18 is considered for FY 2018-19 and simultaneously derived the obligation to be met in FY 2020-21 as shown in the Table below:



Table 3-23: RPO computed for FY 2017-18

Description	Reference	MU
Total sales from FY 10-11 till FY 17-18	А	9,627.30
Hydro Purchase of FY 2016-17 and FY 2017-18	В	338.08
Net Power Sale for RPO computation	C=A-B	9,289.22
Total Obligation for the year (%)		
Solar (%)	D	1.00%
Non Solar (%)	E	5.00%
Total Obligation for year		
Solar (MU)	F=D*C	92.89
Non Solar (MU)	G=E*C	464.46
Total Obligation till FY 2017-18(MU)	H=F+G	557.35
Total RPO Fulfilled till FY 2017-18		
Solar (including net metering)		37.24
Non Solar	J	165.41
Total RPO Fulfilled till FY 2017-18	K=I+J	202.65
Balance Obligation to be fulfilled in FY 18-19	L=M+N	354.70
Solar	M=F-I	55.65
Non Solar	N=G-J	299.05

Table 3-24: RPO computed for FY 2018-19

S. No	Particular	Reference	Quantum (MU)
1	Total Sales for FY 2018-19	Α	1850.07
2	Hydro Purchase during the year (AD Hydro)	В	132.77
	Net Power Sale for RPO computation	C=A-B	1717.30
3	Total Obligation for the year (%)		
4	Solar (%)	D	1%
5	Non Solar (%)	E	5%
6	Total Obligation for year		
7	Solar (MU)	F=D*C	17.17
8	Non Solar (MU)	G=E*C	85.86
9	Total Obligation for the year(MU)	H=F+G	103.04
10	Total RPO Fulfilled during the year		
11	Solar	I	5.72
12	Non Solar	J	310.37
13	Total RPO Fulfilled	K=I+J	316.08

Table 3-25: RPO details computed by the Commission for FY 2018-19 (MU)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2018-19)
Solar	55.65	17.17	5.72	67.11



RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2018-19)
Non-Solar	299.05	85.86	310.37	74.55
Total	354.70	103.04	316.08	141.66

3.6.49 The Commission vide its Order dated July 14, 2015 in Petition No. 1012 of 2015 approved power purchase agreement between NPCL and Greater Noida Industrial Development Authority (GNIDA) for purchase of 1 MWp Solar power. The details of Renewable Power purchase as submitted by the Petitioner is shown in the Table below:

Table 3-26: Details of Renewable purchase as submitted by the Petitioner for FY 2018-19

Supplier's Name	MU Imported at NPCL bus	Total (in Rs. Crs)	Per Unit Cost
GNIDA (Solar)	1.26	0.87	6.92
Captive (Solar)	0.00	0.00	-
APPCPL (Solar)	0.35	0.19	5.38
Net Metering (Solar)	4.10	3.00	7.31
MPPL (Non-Solar)	97.78	52.41	5.36
APPCPL (Non-Solar)	212.58	112.44	5.29
Subtotal	316.08	168.91	5.34

- 3.6.50 The Petitioner purchased Renewable power from short term sources (not approved by the Commission). The Commission also through its Tariff Order dated January 22, 2019 approved 281.44 MUs for procurement of power through Renewable Energy.
- 3.6.51 Since Renewable energy is required for fulfilment of RPO obligation, the same seems justified and is being approved subject to any further Orders of the Commission in matters related to RPO in future. Also, the Commission has analysed the landed price from exchange at NPCL periphery which arrives at Rs. 4.88/kWh (Rs. 3.88/kWh Average RTC Price+ Rs. 1.00/kWh Transmission charges and losses) and added the forbearance price of Rs. 1000/MWh for Solar and Non-Solar REC which comes to Rs. 5.88/kWh. Hence, the power purchase cost from renewable seems reasonable. However, in future the Petitioner should strictly follow the Central Government Guidelines for Procurement of power for short term (i.e. for a period more than one day to one year) by Distribution Licensees through Tariff based bidding process using National e-bidding portal-reg dated March 30, 2016. The link for the same is provided below: REC Price (Both solar and Non Solar)

(https://www.mstcecommerce.com/auctionhome/RenderFileGeneralAuctions.jsp?fil
e=PPA-Revised-Guidelines-Short-Term.pdf) (Last accessed on - 21.11.2020)



Power Procurement from Short Term Sources:

3.6.52 The Petitioner has claimed the net-short term power for FY 2018-19 as shown below:

Table 3-27: Power purchase from Short-Term sources as claimed by the Petitioner

Particulars	Approved in Tariff Order for FY 2018-19 dated 22 Jan 2018			True Up Petition		
Sources of Power Purchase	Energy (MU)	Avg. cost (Rs. /kWh)	Cost (Rs. Crore)	Energy Avg. cost Cost (MU) (Rs. /kWh) (Rs. Crore		
Net Short Term Power	315.71	4.76	150.28	346.78	4.88	169.49
Open Access Power				551.69	4.54	250.22
Power banking				(204.91)	3.94	(80.73)

3.6.53 The Petitioner filed a Petition No. 1324/2018 for adoption of tariff under Section 63 of the Electricity Act, 2003 for procurement of 60 MW short Term power round the clock and also within the selected time slots. The Commission vide its Order dated August 06, 2018 approved the Short-Term source of Power for FY 2018-19 as shown in the Table below:

Table 3-28: Power purchase from Short-Term as approved by the Commission vide Order dated August 06, 2018

S. No.	Trader	Period	Duration	Quantum (MW)	Rate at NR (Rs./kWh)	Rate at NPCL bus (Rs./kWh)
	M/s PTC India Limited (RTC	May 2018 to July 2018	00.00 to	10	3.84	4.62
1 Power)	August 2018 to September 2018	24.00	35	4.03	4.82	
M/s Arunanchal Pradesh 2 Power Corporation (P)		May 2018 to September 2018	00.00 to 03.00	25	4.66	5.50
2 Power Corporation (P) Limited (Non RTC)	April, 2018 to September 2018	11.00 to 24.00	45	4.00	5.50	

3.6.54 From the above table the total MU to be procured by NPCL should have been 191.85 MU approx. However, NPCL has submitted short term procurement for FY 2018-19 as under:

Table 3-29: Source wise power purchase as claimed by the Petitioner including

Transmission cost

Supplier's Name	MU Imported at NPCL bus	Total (in Rs. Cr)	Per Unit Cost
Arunachal Power Corporation (P) Ltd. (APPCPL)	82.82	44.15	5.33
Shree Cements Ltd	315.42	158.27	5.02



Supplier's Name	MU Imported at NPCL bus	Total (in Rs. Cr)	Per Unit Cost	
Mittal Processors Private Limited (MPPL)	9.45	4.44	4.70	
AD Hydro Power Ltd	58.27	27.17	4.66	
Power Exchanges	84.27	40.10	4.76	
Others	1.45	0.79	5.42	
Subtotal	551.69	274.92	4.98	

- 3.6.55 It can be seen from the above table that the Petitioner has procured short term power for FY 2018-19 as 551.69 MU from which only two sources were approved by the Commission. The Commission in this regard sought the query for True Up of FY 2018-19 in the data gap as shown below:
 - "3. The Licensee to provide source-wise (long term, medium term, short term, banking, sale of power and other) month-wise power purchase bills and compiled transaction detail (in excel) for FY 2018-19.

The source wise details of Power Purchase have already been provided in MYT Formats Form "PPC FY 2018-19" With respect to details of monthwise, bill-wise power purchase, the same has been reviewed and audited by the Statutory auditors as well the auditors empanelled by the Hon'ble Commission."

- 3.6.56 After continuous follow up, the Petitioner has provided the month wise detail for procurement for Short Term power. From the submission of the Petitioner it was observed that the Petitioner bought 141.09 MU at the rate of Rs. 4.52 /kWh amounting to Rs. 63.79 Crore form the two approved sources i.e. APPCL and PTC (AD Hydro). Hence the same is approved by the Commission.
- 3.6.57 Further, it is observed that the Petitioner bought short term power of 326.33 MUs at the rate of 4.65/kWh amounting to Rs. 151.96 Crore from unapproved sources and did not even inform the Commission.
- 3.6.58 Further, the excess quantum of 326.33 MU bought by the Petitioner, it engaged in Banking of power also, as discussed hereunder.

Power Banking:

3.6.59 The Petitioner has submitted that, some of the power banked during FY 2017-18 was availed during FY 2018-19 while some of the surplus power tied-up for FY 2018-19 was banked to be availed during summers of FY 2019-20 wherein the prices were anticipated to be higher considering impending General Assembly elections and State Assembly elections. Accordingly, out of 551.69 MU power procured from short-term sources, the Petitioner utilised 204.91 MU towards Power Banking. In respect to



above, on Commission's enquiry, the Petitioner submitted the details of power banking as shown in the Table below:

Table 3-30: Details of Power banking as submitted by the Petitioner for FY 2018-19

Type of Contract	Energy Purchase at NPCL Bus	Energy Charges	PGCIL Charges	UPPTCL Charges	Transmission Charges	Total Cost
	(MU)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)
Power Procured in FY 2017-18 through Banking to be returned in FY 2018-19	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 2017- 18	(16.39)	(6.54)	0.37	0.23	0.59	(5.95)
Power Procured through Banking to be returned within FY 2018-19	124.71	0.53	3.25	3.32	6.57	7.1
Return of Power Procured through Banking within FY 2018-19	(137.88)	-	2.73	1.68	4.41	4.41
Power supplied under Banking to be procured in FY 2019-20	(175.34)	-74.71	4.8	3.01	7.81	-66.91
Power Banking FY 2018-19	(204.91)	-80.73	11.14	8.23	19.38	-61.35

3.6.60 The Commission further enquired about the month-wise details of banking of power and variation of UPPTCL charges during of power (137.88 MU) in FY 2018-19. Further, on Commission's enquiry NPCL submitted as under:

"Company decided to procure power through Power Banking by participating in the tender floated by HPSEB through a licensed power trader. As per the terms of contract, the Company was required to procure 50 MW RTC power during Apr'18-Sep'18 which is the peak summer season and demand is at its peak in the Greater Noida Area and is obligated to return the power during 09-18 Hrs. from Oct'18-Mar'19, being the winter season. The further advantages of the aforesaid power banking arrangement were as follows -

- a) Power source was from Northern Region and therefore, there was no issue with respect to transmission congestion;
- b) Since the power was supplied by hydro rich state, it was immune from coal shortages which was prevalent at that time;
- c) Being Hydro Power, it also helped the Company to fulfill its Renewable purchase obligation within 31st March 2019 as per the directions of the Hon'ble Commission;
- d) As per the banking arrangement, the Company will get power during summer season when it has maximum demand while the return was proposed in winters which is a lean period.
- e) Further, due to various reasons, including coal shortage, the IEX rates at NPCL bus were also remained on the higher side. The IEX rates are tabulated below for your ready reference:



Month	Rate (Rs. / kWh)
Apr-18	4.76
May-18	5.91
Jun-18	4.76
Jul-18	4.27
Aug-18	4.09
Sep-18	5.54

Apart from the above, For FY 2018-19, the Company was having two major contracts for procurement of power, first LTPPA with DIL for supply of 170 MW power and MTPPA with M/s PTC for supply of 100 MW RTC power. During the lean season of winters, there was some additional surplus power during Nov'18 to Mar'19 during offpeak hours. In order to balance its load and avoid penalty under CERC's DSM regulations, the Company at best could have sold such power on exchange, but the trends of the rate on exchange during RTC and Off-peak hours were not very lucrative. A summary of IEX rates (RTC) during Nov'18-Mar'19 at NPCL bus for the sale of power is tabulated below for the ready reference of the Hon'ble Commission:

Month	Rate (Rs. / kWh)
Nov-18	2.81
Dec-18	2.55
Jan-19	2.57
Feb-19	2.31
Mar-19	2.32

From the aforesaid rates, it can be seen that the rates were not very lucrative. Hence, it was considered appropriate to export the power under Power Banking during Nov'18-Mar'19 and import the same during the peak season of Summers of FY 2019-20. Accordingly, The Company sold such surplus power through Power Banking to be returned in the summers of FY 2019-20. Banking of surplus power was done to avoid sale on IEX at unviable rates. Further, the return of above power during summer of FY'19-20 helped the Company in optimizing power purchase cost for FY 2019-20."

- 3.6.61 Also, the Petitioner in additional reply submitted the month wise detail of power banking in which the power procured from the source was thermal rather Hydro as submitted in earlier reply.
- 3.6.62 The Petitioner further vide its mail dated September 02, 2019 submitted that:
 - 1. "The Company had submitted its power procurement plan for FY'2018-19 vide Petition No. 1146/2016 (MYT Petition for FY'2017-18 to FY'2019-20), Petition No. 1349/2018 (ARR for FY'2018-19) and Petition No. 1382/2018 (APR for FY'2018-19).



2. The Commission approved the following quantum and cost for short term power:

Tariff Order Date	Energy (MUs)	Costs (Rs. Cr.)	Rate excluding Transmission Charges (Rs./kWh)	Transmission Charges (Rs./kWh)	Rate at NPCL (Rs./kWh)	Petition
30.11.2017	915.74	375.05	4.10	0.71	4.81	Petition No. 1146/2016 (MYT Petition for FY'2017-18 to FY'2019-20)
22.01.2019	315.70	150.28	4.76	0.64	5.40	Petition No. 1349/2018 (ARR for FY'2018-19)
03.09.2019	376.36	179.17	4.76	0.79	5.55	Petition No. 1382/2018 (APR for FY'2018-19)

- 3. The actual cost of short-term power including from SCL stood at Rs. 4.54/kWh against the above approved rate of Rs. 4.76/kWh in the Tariff Order dated 22.01.2019. The short-term power comprises of power procured from DEEP Portal, Banking, SCL, Power Exchange and contingency arrangements.
- 4. In reply to deficiency note issued by the Hon'ble Commission vide its letter dated 23.08.2018, the Company in its submission vide letter dated 24.09.2018 informed the Hon'ble Commission about power procured/to be procured under short term which included power from SCL during FY'2018-19 and accordingly, submitted its power procurement cost for the year at Rs. 4.76/kWh (excluding transmission charges) which was duly approved by the Hon'ble Commission. The Petitioner enclosed the para-4.5.2 of the Tariff Order dated 03.09.2019.
- 5. Regarding power procurement under contingency is concerned, the same has also been approved by the Hon'ble Commission in the various Tariff Orders given for UPPCL/the Company provided it is within the approved rates. The contingency power purchased by the Company is also within the rate approved by the Hon'ble Commission for short term power. Such contingency arrangements were primarily made due to outage of generating plants/emergency requirement. The Petitioner enclosed the relevant para-7.10.2 of UPPCL's Tariff Order dated 22.01.2019.
- 6. The distribution licensees are allowed to sale/banking of power as a tool to optimize their power purchase cost and therefore, many Discoms do the same including the Discoms of State of U.P. It is pertinent to mention here



- that Hon'ble Commission in its MYT Regulations has acknowledged banking arrangements. Further, UPPCL has been procuring power through banking since very long time and the same has been approved by Commission at the time of truing-up from time to time.
- 7. Banking being cashless transaction (since settled in unit terms and not in amount) doesn't carry any rate/amount. It is for this reason the banking transactions have been specifically kept beyond the purview of DEEP Portal. Since, there is no rate/amount involved in the banking of power, therefore, there is no occasion for adoption of tariff for the same. The Petitioner enclosed the relevant para of short-term Guidelines for reference.
- 8. It is pertinent to mention that the Commission in Para-5.4.7 of the Tariff Order dated 22.01.2019 of the Petitioner has stated that banking transactions cannot be projected in advance at the time of ARR and the same will be considered at actuals at the time of true-up. The relevant Para-5.4.7 is quoted as under for ready reference:

 "5.4.7 As regards unscheduled Interchange transactions amounting to Rs 4.34 Cr and Power Banking charges amounting to Rs 3.51 Cr as claimed by the Petitioner, 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

It is pertinent to mention here that Commission while truing-up of FY'2017-18 had approved the banking of power done during the year. The Petitioner enclosed the relevant Para-3.6.20 of Tariff Order dated 03.09.2019 of its Order."

these charges and the same shall be considered at the time of Truing Up

3.6.63 Further with regards to power banking the Petitioner submitted that:

based on actuals subject to prudence check."

- "Subsequent to the withdrawal of 45 MVA power by UPPCL in Feb'14, UPSLDC stopped giving firm approvals to the Company and therefore, entire power for the licensed area was scheduled on day-ahead basis. The matter first went to Hon'ble Commission and thereafter, to Hon'ble APTEL.
- 2. Hon'ble Commission vide its Order dated 21.07.2015 allowed firm capacity of 237 MW only which was later on upheld by Hon'ble APTEL as



well vide its Order dated 28.07.2016. In view of the above, UPPTCL did not processed any application beyond 237 MW on advance basis and continued to allow Open Access on day-ahead basis.

3. Apart from the above, with respect to permission for drawing power from IEX, USPLDC didn't allow the Company to participate on IEX despite the fact that other State Discoms were drawing sizable power from Power Exchange. It submitted the various applications submitted to UPSLDC for grant of NoC for participation on IEX. The Company has been informing the Commission regarding the same in all its correspondences, ARR Petitions, additional information / clarifications. (NoC for purchase of power was first given in Mar'18 for Apr'18 for 30 MW only and thereafter, the NoC was given on month-on-month basis at the sole discretion of UPSLDC, thus there was no certainty of such approvals as well as quantity thereof)

Under the above circumstances majority of power of the Company during FY'2017-18 was scheduled on day-ahead basis.

4. In addition to the above, there were frequent curtailment of power being scheduled from outside Northern Region. Details of multiple curtailed approvals from inter-regional power sourced by the Company and other Discoms during Apr'18-Sep'18 was provided.

Therefore, ensuring adequate and reliable power supply for the consumers of Greater Noida was the biggest challenge for the Company especially, in view of the directions of State Government to ensure at least 18/24 Hrs. supply in rural/other than rural area during FY 2018-19.

As stated above, due to restricted availability of firm transmission capacity up to 237 MW from UPSLDC and also to avoid curtailment of power due to transmission congestion, the Company planned its power procurement for FY'2018-19 in such a manner that most of its short-term power is procured from Northern Region sources as it will be immune from curtailment due to inter-regional congestion. Further, Northern Region sources are most reliable considering the day-ahead scheduling imposed by UPSLDC. The fact was also mentioned in its various ARR and Business Plan Submissions.

5. Therefore, the Company participated in the tender invited by other utilities of Northern Region for banking of power (taking power in summers and returning the same in winters) in addition to procuring power from SCL on day-ahead basis like during FY 2017-18 mainly because of following reasons:



- a. The plant is situated in Northern Region and connected with CTU;
- Unlike other Generators in NR, Shree Cements was agreeable to schedule power on day-ahead basis allowing more flexibility to manage peaks and lows;
- c. Shree Cement also agreed to supply addl. power up to 20% of the total arrangement during peak hours at the same rate;
- d. The rates on exchange for RTC power were very high (~Rs.5.16/kWh at NPCL bus including IEX fee) while the same from SCL was Rs. 5.07/kWh at NPCL bus.
- e. The overall cost of the power supplied was within the rates submitted with Hon'ble Commission for approval in the petitions for Business Plan, ARR for FY 2018-19 and APR for FY 2018-19;
- f. It is pertinent to mention that the Company procured power from SCL on day-ahead basis in FY'2017-18 also and since the cost was within the overall provisional PPC approved by the Hon'ble Commission, the same was allowed while truing-up the ARR for FY 2017-18.

The details of power procured from SCL and power banking with other utilities during the year is shown in the Table below:

Month	SCL (MU)	Other than SCL Purchase (MU)	Total Purchase (MU)	IEX Sale Units (MU)	Banking- In Unit (MU)	Banking Return for Mar'18 (MU) - Old Obligation	Banking Return (MU) - Current Year Obligation	Forward Banking Units (MU)	Net Purchase (MU)	Forward Banking as % of Purchase
Apr-18	13.40	133.04	146.44	-	17.28	-	-	-	163.72	0%
May-18	21.85	151.87	173.73	-	24.54	1	(2.16)	-	196.11	0%
Jun-18	26.99	147.35	174.34		30.58	-	-		204.92	0%
Jul-18	33.62	152.61	186.23	ı	25.00	ı	(10.10)	(1.58)	199.55	-1%
Aug-18	35.92	182.20	218.11	ı	5.84	(14.85)	(2.68)	ı	206.42	0%
Sep-18	35.00	131.66	166.66		21.47	-	(3.32)		184.81	0%
Oct-18	11.96	163.47	175.44	-	1	1	(8.56)	1	166.88	0%
Nov-18	25.62	117.48	143.10			-	(7.57)	(10.31)	125.22	-7%
Dec-18	28.71	198.34	227.06	(5.15)	-	-	(33.20)	(50.71)	138.00	-22%
Jan-19	33.15	189.42	222.57	(3.00)	-	-	(31.02)	(39.88)	148.67	-18%
Feb-19	21.23	174.12	195.35	(3.94)	-	-	(25.38)	(30.51)	135.51	-16%
Mar-19	27.97	184.49	212.46	(10.30)	-	-	(15.43)	(42.36)	144.37	-20%
Total	315.42	1,926.05	2,241.47	(22.40)	124.71	(14.85)	(139.42)	(175.34)	2,014.17	-7%

- **6.** From the above, it can be seen that the Company was significantly benefitted from procurement of power from SCL and banking not only in terms of rates with IEX (though the Company was not allowed to procure the quantum from IEX) but also in terms of load management during Summers and festival months of October and November'18.
- 7. It is also pertinent to mention that during FY 2018-19, the acute coal shortage in the Country fuelled the rates on IEX as well as in the bilateral



- market. Further, the above trend was expected to continue in winters as well as no improvement was expected in coal supply.
- 8. Further, the above rate of SCL can also be benchmarked with the rates prevalent on DEEP Portal during Apr'18-Sep'18. It is noteworthy that rates discovered on DEEP Portal even during Oct'18-Mar'19 continued to remain higher than the rates of SCL. Therefore, considering the trend in bilateral market, the arrangement with SCL was continued in winters as well. Details of various bids held during this period was provided by the Petitioner.
- 9. Further, the Company informed the Commission about the updated status of power procured during FY 2018-19 through its submission vide letter dated 24.09.2018 against the Hon'ble Commissions' query dated 23.08.2018.
- 10. As the Commission is aware that the Company tied-up 100 MW power from M/s PTC (Source: SKS Plant, Chattisgarh) wherein the power was scheduled to commence from 1st Dec'18. However, subsequently SKS faced bankruptcy issues, therefore, it became uncertain whether it will be in a position to supply power from scheduled date of 01.12.2018.
 - It is pertinent to mention that during the above uncertainties, PTC/SKS also failed to submit the application for scheduling power from 01.12.2018 by 30.06.2020 being the last date for applying MTOA, making the situation all the more doubtful and uncertain.
- 11. Hence, in aforesaid scenario of high rates of power in both IEX and DEEP Portal, power was procured from SCL to ensure adequate and reliable power supply within the overall approved cost.
- 12. Further, Parliamentary Elections were to take place sometime during March'19-April'19 due to which it was envisaged that both the demand of power and prices thereof would be higher.
- 13. From the statement, the Commission would kindly observe that power taken from SCL from April-November'18 was fully utilized to meet the demand of the consumers ensuring reliable power supply to them as well as return banking obligations.
- 14. As regards purchase and banking of power during Dec'18-Mar'19, the following is submitted for the kind consideration of the Commission:
- a) Due to persistent shortage of coal, DIL vide e-mail dated 22.12.2018 informed that its plant availability is likely to remain around 60% during Jan'19-Feb'19.



- b) Though SKS power was not expected as mentioned herein above, the power supply was started in Dec'18. However, there were lot of interruptions since Dec'18 itself.
- c) The banking of power was done due to continued ban in multiple phases on construction/industrial activities in NCR by NGT/CPCB for controlling pollution unexpectedly lowered the demand.
- 15. The Commission from time to time in its Tariff Orders has been stating that UI and Banking power would be approved at actuals at the time of truing-up only despite the submissions of the licensee. Accordingly, approvals for UI and Banking power is accorded by the Hon'ble Commission at the time of truing-up only.
- 16. The distribution licensees are allowed power banking to manage their load and optimize power purchase cost. The Commission has approved banking of power by the Company in previous years also. It is pertinent to mention that the main thrust has been to ensure reliable power supply for the consumers and also optimize the overall power procurement cost.

 Therefore, to ensure uninterrupted power supply in any of the eventualities, a back-up source from Northern Region was kept in hand. Since, SCL has its own generating plant connected with CTU and supplied power in earlier years also as well as in emergency at short notice, power was procured from SCL during FY'2018-19 also."
- 3.6.64 Further on Prudence check, the Commission found that neither the Petitioner took any prior approval of the Commission for Banking of Power, nor informed the Commission about it. Further, Commission refers to Regulation 19 (d) of the UPERC MYT Regulation, 2014 provide as under:

Quote

19 (d) If there is a short term requirement of power by the Distribution Licensee over and above the quantum as approved by the Commission and such requirement is on account of any factor beyond the control of the Licensee (shortage / non availability of fuel, snow capping of hydro resources inhibiting power generation in sources stipulated in the plan, unplanned / forced outages of power generating units or acts of God), then the cost shall be directly passed on to the customer without prior approval of the Commission.

Provided that the cost of the additional power shall be capped by the lower of the weighted average price of power exchange rates or bilateral market purchases for the same quarter.



Provided further that in such a case, the Distribution Licensee shall inform the Commission about the purchase of power over and above approved quantum with all the details. In case the Commission is not satisfied by the quantum and/or rates, the Commission may disallow the same in the True Up."

Unquote

- 3.6.65 In terms of the above Regulations, the Commission is of the view that the Petitioner indulged in excess purchase of short-term power and Banking therein without any prior approval of the Commission. Also, neither it took consent about the Banking of Power and neither did it inform the Commission about the same. Accordingly, in terms of Regulation 19 of UPERC (Multi Year Distribution Tariff) Regulations, 2014, the Commission disallows additional short-term power bought and Banking of Power done in FY 2018-19 except for the approved portion of Banking of power which was allowed in FY 2017-18.
- 3.6.66 The Commission also the analysed the average IEX price rate for FY 2017-18, FY 2018-19 and FY 2019-20 as shown in the Table below:

Particular FY 2017-18 FY 2018-19 FY 2019-20 3.01 Average RTC 4.02 3.88 Average Peak 4.70 4.67 3.56 2.83 Average Non- Peak 3.79 3.62 3.77 2.84 Average Day 3.95 Average Night 3.38 3.34 2.77 **Average Morning** 4.26 3.84 2.92

Table 3-31: Average RTC prices at IEX

Source: https://www.iexindia.com/marketdata/areaprice.aspx

- 3.6.67 The Commission for the True Up of FY 2018-19, approves the short-term power which was approved by the Commission i.e. power procured from APPCL and A.D Hydro. The Commission has also approved the contingency power procured by the Petitioner i.e. MPPL and the power procured from exchanges.
- 3.6.68 Further, the Commission observed that the Petitioner had purchased extra quantum from short-term sources and indulged in banking the power. The power procured by the Petitioner from unapproved sources is being disallowed, the Commission directs the Petitioner to take prior approval of Commission for short-term procurement (other than from exchanges) and for banking of power in future. The Commission, for approval of power procured from Short-Term other than APPCL, AD hydro and MPPL, has considered the remaining requirement to be fulfilled through power exchanges. The Commission has approved the same rate of power purchase from exchanges as claimed by the Petitioner i.e. Rs. 3.85/kWh, which translates to Rs 4.08/kWh at NPCL



bus, since it is lower than the average rate of RTC power for FY 2018-19 i.e. Rs. 3.88/kWh. The Commission directs the Petitioner that in future it should strictly follow the Central Government Guidelines for Procurement of power for short term (i.e. for a period more than one day to one year) by Distribution Licensees through tariff-based bidding process using National e-bidding portal-reg dated March 30, 2016. The link for the same is provided below:

(https://www.mstcecommerce.com/auctionhome/RenderFileGeneralAuctions.jsp?fil e=PPA-Revised-Guidelines-Short-Term.pdf) (Last accessed on - 21.11.2020)

3.6.69 Accordingly, the Commission for FY 2018-19 for procurement of power from Short-term allows the power as shown in the Table below:

Table 3-32: Power procurement for Short-Term for FY 2018-19 (excluding Transmission)

	True Up Peti	ition (FY 20	18-19)	Approved (FY 2018-19)			
Supplier's Name	MU Imported at NPCL bus	Per Unit Cost	Total (in Rs. Cr)	MU Imported at NPCL bus	Per Unit Cost	Total (in Rs. Cr)	
Arunachal Power Corporation (P) Ltd. (APPCPL)	82.82	4.81	39.84	82.82	4.81	39.84	
Shree Cements Ltd	315.42	4.67	147.25				
Mittal Processors Private Limited (MPPL)	9.45	4.23	4.00	9.45	4.11	3.89	
AD Hydro Power Ltd	58.27	4.12	24.01	58.27	4.12	24.01	
Power Exchange (actual)	84.27	4.08	34.40	84.27	4.08	34.40	
Power Exchange (Deemed)				99.72	4.08	40.71	
Others	1.45	4.88	0.71	1.45	4.11	0.60	
Subtotal	551.69	4.54	250.22	336.01	4.27	143.45	

3.6.70 As regards banking of power, the Commission is of the view that only the banking of power purchase approved in FY 2017-18, is allowed without transmission charges. All other excess and unapproved short-term power purchased and banked in FY 2018-19 are disallowed and the Petitioner is directed to take prior approval of Commission for short-term procurement (other than from exchanges) and for banking of power in future. Banking of power in approved is as under:

Table 3-33: Power banking approved for FY 2018-19

Type of Contract	Energy Purchase at NPCL Bus	Energy Charges	PGCIL Charges	UPPTCL Charges	Transmission Charges	Total Cost
	(MU)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)
Return of Power Procured through Banking in FY 18	(16.39)	(6.54)				(6.54)



Sale of Power:

3.6.71 The Petitioner submitted that it has sold (22.40) MU at the rate of Rs. 2.62/kWh amounting to Rs. 5.86 Crore. The Commission sought the details of power sold by the Petitioner is shown in the Table below:

Table 3-34: Power Sold by the Petitioner in FY 2018-19

Beneficiary	Units Sold (MU)	Sale (Rs. Cr.)
Sale of Power to DNH (Through APPCL)	5.15	1.14
Sale of Power to UPCL (Through APPCL)	17.25	4.72
Total	22.40	5.86
The above sale of power has been benchmarked with	rate discovered at IEX.	

3.6.72 Since the Commission in power purchase from short term has already disallowed any excess and unapproved short-term power purchased and banked in FY 2018-19, accordingly, there would not be any scenario of sale of excess power. Hence, the Commission for the True Up of FY 2018-19 is disallowing the sale of power.

Unscheduled Interchange:

- 3.6.73 The Petitioner submitted that it has overdrawn 37.46 MU in FY 2018-19 amounting to the cost of Rs. 30.72 Crore. The Commission in this regard asked the Petitioner provide the data on actual energy input at T <> D boundary of NPCL for FY 2018-19, duly certified by SLDC and also to provide the DSM account for FY 2018-19.
- 3.6.74 The Petitioner in this regard submitted that it duly reconciles its power purchased with REA published by NRLDC on monthly basis. Further, with respect to the actual energy input at T<>D boundary of NPCL, duly certified by SLDC, the energy accounting provided by SLDC carries a number of mistakes which are being pursued regularly for correction. The Commission will be surprised to know that UPSLDC revised the energy accounting statement for the period from FY 2015-16 to FY 2018-19 more than 40 times which included revisions for multiple weeks of preceding periods and still the same is not in sync with the REA published by NRLDC. Hence, the Petitioner finalises its statutory accounts based on the energy certified by NRLDC being further reduced by the Intra-State transmission losses as approved by the Commission. The aforesaid Statement is duly vetted by the Statutory Auditors as well as the Auditors recommended by the Commission every year. Accordingly, the same is approved. However, the Petitioner is directed to limit its UI and indulge in real time markets.

Transmission Charges:

3.6.75 Further with regards to the Transmission charges, the Commission asked the Petitioner to provide a detailed justification and reasons for increase in transmission



charges (approx. Rs. 50 Crore) with respect to approved transmission charges in Tariff Order for FY 2018-19 dated January 22, 2019.

3.6.76 In this regards the Petitioner submitted that:

"The Commission vide Tariff Order dated 22nd January'2019 had approved the transmission charges for FY 2018-19 at Rs. 129.71 Cr. vis-à-vis the actual Transmission charges for FY 2018-19 at Rs. 184.30 Cr. From the above, it can be seen that there is an increase in Transmission charges of Rs. 54.59 Cr in approved vis-à-vis actual transmission charges for FY 2018-19. The aforesaid increase is on account of reasons as stated below: -

- (a) There are two major components of Transmission charges for FY 2018-19 i.e. Inter-state Transmission charges paid to PGCIL and Intra-state Transmission charges paid to UPPTCL. From MYT Formats Form "PPC FY 19" of the ARR petition no. 1541/2019 dt. 27th December, 2019. It can be seen that while inter-state transmission charges have increased from Rs. 88.06 Cr as per Tariff Order to Rs. 141.93 Cr as per actual audited accounts (Refer MYT Formats Form "PPC FY 19"), the intra-state transmission charges were approved at Rs. 41.65 Cr vis-à-vis Actual Intra-State Transmission charges for Rs. 42.36 Cr. From the above, it can be seen that the major difference is in inter-state transmission charges paid to PGCIL.
- (b) The Commission in its Tariff Order dated 22nd January, 2019 had approved the Long-Term transmission charges @ Rs. 9821/MW and Short-Term transmission charges @ Rs. 212/MW from PGCIL. However, during FY 2018-19, CERC vide its various orders had approved the PGCIL rates for long term and short-term open access as follows:

Short Term Charges	Long Term Charges	CERC Order date	Reference
Rs. 212.00/MW	Rs. 9,958 /MW Per Day	16 th Feb'18	Annexure-1
Rs. 292.00/MW	Rs. 12,489/MW Per Day	5 th Jun'18	Annexure-2
Rs. 274.10/MW	Rs. 12,919/ MW Per Day	30 th Aug'18	Annexure-3
		& 19 th Sep'18	& Annexure-4
Rs. 234.50/MW	Rs. 10,256/ MW Per Day	15 th Nov'18	Annexure-5
Rs. 235.60/MW	Rs. 9,971/ MW Per Day	6 th Feb'19	Annexure-6



From the above, it can be seen that the transmission charges for PGCIL are higher than the Transmission charges approved by the Hon'ble Commission in its Tariff Order dated 22^{nd} January, 2019 by as much as 37%. This has resulted into increase in transmission charges for FY 2018-19 by at-least 30% say approsx. Rs 27 Cr.

(c) As per LTPPA with M/s DIL for supply of 170 MW power, LTA has been granted by PGCIL (CTU) in two parts, viz., 58 MW in existing system and the balance 112 MW in Champa-Kurukshetra Pole-1. Accordingly, the PoC bills for applicable transmission charges were raised by PGCIL to DIL (being the long-term applicant) on monthly basis. The monthly amount, so billed, is being reimbursed by NPCL as per the terms of the LTPPA.

From November 2018 onwards, PGCIL also started raising monthly PoC bills for 170 MW LTA from Existing line in addition to 112 MW from Champa-Kurukshetra line which resulted into higher PoC bill than the previous average monthly bill in accordance with CERC Order dated 22.02.2018 in Petition No. 13/TT/2017 determining HVDC charges pertaining to Champa-Kurukshetra Pole-1 line. As per the aforesaid Order, Hon'ble CERC approved sharing of HVDC charges for Champa-Kurukshetra Pole-1 line as per Regulation 11 (4)(3) (iii) instead of 11 (4)(3)(i) of the Sharing Regulations 2010. Consequently, transmission charges in FY 2018-19 got increased by an amount of Rs. 23.80 Cr. raised by PGCIL for the period Nov'18 to Mar'19 which was not provided earlier in the ARR / corresponding Tariff Order dated 22nd January, 2019.

Subsequently, on the Review Petition filed by PGCIL & Other beneficiaries on the above erroneous treatment of sharing of HVDC transmission charges under Regulation 11(4)(3)(iii) instead of 11(4)(3)(i) of Sharing Regulations 2010, the Hon'ble CERC vide its Order dated 31.07.2019 allowed the above Review Petition and directed PGCIL to refund the excess LTA charges to the beneficiaries.



Accordingly, in pursuance to the CERC's order dated 31.07.2019, during FY 2019-20, PGCIL reversed the additional LTA charges of Rs. 23.80 Cr incurred in FY 2018-19 which has been credited in the ARR for FY 2019-20 by the Company after receiving the credit of the same from M/s DIL.

Thus, from the above, it can be seen that the transmission charges for FY 2018-19 has increased by approx. Rs. 24 Cr as against the same approved vide Tariff order dated 22^{nd} January, 2019.

(d) As explained earlier, during FY 2018-19, the Company had incurred additional transmission charges towards power procured through Power Banking in FY 2017-18 and returned in FY 2018-19. Similarly, during summers of FY 2018-19, the Company had procured some power through power banking which was returned in the same year during winters itself. Also, certain power, being surplus during off-peak hours in winters of FY 2018-19 had also been exported under power banking, to be procured during peak hours in the Summers of FY 2019-20 which has resulted into additional transmission charges during FY 2018-19."

3.6.77 The Petitioner with regards to power purchase claimed as 'others' submitted that:

"It received a refund of Rs. 3.54 Cr from UPPTCL against the excess transmission charges levied by it during the period starting from Oct'09 till Nov'11. The aforesaid transmission charges were claimed in the ARR of the respective years on the basis of actual payment made and accordingly, the Company has reduced the power purchase cost for FY 2018-19 when it has received the refund of such transmission charges. The aforesaid refund has been shown under the sub-head "Other" in the Power Purchase Cost details for FY 2018-19 in the MYT Formats "PPC FY 2018-19".

Apart from above, it is clarified that UPSLDC charges Rs. 5000/- as concurrence charges against each application for Open Access through UPPTCL network. For the purpose, the Company provided 10 – 20 Demand Drafts/NEFT Remittance of Rs. 5,000 each simultaneously with UPPTCL who in turn utilises them against each application for Open Access. In absence of reconciliation, it is not feasible to attribute every Demand Draft/NEFT Remittance with respective source of power and therefore, the



amount so paid is expensed out on the payment basis collectively under Transmission Charges. The amount so paid has been included under the sub-head "Other" in Power Purchase Cost details for FY 2018-19 in MYT Formats Form "PPC FY 2018-19.

Inadvertently, the amount has been shown under the column of PGCIL while it is being paid to UPPTCL hence, should be classified under STU Charges."

3.6.78 Accordingly, the Total power purchase approved for FY 2018-19 is shown in the Table below:

Table 3-35: Power Purchase Cost and quantum as approved by the Commission for FY 2018-19

	Claimed	in True Up Pe	tition		А	pproved fo	r FY 2018-	19 (True U	p)	
Particular	Energy at NPCL Periphery (MU)	Rate at NPCL Periphery (excluding transmissi on) (Rs. /kWh)	Total Cost excluding Transmiss ion (Rs. Crore)	Energy at NPCL Periphery (MU)	Rate at NPCL Periphery (excluding transmissi on) (Rs. /kWh)	Total Cost excluding Transmis sion (Rs. Crore)	PGCIL Cost (Rs. Crore)	UPPTCL (Rs. Crore)	Total Cost including Transmissi on (Rs. Crore)	Rate at NPCL Periphery (including transmissi on) (Rs. /kWh)
	Α	B=C/A*10	С	D	E	F=E/D*1 0	G	н	I	J=I/D*10
Long Term Power (from DIL)	1086.15	4.75	515.61	1,086.15	3.84	416.74	104.15	21.38	542.27	4.99
Medium Term MTPPA (PTC India Ltd)	250.09	3.55	88.74	250.09	3.23	80.78	16.26	8.00	105.04	4.20
Power Purchase from Short- Term	551.69	4.54	250.22	336.01	4.27	143.45	11.31	9.35	164.11	4.88
Power Purchase from Traders (RTC)										
Power Purchase from Traders (Peak)										
Arunachal Power Corporation (P) Ltd. (APPCPL)	82.82	4.81	39.84	82.82	4.81	39.84	2.22	2.09	44.15	5.33
Shree Cements Ltd	315.42	4.67	147.25							
Mittal Processors Private Limited (MPPL)	9.45	4.23	4.00	9.45	4.11	3.89	0.36	0.28	4.53	4.79
AD Hydro Power Ltd	58.27	4.12	24.01	58.27	4.12	24.01	1.60	1.56	27.17	4.66
Power Exchanges (Actual)	84.27	4.08	34.40	84.27	4.08	34.40	3.24	2.46	40.10	4.76
Power exchange (Deemed)				99.74	4.08	40.71	3.83	2.91	47.46	4.76
Others	1.45	4.88	0.71	1.45	4.11	0.60	0.06	0.04	0.69	4.79
Power Purchase from RE	316.08	5.34	168.76	316.08	5.34	168.76	0.10	0.05	168.91	5.34
GNIDA (Solar)	1.26	6.92	0.87	1.26	6.92	0.87	0.00	0.00	0.87	6.92
APPCPL (Solar)	0.35	5.38	0.19	0.35	5.38	0.19	0.00	0.00	0.19	5.38
Net Metering (Solar)	4.10	7.31	3.00	4.10	7.31	3.00	0.00	0.00	3.00	7.31
MPPL (Non-Solar)	97.78	5.34	52.24	97.78	5.34	52.24	0.12	0.04	52.41	5.36
APPCPL (Non-Solar)	212.58	5.29	112.45	212.58	5.29	112.45	-0.02	0.01	112.44	5.29
Subtotal	2,204.01	4.64	1,023.32	1988.33	4.07	809.73	131.81	38.78	980.32	4.93
Power Banking	-204.91	3.94	-80.73	(14.85)	4.40	(6.54)				-
Sale of Energy	-22.40	2.62	-5.87							
UI	37.46	8.20	30.72	37.46	8.20	30.72				-
Total Power Purchase Cost (excluding transmission charges)	2,014.17	4.80	967.44	2,010.94	4.15	833.91	131.81	38.78	1004.50	5.00



	Claimed	in True Up Pe	tition		А	pproved for	FY 2018-	19 (True U	p)	
Particular	Energy at NPCL Periphery (MU)	Rate at NPCL Periphery (excluding transmissi on) (Rs. /kWh)	Total Cost excluding Transmiss ion (Rs. Crore)	Energy at NPCL Periphery (MU)	Rate at NPCL Periphery (excluding transmissi on) (Rs. /kWh)	Total Cost excluding Transmis sion (Rs. Crore)	PGCIL Cost (Rs. Crore)	UPPTCL (Rs. Crore)	Total Cost including Transmissi on (Rs. Crore)	Rate at NPCL Periphery (including transmissi on) (Rs. /kWh)
Total Transmission Charges			184.31			171.59				
Transmission Charges of PGCIL			141.94			131.81				
Transmission Charges of UPPTCL			42.36			38.78				
Total Power Purchase Cost (including transmission charges)	2014.17	5.72	1151.75	2010.94	4.15	1004.50			1004.50	5.00

3.6.79 Further, as mentioned earlier, the Petitioner have overbooked the sales of 21.73 MU under the unmetered categories of the consumers against the norms approved for those categories. The same has been disallowed and the corresponding excess power purchase cost claimed by the Petitioner is also being disallowed as depicted below:

Table 3-36: Disallowance in PPC for FY 2018-19 (Rs. Crore)

S.NO.	Particulars	Approved
1	Excess Sales booked under unmetered categories (MU)	21.73
2	Distribution Loss (%)	8.00%
3	Excess energy at Discom periphery (MU)	23.62
4	Total excess Power Purchased (MU)	23.62
5	Rate considered of short-Term power purchase at NPCL Bus (Rs/kWh)	4.08
6	Disallowance in PPC due to excess sales booking in unmetered categories (Rs. Crore)	9.64

Table 3-37: Net Power Purchase Cost as approved by the Commission for FY 2018-19

Particular	Cost (Rs. Crore)
Total Power Purchase Cost	1004.50
Adjustment of Extra Sales	9.64
Net Power Purchase	994.87

3.7 OPERATION AND MAINTENANCE EXPENSE

- 3.7.1 Operation and Maintenance (O&M) expenses comprises of Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure.
- 3.7.2 The Petitioner has submitted that according to Regulation 25 of the MYT Regulations, 2014 deals with the O & M Expenses which is reproduced below: -
 - "25 Operation & Maintenance Expenses



- (a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, Repairs and maintenance (R&M) expense and Administrative and General Expense (A&G) expense. Provided that such norms may be specified for a specific Distribution Licensee or a class of Distribution Licensees.
- (b) Norms shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel for Employee cost; combination of A&G expense per personnel and A&G expense per 1000 consumers for A&G expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses:
- (c) One-time expenses such as expense due to change in accounting policy, arrears paid due to **pay commissions** etc., shall be excluded from the norms in the trajectory.
- (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.
- (e) The One-time expenses and the **expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses** after prudence check.
- (f) The norms in the trajectory shall be specified over the control period with due consideration to productivity improvements.
- (g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline.
- (h) The Distribution Licensee specific trajectory of norms shall be identified by the Commission on the basis of simple average of previous five years audited figures, duly normalized for any abnormal variation.
- (i) For new Distribution Licensee whose date of commercial operation is within the tariff period (i.e. April 1, 2015 to March 31, 2020), detailed project report shall be used by the Commission to estimate values of norms.

25.1 Employee Cost

Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by 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., governed by the following formula:

EMPn= (EMPb * CPI inflation) + Provision

Where:

EMPn: Employee expense for the year n.



EMPb: Employee expense as per the norm CPI inflation: is the average increase in the Consumer Price Index (CPI) for immediately preceding three financial years.

Provision: Provision for expenses beyond control of the Distribution Licensee and expected one-time expenses as specified above.

25.2 Repairs and Maintenance Expense

Repairs and Maintenance expense shall be calculated as percentage (as per the norm defined) of Average Gross Fixed Assets for the year governed by following formula:

 $R&M_n = K_b * GFA_n$

Where:

R&M_n: Repairs & Maintenance expense for nth year

GFA_n: Average Gross Fixed Assets for nth year

K_b: Percentage point as per the norm.

25.3 Administrative and General Expense

A&G expense shall be computed as per the norm escalated by 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, and shall be governed by following formula:

 $A\&G_n = (A\&G_b * WPI inflation) + Provision$

Where:

 $A\&G_n$: A&G expense for the year n $A\&G_b$: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI)

for immediately preceding three financial years

Provision: Cost for initiatives or other one-time expenses as proposed

by the Distribution Licensee and validated by the Commission."

3.7.3 The Petitioner submitted that the Commission vide Tariff Order for FY 2018-19 dated 22nd January, 2019 has approved the O & M expenses at Rs.82.58 Crore (net of employee cost capitalised). As per Audited Accounts, the actual O & M Expenses for FY 2018-19 are at Rs. 96.78 Crore (net of employee cost capitalised) and excluding GST component. The actual O&M Expenses for FY 2018-19 is provided in Table below along-with amount provisionally approved by the Commission in tariff order dated 22nd January, 2019.

Table 3-38: O & M expenses (Rs. Cr) for FY 2018-19 as submitted by Petitioner

SI. No.	Particulars	Approved Vide T.O. dated 22 January 2019.	Actual
1	Repair & Maintenance Expenses	45.4	44.19



SI. No.	Particulars	Approved Vide T.O. dated 22 January 2019.	Actual				
2	Employees Expenses	29.89	48.81				
3	Administrative & General Expenses	13.24	12.78				
4	Total O&M Expenses	88.53	105.77				
5	Employee Cost Capitalised	-5.95	-8.99				
6	Net O&M Expenses excluding GST component	82.58	96.78				
7	Add: GST Component	•	3.56				
8	Total O&M Expenses	82.58	100.34				
Total	Total may not tally due to rounding offs						

3.7.4 The Petitioner has further submitted that from the above table, Commission will observe that there is huge gap between the amount approved by the Commission and the actual expenses with respect to Employee Expenses. owing to following factors listed below, being beyond the control of the Petitioner: -

Increase in Minimum wages:

Skilled

a. All enterprise, associations, partnership, body corporates etc. are bound by the provisions of Minimum Wages Act 1948 and Govt. of Uttar Pradesh under the provisions of the Minimum Wages Act, 1948 revises minimum wages twice in a year (i.e. with effect from April and October). The comparative revised minimum wages of U.P. during FY 2018-19 were as provided in Table below:

Class of w.e.f. 1st w.e.f. 1st % increase As on 1st Apr'13 labour Apr'18 Oct'18 in C over A Α В C Unskilled 4,975.86 7,613.00 7,675.45 54.25% Semi-skilled 5,672.48 8,375.00 8,443.00 48.84%

6,296.38

Table 3-39: Minimum Wages in State of U.P.

b. The Petitioner submitted that, from the above table, it may be seen that the wages applicable from 1st April, 2018 was higher by 48-54% as compared to wages prevailing on April 2013 (i.e. mean financial year considered for determination of norms). Thus, the wages applicable for full FY 2018-19 has been significantly higher as compared to the norms.

9,381.00

9,457.49

50.21%

c. The Petitioner further stated that its license area is situated in National Capital Region (i.e. NCR) and the cost of living in this area is equivalent to the cost of living in National Capital Territory (i.e. Delhi). Thus, the impact of changes in minimum wages and other labour welfare schemes are echoed in NCR region as well.



Accordingly, the changes in minimum wage rate of NCT Delhi also affect the cost at which labour is available in Delhi-NCR. The following Table-8 shows that minimum wages prevailing during FY 2018-19 in NCT-Delhi were higher by 80%-83% as compared to State of UP:-

Table 3-40: Comparative Minimum Wages in State of U.P. and NCT-Delhi

Period	Particulars	Ref.	Unskilled Labour	Semi- skilled	Skilled
A 10	NCT-Delhi	a	13,896	15,296	16,858
Apr-18 to Sep-	State of U.P.	b	7,613	8,375	9,381
18	Variation	c=a-b	6,283	6,921	7,477
10	Variation (%)	d=c/b	83%	83%	80%
0.1.40	NCT-Delhi	е	14,000	15,400	16,962
Oct-18	State of U.P.	f	7,675	8,443	9,457
to Mar- 19	Variation	g=e-f	6,325	6,957	7,505
	Variation (%)	h=g/e	82%	82%	79%
				Wages	in Rupees

- d. 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 the remuneration of entire staff including senior level employees as well. Further, all enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages Act 1948 and 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.
- e. The Petitioner further submitted that it is very difficult for a private organization to quantify the impact of wage revision in its overall O&M Expenses. However, these revisions increase the overall cost where man power is involved much more than the increase in CPI being allowed through normative Employee Cost. Thus, the amount of escalation allowed by the Commission is not taking into account the revisions in wages.
- f. The Petitioner has 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.



g. The Petitioner further submitted that the Regulation 29 of MYT Regulation, 2014 which 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, it has been able to contain the same to 0.84% during the FY 2018-19. 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 3-41: Savings in Provisions for Bad Debts for FY 2018-19 as submitted by Petitioner

SI. No.	Particulars	U.o.M.	Reference	Actual
1	Revenue billed for the year	Rs. Cr.	а	1557.6
2	Actual Provision for Bad & Doubtful debts	Rs. Cr.	b	13.29
3	Provision as % of Revenue billed	%	c= b/a	0.84%
4	Normative Provision for Bad & Doubtful Debt @2%	Rs. Cr.	d=a x 2%	31.51
5	Saving in provision for Bad & Doubtful debts	Rs. Cr.	e=d-b	18.22

h. The Petitioner has submitted that it is able to limit Bad & Doubtful Debts at 0.84% 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, 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. The Petitioner has therefore requested that it should be allowed to recover its employee cost at actuals.

Recommendation of Sixth / Seventh Pay Commission:

a. The Petitioner has submitted that 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. The Petitioner has further submitted that the Commission has been approving the impact of change in pay scales as recommended and approved by various pay Commissions to all State Discoms, on actual basis. Also, the Regulation-25 of MYT Regulations 2014 provides for separate approval of such expenses over and above normative employee costs as reproduced herein below:-

*"*25.

- (c) One-time expenses such as expenses due to change in accounting policy, arrears paid due to pay commission etc., shall be excluded from the norms in the trajectory.
- (d) The expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits etc. in Employee costs etc. shall be excluded from norms in the trajectory.
- (e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

....."

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

Other Cost Drivers:

- a. The Petitioner has submitted that it has been striving hard to control and optimize its O & M Expense primarily keeping the consumers interest in view. However, 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.
- b. 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 further submitted that based on the above, Commission in its Tariff Order dated 14th October, 2010 has directed the Petitioner to conduct a study to benchmark its O&M Cost and accordingly ICRA Management Consultancy Services Private Limited was appointed to conduct the study through process of competitive bidding and prior approval of the Commission.
- d. The Petitioner submitted that based on the study conducted, it is no more feasible for the Petitioner 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.
- e. 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 Cost:

- a. The Petitioner has submitted that it has capitalized an amount of Rs. 8.99 Crore out of the total employee cost of Rs. 48.81 Crore incurred during FY 2018-19, as per past practice duly approved by the Commission. 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. Further, 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. 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. Accordingly, the Petitioner has requested the Commission to approve the capitalization of employee cost at Rs. 8.99 Crore during F Y 2018-19 and the net O & M expenses excluding GST component at Rs. 96.78 Crore for FY 2018-19 based on its audited accounts.



Commission's Analysis:

3.7.5 As regards to the O&M expenses, the Commission vide its deficiency dated May 13, 2020 sought a detailed computation of O&M expenses based on normative parameters and also asked the Petitioner to reconcile the same with the Audited Accounts for each head of O&M i.e. Employee expenses, Administrative and General expenses and R&M Expenses.

Table 3-42: Reconciliation of O&M Expenses as submitted by the Petitioner

SI. No.	Description	Amount (Rs. Cr.)	Remark		
1	Employee cost as shown in Audited Accounts for FY 2018-19	48.73	Please refer to Note-34 of Audited Accounts		
2	Re-measurement of post- employment benefit obligations (as per Ind AS requirement)	0.08	Please refer to Statement of Profit & Loss in Audited Accounts		
3	Other Expense as shown in Audited Accounts for FY 2018-19	79.20	Please refer to Note-37 of Audited Accounts		
4	Total Operating Expenses as per Audited Accounts	128.01			
	Less: Items dealt with separately in ARR as per UPERC (MYT Distribution Tariff) Regulations,				
		2014:			
5	Bad debts written off & provision for doubtful debts	(13.95)	Please refer to Note-37 of Audited Accounts		
6	Loss on sale of Fixed Assets	(0.74)	Please refer to Note-37 of Audited Accounts		
7	CSR Expenses	(3.97)	Please refer to Note-37 of Audited Accounts		
8	GST Impact	(3.56)	Included under "Miscellaneous expenses" shown under Note-37 of Audited Accounts and claimed separately in Form F-51 of True-up Petition		
9	Loss on fair valuation of investments (not considered for ARR Determination)	(0.02)	Please refer to Note-37 of Audited Accounts		
10	Gross O&M Expenses for True-up	105.77			
10	Total may not tally due to rounding offs				

3.7.6 Further, Regulation 25 of UPERC (Multi Year Distribution Tariff) Regulations, 2014 is as reproduced below:

Quote

25. Operation & Maintenance Expenses

The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, Repairs and maintenance (R&M) expense and Administrative and General Expense (A&G) expense. Provided



that such norms may be specified for a specific Distribution Licensee or a class of Distribution Licensees.

- (b) Norms shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel for Employee cost; combination of A&G expense per personnel and A&G expense per 1000 consumers for A&G expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses:
- (c) One-time expenses such as expense due to change in accounting policy, arrears paid due to pay commissions etc., shall be excluded from the norms in the trajectory.
- (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.

Unquote

3.7.7 As per the provisions of the aforesaid Regulations, the Commission in MYT Order dated November 30, 2017 has computed the norms for Employee expenses, R&M expenses and A&G expenses. The relevant extract of the Order is as follows:

Quote

Computation of Employee Cost:

5.3.11 Step-4: Then year wise i.e. FY 2017-18, FY 2018-19 and FY 2019-20 Employee

Expense (Consumers) and Employee Expense (Substation) is calculated considering norms per 1000 consumers and norms per substation (calculated above) using following formulae:

Employee Expense (Consumers)= (Norms per 1000 consumers * Number of consumers) / 1000

Employee Expense (Substation)= (Norms per substation * Number of consumers)

Particulars	Base Value	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
CPI Inflation		4.12%	7.21%	7.21%	7.21%
Norms per 1000 consumers(RsCrore)	0.269	0.314*	0.337	0.361	0.387
No of consumers		77672	84016	91602	99328
Employee Expense (F)(RsCrore)		24.41	28.31	33.09	38.46
Norms per substation(RsCrore)	0.003	0.004*	0.004	0.004	0.005
No of sub-stations		5967	6211	6453	6641
Employee Expense (G)(RsCrore)		22.58	25.20	28.07	30.97



*Note- 0.314 and 0.004 is arrived after escalating the base values by applying CPI inflation for FY 2014-15, FY 2015-16 and FY 2016-17.

•••••

Computation of Repair & Maintenance (R&M) Cost:

5.3.17 Step-4: Kb for control period has been computed by considering the audited figures of the preceding five years (i.e FY 2011-12 to FY 2015-16) with the formulae as follows:

Kb = % of (R&M Expenses / Average GFA)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
WPI Inflation		1.73%	0.94%	0.94%	0.94%
КЬ	2.57% = Avg. of previous 5 years	2.62% = 2.57% *(1+ 1.73%)	2.64% =2.62*(1+ 0.94%)	2.67% =2.72%*(1+ 0.94%)	2.69% =2.77%*(1+ 0.94%)

Computation of Administrative & General (A&G) Cost:

5.3.23 Step-4: Then the year wise i.e. FY 2017-18, FY 2018-19 and FY 2019-20 total A&G Expenses are calculated considering A&G Expense (Consumers) and A&G Expense (Employee) per 1000 consumers as shown below:

A&G Expense (Consumers)= (Norms per 1000 consumers * Number of consumers) / 1000

A&G Expense (Employee)= (Norms per employee * Number of employee)

Particulars	Base Value	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Norms per 1000 consumers (Rs Crore)	0.120	0.119	0.120	0.121	0.122
No of consumers (nos.)		77672	84016	91602	99328
A&G Expense (F) (Rs Crore)		9.24	10.09	11.10	12.15
Norms per substation (Rs Crore)	0.0314	0.0311	0.0314	0.0317	0.0320
No of employees (nos.)		362	440	500	574
A&G Expense (G) (Rs Crore)		11.25	13.81	15.84	18.35

Note- *0.120 & 0.0314 is arrived after escalating the base values by applying WPI inflation for FY 2014-15, FY 2015-16 and FY 2016-17.

Unquote

3.7.8 In the True Up of the previous year, of the same Control Period, the Commission allowed the O&M expenses as per the UPERC (Multi Year Distribution Tariff) Regulations, 2014. 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 for Employee expenses, R&M expenses and A&G expenses in Tariff Regulations and hence each of them have to be dealt individually & appropriately. As per the UPERC (Multi Year Distribution Tariff) Regulations, 2014, 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.

3.7.9 The Hon'ble APTEL in its Judgment dated June 2, 2016 in the matter of NPCL Vs. UPERC has held that normative approach has to be followed while allowing O&M expense. The relevant extract of the said Judgment has been reproduced below:

Quote

The State Commission in the Impugned Tariff Order has allowed O&M expenses based on norms as per the provisions of the Distribution Tariff Regulations which has been followed by it in its earlier Tariff orders. We do not find any infirmity in this approach followed by the State Commission.

Unquote

3.7.10 Therefore, the Commission for the purpose of True-Up of Employee expenses, R&M expenses and A&G expenses has taken the same norms as computed in the aforementioned MYT Order dated November 30, 2017 as shown below:

Table 3-43: Normative Employee Expenses for FY 2018-19 (Rs. Cr)

S. No	Particulars	FY 2018-19
Α	Norms per 1000 consumers	0.361
В	Number of consumers	91,234.00
С	Employee Expenses (consumers) (a)	32.94
D	Norms per substation	0.0040
Ε	Number of substations	6,573.00
F	Employee Expenses (substation) (b)	26.29
G	Total Employee Expenses {c=(a+b)/2}	29.61

Table 3-44: Normative R&M expenses for FY 2018-19 (Rs Cr)

SI No.	Parameters	Reference	FY 2018-19
1	Opening GFA	Α	1445.60
2	Additions	В	101.14



SI No.	Parameters	Reference	FY 2018-19
3	Deletions	С	4.30
4	Closing GFA	D=A+B-C	1542.43
5	Average GFA considered for R&M	E=(A+D)/2	1494.01
6	k _b	F	2.67%
7	Normative R&M expenses (Rs Cr)	G=E×F	39.89

^{*} The opening GFA is not matching with last year closing GFA due to disallowances as discussed in Capex section.

Table 3-45: Normative A&G Expenses for FY 2018-19 (Rs. Crore)

S. No	Particulars	FY 2018-19
Α	Norms per 1000 consumers	0.1210
В	Number of consumers	91,234
С	A&G Expenses (consumers)	11.04
D	Norms per Employee	0.0317
E	Number of Employee	429
F	A&G Expenses (Employees)	13.60
G	Total A&G Expenses (C+F)/2	12.32

- 3.7.11 The Commission while allowing the O&M expenses, has considered the "lower of normative or actual for each element of O&M, i.e. Employee Expense, R&M & A&G" otherwise the purpose of having individual norms of Employee Expenses, A&G Expenses, and R&M Expenses will be affected.
- 3.7.12 Based on the above, the computation of Trued- Up O&M expenses for FY 2018-19 as per the norms specified in the UPERC (Multi Year Distribution Tariff) Regulations, 2014, is as shown in the Table below:

Table 3-46: O&M Expenses as approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved vide T.O. 22/01/2019	Audited Accounts	True Up Petition	Normative	Approved upon Truing up
Employee Expenses	29.89	48.81	48.81	29.61	29.61
Repair & Maintenance Expenses	45.40	44.19	44.19	39.89	39.89
Administrative and General Expenses	13.24	12.78	12.78	12.32	12.32
Gross O&M Expenses	88.53	105.78	105.78	81.82	81.82
Less:					
Employee Expenses Capitalized	5.95	8.99	8.99	8.99	8.99
Net O&M Expenses	82.58	96.79	96.79	72.83	72.83



3.8 EXPENSES INCURRED DUE TO CHANGE IN LAW- GST

- 3.8.1 The Petitioner has 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.
- 3.8.2 The Petitioner has further submitted that as per Regulation 25(d) and Regulation 9.1 of MYT Regulations 2014, 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.
- 3.8.3 The Petitioner has further submitted that it has 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. Petitioner has submitted that 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.
- 3.8.4 Accordingly, considering, the approved incremental rate of GST at 5.88%, the net impact of GST for FY 2018-19 would be computed as provided in Table below: -

Table 3-47: Impact of GST for FY 2018-19 as submitted by Petitioner (Rs. Crore.)

SI. No.	GST Item	Reference	Actual
1	Repair & Maintenance Expenses including GST	Α	46.95
2	Administrative and General Expenses including GST	В	13.57
3	Net expenses affected by GST	c=a+b	60.52
4	Approved incremental rate of GST	D	5.88%
5	Net impact of GST	e=c x d	3.56

- 3.8.5 The Petitioner has 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 it.
- 3.8.6 The Petitioner has submitted the CBEC vide Circular No. 34/8/2018-GST dated 1st March, 2018 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
- 3.8.7 The Petitioner has submitted that the 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. The Petitioner filed the detailed reply in response to summon and also filed a writ petition before Hon'ble Allahabad High Court on 24th July, 2018 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. Further, the Petitioner has started to levy GST on above services from October, 2018 onwards.
- 3.8.8 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 on such service was not levied and recovered from consumers under its bona fide intention of non-applicability of circular. However, pending final adjudication of the matter, the amount payable cannot be ascertained at this stage, therefore, the Petitioner has submitted that it has not claimed the same in this True up Petition and it shall claim the same on actual basis at an appropriate time in subsequent years.

Commission's Analysis

3.8.9 With regards to GST claimed of Rs. 3.56 Crore in True Up of FY 2018-19, a query vide email dated May 13, 2020 was sought from the Petitioner to provide computation of GST and documentary evidence of the same to substantiate the claim. The Petitioner in regards to the above query submitted the details as:

"As submitted earlier, the Central Government has made new GST effective from July 01, 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.

In order to determine the impact of GST on its expenses, the Company had further submitted that it has got the impact analysis of GST done from M/s Lakshmikumaran & Sridharan, Attorney. The report summarizes and bring forth the impact of GST Act as well as rules, notifications, etc., made thereunder, on the distribution of electricity done by the Company, with emphasis on cost of various expenses incurred by the Company pre and post implementation of GST. This Report provides an insight into the indirect taxation system of the country post GST and contains an analysis of the cost increase/decrease to Petitioner after the implementation of GST.

Based on the above submission, the Hon'ble Commission in its Tariff Order dated 3^{rd} September 2019 has approved the differential impact of GST @ 5.88% of the expenses.

Accordingly, for the purpose of claiming the impact of additional cost on account of GST, the Company has computed the amount as follows -

	Table:-3 Computation of GST Impact						
SI.	SI. Expenses Amount GST Impact GST Impact						
No.	(Rs. Cr.) (%)			(Rs. Cr.)			
1	R&M Expenses	46.95	5.88%	2.76			
2	A&G Expenses	13.57	5.88%	0.80			
	Total	60.52	5.88%	3.56			

It is further submitted that the CBEC vide Circular No. 34/8/2018-GST dated 1st March' 2018 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. Rental Charges against metering equipment
- iv. Testing fee for meter/transformer, capacitors etc.
- v. Labour charges from customer for shifting of service lines

The Company has challenged the aforesaid circular through Writ no. 1045 of 2018 at Allahabad High Court which is still pending. Therefore, has not considered the impact of the aforesaid Circular in the above estimated GST impact."