MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400 005 Tel. No. 022 22163964/65/69 – Fax 022 22163976

E-mail: mercindia@merc.gov.in
Website: www.merc.gov.in

Ref. No. MERC/FAC/2019-20/E-Letter

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

April, 2019 to June, 2019.

Reference: TPC-D's submission dated 5 November, 2019, 26 May, 13 June and 25 July, 2020

for post-facto approval of FAC for the period from April, 2019 to June, 2019.

Sir.

Upon vetting the FAC calculations for the months of April, 2019 to June, 2019 as mentioned in the above reference, the Commission has accorded post facto approval to TPC-D for charging FAC to its consumers as shown in the table below:

Month	April , 2019	May, 2019	June, 2019
Z _{FAC} allowed for recovery (Rs. Crore)	7.23	8.14	10.64

TPC-D was to recover Rs.18.78 Crore cumulatively for the last two months of the quarter, however, as against this, TPC-D has actually recovered Rs. 13.07 Crore only. Hence, there is an under-recovery of amount Rs. 5.72 Crore (Rs. 13.07 Crore – Rs. 18.78 Crore) which is mainly because of non-consideration of refund as mentioned **in Para 6.2 of the enclosed Report**. Therefore, TPC-D is allowed to recover additional FAC of Rs. 5.72 Crore from consumers. Since FY 2019-20 is already over, the above adjustment will be rolled over in next FAC approvals (i.e., FAC of Q2 of FY 2019-20) and finally would be adjusted in the final True up of FY 2019-20.



Date: 27 July, 2020

As FY 2019-20 is already over and provisional True-up of FY 2019-20 has also been done in recent MYT Order dated 30 March, 2020, the rationale for post facto approval of Q1 of FY 2019-20 is only to carry forward the allowance or disallowance to next quarter and subsequently to Q4 of FY 2019-20. Any variation in final allowance or disallowance of FAC will be reconciled at the time of final True-up of FY 2019-20 under the MERC (Multi Year Tariff) Regulations, 2015.

Yours faithfully,

Sd/-(Prafulla Varhade) Director (EE), MERC



Encl: Annexure A: Detailed Vetting Report for the period of April, 2019 to June, 2019.

Page 2 of 24

Detailed Vetting Report

Date: 27 July,2020

POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF APRIL, 2019 to JUNE, 2019

Subject: Post facto approval of TPC-D's Fuel Adjustment Charges (FAC) for the period of

April, 2019 to June, 2019.

Reference: TPC-D's FAC submission dated 5 November, 2019, 26 May, 13 June and 25 July,

2020 for post-facto approval of FAC for the period from April, 2019 to June, 2019.

1. FAC submission by TPC-D:

1.1 TPC-D has submitted FAC submissions for the months of April, 2019 to June, 2019 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 June, 2019 to August, 2019.

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 Truing-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 On 12 September, 2018, the Commission has issued Tariff Order for TPC-D (Case No. 69 of 2018) for Mid-Term Review, including Truing-up of FY 2015-16 and FY 2016-17, provisional Truing-up for FY 2017-18, and revised Aggregate Revenue Requirement and Tariff for FY 2018-19 to FY 2019-20. Revised Tariff has been made applicable from 1 September, 2018.
- 2.3 On 30 March, 2020, the Commission has issued MYT Tariff Order for TPC-D (Case No.326 of 2019) for Truing-up of FY 2017-18 and FY 2018-19, provisional Truing-up for FY 2019-20, and Aggregate Revenue Requirement and Tariff for FY 2020-21 to FY 2024-25. Tariff has been made applicable from 1 April, 2020.
- 2.4 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.

- 2.5 Vide FAC vetting Report dated 16 January, 2017, the Commission accorded prior approval to the FAC for the month of October, 2016.
- 2.6 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, on 5 November, 2019, 26 May, 13 June and 25 July, 2020, TPC-D has filed FAC submissions for the months of April, 2019 to June, 2019 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.

	Approved by	Monthly	A	Actual Sales			
Consumer Category	the Commission * (MU)	Approve d (MU)	April' 19 (MU)	May'19 (MU)	June'19 (MU)		
	(I)	(II=I/12)	(III)	(IV)	(V)		
LT Category							
LT I(B) – Residential	2072.63	172.72	171.03	182.62	207.00		
LT II(A) - Commercial upto 20 kW	163.38	13.62	15.28	16.33	16.59		
LT II(B) - Commercial 20 to 50 kW	96.94	8.08	5.15	11.25	4.99		
LT II(C) - Commercial > 50 kW	318.15	26.51	22.77	33.92	19.22		
LT III(A) - Industrial upto 20 kW	36.07	3.01	2.96	3.75	2.65		
LT III(B) - Industrial > 20 kW	202.40	16.87	14.90	18.30	13.60		
LT IV - PWW & Sewage Treatment Plants	25.80	2.15	0.05	0.06	0.04		
LT V - Advertisement & Hoardings	0.10	0.01	0.01	0.01	0.01		
LT VI – Streetlights	0.75	0.06	0.05	0.05	0.05		
LT VII(A) - Temporary Religious	0.03	0.00	0.00	0.00	0.00		
LT VII(B) - Temporary Others	32.58	2.72	1.43	2.27	1.86		
LT VIII - Crematoriums & Burial Grounds	0.29	0.02	0.00	0.05	0.00		
LT IX(A) - Public Service Govt Hospital &Educational Institutions	2.09	0.17	0.17	0.47	0.14		
LT IX(B) - Public Services Others	0.09	0.01	1.47	2.23	1.31		
LT XI - Electric Vehicle Charging Stn.	0.00	0.00	0.00	0.01	0.00		
HT Category							

	Approved by	Monthly	A	ctual Sale	es
Consumer Category	the Commission * (MU)	Approve d (MU)	April' 19 (MU)	May'19 (MU)	June'19 (MU)
	(I)	(II=I/12)	(III)	(IV)	(V)
HT I – Industry	925.25	77.10	75.43	87.92	89.05
HT II – Commercial	644.60	53.72	42.45	50.29	47.80
HT III - Group Housing Society (Resi)	3.76	0.31	0.71	0.78	0.82
HT IV - PWW & Sewage Treatment Plants	76.00	6.33	5.30	5.53	5.56
HT V(A) - Railways 22/33 kV	70.08	5.84	7.22	5.61	6.43
HT V(B) - Railways Metro & Monorail	11.77	0.98	0.00	0.00	0.00
HT VI(A) - Public Service Govt Hospital & Educational Institutions	14.66	1.22	1.28	1.45	1.45
HT VI(B) - Public Services Others	166.37	13.86	7.41	14.13	13.54
HT VII - Temporary Supply	37.21		3.40	3.78	3.03
Total	4901.00	408.42	378.47	440.83	435.13

^{*} As per MTR Order dated 12 September, 2018

3.2 It was observed that the total sale for April, May & June, 2019 is 378.47 MUs, 440.83 MUs and 435.13 MUs respectively as compared to 408.42 MUs of sales approved vide MTR Order. The variation in energy sale during April was primarily on account of lower sales observed in HT-II Commercial, HT VI(B) - Public Services Others, LT-II (B) &(C) commercial. The variation in energy sale during May & June was primarily on account of higher sales in HT-I Industry and LT I(B) - Residential categories. TPC-D has stated that higher sales in May& June was due to seasonal impact on account of summer season.

4. <u>Cost of Power Purchase</u>

- 4.1 TPC-D purchases 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.
 - a) Purchases from Tata Power Company Ltd. (TPC-G)
 - b) Renewable energy procurement (RPS)
 - c) Bilateral contracts and decrements to the imbalance pool.
 - d) Unscheduled Interchanges (Interstate UI)
- 4.2 The following Table shows the variation in average power purchase cost (APPC) (Rs/kWh) for the month of April, 2019 to June, 2019 as compared to average power purchase cost approved in Tariff Order dated 12 September, 2018.

	Tariff Order	r Dated 12.0	9.2018	Actual for April, 2019			
Particulars	Net Purchase	Cost	APPC	Net Purchase	Cost	APPC	
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
TPC-G	3543.84	1579.60	4.46	328.12	145.82	4.44	
RE Sources #	707.48	307.380	4.34	23.30	13.86	5.95	
Bilateral @	528.95	151.570	2.87	49.34	20.08	4.07	
Others*	-	-	-	20.29	7.06	3.48	
Total	4780.27	2038.55	4.26	421.05	186.82	4.44	

	Tariff Ord	ler Dated 1	2.09.2018	Actual for May, 2019			
Particulars	Net Purchase	Cost A		Net Purchase	Cost	APPC	
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
TPC-G	3543.84	1579.60	4.46	339.28	148.06	4.36	
RE Sources #	707.48	307.380	4.34	29.62	21.25	7.17	
Bilateral @	528.95	151.570	2.87	60.41	25.55	4.23	
Others	-	-	-	50.01	17.69	3.54	
Total	4780.27	2038.55	4.26	479.33	212.55	4.43	

	Tariff Ord	er Dated 1	2.09.2018	Actual for June, 2019			
Particulars	Net Purchase	Cost	APPC	Net Purchase	Cost	APPC	
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
TPC-G	3543.84	1579.60	4.46	310.42	141.50	4.56	
RE Sources #	707.48	307.380	4.34	39.31	21.14	5.38	
Bilateral @	528.95	151.570	2.87	55.10	20.82	3.78	
Others	-	-	-	66.31	23.16	3.49	
Total	4780.27	2038.55	4.26	471.14	206.62	4.39	

^{*}Others include UI/OLA Sale- Pl. refer para.4.33 to 4.36 below.

4.3 The Commission has scrutinised 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 April, 2019 to June, 2019. 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.

[#] the rates of the RE sources include the cost of REC which were not considered in the MTR Order. Also, there is absence of new cheaper RE sources which was envisaged under the MTR Order. Pl. refer para. 4.23 to 4.29 below.

[@] The Commission approved the ceiling rate to Rs. 5 per Unit in a subsequent Order in December, 2018. Pl. refer para.4.31 and 4.32 below.

TPC-G

4.4 TPC-G operates thermal as well as hydro generating stations. The thermal generating station of TPC-G are placed in MoD stack by MSLDC whereas the hydro is considered as must run. TPC-D has purchased 328.12 MUs, 339.28 MUs and 310.42 MUs of energy from TPC-G during the months of April, May and June, 2019, respectively. The variation in power purchase quantum during Q1 period is mainly on account of variation in PLF of various generating station of TPC-G which is due to variation in system demand during aforesaid period, as stated by TPC-G. The Table below shows the PLF of its thermal generating stations during Q1 of FY 2019-20:

Units/Months	Unit 5	Unit 7	Unit 8	Total
Units/Months	(Multi-fired)	(Gas)	(Coal)	Monthly
Apr-19 (PLF%)	76.78%	97.97%	85.19%	83.14%
May-19 (PLF%)	75.20%	99.91%	77.52%	80.61%
Jun-19 (PLF%)	69.91%	95.48%	82.15%	78.15%
Quarterly (PLF%)	73.98%	97.81%	81.57%	

- From the above Table, it can be seen that the quarterly PLF of unit 5 & 8 were lower than the normative level (85%) whereas the PLF of unit 7 (gas based) was above normative. TPC-G further stated that although the PLF of unit 5 & 8 were lower (below normative level of 85%) due to low system demand, the generation availability of all of its units was more than 95% during Q1 period. In this regard the Commission sought TPC-D to confirm if it has fully utilised all its contracted power before scheduling any costlier power or short term power. TPC-D was also sought to confirm if MoD principles has been followed while scheduling power from various sources. On response to above query, TPC-D vide its reply confirmed that all the power procurement during quarter 1 of FY 2019-20 has been done through sources approved in MTR Order. However, in the month of May, 2019, Tata Power-D had procured 1.802 MUs of Standby Power from MSEDCL in addition to power procurement from approved sources. This standby power was purchased mainly due to emergency outage of Trombay Unit 8 from 15th May 2019 to 17th May 2019. The final bill for standby power purchase is yet to received from MSEDCL. For the purpose of booking power purchase cost TPC-D have considered rate based on weighted average rates of the actual bills received for latest two years.
- 4.6 TPC-D further stated that, it has fully utilised availability declared by all contracted sources during aforesaid period before scheduling the above mentioned standby power procurement. Any shortfall in power over & above availability declared by contracted conventional/RE sources was met from short term bilateral sources through competitive bidding route and power purchase from Power Exchange.
- 4.7 With regards to following of MoD principle, TPC-D stated that the State Merit Order Despatch (MOD) is run by State Load Despatch Centre (SLDC) and TPC-D gets the drawl schedules, accordingly from SLDC. TPC-D has followed such schedule provided by SLDC during the months of April-2019, May2019 and June-2019.

4.8 The Commission has sought for month wise and cumulative availability declared by TPC-G for its various generating stations during the Q1 period. TPC-G has provided the same as shown in Table below:

Unit 5 (Thermal)	Apr-19	May-19	Jun-19
Monthly Availability	100.00%	100.00%	100.00%
Cumulative Availability	100.00%	100.00%	100.00%
Unit 7 (Thermal)	Apr-19	May-19	Jun-19
Monthly Availability	100.00%	100.00%	100.00%
Cumulative Availability	100.00%	100.00%	100.00%
Unit 8 (Thermal)	Apr-19	May-19	Jun-19
Monthly Availability	99.25%	90.50%	97.78%
Cumulative Availability	99.25%	94.81%	95.79%
Bhira (Hydro)	Apr-19	May-19	Jun-19
Monthly Availability	100.00%	100.00%	100.00%
Cumulative Availability	100.00%	100.00%	100.00%
Bhivpuri (Hydro)	Apr-19	May-19	Jun-19
Monthly Availability	100.00%	100.00%	100.00%
Cumulative Availability	100.00%	100.00%	100.00%
Khopoli (Hydro)	Apr-19	May-19	Jun-19
Monthly Availability	100.00%	100.00%	100.00%
Cumulative Availability	100.00%	100.00%	100.00%

- 4.9 As it can be seen from the Table above, that cumulative availability of all generating Units were above normative Target availability of 85%, therefore, TPC-G was entitled for recovery of full monthly fixed cost during the aforesaid period, in line with Regulation 48.3 of MYT Regulations 2015.
- 4.10 The weighted average power purchase cost for TPC-G considering all its thermal and hydro generation has been worked out at Rs. 4.44/ kWh, Rs. 4.36/ kWh and Rs. 4.56/kWh for the months of April, May and June, 2019, respectively as compared to MTR approved rate of Rs. 4.46/kWh. The APPC is marginally lower by approx. Rs. 0.02/kWh and Rs. 0.10/kWh in the month of April, 2019 and May 2019 respectively whereas it is higher by approx. Rs. 0.10/kWh in June. The variation in power purchase price is mainly because of following reasons:
 - Due to variation in fuel parameters during Q1 period as compared to MTR approved parameters
 - Due to the change in actual quantum from various sources as compared to MTR approved quantum

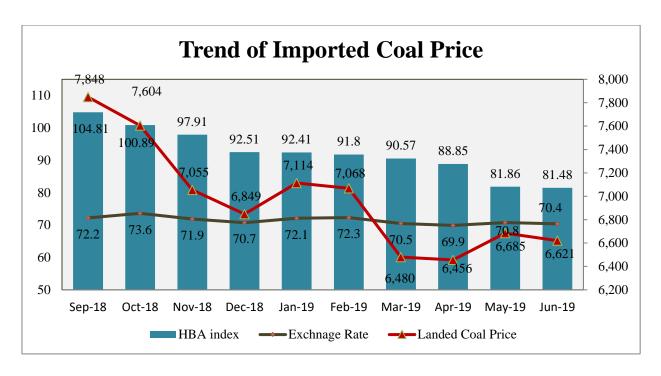
Fuel parameter Analysis:

4.11 TPC-G generates power on Imported Coal, Domestic Natural Gas (under APM mechanism), Oil (LSHS), imported RLNG and Hydro. The Commission observed that energy charge

with respect to coal based generating stations was lower whereas for gas based generating station it was higher during Q1 period as compared to respective MTR approved charges. The energy charges for hydro remains same as approved in MTR Order. The Table below shows the comparison of actual energy charges vis-à-vis approved energy charges for thermal generating station.

Units/	Unit 5 Variation Variation		Unit 8		Variation				
Months	Approved	Actual	variation	Approved	Actual	Variation	Approved	Actual	variation
Apr-19	3.99	3.63	(0.36)	1.80	2.55	0.74	3.94	3.70	(0.24)
May-19	3.99	3.69	(0.30)	1.80	2.54	0.74	3.94	3.76	(0.19)
Jun-19	3.99	3.71	(0.28)	1.80	2.55	0.75	3.94	3.80	(0.15)

- 4.12 The above variation in energy charges is mainly due to variation in fuel prices during the respective period. The Commission has sought for fuel purchase bills during respective quarter.
- 4.13 With regards to coal, TPC-G mainly procures imported coal from Indonesian market and the price of which is linked to Harga Batubara Acuan (HBA) index. The coal reference price i.e., Harga Batubara Acuan or HBA index for Indonesian coal is set by Ministry of Energy and Mineral Resources (Indonesia). The Commission has asked TPC-G to confirm if the imported coal has been procured through competitive bidding along with documentary evidence. The Commission has also sought for prevailing HBA index during the aforesaid period along with the detailed computation of FOB price at which the coal has been procured by TPC-G. In response to above, TPC-G stated that it has procured imported coal through competitive bidding route and submitted the bidding documents via its data gap reply. TPC-G has also provided the HBA indices prevailing during Q1 period. The Commission has observed that the HBA indices and hence, the price of imported coal in international market has shown downward trend in recent times. However, at the time of MTR Order, the HBA indices was very high (104.81 as shown in graph). This is mainly attributed to demand supply position of the global coal market. The graph below shows the trend of HBA indices vis-à-vis landed coal cost claimed by TPC-G from September 2018 to June, 2019.



- 4.14 From graph above, it can be observed that the HBA index was at around 104.8 in September 2018 and has decreased to 81.48 in June 2019. Due to this, the landed cost of coal and hence, energy charges during present quarter has arrived lower as compared to cost approved in MTR Order dated 12 September, 2018. The landed cost of coal claimed by TPC-G is Rs. 6456/MT, Rs. 6685/MT and Rs. 6621/MT for the month of April, May and June, 2019 as against the MTR approved rate of Rs. 7154/MT.
- 4.15 Further, the Commission has also scrutinised the sample bills provided in order to verify the landed cost of imported coal. The Table below provides the detailed computation of basic cost of imported cost for the month of May, 2019:

Month	2 May-19	21 May-19	30 May-19	Remark
Exchange Rate	69.54	69.73	69.79	Verified from SAP Entry
Supplier	PT ADARO	PT ADARO	PT ADARO	Verified from Invoice
Vessel Name	THARKEY	DUBAI CROWN	NATHAN BRANDON	Verified from Invoice
HBA	81.86	81.86	81.86	Submitted by TPC-G
Coal Qty (MT)	77772.00	50000.00	48922.00	Verified from Invoice
GCV (kcal/kg)	4907.00	4872.00	4909.00	Verified from Invoice
Moisture (%)	28.41	28.65	28.19	Verified from Invoice
Ash (%)	1.92	1.76	1.76	Verified from Invoice
Sulphur (%)	0.11	0.10	0.10	Verified from Invoice
HPB	57.43	57.02	57.71	Calculated
Premium	0.50	0.50	0.50	Verified from Invoice
FOB (USD/MT)	57.93	57.52	58.21	Verified from Invoice
FOB Rs /MT	4028.56	4010.82	4062.20	Calculated
Base Price in USD	4505331.96	2876000.00	2847749.62	Verified from Invoice

Month	2 May-19	21 May-19	30 May-19	Remark
Base Price in INR	313309344.63	200540891.60	198730776.78	Verified from SAP Entry
Avg Base Price Rs./MT		4032.85		Calculated

4.16 As from Table above the average basic cost of imported coal for the month of May, 2019 is Rs. 4,032.85/MT. The landed cost of imported coal is arrived by adding the freight charges, excise duty, custom duty, GST compensation cess, insurance and other handling charges. The Commission has sought TPC-G to provide the details of above expenses. TPC-G in its data gap reply submitted the details, accordingly, the Commission worked out the landed cost of imported coal for the month of May 2019 as shown in Table below:

Sr. No	Particular	Source/Formula	Units	Price
1	Base price	As computed above	Rs./MT	4032.85
2	Freight charges	As per bills	Rs./Rs.	698.87
3	Excise + Custome Duty + C E Cess + insurance	As submitted	Rs./MT	664.44
4	Handling and wharfage	As submitted	Rs./MT	543.46
5	Other Fuel Handling Charges	As submitted	Rs./MT	626.33
6	Total landed cost	Sum (3:4)	Rs./MT	6,565.95

- 4.17 From the Table above, the landed cost of imported coal for the month of May 2019 has been worked at Rs. 6,565.95 /MT. Although, the landed cost claimed by TPC-G in FAC computation for the month of May 2019 is Rs. 6,685/MT. This is mainly due to reason that the cost claimed by TPC-G in FAC computation pertains to cost of coal consumed in respective period whereas, the cost as calculated above pertains to recent purchase cost. Further, the cost claimed in FAC computation is based on the weighted average cost of the total coal purchase and the cost of actual inventory prevailing at that time. Therefore, there is a variation in the between the cost claimed by TPC-G and as computed by the Commission. However, the sample calculations are found to be in similar range as submitted by TPC-G. Further, the Commission has also sought for third party sampling report for GCV verifications. TPC-G has submitted the third party sampling certificate issued by Bureau Veritas for the respective period. The Commission has verified the document submitted and found to be in order.
- 4.18 With regards to higher gas price and hence, energy charges for gas generating station, TPC-G stated that the actual energy charge is higher than approved energy charge due to following reasons:
 - APM gas price increased due to its scheduled revision by MOPNG (Ministry of Petroleum & Natural Gas) from 1 April, 2019 from \$3.36 / MMBTU to \$3.69/MMBTU (increased by 10%).

- Revised ONGC differential tariff which has increased from Rs. 5.7/MMBTU to Rs. 34.73/MMBTU.
- 4.19 TPC-G has submitted the sample gas bills issued by GAIL showing the above revised rate and the same has been verified. Further, the Commission has analysed the above variation in fuel prices and worked out the net impact of the same on fuel adjustment charges during the respective period as shown in Table below:

Particulars for April, 2019	Units	Unit 5 Coal	Unit 7 Gas	Unit 8 Coal	Net Impact
Energy Available to TPC-D	Mus	127.45	60.35	86.22	
Approved Energy Charge	Rs./kWh	3.99	1.80	3.94	
Actual Energy Charge	Rs./kWh	3.63	2.55	3.70	
Fuel Surcharge Adjustment	Rs./kWh	(0.36)	0.74	(0.24)	
Recoverable through FAC	Rs. Crore	(4.63)	4.47	(2.10)	(2.26)
Particulars for May, 2019	Units	Unit 5 Coal	Unit 7 Gas	Unit 8 Coal	Net Impact
Energy Available to TPC-D	Mus	128.74	63.60	80.90	
Approved Energy Charge	Rs./kWh	3.99	1.80	3.94	
Actual Energy Charge	Rs./kWh	3.69	2.54	3.76	
Fuel Surcharge Adjustment	Rs./kWh	(0.30)	0.74	(0.19)	
Recoverable through FAC	Rs. Crore	(3.89)	4.70	(1.50)	(0.69)
Particulars for June, 2019	Units	Unit 5 Coal	Unit 7 Gas	Unit 8 Coal	Net Impact
Energy Available to TPC-D	MUs	115.62	58.85	83.14	
Approved Energy Charge	Rs./kWh	3.99	1.80	3.94	
Actual Energy Charge	Rs./kWh	3.71	2.55	3.80	
Fuel Surcharge Adjustment	Rs./kWh	(0.28)	0.75	(0.15)	
Recoverable through FAC	Rs. Crore	(3.18)	4.42	(1.22)	0.01

4.20 It was observed that the net impact of change in fuel prices (i.e., increase in gas price and decrease in coal price) is refund during April and May, 2019 i.e., around Rs. (2.26) Crore and Rs. (0.69) Crore, respectively. Whereas in the month of June, 2019 the impact of increase in gas price is almost offset by decrease in coal price. The above negative impact during the month of April and May, 2019 coupled with higher energy purchase has contributed in reduction in average power purchase price during the aforesaid period. However, in the month of June, 2019 although there was no positive or negative impact due to fuel price variation but the lower energy purchase during the said month has resulted in increase in average power purchase price (APPC=Total Power Purchase Cost /Total Energy Purchase). TPC-D has purchased 310.42 MUs of power during the month of June whereas it has purchased 328.12 MUs and 339.28 MUs of power during April and May, 2019 respectively. Hence, the spread of full monthly fixed cost over lower purchase has resulted

in higher APPC during said month. Considering the above the weighted average power purchase cost for TPC-G is arrived at Rs. 4.44/ kWh, Rs. 4.36/ kWh and Rs. 4.56/kWh for the months of April, May, and June, 2019, respectively as compared to MTR approved rate of Rs. 4.46/kWh.

Renewable Purchase (RE Power):

- 4.21 With regards to RE Power, TPC-D stated that to meet the RPO obligation in line with the MERC (Renewable Purchase Obligation, Its Compliance and Implementation of REC Framework) Regulations 2016, TPC-D procures RE Power from its long term tied up RE sources (solar RE sources and non-solar RE sources). The balance requirement towards RPO target has been met through REC purchase. For solar power, TPC-D has long term agreement with Mulshi Solar Plant, Palaswadi and Carnac roof top. For non-solar power, TPC-D has long term contract with wind generators such as Khandke, Bramhanvel, Sadawaghapur, Visapur, Agaswadi. Tata Power-D is procuring solar as well as non-solar power at a generic tariff approved by the Commission.
- 4.22 During the present quarter, TPC-D has purchased 4.54 MUs, 4.79 MUs and 3.66 MUs of solar power from existing solar sources at a rate of Rs. 9.59/kWh, Rs. 9.58/kWh and Rs. 9.56/kWh in the month of April, May and June, 2019, respectively, which is within the MTR approved rate of Rs. 9.81/kWh applicable for existing solar tied up sources. For its non-solar RPO target, TPC-D has purchased 18.76 MUs, 24.83 MUs and 35.65 MUs of non-solar power at a rate of Rs. 5.08/kWh, Rs. 5.00/kWh and Rs.4.95/kWh in the month of April, May and June, 2019, respectively as against the MTR approved rate of Rs. 5.06/kWh applicable for existing non-solar tied up sources. Based on both solar and non-solar power, the total RE power procured by TPC-D stands at 23.30 MUs, 29.62 MUs and 39.31 MUs for the month of April, May and June, 2019, respectively. The weighted average price for above RE purchase worked out as Rs. 5.95/kWh, Rs. 5.74/kWh and Rs. 5.38/kWh during the months of April, May and June, 2019 as compared to MTR approved weighted average price of Rs. 5.67/kWh applicable for existing solar and non-solar sources.
- 4.23 Apart from above TPC-D has also purchased non-solar REC of worth Rs. 4.26 Crore mainly during the month of May 2019 to fulfil its RPO Obligation. Considering the RE (solar and non-solar) purchase cost and also the REC cost as mentioned above, the landed cost for the month of May 2019 has increased from Rs. 5.74/kWh to Rs. 7.18/kWh. Thus, based on above the overall weighted average price of RE power inclusive of REC cost stands at Rs. 5.95/kWh, Rs. 7.18/kWh and Rs. 5.38/kWh, for months of April, May and June, 2019 respectively, as compared to MTR approved rate of Rs.4.34/kWh. The Table below shows the comparison of actual RE power purchase vis-à-vis approved during the Q1 of FY 2019-20:

	As app	As approved in MTR Order			Actual for April, 2019		
Particular	Quantu m (MUs)	% share	Rate (Rs./kWh)	Quantum (MUs)	% share	Rate (Rs./kWh)	
Solar Sources:							

Existing Sources	47.4	6.70%	9.81	4.54	19.49%	9.59
New Solar	119.91	16.95%	2.72*	-	-	-
Non-Solar Sources	:					
Existing Sources	322.21	45.54%	5.06	18.76	80.51%	5.08
New Non- Solar (MU)	208.4	29.46%	2.87*	-	-	-
Mini/Micro Hydro Purchase	9.56	1.35%	5.64*	-	-	-
Total RE Power	707.48	100.00%	4.34	23.30	100.00%	5.95
REC Solar	-	-	-	-	-	-
REC Non-solar	-	-	-	-	-	-

*Generic Tariff solar and non-solar Tariff as considered in MTR Order

	Act	ual for May,	2019	Actual for June, 2019		
Particular	Quantu m (MUs)	% share	Rate (Rs./kWh)	Quantum (MUs)	% share	Rate (Rs./kWh)
Solar Sources:						
Existing Sources	4.79	16.17%	9.58	3.66	9.30%	9.56
New Solar	-	-	-	-	-	-
Non-Solar Sources	:					
Existing Sources	24.831	83.83%	5.00	35.65	90.70%	4.950
New Non- Solar (MU)	-	-	-	-	-	-
Mini/Micro Hydro Purchase	-	-	-	-	-	-
Total RE Power	29.62	100.00%	5.74	39.31	100.00%	5.38
REC Solar	-	-	4.26^	-	-	-
REC Non-solar	-	-	-	-	-	-
Total RE Power	-	-	7.18	-	_	-

[^]REC purchase in Rs.Crore

- 4.24 It can be observed from above Table that even though TPC-D has procured RE power at a generic Tariff approved by the Commission, the overall APPC is still appearing higher than the MTR approved rate of Rs. 4.34/kWh. The increase in APPC is mainly due to following reasons:
 - Due to the change in actual quantum of power (% share) from various sources, there is a change in the weighted average rate of purchase from Solar RE and Non-Solar RE sources.
 - Due to the absence of new cheaper RE sources in the total purchase portfolio as envisaged by the Commission while determining the price for FY 2019-20 in its MTR Order.
 - Due to additional purchase of REC by TPC-D during the respective period in order to fulfil its RPO Obligation of the year.

- 4.25 Further, it is to be noted that the Commission in its MTR Order dated 12 September, 2018, has arrived at APPC from RE sources as Rs. 4.34/kWh considering the purchase form existing tied-up long term Solar and Non-Solar sources. While arriving this APPC, the weighted average purchase cost for existing solar sources was taken as Rs.9.81/kWh and for non-solar it was considered as Rs.5.06/kWh. The balance requirement of Solar and Non-Solar RPO target was considered to be met through new RE sources considering the average price as Rs.2.72/kWh for Solar, Rs.2.87/kWh for Non-Solar and Rs.5.64/kWh for micro/mini hydro purchase. No REC purchase has been considered in MTR Order for FY 2019-20. TPC-D was accordingly directed to explore new cheap RE sources. Based on above the weighted average cost of power purchase has been worked out as Rs.4.34/kWh for FY 2019-20 in the MTR Order.
- 4.26 As against the above, in actual TPC-D has procured RE power from existing tied up sources only and there was no RE purchase from new cheaper sources as envisaged in MTR Order. On response to clarification sought with regards to absence of new cheaper RE sources, TPC-D stated that it has explored the option of procuring Solar RE on short term basis. Accordingly, TPC-D has floated a tender in May 2019 through DEEP e-bidding Portal, for procurement of Solar Renewable Power on short term basis through Tariff based competitive bidding process, but there was no response for the same.
- 4.27 Subsequently, TPC-D considering the future increasing solar RPO targets, TPC-D had put up the proposal in front of the Commission through a petition in Case No. 136 of 2019 dated 6 June 2019, to procure 150 MW solar power from grid connected solar PV power projects through Competitive Bidding Process. The Commission had issued an order in this case on 2nd August 2019 in which the Commission has accorded an approval for procurement of 150 MW Solar power from grid connected Solar PV projects for a PPA period of 25 years through Competitive Bidding process.
- 4.28 Further, TPC- D floated a tender on 21 August, 2019 on MSTC's e-bidding 'DEEP Portal' to procure cumulative 150 MW Solar Power from grid connected solar photovoltaic project on long term basis for a period of 25 years. TPREL was declared as successful Bidder after completion of the Bidding process. Subsequently, TPC-D had filed a petition for adoption of Tariff and through the Order dated 4 December, 2019 in Case No. 292 of 2019, the Commission has accorded approval for procurement of 150 MW on long term basis from grid connected Solar power project for Rs. 2.83 per unit for 25 Years. Subsequent to this Order, Tata Power-D signed a PPA on 3 January 2020. Considering the timelines of this process, this project is scheduled to achieve commercial operation in FY 2021-22. TPC-D further stated that it is taking significant efforts for procuring RE power as approved by the Commission.
- 4.29 TPC-D also submitted the other efforts taken by it to tie up cheaper RE power and stated that it had explored option to tie-up on Generic tariff by approaching few Developers who were winning bidders in MSEDCL's tendering process, however considering the short timeline for CoD from August 2018 to March 2019, Tariff period of 13 years & safeguard duty issue, developers were not inclined to tie-up with the terms & conditions as per Generic tariff.

4.30 As regards to purchase of REC is concerned, TPC-D stated that MERC RPO Regulations, 2016 also allows Distribution Licensees and other Obligated Entities to meet their RPO by purchasing RECs. Hence, in line with the same to fulfil the RPO obligation TPC-D has purchased REC during the Q1 period. TPC-D has submitted the RE certificate and obligation report issued by IEX and the same has been verified.

Bilateral Sources/Traders:

- 4.31 TPC-D has purchased bilateral power from Dhariwal Infrastructure Limited, Llyods Metal & Energy Limited, JSW, Adani Power and IEX during Q1 FY2019-20. The total bilateral power from above sources stands at 49.34 MUs, 60.41 MUs and 55.10 MUs respectively during the months of April, May and June, 2019. The average power purchase cost from traders is Rs. 4.07/kWh, Rs. 4.23/kWh and Rs. 3.78/kWh during the month of April, May and June, 2019 respectively, as compared to MTR approved rate of Rs. 2.87/kWh. The Commission has enquired whether the above bilateral power from traders has been procured through competitive bidding as per guidelines issued by MOP. In response to this, TPC-D confirmed that it has purchased its bilateral power through competitive bidding during the aforesaid periods.
- 4.32 Further, it is to be noted that the Commission in its Order in Case No. 319 of 2018 dated 3 December, 2018 has increased the ceiling rate for purchase of short-term power to Rs. 5.00/kWh for FY 2018-19 and FY 2019-20. Considering that the actual bilateral power has been procured through competitive bidding and is also within the revised ceiling approved by the Commission, the same has been considered as submitted by TPC-D.

UI and OLA Sale:

- 4.33 It was observed that TPC-D has considered Unscheduled Interchange (UI) power of 20.54 MUs, 48.47 MUs and 66.57MUs at a price of Rs. 3.50/kWh during the months of April, May and June, 2019, respectively. The Commission has sought for supporting invoices/bills for UI purchase. In response, 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 bills/invoices of UI for the period April to June 2019 can be provided once provisional bill settlement of UI is completed. At present, TPC-D has considered UI price at provisional basis.
- 4.34 TPC-D has purchased significant UI power during Q1 period which is mainly due to backing down of TPC-G generating stations as per State-wide MoD run by MSLDC. TPC-G's generating Stations with which TPC-D has long term contracts are at a higher position in the Merit Order Stack. Hence, depending on the State demand these generators are backed down. As per the procedure laid down by the Commission the requirement against backed down generation get fulfilled by the pool power. Hence, quantum of UI power purchased is higher during Q1 period.

- 4.35 The Commission in its previous FAC approval (Q1 of FY 2018-19) had disallowed UI claim being provisional. However, TPC-D in its earlier submission (Q2 of FY 2018-19) has requested to consider these provisional entries as UI power is actually consumed and the rates of which are normally lower as compared to other sources of power, thus onsideration of the same reduces the average power purchase cost, hence, reducing FAC burden on consumers. Accordingly, on request of licensee and also to avoid FAC burdens on consumers, the Commission considered the power purchase quantum as well as the cost towards UI on provisional basis in post facto approval of FY 2018-19. In present approval also, the Commission has adopted the same approach as per previous post facto approvals and has considered imbalance power purchase quantum as well as the cost on provisional basis as submitted by TPC-D. However, Utility is requested to expedite the UI settlement process and submit the actual bills with adjustments if any promptly. Further, it is to clarify that TPC-D should not treat the Imbalance Pool mechanism as a source of procuring power. It is only meant for settling the deviations in the real-time power interchange between various pool participants. Therefore, TPC-D is required to carry out due diligence of its Power procurement plans in such a way to minimise quantum of purchase from Imbalance Pool.
- 4.36 With regards to Outside Licence Area (OLA) or surplus sale, it was observed that TPC-D has sold total 0.77 MUs of power during quarter 1 of FY 2019-20 at a price of Rs. 5.31/kWh. TPC-D has earned a revenue of Rs. 0.41 Crore from this transaction which has been considered in reduction of power purchase cost during the respective period. TPC-D has submitted the sample invoices of OLA sale. Further, the Commission has also compared the price 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. 3.22/kWh, Rs. 3.34/kWh and Rs.3.32/kWh for the months of April, May and June, 2019 respectively. TPC-D has managed to sell the surplus power at a rate higher than these MCP rate as already mentioned above. Accordingly, the OLA sale is considered as submitted by TPC-D.
- 4.37 Further, it was observed that TPC-D had purchased 1.80 MUs of power with a rocurement cost of Rs. 0.86 crore in May, 2019. On response to clarification sought against the same TPC-D stated that it has procured 1.80 MUs Standby Power in the month of May 2019 from MSEDCL due to emergency outage of Trombay Unit 8 from 15 May, 2019 to 17 May, 2019. TPC-D stated that the final bills of standby power is yet to receive from MSEDCL. The Commission has considered the same as per previous post facto approvals. However, TPC-D is required to submit the actual bills during final truing up of FY 2019-20. Any variation between the provisional and actual figures will be reconciled and adjusted at time of final truing up of FY 2019-20.
- 4.38 Based on above, on an overall basis the key reason for variation in APPC is due to variation in fuel prices, absence of new cheaper sources of power in total RE portfolio, additional purchase of REC to fulfil RPO, purchase of power from traders etc. Accordingly, the Commission allows the average power purchase cost of **Rs. 4.44/kWh** for the month of

April, 2019, **Rs. 4.43/kWh** for the month of May, 2019 and **Rs. 4.39/kWh** for the month of June, 2019 as against the MTR approved rate of **Rs. 4.26/kWh** 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 cost for the months of Q1 FY 2019-20. The same has been compared with the average power purchase cost approved by the Commission in Tariff Orders dated 12 September, 2018 and arrived at differential per unit rate at which ZFAC is to be passed on to the consumers.
- 5.2 The following Table shows the ZFAC worked out by the Commission on account of difference in fuel and power purchase cost for the month of April, 2019 to June, 2019.

S. No.	Particulars	Units	April, 2019	May, 2019	June, 2019
1	Average power purchase cost approved by the Commission	Rs./kWh	4.26	4.26	4.26
2	Actual average power purchase cost	Rs./kWh	4.44	4.43	4.39
3	Change in average power purchase cost (=2 -1)	Rs./kWh	0.17	0.17	0.12
4	Net Power Purchase	MU	421.05	479.33	471.14
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	7.26	8.14	5.71

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

6.1 Adjustment factor for over recovery/under recovery (B) for the period of April, 2019 to June, 2019, the adjustment factor to be added/reduced is as below;

S. No.	Particulars	Units	April, 2019	May, 2019	June, 2019
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.000	0.000	7.23
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.000	0.000	2.32
1.3	(over-recovery)/under-recovery (=1.1 - 1.2)	Rs. Crore	0.000	0.000	4.92
2.0	Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	0.000	0.000	0.000
3.0	Adjustment factor for over- recovery/under-recovery (1.3+2.0)	Rs. Crore	0.000	0.000	4.92

6.2 TPC-D in its submission had computed adjustment factor for recovery as Rs. (5.06) crore for April, 2019, Rs. (0.61) crore for May 2019 and Rs. (0.16) crore in June 2019. However,

it is to be noted that True up of FY 2018-19 has been carried out by the Commission in latest MYT Order in Case No. 326 of 2019 dated 30 March 2020. Hence, all the cost pertaining to power purchase of FY 2018-19 has been adjusted in the True up of FY 2018-19 and the same has also been confirmed by TPC-D in its data gap reply. Therefore, adjustment factor in the month of April and May 2019 have been considered as nil. Due to this a refund amounting to Rs. (5.67) Crore (i.e., Rs. (5.06) crore for April + Rs. (0.61) crore for May) has not been considered.

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 cost for under/over recovery for the month of April, 2019 to June, 2019.

S. No.	Particulars	Units	Apr, 2019	May, 2019	Jun, 2019
1	Adjustment factor for over- recovery/under-recovery	Rs. Crore	0.000	0.000	4.92
2	Applicable Interest rate	%	10.00%	9.95%	9.95%
3	Carrying cost for over- recovery/under-recovery	Rs. Crore	0.000	0.000	0.04

8. <u>Disallowance due to excess Distribution Loss</u>

8.1 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.

"10.8The 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"

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

S.N o.	Particulars	Units	Approv ed in Tariff Order	Actual up to April-19	Actual up to May19	Actual up to June-19
1	Net Energy input at Distribution Voltages	MU	2567.96	250.56	507.92	756.66
2	Energy sales (metered) at Distribution voltages	MU	2541.77	246.89	505.21	746.69
3	Distribution Loss (=1-2)	MU	26.190	3.67	2.71	9.97
4	Distribution Loss as % of net energy input (=3/1)	%	1.02%	1.46%	0.53%	1.32%
5	Excess Distribution Loss =[Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	1.30	0.00	0.91
6	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	•	0.02	0.00	0.02

8.3 As seen from the above Table, cumulative distribution loss is 1.46% for the month of April, 2019, 0.53% for May, 2019 and 1.32% for the month of June, 2019. The cumulative distribution losses in April and June was observed higher than the approved Distribution Loss of 1.02%. Hence, there is excess distribution loss of 1.30 MUs and 0.91 MUs in April and June respectively. Accordingly, amount of Rs. 0.02 crore in April and Rs. 0.02 crore in June 2019 have been disallowed on account of excess distribution loss.

9. Summary of Allowable ZFAC

9.1 The summary of the FAC amount as approved by the Commission for the month of April, 2019 to June, 2019 which is allowed to be recovered in the billing month of June, 2019 to August, 2019 is as shown in the Table below:

S. No.	Particulars	Units	Apr, 2019	May, 2019	Jun, 2019
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	7.26	8.14	5.71
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.00	0.00	0.04
1.3	Adjustment factor for over- recovery/under-recovery (B)	Rs. Crore	0.00	0.00	4.92
1.4	$\mathbf{ZFAC} = \mathbf{F} + \mathbf{C} + \mathbf{B}$	Rs. Crore	7.26	8.14	10.66
2.0	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	400.94	459.74	446.27
2.2	Excess Distribution Loss	MU	1.30	0.00	0.91

S. No.	Particulars	Units	Apr, 2019	May, 2019	Jun, 2019
2.3	ZFAC per kWh	Rs./kWh	0.18	0.18	0.24
2.4	Cap at 20% of variable component of tariff	Rs./kWh	1.17	1.17	1.17
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.18	0.18	0.24
3.0	Recovery of FAC				
3.1	Allowable FAC [(2.1 x 2.5)/10]	Rs. Crore	7.26	8.14	10.66
3.2	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.5)/10]	Rs. Crore	0.02	0.00	0.02
4.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	7.23	8.14	10.64
5.0	Carried forward FAC for recovery during future period	Rs. Crore	-	-	-

- 9.2 It can be seen from the above Table that standalone FAC for the months of April, May and June, 2019 is Rs. 7.23 Crore, Rs. 8.14 Crore and Rs 10.64 Crore, respectively. Based on total energy sales and excess distribution losses, FAC per unit has been working out as Rs. 0.18/kWh, Rs. 0.18/kWh and Rs. 0.24/kWh for the months of April, May and June, 2019, respectively.
- 9.3 As against the above, TPC-D in its FAC submission has claimed standalone FAC for the months of April, May and June, 2019 as Rs.2.15 Crore, Rs. 7.53 Crore and Rs. 5.54 Crore, respectively. FAC per unit claimed by TPC-D were Rs. 0.05/kWh, Rs. 0.16/kWh and Rs. 0.12/kWh for the months of April, May and June, 2019, respectively.
- 9.4 TPC-D was to recover Rs.18.78 Crore cumulatively for the last two months of quarter, however, as against this TPC-D has actually recovered Rs. 13.07 Crore only. Hence, there is an under-recovery of amount Rs. 5.72 Crore which is mainly because of non-consideration of refund as mentioned in para 6.2 above. Therefore, TPC-D is allowed to recover additional FAC of Rs. 5.72 Crore from consumers. However, as FY 2019-20 is already over, therefore, above adjustment will be rolled over in next FAC approvals (i.e., FAC of Q2 of FY 2019-20) and finally would be adjusted in the final True up of FY 2019-20.

10. Recovery from Consumers:

10.1 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:—

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

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 period as may be directed by the Commission..."

- 10.2 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 an under recovery of ZFAC in absolute terms on considering category wise per unit FAC worked out and category wise actual sales for the month of April, 2019 to June, 2019.
- 10.3 The following Table shows per unit ZFAC to be charged to the consumers of TPC-D for the billing month of June, 2019 to August, 2019.

S.			ZFAC to be l	evied in billin	ng month of
No	Consumer Category	Slabs	June'19	July'19	August'19
			(Rs./kWh)	(Rs./kWh)	(Rs./kWh)
(A)	LT Category				
1	LT 1 – BPL	0 - 30	0.025	0.084	0.063
2	LT 1 - Residential S1	0 - 100	0.014	0.043	0.033
3	LT 1 - Residential S2	101 - 300	0.038	0.114	0.087
4	LT 1 - Residential S3	301 - 500	0.064	0.206	0.157
5	LT 1 - Residential S4	> 501	0.089	0.286	0.217
6	LT II Commercial (A)	0 - 20 kW	0.059	0.192	0.146
7	LT II Commercial (B)	20–50 kW	0.062	0.192	0.145
8	LT II Commercial (C)	> 50 kW	0.074	0.223	0.169
9	LT III (A) - LT Industries	0 - 20 kW	0.058	0.184	0.140
10	LT III (B) - LT Industries	> 20 kW	0.060	0.181	0.138

S.			ZFAC to be l	evied in billi	ng month of
No	Consumer Category	Slabs	June'19	July'19	August'19
			(Rs./kWh)	(Rs./kWh)	(Rs./kWh)
11	LT IV - Public Water Works	all units	0.054	0.167	0.127
12	LT V - Advt & Hoardings	all units	0.074	0.221	0.167
13	LT VI - Street Lights	all units	0.064	0.193	0.146
14	LT VII (A) - Temporary Supply –Religious	all units	0.044	0.138	0.105
15	LT VII (B) - Temporary Supply –Others	all units	0.070	0.212	0.161
16	LT VIII - Crematorium and Burial Grounds	all units	0.032	0.097	0.074
17	LT IX (A) - Public Service – Govt. Hospitals & Educational Institutes	all units	0.049	0.157	0.119
18	LT IX (B) - Public Service – Others	all units	0.064	0.191	0.145
(B)	HT Category				
19	HT - I Industry	all units	0.068	0.207	0.157
20	HT - II Commercial	all units	0.072	0.218	0.165
21	HT - III Group Housing Society (Residential)	all units	0.064	0.197	0.149
22	HT - IV Public Water Works	all units	0.057	0.172	0.131
23	HT-V Railways, Metro & Monorail	all units	0.054	0.165	0.125
24	HT-VI (A) Public Service – Govt. Hospitals & Educational Institutes	all units	0.063	0.194	0.147
25	HT-VI (B) Public Service- Others	all units	0.069	0.209	0.159
26	HT-VII Temporary Supply	all units	0.069	0.206	0.156
27	HT VIII - EV Charging Stations	all units	-	0.131	0.099

11. Summary

The Table below shows the summary of FAC claimed by TPC-D vis-à-vis approved by the Commission for Q1 of FY 2019-20:

Particular	Month	Claimed	Approved	Remarks
FAC (Rs. Cr.)	April	2.15	7.23	(Rs. 18.78 Cr
	May	7.53	8.14	Rs. 13.07 Cr.)
	June	5.54	10.64	=Rs. 5.72 Cr.
FAC per Unit	April	0.054	0.180	Recoverable
	May	0.164	0.177	
	June	0.124	0.238	

TPC-D was to recover Rs.18.78 Crore cumulatively for the last two months of quarter, however, as against this TPC-D has actually recovered Rs. 13.07 Crore only. Hence, there is an under-recovery of amount Rs. 5.72 Crore. Since FY 2019-20 is already over, the above adjustment will be rolled over in next FAC approvals (i.e., FAC of Q2 of FY 2019-20) and finally would be adjusted in the final True up of FY 2019-20.