



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2018 2019/1285

Date: 14 November, 2018

To,
The Managing Director,
Tata Power Company Ltd.,
Dharavi Receiving Station,
New Shalimar Industrial Estate
Matunga, Mumbai – 400 019

Subject: Post facto approval of TPC-D's Fuel Adjustment Charges (FAC) for the period of January, 2018 to March, 2018.

Reference: 1. TPC-D's FAC submission vide letter no.179 dated 11 July, 2018 for post-facto approval of FAC for the period from January, 2018 to March, 2018.
2. Replies to Data Gaps received on 2 and 5 November, 2018.

Sir,

Upon vetting the FAC calculations for the months of January, 2018 to March, 2018, the Commission has accorded post facto approval to TPC-D for charging FAC to its consumers as shown in the table below:

Month	Jan2018	Feb2018	Mar 2018
Z _{FAC} allowed for recovery (Rs. Crore)	24.81	26.78	17.32

TPC-D is allowed to levy Rs. 0.04 Crore along with interest to consumers in next FAC billing cycle. This is on account of correction in power purchase expenses and its impact on adjustment factor, carrying cost etc as explained in para 10.2 of the vetting report.

The above approval of FAC is subject to final True up of FY 2017-18 under the MERC (Multi Year Tariff) Regulations, 2015.

Yours faithfully,

(Dr. Rajendra Ambekar)
Executive Director, MERC

Encl:Annexure A: Detailed Vetting Report for the periodof January, 2018 to March, 2018.

**POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JANUARY,
2018 TO MARCH, 2018**

Subject: Post facto approval of TPC-D's Fuel Adjustment Charges (FAC) for the period of January, 2018 to March, 2018.

Reference: 1. TPC-D's FAC submission vide letter no. 179 dated 11 July, 2018 for post-facto approval of FAC for the period from January, 2018 to March, 2018.
2. Replies to Data Gaps received on 2 and 5 November, 2018.

1. **FAC submission by TPC-D:**

1.1 TPC-D has submitted FAC submissions for the months of January, 2018 to March, 2018 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by TPC-D, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of March, 2018 to May, 2018.

2. **Background**

2.1 On 21 October, 2016, the Commission has issued Tariff Order for TPC-D (Case No.47 of 2016) for True-up of FY 2014-15, provisional True-up for FY 2015-16, and Aggregate Revenue Requirement and Tariff for FY 2016-17 to FY 2019-20. Revised Tariff has been made applicable from 1 October, 2016.

2.2 Vide its letter dated 15 November, 2016, the Commission communicated the excel formats for filing of FAC submissions to all Distribution Licensees. The Commission also directed all Distribution Licensees to submit FAC computations, including details pertaining to variation in fuel cost of generators for the approval of the Commission.

2.3 Vide FAC vetting Report dated 16 January, 2017, the Commission accorded prior approval to the FAC for the month of October, 2016.

2.4 In terms of MERC (MYT) Regulations, 2015 a Distribution Licensee is required to obtain post facto approval of the Commission on a quarterly basis for FAC charges. Accordingly, vide its letter dated 11 July, 2018. TPC-D has filed FAC submissions for the months of January, 2018 to March, 2018 for post facto approval. The Commission has scrutinized the submissions provided by TPC-D and has also verified the fuel and power purchase bills provided along with its submissions.



3. Energy Sales of the Licensee

3.1 The net energy sales within licence area as submitted by TPC-D in the FAC submission and as approved by the Commission are as shown in the table below.

Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales		
			Jan'18 (MU)	Feb'18 (MU)	Mar'18 (MU)
			(I)	(II=I/12)	(III)
LT Category					
LT I(A) - Residential (BPL)	0.02	0.00	0.00	0.00	0.00
LT I(B) – Residential	2122.18	176.85	117.39	125.18	144.56
LT II(A) - Commercial upto 20 kW	275.25	22.94	12.79	13.44	14.72
LT II(B) - Commercial 20 to 50 kW	90.36	7.53	6.31	5.70	8.29
LT II(C) - Commercial > 50 kW	363.45	30.29	22.92	20.50	29.89
LT III(A) - Industrial upto 20 kW	70.5	5.88	3.46	3.37	3.77
LT III(B) - Industrial > 20 kW	210.04	17.50	14.72	11.64	18.93
LT V - Advertisement & Hoardings	0.05	0.00	0.01	0.01	0.01
LT VI – Streetlights	0.57	0.05	0.05	0.04	0.04
LT VII(A) - Temporary Religious	0.08	0.01	0.00	0.00	0.00
LT VII(B) - Temporary Others	21.05	1.75	2.21	1.86	2.45
LT VIII - Crematoriums & Burial Grounds	0.33	0.03	0.03	0.03	0.03
LT IX(A) - Public Service Govt Hospital & Educational Institutions	0.09	0.01	0.29	0.27	0.39
LT IX(B) - Public Services Others	15.78	1.32	1.51	1.37	2.08
HT Category					
HT I – Industry	882.19	73.52	56.09	51.54	69.49
HT II – Commercial	610.51	50.88	36.85	34.85	36.44
HT III - Group Housing Society (Resi)	3.56	0.30	0.27	0.25	0.32
HT IV - PWW & Sewage Treatment Plants	63.97	5.33	6.41	5.80	6.34
HT V(A) - Railways 22/33 kV	158.1	13.18	5.03	4.71	5.43
HT V(B) - Railways Metro & Monorail	6.38	0.53	0.40	0.39	0.49
HT VI(A) - Public Service Govt Hospital & Educational Institutions	43.94	3.66	0.87	0.88	1.04
HT VI(B) - Public Services Others	153.62	12.80	6.90	5.50	6.78
HT VII - Temporary Supply	10.18	0.85	1.59	1.45	1.79
Sub total	5102.20	425.18	296.09	288.76	353.28

3.2 It was observed that the total sale for January to March, 2018 is 296.09 MU, 288.76 MU and 353.28 MU respectively which is lower than that of the MYT approved i.e., 425.18MU.

4. Cost of Power Purchase



4.1 TPC-D purchase majority of its power from TPC-G. Further, TPC-D also procures power from other sources in order to fulfil the demand of its consumers. The following are the list of sources from which TPC-D procures power to meet its demand.

- Purchases from Tata Power Company Ltd. (TPC-G)
- Renewable energy procurement (RPS)
- Bilateral contracts and decrements to the imbalance pool.
- Unscheduled Interchanges (Interstate UI)

4.2 The following tables show the variation in average power purchase cost (Rs/kWh) for the months of January, 2018 to March, 2018 as compared to average power purchase cost approved in Tariff Order dated 21 October, 2016:

Particulars	Tariff Order Dated 21.10.2016			Actual for Jan, 2018		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	3666.70	1539.52	4.20	247.26	114.68	4.64
RE Sources	369.61	261.48	7.07	13.43	20.22	15.06
Bilateral	1300.34	407.25	3.13	50.80	16.90	3.33
Others	-	-	-	(8.93)	(3.91)	4.38
Total	5336.66	2208.25	4.14	304.75	148.93	4.89

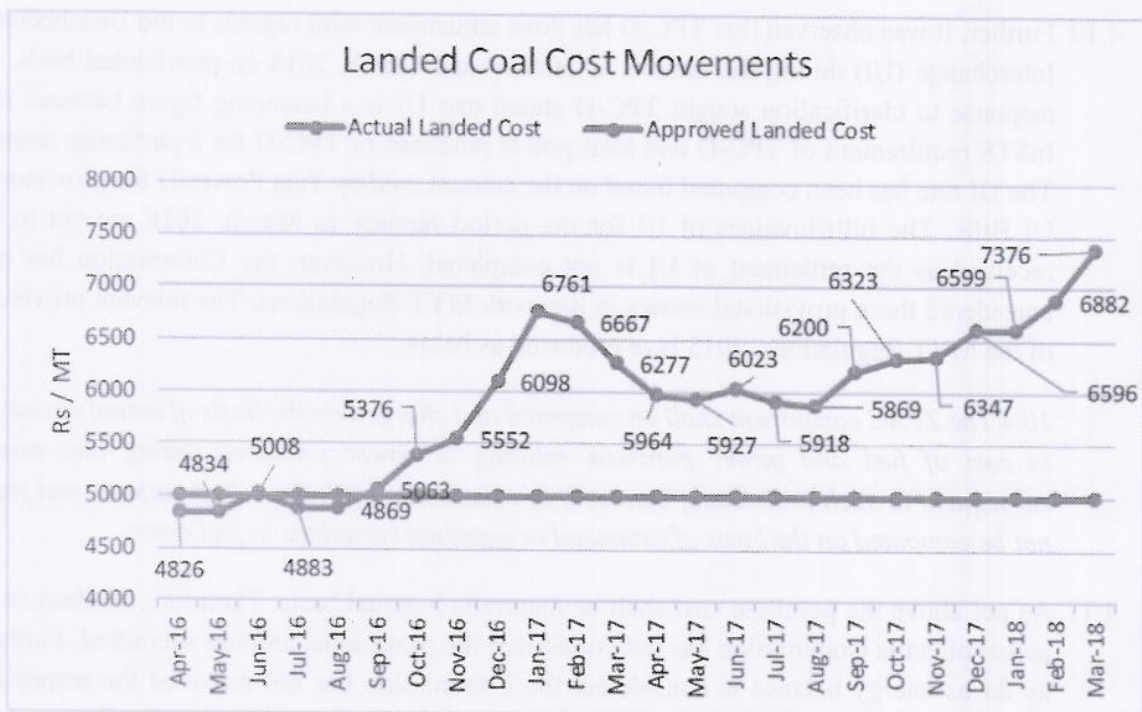
Particulars	Actual for Feb, 2018			Actual for Mar, 2018		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	297.87	141.96	4.77	360.54	166.24	4.61
RE Sources	12.51	12.76	10.21	14.89	13.39	8.99
Bilateral	1.15	0.29	2.52	1.48	0.37	2.52
Others	(22.10)	(10.08)	4.56	(32.15)	(15.23)	(4.74)
Total	289.43	144.93	5.01	344.75	164.77	4.78

4.3 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of TPC-D with regards to average power purchase cost for the months of January to March, 2018. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase Cost from the relevant bills/invoices received for all purchasing sources.



- 4.4 With regards to TPC-G, TPC-D has purchased 247.26 MU, 297.87 MU and 360.54 MU in the months of January, February and March, 2017 respectively. The Commission has observed that the quantum of power purchase from TPC-G's Unit 5 and Unit 8 during the month of January was lower as compared to the corresponding purchases during the months of February and March, 2018, which was mainly on account of lower availability of the aforesaid Units. This has led TPC-D to purchase the required power from the Standby arrangement and Traders for the month of January, 2018.
- 4.5 In response to query TPC-D stated that during the month of January, 2018 apart from planned outage of Unit 5 there were also two forced outages of Unit 8 due to which there was lower generation and hence, lower power procurement from TPC-G. Further, the planned outage of approximately 365 hours was taken from 2 January, 2018 to 17 January, 2018 for boiler rectification and generator primary water flushing. Even though the PLF was lower for the above month, the entire monthly fixed cost was payable as the cumulative plant availability was above the normative availability of 85% in line with Regulation 48.3 of MYT Regulations, 2015. This has resulted into fixed cost spread over lower net generation increasing average power purchase price from these Units and thus impacting the APPC. Further, due to low availability, TPC-D has purchased 2.19 MUs in the month of January through standby power from MSEDCL.
- 4.6 The APPC for TPC-G, which generates power on Imported Coal, Domestic Natural Gas (under APM mechanism), Oil (LSHS) and imported RLNG has been worked out at Rs. 4.64/ kWh, Rs. 4.77/ kWh and Rs. 4.61/ kWh respectively for months of January, February and March, 2018. This is higher than that of MYT approved rate, i.e., Rs. 4.20/ kWh. Apart from the fixed cost impact stated in the para above, the variation is mainly on account of steep increase in average price of fuel from January, 2018 onwards which can be primarily attributed to the steep rise in coal prices. The landed cost of coal for the month of January to March, 2018 is Rs.6599/MT, Rs. 6882/MT and Rs. 7376/MT respectively which is around 30% to 50% higher than that of MYT approved value of Rs. 5003/MT. The generator (TPC-G) of TPC-D has provided a comparison of the landed cost of coal prevailing for various months compared to the Commission approved landed cost of Coal in the corresponding MYT Order as follows.





- 4.7 There is significant rise in coal prices in the month of January to March 2018 and is substantially higher than the approved coal price in the corresponding MYT Order. Further, the Commission scrutinised the sample coal bills for January, 2018 provided by TPC-G for ascertaining the coal price increase.
- 4.8 TPC-D had purchased non-Solar and Solar RE power from various sources as well asthrough the REC mechanism. TPC-D has long-term tie ups with wind and solar generators. TPC-D has purchase total 13.43 MU, 12.51 MU and 14.89 MU of RE power during the months of January, February and March, 2018 respectively. This power has been purchased by TPC-D as per Generic Tariff rate approved by the Commission. The average power purchase cost from RE sources during the months of January, February and March, 2018 is Rs. 15.06/kWh, Rs. 10.21/kWh and Rs. 8.99/kWh respectively as compared to the MYT approved rate of Rs. 7.07/kWh. The variation is mainly on account of purchase of REC during the respective period. In order to fulfil its RPO obligation, TPC-D has purchased REC of worth Rs. 11.50 Crore, Rs. 4.77 Crore and Rs. 4.13 Crore during the aforesaid period against the monthly average of Rs. 4.71 Crore approved in the MYT Order. Due to this the total power purchase cost has increased and thus impacting the APPC.
- 4.9 With regards to bilateral, TPC-D has purchased 50.80 MU, 1.15 MU and 1.48 MU respectively during the months of January, February and March, 2018. The average power purchase cost from traders is Rs. 3.33/kWh, Rs.2.52/kWh and Rs. 2.52/kWh respectively as compared to the MYT approved rate of Rs. 3.13/kWh. TPC-D has submitted the supporting invoice during the aforesaid period. The Commission has scrutinised the documents submitted and found to be in order.



4.10 Further, it was observed that TPC-D has done adjustment with regards to the Unscheduled Interchange (UI) during the months of January and March, 2018 on provisional basis. In response to clarification sought TPC-D stated that UI is a balancing figure between the InSTS requirement of TPC-D and total power purchase of TPC-D for a particular month. The UI rate has been computed based on the amount paid by Tata Power-D for provisional UI Bills. The bills/invoices of UI for the period January to March, 2018 are yet to be received as the settlement of UI is not completed. However, the Commission has not considered these provisional entries in line with MYT Regulations. The relevant provision of the MYT Regulations, 2015 is reproduced as below:

10.4 The ZFAC component shall be computed and charged on the basis of actual variation in cost of fuel and power purchase relating to power procured during any month subsequent to such costs being incurred, in accordance with these Regulations, and shall not be computed on the basis of estimated or expected variations in fuel costs.

4.11 As per above the purchase cost shall be incurred on actual basis. Therefore, in absence of actual bills the Commission has not considered the provisional amount submitted. Further, as far as energy balance is considered, the Commission has not removed the respective quantum from the computation of energy availability of TPC-D for distribution loss computation. Thus, it has no impact of the energy balance.

4.12 Further, it was observed that TPC-D has done sale of surplus power during the months of January to March, 2018. The Commission has compared the rate of sale of surplus power by TPC-D vis-à-vis the Market Clearing Price (MCP) prices of power traded at IEX. The average MCP prices prevailed at Rs. 3.20/kWh, Rs. 3.23/kWh and Rs. 4.02/kWh for the months of January, February and March, 2018 respectively. Against the above prices traded, TPC-D sold the surplus power at a rate of Rs. 4.38/kWh, 4.56/kWh and Rs. 4.74/kWh for the months of January, February and March, 2018 respectively.

4.13 Further, it was observed that TPC-D has considered Rs. 5.08 Crore in the total power purchase cost during the month of March, 2018 on account of additional custom duty pertaining to past period. In this regards, the Commission observes that Additional Customs Duty had become payable due to the difference of opinion in classification of coal by TPC-G and Office of the Commissioner Customs (SIIB-Imports). TPC-G classified the above coal procured under “Steaming Non-Coking Coal” category attracting “Nil” Basic Custom Duty (BCD) and 1% Countervailing Duties (CVD). Whereas the authorities classified the same coal procured under “Bituminous Coal” attracting BCD of 5% ad valorem and CVD of 6% ad valorem. Further, as the matter is pending for decision before the Supreme Court, there is an uncertainty in the implications and costs that would result from the outcome of the verdict. Pending the verdict of the Supreme Court, the Commission has not included the claims of TPC-D in this report.

4.14 Based on above, the Commission allows the average power purchase cost of **Rs. 4.89/kWh** for the month of January, 2018, **Rs. 5.01/kWh** for the month of February, 2018 and **Rs. 4.78/kWh** for the month of March, 2018 as shown in the tables above.



5. **FAC on account of fuel and power purchase cost (F)**

5.1 The Commission has worked out the average power purchase costs for the months as shown in above tables. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 21 October, 2016 and arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

5.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the months of January, 2018 to March, 2018.

S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2017
1	Average power purchase cost approved by the Commission	Rs./kWh	4.14	4.14	4.14
2	Actual average power purchase cost	Rs./kWh	4.89	5.01	4.78
3	Change in average power purchase cost (=2 -1)	Rs./kWh	0.75	0.87	0.64
4	Net Power Purchase	MU	304.75	289.43	344.75
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	22.83	25.17	22.12

5.3 Further, because of disallowance of UI on provisional basis and also due to non-consideration of Additional Custom Duty as explained earlier there is a under recovery in change in fuel and power purchase cost claimed by TPC-D and approved by the Commission as shown in Table below:

Month	Basis	Jan2018	Feb2018	Mar2018	Total
Change in fuel cost claimed (Rs. Crore)	a	22.21	24.01	22.82	69.05
Change in fuel cost Approved (Rs. Crore)	b	22.83	25.17	22.12	70.11
under-recovery (Rs. Crore)	c = (b-a)	0.62	1.15	(0.71)	1.07

6. **Adjustment for over recovery/under recovery (B)**

6.1 After adjustment for over-recovery/under recovery (B), the adjustment factor to be added / reduced is as below:

S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	12.04	17.80	24.81
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	10.07	16.19	28.99
1.3	Adjustment factor for over-recovery/under-	Rs. Crore	1.972	1.608	(4.18)



S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
	recovery (1.2 - 1.1)				
2.0	Carried forward adjustment attributable to application of ceiling limit for previous month	Rs. Crore	0.000	(0.005)	(0.014)
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	1.972	1.603	(4.197)
4.0	Adjustment for refund as per Post Facto Approval for QII	Rs. Crore			(0.566)
5.0	Amount not allowed to be recovered due to FAC limit	Rs. Crore			0.001
6.0	Net Adjustment factor for over-recovery/under-recovery (1.3+ 1.4)	Rs. Crore	1.972	1.603	(4.762)

6.2 TPC-D in its submission has considered the cost allowed to be recovered for the month of February as Rs.18.35 Crore as against approved value of Rs.17.80 Crore. In response to clarification sought, TPC-D stated the as the FAC for the billing month of April, 2018 was charged to consumers prior to the post facto approval of FAC for Q3 of FY 2017-18 therefore aforesaid values have been considered as per their computation. However, the Commission has considered the approved amount in this report and accordingly computed the FAC. Further, the refund of Rs. 0.54 Crores along with the interest for the period 1 October, 2017 to 31 March, 2018 has been considered by Tata Power-D. Tata Power-D has refunded total amount of Rs. 0.566 Crores including interest in the May billing cycle.

7. Carrying Cost for over recovery/under recovery (B)

7.1 The following Table shows the month wise interest rate and amount worked out as Carrying/ Holding cost for under/ over recovery for the months of January, 2018 to March, 2018.

Month	Jan 2018	Feb 2018	Mar 2018
Adjustment Factor (Rs. Crore)	1.97	1.60	(4.20)
Applicable Interest Rate	9.45%	9.45%	9.65%
Carrying/ Holding cost for under/ over recovery (Rs. Crore)	0.016	0.013	(0.034)

8. Apart from above FAC components claimed above, TPC-D has done adjustment in the last month of quarter, i.e., March, 2018 on account of impact of updating data of previous months. In response to clarification sought, TPC-D stated that the adjustment represents the annual impact of updating the previous months data such as changeover FBSM, Wind generation due to receipt of Credit Notes, Transmission loss due to revisions by Maharashtra State Load Dispatch Centre (MSLDC), Open Access units etc. However, the Commission has not considered the same for the purpose of FAC computation as TPC-D can claim the same during True-up process.



9. **Disallowance due to excess Distribution Loss**

9.1 Regulation 10.8 of MYT Regulations, 2015 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

“10.8 The total ZFAC recoverable as per the formula specified above shall be recovered from the actual sales in terms of “Rupees per kilowatt-hour”:

Provided that, in case of unmetered consumers, the ZFAC shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of ZFAC corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total ZFAC recoverable”

9.2 The following table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.

S. No.	Particulars	Units	Approved in Tariff Order	Actual up to		
				Jan-18	Feb-18	Mar-18
1	Energy Requirement for TPC-D Consumers at T\diamondD interface	MU	2474.86	2249.74	2446.15	2681.68
2	TPC-D Retail Sales (excluding sales at 110/132 kV level)	MU	2449.61	2226.24	2419.65	2657.57
3	Distribution Loss (1 - 2)	MU	25.25	23.51	26.50	24.12
4	Distribution Loss as % of net energy input (3/1)	%	1.02%	1.04%	1.08%	0.90%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.064	0.157	-
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	(0.005)	(0.014)	-



9.3 Further, TPC-D stated that for the months of January and February, 2018 due to the formula error TPC-D has not considered the excess distribution loss while calculating the FAC per unit. However, the Commission has considered the excess distribution loss in this FAC approval. As seen from the above table, cumulative distribution loss for the months of January, 2018 to February, 2018 is higher than the approved distribution loss of 1.02%. Accordingly, 0.005 MU and 0.014 MU deductions have been made on account of excess distribution loss for the month of January, 2018 to February, 2018 and cumulative distribution loss for the months of March, 2018 is lower than the approved distribution loss of 1.02%. Hence, no deductions have been made on account of excess distribution loss for the same.

10. Summary of Allowable Z_{FAC}

10.1 The summary of the FAC amount as approved by the Commission for the month of January, 2018 to March, 2018 which is allowed to be recovered in the billing month of March, 2018 to May, 2018 is as shown in the Table below.

S. No.	Particulars	Units	Jan 2018	Feb 2018	Mar 2018
1.0	Calculation of ZFAC				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	22.83	25.17	22.12
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.02	0.01	(0.03)
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	1.97	1.60	(4.76)
1.4	ZFAC = F+C+B	Rs. Crore	24.81	26.78	17.32
2.0	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	290.70	284.96	363.82
2.2	Excess Distribution Loss*	MU	0.06	0.16	0.00
2.3	ZFAC per kWh	Rs./kWh	0.85	0.94	0.48
2.4	Cap at 20% of variable component of tariff	Rs./kWh	1.19	1.19	1.19
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.85	0.94	0.48
3.0	Recovery of FAC				
3.1	Allowable FAC [(2.1 x 2.5)/10]	Rs. Crore	24.81	26.77	17.32
3.2	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.5)/10]	Rs. Crore	(0.005)	(0.014)	
4.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	24.81	26.78	17.32
4.1	Carried forward FAC for recovery during future period (3.1-4.0)	Rs. Crore	0.000	0.000	0.000



10.2 It can be seen from the above table that a recovery of Rs. 68.92 Crore becomes due for the months from January, 2018 to March, 2018 cumulatively against which the TPC-D has recovered Rs. 68.88 Crore due to the disallowance of UI specified in Para 5.3 and the errors specified in para 6.2 and para 9.3 above. The Commission allows the TPC-D to recover remaining Rs.0.04 Crore along with interest to consumers in next FAC billing cycle.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MERC MYT Regulations, 2015 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

“10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

$$\text{ZFAC Cat (Rs/kWh)} = [\text{ZFAC} / (\text{Metered sales} + \text{Unmetered consumption estimates} + \text{Excess distribution losses})] * k * 10,$$

Where:

ZFAC Cat = ZFAC component for a particular Tariff category/sub-category/consumption slab in ‘Rupees per kWh’ terms;

k = Average Billing Rate / ACOS;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in ‘Rupees per kWh’ as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

ACOS = Average Cost of Supply in ‘Rupees per kWh’ as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly ZFAC shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the ZFAC on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future periods as may be directed by the Commission....”

11.2 The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations. The Commission observed that there is



variation of Z_{FAC} in absolute terms on considering category wise per unit FAC worked out and category wise actual sales for the months of January, 2018 to March, 2018.

11.3 The variation in FAC in absolute terms is due to formula error of Z_{FAC} computed on per unit basis. The variation however is taken care in the adjustment factor of subsequent months.

11.4 The following table shows per unit Z_{FAC} to be charged to the consumers of TPC-D for the billing month of March, 2018 to May, 2018.

FAC for Billing Month of March, 2018 to May, 2018

S. No	Consumer Category	Slabs	ZFAC to be levied in billing month of		
			Mar'18	Apr'18	May'18
			(Rs./kWh)	(Rs./kWh)	(Rs./kWh)
(A)	LT Category				
1	LT 1 – BPL	0 – 30	0.150	0.150	0.147
2	LT 1 - Residential S1	0 – 100	0.186	0.244	0.135
3	LT 1 - Residential S2	101 – 300	0.479	0.589	0.326
4	LT 1 - Residential S3	301 – 500	0.883	0.980	0.542
5	LT 1 - Residential S4	> 501	1.188	1.308	0.723
6	LT II Commercial (A)	0 - 20 kW	0.920	1.030	0.570
7	LT II Commercial (B)	20–50 kW	0.988	1.051	0.581
8	LT II Commercial (C)	> 50 kW	1.137	1.164	0.644
9	LT III (A) - LT Industries	0 - 20 kW	0.871	0.926	0.512
10	LT III (B) - LT Industries	> 20 kW	1.051	1.070	0.592
11	LT IV - Public Water Works	all units	0.776	0.795	0.440
12	LT V - Advt & Hoardings	all units	1.584	1.550	0.857
13	LT VI - Street Lights	all units	0.938	0.963	0.533
14	LT VII (A) - Temporary Supply –Religious	all units	0.691	0.771	0.426
15	LT VII (B) - Temporary Supply –Others	all units	1.172	1.189	0.658
16	LT VIII - Crematorium and Burial Grounds	all units	0.496	0.567	0.313
17	LT IX (A) - Public Service – Govt. Hospitals & Educational Institutes	all units	0.945	0.981	0.543
18	LT IX (B) - Public Service – Others	all units	1.109	1.183	0.654
19	LT X - Agriculture (A) Pumpsets	all units	0.578	0.600	0.358
20	LT X - Agriculture (B) Others	all units	0.782	0.853	0.472
(B)	HT Category				
21	HT - I Industry	all units	1.024	1.131	0.625
22	HT - II Commercial	all units	1.139	1.256	0.695
23	HT - III Group Housing Society (Residential)	all units	0.739	0.856	0.473



S. No	Consumer Category	Slabs	ZFAC to be levied in billing month of		
			Mar'18	Apr'18	May'18
			(Rs./kWh)	(Rs./kWh)	(Rs./kWh)
24	HT - IV Public Water Works	all units	0.928	1.012	0.560
25	HT-V Railways, Metro & Monorail	all units	0.944	1.018	0.563
26	HT-VI (A) Public Service – Govt. Hospitals & Educational Institutes	all units	0.931	1.003	0.555
27	HT-VI (B) Public Service- Others	all units	1.081	1.166	0.645
28	HT-VII Temporary Supply	all units	1.144	1.233	0.682



