

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/MSEDCL/.....2

Date: 26 April, 2019

To.

The Managing Director,

Maharashtra State Electricity Distribution Company Ltd., 5th Floor, Prakashgad, Plot No. G-9 Bandra (East), Mumbai 400 051.

Subject:

Post facto approval of MSEDCL's Fuel Adjustment Charges (FAC) for the period

of April, 2018 to June, 2018.

Reference:

MSEDCL's FAC submissions vide Letter No. MSEDCL/ PP/FAC/ 027594 dated

26 November, 2018 for post-facto approval of FAC for the period of April, 2018

to June, 2018.

Sir,

Upon vetting the FAC calculations for the month of April, 2018 to June, 2018 as mentioned in the above reference, the Commission has accorded post facto approval to MSEDCL for levying FAC to its consumers as shown in the table below:

ZFAC	Apr, 2018	May, 2018	June, 2018
FAC allowed (Rs. Crore)	(169.35)	288.91	313.37

MSEDCL is directed to recover Rs. 34.29 Crore along with interest in the next FAC billing cycle. This is on account of correction in adjustment factor, FAC levy methodology adopted for April to June, 2018 as explained in para 3.7, 5.5, 5.14 5.15 5.16, 127.4 and 1210.6 of the Vetting Report.

The above approval of FAC is subject to the final True up of FY 2018-19 under the MERC (Multi Year Tariff) Regulations, 2015.

Yours faithfully,

(Dr. Rajendra Ambekar) Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the period of April, 2018 to June, 2018.

Page 1 of 29



1 1

POST FACTO APPROVAL FOR FAC FOR THE MONTH OF APRIL 2018 TO JUNE 2018

Subject: Post facto approval of MSEDCL's Fuel Adjustment Charges (FAC) for the

period of April, 2018 to June, 2018.

Reference: MSEDCL's FAC submissions vide Letter No. MSEDCL/ PP/FAC/ 027594

dated 26 November, 2018 for post facto approval of FAC for the period of April,

2018 to June, 2018.

1. FAC submission by MSEDCL:

1.1 MSEDCL has made FAC submissions for the month of April, 2018 to June, 2018 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MSEDCL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing month of July, 2018 to September, 2018.

2. Background

- 2.1 On 3rd November,2016, the Commission has issued Tariff Order for MSEDCL, (Case No.48 of 2016) for approval of True-up of FY 2014-15, provisional Truing-up for FY 2015-16 and Aggregate Revenue Requirement (ARR) and Tariff for FY 2016-17 and FY 2019-20. Revised Tariff has been made applicable from 1st November 2016.
- 2.2 On 12 September, 2018, the Commission has issued Tariff Order for MSEDCL (Case No.195 of 2017) 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 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.
- 2.4 Vide FAC vetting Report dated 1 March, 2017, the Commission accorded prior approval of the FAC for the month of November, 2016.
- 2.5 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 26 November, 2018 MSEDCL has filed FAC submissions for the month of April, 2018 to June, 2018 for post facto approval. The Commission has scrutinized the submissions provided by MSEDCL and has also verified the fuel and power purchase bills provided along with its submissions.

3. Revised monthly MoD Stack for MSEDCL

3.1 MSEDCL stated that the Commission in its MTR Order for MSEDCL in Case No. 195 of 2017 dated 12 September, 2018 had approved the total power purchase quantum (MUs) and cost for FY 2018-19 and FY 2019-20 in Table No. 6-41 and Table No. 6-42 respectively. The relevant Tables from MTR Order is reproduced as under;

Table 6-41: Approved Power Purchase Cost for FY 2018-19 (MTR Order)

Generator Name	Energy Purchase (MU)	Capacity Charges (Rs. Crore)	Variable Cost per unit (Rs/kWh)	Total Variable Charge (Rs. Crore)	Other Charges (incl. suppl. & IT) (Rs. Crore)	Total Cost (Rs. Crore)	Rate per unit of power procured (Rs/kWh)
Must Run Plants	28,397	224	3.72	10,565		10,789	3.80
MSPGCL Total	43,753	8,721	2.24	9,784	-	18,506	4.23
NTPC Total	25,937	4,213	1.43	3,716	268	8,197	3.16
IPP and UMPP Total	29,113	4,252	2.08	6,062	95	10,409	3.58
PGCIL charge including Reactive energy	Sovenit for a	2,688			Hagray A. Hagt bank	2,688	06 _
Total Power purchase	1,27,199	20,098	2.37	30,128	363	50,589	3.98

Table 6-42: Approved Power Purchase Cost for FY 2019-20 (MTR Order)

Generator Name	Energy Purchase (MU)	Capacity Charges (Rs. Crore)	Variable Cost per unit (Rs/kWh)	Total Variable Charge (Rs. Crore)	Other Charges (incl. suppl. & IT) (Rs. Crore)	Total Cost (Rs. Crore)	Rate per unit of power procured (Rs/kWh)
Must Run Plants	30,537	236	3.78	11,553	- William - Will	11,789	3.86
MSPGCL Total	43,877	8,743	2.23	9,800	160 - 160.	18,543	4.23

Generator Name	Energy Purchase (MU)	Capacity Charges (Rs. Crore)	Variable Cost per unit (Rs/kWh)	Total Variable Charge (Rs. Crore)	Other Charges (incl. suppl. & IT) (Rs. Crore)	Total Cost (Rs. Crore)	Rate per unit of power procured (Rs/kWh)
NTPC Total	27,634	4,992	1.42	3,910	280	9,183	3.32
IPP and UMPP Total	28,585	4,247	2.08	5,951	98	10,296	3.60
PGCIL charge including Reactive energy	-	2,928		-	- 100	2,928	nine y
Total Power purchase	1,30,634	21,146	2.39	31,214	378	52,738	4.04

3.2 The Commission has also approved station wise monthly MoD Stack in Annexure III of the Order (Refer Page 632 of 638 to 635 of 638). However, MSEDCL has now analysed and observed that there is a difference of around 5526 MUs and 5968 MUs between the yearly approved MUs as per Table 6-41 and Table 6-42 (as given above) and total monthly MoD stack as per Annexure III as shown in Table below;

Particular	FY 2018-19	FY 2019-20
MoD Stack MUs	121673	124936
Yearly Approved MUs	127199	130634
Difference of MUs	5526	5698

- 3.3 Considering the above difference, the Monthly MoD stack values need to be revised for both FY 2018-19 and FY 2019-20.
- 3.4 Further, MSEDCL submitted that it has worked out as well as levied FAC upto the month of October, 2018 based on MTR MoD Stack values. The difference in MoD stack and yearly approved MUs came to knowledge of MSEDCL during the month of February, 2018 during which it was charging FAC computed for the month of November, 2018.
- 3.5 Therefore, MSEDCL has now recalculated FAC from April, 2018 to October, 2018 and the difference between the actually levied and revised FAC has been worked out by MSEDCL as Rs. 576.453 Crore. MSEDCL as requested to allow this additional FAC of Rs, 576.453 Crore in seven equal monthly instalment along with carrying cost.
- 3.6 With regards to above, the Commission acknowledges the difference in MoD stack values vis-à-vis yearly approved in MTR Order. Accordingly, the Commission has revised the MoD stack values for FY 2018-19 as well as for FY 2019-20 which has attached as Annexure A to this report.
- 3.7 With respect to MSEDCL claim regarding additional FAC of Rs. 576.453 is concerned, the Commission while approving the FAC from April, 2018 onwards has considered the

revised MoD stack values in its FAC computation as per Annexure A . Hence, there is no need for any additional FAC as claimed by MSEDCL.

4. Energy Sales of the Licensee

4.1 The net energy sales within licence area as submitted by MSEDCL in the FAC submission and as approved by the Commission are as shown in the table below.

	Approved by	Approved	Act	ual sales (M	(U)
Consumer Category	the Commission	for the month	Apr-18	May-18	Jun-18
	(I)	(II=I/12)	(III)	(IV)	(V)
1. Metered Sales					
HT Category		OFT, IS		588	
Industry General	28545.71	2378.81	2573.45	2639.79	2539.50
Industry Seasonal	101.93	8.49	10.77	8.78	4.05
Commercial	1840.33	153.36	174.46	201.26	164.80
Railway metro monorail	59.25	4.94	8.62	9.18	8.55
Public water works	1584.10	132.01	161.16	168.73	162.56
Agriculture pumpset	784.76	65.40	133.56	147.30	96.09
Agriculture other	239.25	19.94	21.29	22.90	20.44
Group Housing Society	217.33	18.11	21.15	23.00	19.96
Temp Supply other	4.32	0.36	0.37	0.43	0.00
Public Service Govt	225.19	18.77	23.60	25.34	0.35
Public Service other	767.41	63.95	71.19	74.58	21.88
MSPGCL Aux Consumption	218.25	18.19	17.86	19.78	65.47
Other Adjustment			397.33	437.15	452.93
Sub Total	34587.83	2882.32	3614.81	3779.02	3556.58
LT Category			and mine		
BPL	54.35	4.53	3.24	3.52	3.63
Residential	19509.88	1625.82	1939.97	2121.03	2134.25
Non residential	5578.37	464.86	533.28	562.58	556.05
Public water works	746.26	62.19	65.37	70.64	69.26
AG metered pumpset	19054.39	1587.87	1990.80	1990.80	1373.29
AG metered other	136.08	11.34	12.11	13.49	12.20
Industry	6849.84	570.82	747.34	733.62	710.39
Street light	1883.04	156.92	168.70	164.62	164.70
Temporary supply	16.13	1.34	1.48	1.59	1.64
Advertisement and hording	4.65	0.39	0.40	0.40	0.40
Crematorium and burial ground	1.97	0.16	0.19	0.17	0.24
Public service	453.39	37.78	42.88	42.95	42.53
Prepaid	0.00	0.00	0.91	1.03	0.83
LT credit/Solar offset				4.08	4.43

	Approved by	Approved	Act	ual sales (M	U)
Consumer Category	the Commission	for the month	Apr-18	May-18	Jun-18
	(I)	(II=I/12)	(III)	(IV)	(V)
Sub Total	54288.35	4524.03	5506.65	5710.52	5073.83
Energy Sales outside the License Area	ne pw (DGN2)	f Allifor got	B 2105 pe	12 Septem	
Traded units	0.00	0.00	0.00	0.00	0.00
Sub Total	0.00	0.00	0.00	0.00	0.00
Sub Total- Metered Sales	88876.18	7406.35	9,121.46	9489.53	8630.41
2. Unmetered Sales					
Unmetered Hrs>1318	2193.48	182.79	1000.40	1000 10	550.51
Unmetered Hrs<1318	7968.59	664.05	1099.49	1099.49	558.71
Sub Total- Unmetered Sales	10162.07	846.84	1099.49	1099.49	558.71
Grand Total (Metered+Unmetered)	99038.25	8253.19	10,220.95	10,589.02	9,189.12

4.2 It was observed that the total sale for April to June, 2018 is 10220.95 MUs, 10589.02 MUs and 9189.12 MUs respectively is higher than that of the MTR approved, i.e., 8253.19 MUs. The major variation was observed in HT Industrial General, HT Commercial, HT Agriculture and LT Residential as shown in Table above.

5. Cost of Power Purchase

- 5.1 MSEDCL mainly procures power from following sources;
 - a) MSPGCL
 - b) Central Generating Station
 - c) JSW (Ratnagiri) Energy Ltd.
 - d) Adani Power Limited
 - e) Mundra UMPP
 - f) RattanIndia Power Limited
 - g) EMCO Power
 - h) Bilateral Procurement (Power Exchange, Traders, etc.)
 - i) Renewable Energy Sources
 - j) Infirm Power (MSPGCL units under commissioning, other infirm sources)
- 5.2 MSEDCL also buys power from other sources such as Sardar Sarovar and Pench Hydro project, renewable sources including co-generation, Wind power and Solar.
- 5.3 In addition to the above sources, in case of any shortfall from approved sources, when demand exceeds availability or for cost optimization, MSEDCL sources power from exchange/Traders or other sources at the market price through competitive bidding in accordance with the Guidelines of MoP.

- 5.4 During the scrutiny it was observed that for the month of June, 2018 while computing the change in fuel cost (i.e., F component of total FAC), MSEDCL has considered the approved power purchase cost, quantum and the other associated values from the MTR Order which was issued on September, 2018 whereas for the months of April and May, 2018 the corresponding values were observed to be taken form MYT Order. In response to the clarification sought MSEDCL stated that the Commission has issued MTR Order on 12 September 2018 during which MSEDCL was computing the FAC for the month of June, 2018. As per the current billing cycle undertaken by MSEDCL FAC for the month of June, 2018 was to levy in the month of September, 2018 and as the MTR Order was available during the FAC levy month therefore for the month of June, 2018 MSEDCL has considered the corresponding approved values from MTR Order.
- Also it was observed that during the month of June, 2018 MSEDCL has considered some adjustment as recovery of differential amount of recalculated FAC of previous months. Upon clarification sought MSEDCL referring to the note of MTR Order (Pg.548 of 638) stated that although the tariff is effective from 1 September, 2018 the revenue has been computed for the entire FY 2018-19, therefore MSEDCL has recalculated the FAC for the month of April and May, 2018 which has been levied as per MYT approved values. The difference between the actually levied FAC as per MYT Order and recalculate FAC as per MTR Order has been adjusted by MSEDCL in the month of June, 2018. The Commission has sought for the computation of recalculated FAC, which MSEDCL has submitted. With regards to above the Commission has considered the approach of FAC recalculation undertaken by MSEDCL as the same approach was adopted by the Commission during its previous vetting report dated 1 March, 2017. Although, the Commission has not recalculated the FAC but it has actually considered the MTR approved values from April, 2018 onwards in its FAC computation. The FAC thus computed by the Commission considering the MTR approved values were then compared with the corresponding FAC actually levied by MSEDCL (considering the FAC recalculation) in order to arrive at the net differential.
- 5.6 The following table shows the variation in average power purchase cost (Rs/kWh) for the month of April, 2018 to June, 2018 as compared to average power purchase cost approved in Tariff Order dated 12 September, 2018:

		l for Apr, 20 2 th Septembe		Actual for Apr, 2018		
Particulars	Net Purchase	Cost	Average Power Purchas e Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Thermal Power Plants	8406.42	3143.09	3.74	10339.12	3772.98	3.65



		l for Apr, 20 2 th Septembe		Actual for Apr, 2018			
Particulars	Net Purchase	Cost	Average Power Purchas e Cost	Net Purchase	Cost	Average Power Purchase Cost	
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
Must Run Sources	2380.39	786.38	3.30	1926.48	739.02	3.84	
Total	10786.82	4054.98	3.76	12265.59	4512.00	3.68	

		for May, 20 2 th Septembe		Actual for May, 2018			
Particulars	Net Purchase	Cost	Average Power Purchas e Cost	Net Purchase	Cost	Average Power Purchase Cost	
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
Thermal Power Plants	8589.59	3174.63	3.70	10682.86	4356.26	4.08	
Must Run Sources	2444.03	932.76	3.82	1914.50	685.63	3.58	
Total	11033.62	4107.39	3.72	12597.35	5041.89	4.00	

	(65, 5)	l for Jun, 20 2 th Septembe		Actual for Jun, 2018			
Particulars	Net Purchase	Cost	Average Power Purchas e Cost	Net Purchase	Cost	Average Power Purchase Cost	
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
Thermal Power Plants	8208.87	3092.40	3.77	8717.10	3479.21	3.99	
Must Run Sources	2348.42	894.35	3.81	1747.95	800.51	4.58	
Total	10557.29	3984.75	3.77	10465.05	4279.72	4.09	

5.7 MSPGCL – The Commission has scrutinised the detailed bills submitted and observed that total energy purchased from MSPGCL's Thermal and Gas Power Generating Stations during the month of April, May and June, 2018 are 4322.31 MUs, 4516.32 MUs and 3746.91 MUs respectively against the revised month wise MoD stack of 3826.96 MUs, 3857.48 MUs and 3629.41 MUs respectively. The variable cost from these sources during the aforesaid period is Rs. 1145.14 Crore, Rs. 1190.98 Crore and Rs. 978.73 Crore

respectively which has been worked out as per the energy charge approved by the Commission in its Tariff Order. Further, it was observed that MSEDCL has considered an amount of Rs. 57.20 Crore during the month of April, 2018 towards MSPGCL infirm power. The Commission has sought clarification along with the supporting bills invoices against the same. In response to clarification sought it was clarified that MSEDCL has considered Rs. 55.11 Crore as MSPGCL instalment towards differential fixed charges as per the Commission Order dated 14 December, 2017 in Case no. 59 of 2017 and Rs. 2.2 Crore as Bhusawal supplementary bill. Accordingly, total amount of Rs. 57.20 Crore (Rs. 55.11 Crore plus Rs. 2.2 Crore) has been considered in the month of April, 2018.

- 5.8 The average power purchasing cost from all MSPGCL's Thermal and Gas Power Generating Stations during the months of April, May and June, 2018 is Rs. 4.08/kWh, 3.91/kWh and Rs. 4.04/kWh which is lower as compared to the monthly average power purchase cost considering revised MoD stack values as Rs.4.16/kWh, Rs.4.13/kWh and Rs.4.24/kWh respectively. The reduction in average power purchase cost is mainly on account of reduction/disallowance in fixed charge payable as the cumulative availability of most of the MSPGCL plants during the respective period were lower than the MYT approved Target availability. Therefore, the monthly fixed cost allowable to recover was reduced as per the plant's availability and thus lowering the total power purchase cost. Further, the negative impact towards fuel surcharge adjustment bills for the respective period has also led to reduction in the total power purchase cost and thus lowering of APPC.
- 5.9 NTPC The total units purchased from NTPC's stations during the months of April, May and June, 2018 are 2866.14 MUs, 2781.23 MUs and 2370.82 MUs respectively against the revised monthly MoD stack units of 2110.53 MUs, 2180.88 MUs and 2110.53 MUs respectively. It can be seen that the quantum of energy purchase from these stations is more than the monthly approved MoD stack units. This is due to the purchase of power from NTPC's new plants like Solapur-2 STPS, Mouda, Lara, Gadarwara and Khargone etc. whose COD were not declared at the time MTR Order, hence, the energy purchase from these plant were not included in the MTR Order. However, as MSEDCL has a firm share allocation for drawal of power as allocated by MoP, the Commission had approved the variable charge and fixed charges per unit from these plants as per the information received from NTPC.
- 5.10 The total power purchase cost including the fixed charges, RLDC charges, ED & Cess, incentives and other charges from NTPC's stations during the months of April, May and June, 2018 are Rs. 876.88 Crore, Rs. 842.29 Crore and Rs. 718.91 Crore respectively. Accordingly, the average power purchase cost from NTPC Units during the aforesaid period is Rs. 3.06/kWh, Rs. 3.03/kWh and Rs. 3.03/kWh which is lower as compared to rate derived considering revised MoD stack value as Rs. 3.19/kWh, Rs. 3.13/kWh and Rs. 3.19/kWh respectively. The reduction in the average power purchase cost is mainly due to reduction in variable cost on account of variable charge revision and sharing gain during the aforesaid period. Further, the reduction in monthly fixed cost payable has also led to

the reduction in total power purchase cost thus lowering the APPC. The Commission has verified the respective amount and quantum purchased from the detailed summary of invoices submitted by MSEDCL and found to be in order.

- 5.11 IPPs MSEDCL has purchased power from Mundra CGPL UMPP and IPPs, viz., JSW, EMCO Power, India Bulls Power (RattanIndia) and Adani Power. The total power purchased from these sources are 2571.99 MUs, 2594.01 MUs and 2365.38 MUs respectively against the revised monthly MoD stack of 2468.93 MUs, 2551.23 MUs and 2468.93 MUs respectively during the months of April, May and June, 2018. The average power purchase cost from these stations is 3.48/kWh, Rs. 5.35/kWh and Rs. 4.84/kWh respectively during the aforesaid period as compared to monthly rate considering revised MoD stack as Rs. 3.56/kWh, Rs. 3.51/kWh and Rs. 3.56/kWh respectively. The variation in the power purchase rate is due to change in variable rate as the rates are linked to various factors such as variation in monthly exchange rates, CERC index for inland handling of imported fuel and for inland transportation of fuel. Further, the impact of 'change in law' for non-availability/shortfall in domestic coal as well as new coal distribution policy has also been included by Adani Power or CGPL which has led to the variation the total power purchase cost and thus increased the APPC mainly during the month of May and June, 2018. The above CIL events has been approved by the Commission or CERC as the case may be under the provision of PPA. The Commission has verified the aforesaid purchase from the energy invoices and CIL invoices submitted by MSEDCL in response to the query raised against the same and found to be in order.
- 5.12 Traders MSEDCL has purchased power from PTC India, JPL, Manikaran Power Limited, GMRETL, Dhariwal Infrastructure Limited and JSW etc. The Commission has verified the quantum of energy purchase and associated charges from the detailed bills summary submitted and found to be in order. Further, the average power purchase cost from these sources during the months of April, May and June, 2018 is Rs. 4.09/kWh, Rs. 4.51/kWh and Rs. 4.31/kWh respectively. The Commission in its MTR Order has not considered any quantum and amount with regards to short term power purchase as the entire demand would have been considered to be met through projected sources of power. Hence, the same is not considered in the energy balance for each year of the 3rd Control Period by the Commission. However, the Commission has allowed MSEDCL to procure short term power at the market price in case of any shortfall from approved sources or when demand exceeds availability. Further, as the power from traders has been procured by MSEDCL through competitive bidding, the Commission has considered the respective actual quantum and the cost as submitted by MSEDCL.
- 5.13 Must Run The sources of Must Run Stations include KAPP, TAPP 1&2, TAPP 3&4, SSP, Pench, Dodson I and Dodson II, Non-Conventional Energy, etc. MSEDCL has purchased 1926.48 MUs, 1914.50 MUs and 1747.95 MUs respectively during the months of April, May and June, 2018 as compared to the revised monthly MoD energy purchase of 2380.39 MUs, 2444.03 MUs and 2348.42 MUs respectively. The total power purchase



- cost from Must Run sources as Claimed by MSEDCL are Rs. 1069.02 Crore, Rs. 686.38 Crore and Rs. 800.51 Crore during the month of April, May and June, 2018 respectively.
- 5.14 The average power purchase cost as claimed by MSEDCL from these stations during the aforesaid period is Rs. 5.55/kWh, 3.59/kWh and Rs. 4.58/kWh as compared rate derived on the basis of revised MoD stack as Rs. 3.30/kWh, Rs. 3.82/kWh and Rs. 3.81/kWh respectively. In response to clarification sought against such increase in the average power purchase cost of these sources mainly in the month of April and June, 2018, it was observed that during the month of April, 2018 MSEDCL has considered Rs. 330 Crore in the total power purchase cost. The aforesaid cost has been levied by MSEDCL in the billing month of July, 2018 and accordingly deposited the same into RPO Regulatory Charges Fund created in April, 2018. Further, it was clarified by MSEDCL that no REC has been purchased with the recovered amount. The Commission in line with the methodology adopted in its previous vetting report and in accordance with the MYT Regulations, 2015 has not considered the aforesaid amount in this vetting report. The MYT Regulations, 2015 specifies that the FAC is chargeable on the basis of actual power procured subsequent to such a cost being incurred and shall not be provisional basis and the relevant provision of MYT Regulations, 2015 is reproduced 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.

5.15 Further, as MSEDCL has actually recovered the amount of Rs. 330 Crore as explained above but it has not procured any REC with that amount during the relevant months, therefore, MSEDCL has to bear the associated cost of holding the amount during the concerned period. The Commission has computed the associated holding for the amount of Rs. 330 Crore from the month of August, 2018 (i.e., midpoint for the billing months of Q1 of FY 2018-19) till January, 2019 as shown in table below.

Month	Amount in Rs. Crore	Rate of Interest	Holding cost
August'18	330	9.75%	2.68
September'18	330	9.95%	2.74
October'18	330	9.95%	2.74
November'18	330	9.95%	2.74
December'18	330	10.05%	2.76
January'19	330	10.05%	2.76
	Total Holding cost		16.42

5.16 The Commission has then bifurcated the associated holding into Ag and Non-Ag categories as computed above based on the categories wise sales of the June, 2018. Accordingly, after disallowance of amount Rs. 330 Crore towards RPO Regulatory Charge Fund the power purchase cost from must run sources has been arrived at Rs.

739.02 Crore and accordingly, the total average power purchase cost from must run sources for the month of April, 2018 has been worked out as Rs. 3.84/kWh as against Rs. 5.55/kWh as claimed by MSEDCL. Further, the APPC from must run sources during the month of May, 2018 is lower as compared to MoD rate as shown above which can be contributed to the higher purchase of energy from MSPGCL Hydro plants during the respective period. MSEDCL has purchased almost 37% of total must run power from MSPGCL Hydro plants having the variable cost of Rs. 0.2/kWh. This has resulted into lower APPC during the month of May, 2018. Further, the APPC from must run sources from the month of June, 2018 is higher as compared to MTR approved rate mainly on account of lower purchase of power from MSPGCL Hydro plants. MSEDCL has purchased about 11.5% of total must run power from MSPGCL Hydro plants in the month of June, 2018. Although, the quantity of power purchase is lower, the monthly fixed charges are full payable as the actual PAFM of all hydro stations were observed above target availability. Hence, the spread of higher power purchase onto lower net generation has resulted into an increase in APPC during the respective month.

5.17 Therefore, on an overall basis the APPC in the month of April, 2018 is lower as compared to rate considering revised MoD stack, mainly on account of disallowance of Rs. 330 Crore towards RPO Regulatory Charge Fund, revisions in variable cost and other charges etc. as explained above. The APPC for the month of May and June, 2018 is higher mainly due to incorporation of change in law amount in the total power purchase cost in line with the Commission's Order. Accordingly, after the complete scrutiny of the relevant document submitted, the Commission allows the average power purchase cost of Rs. 3.68/kWh for the month of April, 2018, Rs. 4.00/kWh for the month of May, 2018 and Rs. 4.09/kWh for the month of June, 2018 as shown in the table 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 month as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 14 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, 2018 to June, 2018.

S. No.	Particulars	Units	Apr, 2018	May, 2018	Jun, 2018
1	Average power purchase cost approved by the Commission	Rs./kWh	3.76	3.72	3.77
2	Actual average power purchase cost	Rs./kWh	3.68	4.00	4.09
3	Change in average power purchase cost	Rs./kWh	(0.08)	0.28	0.32

S. No.	Particulars	Units	Apr, 2018	May, 2018	Jun, 2018
	(=2 -1)				
4	Net Power Purchase	MU	12265.59	12597.35	10465.05
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	(98.88)	352.38	329.79

5.3 The Commission in its previous vetting report had adopted the methodology of bifurcating the over-recovery/under-recovery amounts into Agriculture (AG) and non-Agriculture (non-AG) categories for computation of adjustment factor. Based on the same methodology, the Commission has bifurcated the stand alone month power purchase cost variation as computed above into the Agriculture and non-Agriculture categories. The Commission has considered the ratio of actual AG and non-AG sale for the respective months for which FAC is computed to bifurcate the power purchase cost variation. The power purchase cost variation for AG and non-AG consumers is shown in the Table below.

Particulars	Units	Apr'18			May'18		
T ar ticulary		Total	Ag	Non-Ag	Total	Ag	Non-Ag
Category wise sales during the month	Mus	10168.88	3090.29	7078.59	10514.59	3090.29	7424.30
Change in Fuel cost and power purchase cost attributable to Sales within the License Area (F)	Rs. Crore	(98.88)	(30.05)	(68.83)	352.38	103.57	248.82

Particulars	Units	Jun'18				
		Total	Ag	Non-Ag		
Category wise sales during the month	Mus	9089.53	1932.00	7157.53		
Change in Fuel cost and power purchase cost attributable to Sales within the License Area (F)	Rs. Crore	329.79	70.10	259.69		

6 Adjustment for over recovery/under recovery (B)

6.1 MSEDCL has bifurcated the over-recovery/under-recovery amounts into Agriculture and non-Agriculture categories for computation of adjustment factor. The bifurcation has been done based on the FAC and actual sales of N-2 month. Further, MSEDCL has considered the FAC of N-2 month as per their computation. However, the Commission has recomputed the incremental cost allowed to be recovered based on the approved FAC of previous quarter and bifurcated the same as per actual sales of N-2 month as shown in the Table below. The incremental cost actually recovered has been considered as submitted by MSEDCL and accordingly, the adjustment factors have been computed

6.2 Accordingly, the adjustment factor for over recovery/under recovery (B) for the period of April, 2018 to June, 2018, is as below.

S. No.	Particulars	Units	Apr'18		May'18		Jun'18	
	Category		Ag	Non-Ag	Ag	Non-Ag	Ag	Non-Ag
1.0	Sales in Month n-4	MUs	2664.58	6202.32	2664.58	5989.94	2932.26	6168.00
	Total Incremental cost allowed to be recovered in Month n-4*	Rs. Crore	(116	5.32)	64	.89	o waiv n	
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	(103.57)	(12.75)	(54.65)	119.53	bove, the day,-2018 A.C. allow	-
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	(59.17)	12.21	(0.23)	122.95	mountaine gnicroogi	-
1.3	Adjustment factor for (over- recovery)/under- recovery (=1.1 - 1.2)	Rs. Crore	(44.39)	(24.96)	(54.42)	(3.42)	Nant <u>u</u> rner minub ata	1.2

^{*}corrected as per previous approved vetting report.

7 Adjustments of amount pertaining to previous approved vetting report and recalculation of FAC

- 7.1 The Commission in its previous FAC report of April, 2017 to June, 2017 has directed MSEDCL to refund Rs. 724.67 Crore (Rs. 673.90 Crore Income Tax refund by NTPC in June 2017 plus Rs. 50.77 Crore holding cost for the period of July, 2017 to March, 2017) through FAC mechanism in twelve equal instalments starting from April, 2018 along with holding cost. MSEDCL has initiated 3 instalment in Q4 of FY 2017-18 i.e., in the month of January, February and March, 2018 which has been levied in the billing month of April, May and June, 2018 respectively. The Commission has already dealt against the same in its previous vetting approval of Q4 of FY 2017-18.
- 7.2 Further, in the present quarter also, it was observed that MSEDCL has initiated 2 instalments during the month of April and May, 2018 respectively however no instalment was observed to be initiated in the month of June, 2018. In response to clarification sought, MSEDCL stated that as the provisional True-up of FY 2017-18 has been taken place in the MTR Order, MSEDCL has considered the impact of NTPC refund in the total power purchase cost. Hence, the refund instalment is no longer required in FY 2018-19. Further, as MTR Order was issued in September, 2018, by that time MSEDCL has already initiated 2 more instalment of refund (Rs. 60.39 Crore each) i.e., in the billing month of April and May, 2018. Therefore, in the month of June, 2018 MSEDCL has made adjustment to recover the total NTPC refund (i.e., Rs. 120.78 Crore) made in previous two months.

- 7.3 As MSEDCL has recalculated the FAC for the month of April and May, 2018 as explained in para above, the differential so obtained has been added by MSEDCL with the NTPC refund of Rs. 120.78 Crore (two instalment). The Final amount recoverable so obtained (i.e., Rs. 245.51 Crore as per MSEDCL computation) has been divided by MSEDCL into 7 equal instalment along with the associated holding cost and the 1st instalment of Rs. 35.70 Crore has been considered by MSEDCL in the month of June, 2018.
- 7.4 In view of the above, as the Commission has computed the FAC as per MTR Order (considering revised MoD stack) from April, 2018 onwards as already explained in para above, thereby eliminating the need for recalculation of FAC for the month April and May, 2018 as computed by MSEDCL. Further, the Commission while calculating the FAC allowable for the month of April and June, 2018 has not included the NTPC refund instalment in its computation, thereby eliminating the need to recover back the same in the upcoming months, accordingly, netting off the adjustment made against the same.

8 Carrying Cost for over recovery/under recovery (B)

- 8.1 Carrying/Holding cost for under/over recovery has been computed at applicable interest rate during the respective period for the eligible amount. The Commission has computed the carrying cost separately on the adjustment factor as computed above for both Agriculture and Non-Agriculture categories.
- 8.2 The following Table shows the month wise interest rate and amount worked out as Carrying/Holding cost for under/over recovery for the month of April, 2018 to June, 2018.

S. No.	Particulars	Units	Ap	r'18	May'18		Jun'18	
			Ag Category	Non-Ag Category	Ag Category	Non-Ag Category	Ag Category	Non-Ag Category
1 dia	Adjustment factor for over- recovery/under- recovery	Rs. Crore	(44.39)	(24.96)	(54.42)	(3.42)		-
2	Applicable Interest rate	%	9.65	9.65	9.45	9.45	-	-
3	Carrying cost for over- recovery/under- recovery	Rs. Crore	(0.71)	(0.40)	(0.86)	(0.05)	olono I	-

9 <u>Disallowance due to excess Distribution Loss</u>

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.			Approved		Actual Upto	
No.	Particulars	Units	in Tariff Order	Apr'18	May'18	Jun'18
1	LT Sales	MU	68,235	6605.67	13411.59	19655.92
2	HT Sales	MU	27,363	2407.99	4902.77	7165.89
3	HT and Renewable Open Access Credit	MU	713	55.98	131.22	233.30
4	Sales to Open Access Consumers (Conventional)	MU	4,547	345.26	709.38	1061.98
5	Total Sales to Consumers	MU	100,858	9414.90	19154.96	28117.09
6	Distribution Loss	%	14.76%	15.05%	15.51%	12.50%
7	Distribution loss	MU	17,458	1668.44	3515.00	4017.38
8	Total Energy Available for Sale at 33 KV	MU	118,315	11083.34	22669.96	32134.47
9	Energy injected and drawn at 33KV	MU	488	33.26	70.88	113.03
10	Net Energy Available for sale at 33 KV	MU	117,827	11,050.08	22,599.08	32,021.45
11	Sales at 66KV level	MU	144	8.94	22.32	32.81
12	Sales at 110 KV/132KV level	MU	4,801	481.61	972.25	1437.19
13	Sales at 220 KV/400 KV level	MU	3,171	320.86	665.49	972.84
14	Net Energy requirement at T ← D Periphery	MU	125,943	11,861.49	24,259.14	34,464.29
15	Excess Distribution loss = [Actual Distribution loss - Distribution loss approved] x Net Energy Input	MU	91013	32.54	168.91	-
16	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	DE UM	NIL	4.71	NIL

9.3 As per month wise FAC submission, the cumulative distribution loss is 15.05% for the month of April, 2018, 15.51% for the month of May, 2018 which are higher than the approved Distribution Loss of 14.76% and 12.50% for the month of June, 2018 which is lower than the approved Distribution Loss of 14.76%. Hence, disallowance on account of excess distribution loss for the months of April, 2018 and May, 2018 have been worked out as 32.54 MU and 168.91 MU respectively. However, the standalone FAC for the month of April, 2018 is negative, so disallowance of FAC due to excess Distribution Loss for the month of April, 2018 has not been worked out.

10 Summary of Allowable ZFAC

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

S. No	Particulars	Units	nits Apr'18		May'18		Jun'18	
	Category	Water St.	Ag	Non-Ag	Ag	Non-Ag	Ag	Non-Ag
1.0	Calculation of ZFAC	285.				3		
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	(30.05)	(68.83)	103.57	248.82	70.10	259.69
1.2	Carrying cost for over-recovery/under- recovery (C)	Rs. Crore	(0.71)	(0.40)	(0.86)	(0.05)	-	2-
1.3	Adjustment factor for over-recovery/under- recovery (B)	Rs. Crore	(44.39)	(24.96)	(54.42)	(3.42)		
	Holding cost for Rs. 330 Crore	Rs. Crore	-	-	_	-	(3.49)	(12.93)
	ZFAC = F+C+B	Rs. Crore	(75.16)	(94.19)	48.29	245.34	66.61	246.76
	ZFAC = F+C+B May'18 for AG Category	Rs. Crore	- 10	-	-	lau-/ Vo	23.21	
	ZFAC = F+C+B Apr'18 for AG Category	Rs. Crore	- 10	-		001/2/21	(100.26)	
	Total ZFAC (Quarterly) for AG Category	Rs. Crore	-	- III	15/ ₁ = 80	l examination	(10.45)	31
2.0	Calculation of FAC Charge				Nogal y			
2.1	Energy Sales within the License Area	MU	3090.29	7078.59	3090.29	7428.39	1,932.00	7157.53
	Energy Sales within the License Area to	MU	/ -	-	- 415111	AY REGULATO	8,112.58	-

S. No	Particulars	Units Apr'18		Ma	May'18		Jun'18	
	Category		Ag	Non-Ag	Ag	Non-Ag	Ag	Non-Ag
	AG consumers during last quarter							
2.2	Excess Distribution Loss	MU	mor-3 1a	-	49.64	119.27	15.1¢) Čn	-
2.3	ZFAC per kWh	Rs./k Wh	(0.24)	(0.13)	0.16	0.33	0.34	0.34
2.4	Cap at 20% of variable component of tariff	Rs./k Wh	NA	NA	NA	NA	NA	NA
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./k Wh	NA	NA	NA	NA	NA	NA
3.0	Recovery of FAC							
3.1	Allowable FAC [(2.1 x 2.5)/10]	Rs. Crore	(75.16)	(94.19)	48.29	245.34	66.61	246.76
3.2	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.5)/10]	Rs. Crore			0.78	3.94	original of the state of the st	-
4.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	(75.16)	(94.19)	47.51	241.40	66.61	246.76
5.0	Carried forward FAC for recovery during future period (1.4-3.2-4)	Rs. Crore	(88) -(87)	-	9(m3) 9(5)(3) 9(m3)	-	- R	April May*

10.2 It can be seen from the above Table that standalone FAC for Non-Agriculture category during the months of April to June, 2018 is Rs. (94.19) Crore, Rs 241.40 Crore and Rs. 246.76 Crore respectively. As the billing of the Non-Agriculture category has been done on monthly basis, hence, based on total monthly energy sales, FAC per unit for Non-Agriculture category has been work out as Rs (0.13)/kWh, Rs 0.33/kWh and Rs 0.34/kWh for the months of April to June, 2018 respectively. Further, the Commission has computed the categories wise total FAC that has been levied by MSEDCL on the basis of actual sales provided by MSEDCL. The following Table shows the difference in FAC as claimed by MSEDCL and as approved by the Commission for Non-Ag category:

		MSEDCL's claim	Approved by the Commission
Month	Units	Non-Ag	Non-Ag
April, 2018	Rs. Crore	47.84	(94.19)
May, 2108	Rs. Crore	59.82	241.40
June, 2018	Rs. Crore	229.14	246.76
Total	Rs. Crore	336.80	393.97



- 10.3 From the Table above MSEDCL has to recover Rs. 393.97 Crore cumulatively in the Q1 of FY 2018-19, however, it has recovered only Rs. 336.80 Crore. Hence, the Commission direct MSEDCL to recover the differential amount Rs. 57.17 Crore along with the interest in the next billing cycle.
- 10.4 The total FAC for Agriculture category during the months of April to June, 2018 is Rs. (75.16) Crore, Rs. 47.51 Crore and Rs. 66.61 Crore respectively. Based on total monthly energy sales for Agriculture category including un-metered sales, FAC per unit for Agriculture category has been work out as Rs (0.24)/kWh, Rs 0.16/kWh and Rs 0.34/kWh for the months of April, May and June, 2018 respectively. Further, the as the billing for Agriculture consumers are done on a quarterly basis and the corresponding FAC for all the three months are levied in a last month for each quarter. Therefore, the Commission has considered the cumulative FAC and the cumulative sales during the respective quarter and accordingly computed the FAC per unit for Agriculture category as Rs. (0.05)/kWh for the months of April to June, 2018 respectively to levied in the month of September, 2018. Further, as per MSEDCL methodology it was observed that, MSEDCL levy the FAC computed for Agriculture categories only in the last billing month of quarter, i.e., in June, 2018. The FAC computed for the month of April to May, 2018 remained un-levied although it has been computed. The following the Table shows the FAC for Agriculture category during the months of April to June, 2018:

		MSEDCL's claim	Approved by the Commission
Month	Units	Ag	Ag
April'18	Rs. Crore	(43.48)	(75.16)
May'18	Rs. Crore	45.99	47.51
June'18	Rs. Crore	61.85	66.61
Total	Rs. Crore	64.36	38.96

- 10.5 From the Table above, MSEDCL has to recover total FAC of Rs. 38.96 Crore to Agriculture consumers, further, as the billing for Agriculture consumers done in the month of June, 2018, i.e., last month of quarter, it was observed that MSEDCL has actually recovered Rs. 61.85 Crore. Therefore, the Commission directs MSEDCL to refund the differential of Rs. (22.89) Crore (Rs. 38.96 Cr- 61.85 Cr) in the next billing cycle along with applicable interest.
- 10.6 Considering the recovery of Rs. 57.17 Crore with regards to Non-Agriculture category and refund of Rs. (22.89) Crore with regards to Agriculture category, the net impact of FAC stands at Rs. 34.29 Crore for Q1 of FY 2018-19.
- 10.7 Further, the Regulation 10.9 of MYT Regulations, 2015 specifies as;

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:

10.8 As the FAC per unit computed is already lower than the 20% cap specified in Regulation as shown in Table above, hence, there is no restriction triggered with regards to such ceiling for all the months of Q1 of FY 2018-19.

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:—

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..."

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 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, 2018 to June, 2018.

11.3 The following table shows per unit ZFAC to be charged to the consumers of MSEDCL in the billing month i.e., July 2018 to September, 2018.

<u>Table A- Fuel Adjustment Charges for the Month of April, 2018 to June, 2018 to be levied</u> <u>in July, 2018 to September, 2018 respectively</u>

LT Category Domestic (LT-1) Domestic (LT-1) Domestic (LT-1) Domestic (LT-1) Domestic (LT-1) Domestic (LT-1) Domestic (LT-2) Domestic (LT-2	Sr. No.	Categories	ZFAC to be levied in billing month of Jul'2018 (Rs./kWh)	ZFAC to be levied in billing month of Aug'2018 (Rs./kWh)	ZFAC to be levied in billing month of Sept'2018 (Rs./kWh)
A BPL (0-30 Units) 0.001 0.027 0.097 B Consumption > 30 Units per month 1 1-100 Units 0.004 0.083 0.256 Ii 101-300 Units 0.008 0.145 0.433 Iii 301-500 Units 0.011 0.195 0.550 IV 500-1000 Units 0.012 0.222 0.612 V Above 1000 Units 0.013 0.243 0.649 2 Non Domestic (LT-2) A 0-20 KW 0.001 0.153 0.432 A 0-20 Units 0.008 0.153 0.432 B Above 200 units 0.011 0.197 0.580 B >20-50 KW 0.012 0.227 0.645 C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) A 0-20 KW 0.003 0.063 0.177 B 20-40 KW 0.003 0.063 0.177 0.040 0.006 0.111 0.310 4 Agriculture (LT-IV) A 0.006 0.111 <t< th=""><th></th><th>LT Category</th><th></th><th></th><th></th></t<>		LT Category			
B Consumption > 30 Units per month I 1-100 Units	1	Domestic (LT-I)			N ASSESSMENT OF THE PROPERTY O
I	Α		0.001	0.027	0.097
Ii 101-300 Units	В	Consumption > 30 Units per month	The second		
Ii 101-300 Units 0.008 0.145 0.433 Iii 301-500 Units 0.011 0.195 0.550 Iv 500-1000 Units 0.012 0.222 0.612 V Above 1000 Units 0.013 0.243 0.649 2 Non Domestic (LT-2)	I	1-100 Units	0.004	0.083	0.256
Sin 301-500 Units 0.011 0.195 0.550 1	Ii	101-300 Units	0.008	0.145	
IV 500-1000 Units 0.012 0.222 0.612 V Above 1000 Units 0.013 0.243 0.649 2 Non Domestic (LT-2)	Iii	301-500 Units	0.011	0.195	
V Above 1000 Units 0.013 0.243 0.649 2 Non Domestic (LT-2) A 0-20 KW 0.008 0.153 0.432 A 0-200 Units 0.011 0.197 0.580 B >20-50 KW 0.012 0.227 0.645 C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) 4 Unmetered Tariff 1 AG unmetered Pump set Zone 1 3,0-5 HP (3.35) 3.539 5.393 B) HP -7.5 HP (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 Zone 2 (1.48) 1.567 2.522 B) HP -7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	Iv	500-1000 Units	0.012		
A 0-20 KW A 0-200 Units B Above 200 units 0.011 0.197 0.580 B >20-50 KW 0.012 0.227 0.645 C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) A 0-20 KW 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) A Unmetered Tariff 1 AG unmetered Pump set Zone 1 A) 0-5 HP 3.56 3.762 5.703 C) Above 7.5 HP 3.76 4.75 HP 3.76 2.522 A) 0-5 HP 3.76 2.522 B) HP -7.5 HP 1.66 2.690 C) Above 7.5 HP 1.67 1.770 2.998 B Metered Tariff (Pumpsets) 0.001 0.015 0.432	V	Above 1000 Units	0.013		
A 0-200 Units 0.008 0.153 0.432 B Above 200 units 0.011 0.197 0.580 B >20-50 KW 0.012 0.227 0.645 C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) A 0-20 KW 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) 4 Agriculture (LT-IV) 4 Agriculture (LT-IV) 5 A) Unmetered Tariff 1 4 AG unmetered Pump set 5 3.539 5.393 B) HP -7.5 HP (3.35) 3.539 5.393 B) HP -7.5 HP (3.74) 3.954 6.224 2 Zone 2 5 2.522 B) HP -7.5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	2	Non Domestic (LT-2)	III E Iggrand 's		
B	Α	0-20 KW	alayan ahban Apin i	o de managaria	45100
B Above 200 units 0.011 0.197 0.580 B >20-50 KW 0.012 0.227 0.645 C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) A 0-20 KW 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) A Unmetered Tariff 1 AG unmetered Pump set 3.53 3.539 5.393 B) HP -7.5 HP (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 2 Zone 2 (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	Α	0-200 Units	0.008	0.153	0.432
B >20-50 KW 0.012 0.227 0.645 C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) Variable 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) Variable Variable Variable A Unmetered Tariff Variable Variable <td>В</td> <td>Above 200 units</td> <td>0.011</td> <td></td> <td></td>	В	Above 200 units	0.011		
C >50 KW 0.014 0.269 0.786 3 Public Water Works (LT-III) 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) 4 Unmetered Tariff 1 AG unmetered Pump set 2 2 2 3.539 5.393 5.393 B) HP -7.5 HP (3.56) 3.762 5.703 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 Z Zone 2 4.0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	В	>20-50 KW	0.012		
A 0-20 KW 0.003 0.063 0.177 B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) 4 Agriculture (LT-IV) 4 Agriculture (LT-IV) 5 A Unmetered Pump set 5 0.350 0.359 0.393 0.393 B) HP -7.5 HP (3.35) 3.539 5.393 0.3762 5.703 0.3762 5.703 0.374 0.3954 0.224 0.242 <td>С</td> <td>>50 KW</td> <td></td> <td></td> <td></td>	С	>50 KW			
B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) A Unmetered Tariff 1 AG unmetered Pump set Zone 1 A) 0-5 HP (3.35) 3.539 5.393 B) HP -7.5 HP (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 2 Zone 2 A) 0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	3	Public Water Works (LT-III)			
B 20-40 KW 0.005 0.085 0.242 C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) 4 Agriculture (LT-IV) 4 Agriculture (LT-IV) 5 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.02 0.042 0.024 0.00 0.035 0.042 0.042 0.00 0.035 0.042 0.042 0.00 0.035 0.042 0.00 0.035 0.042 0.00 0.00 0.035 0.042 0.00 <td< td=""><td>Α</td><td>0-20 KW</td><td>0.003</td><td>0.063</td><td>0.177</td></td<>	Α	0-20 KW	0.003	0.063	0.177
C above 40 kw 0.006 0.111 0.310 4 Agriculture (LT-IV) A Unmetered Tariff Image: Control of the control of	В	20-40 KW			
A Unmetered Tariff 1 AG unmetered Pump set Zone 1 A) 0-5 HP (3.35) B) HP -7.5 HP (3.56) C) Above 7.5 HP (3.74) A) 0-5 HP (3.74) C) Above 7.5 HP (1.48) C) Above 7.5 HP (1.57) C) Above 7.5 HP (1.57) C) Above 7.5 HP (1.67) C) Above 7.5 HP	С	above 40 kw			
1 AG unmetered Pump set Zone 1 (3.35) A) 0-5 HP (3.35) B) HP -7.5 HP (3.56) C) Above 7.5 HP (3.74) 2 Zone 2 A) 0-5 HP (1.48) B) HP -7.5 HP (1.57) C) Above 7.5 HP (1.67) B Metered Tariff (Pumpsets) Metered Tariff (Pumpsets) (0.00) O.005 0.042	4	Agriculture (LT-IV)			
Zone 1 (3.35) 3.539 5.393 B) HP -7.5 HP (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224	A	Unmetered Tariff			
A) 0-5 HP B) HP -7.5 HP C) Above 7.5 HP (3.35) (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 2 Zone 2 A) 0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 Metered Tariff (Pumpsets) (0.00) 0.035 0.042	1	AG unmetered Pump set			
B) HP -7.5 HP (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 Zone 2 A) 0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	al Hai	Zone 1			11500
B) HP -7.5 HP (3.56) 3.762 5.703 C) Above 7.5 HP (3.74) 3.954 6.224 Zone 2 A) 0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042		A) 0-5 HP	(3.35)	3,539	5 393
C) Above 7.5 HP (3.74) 3.954 6.224 2 Zone 2 A) 0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042		B) HP -7.5 HP			
2 Zone 2 A) 0-5 HP (1.48) 1.567 2.522 B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042					
B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	2	Zone 2	(-1.7)	2,351	0.221
B) HP -7.5 HP (1.57) 1.662 2.690 C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	Himi	A) 0-5 HP	(1.48)	1.567	2.522
C) Above 7.5 HP (1.67) 1.770 2.998 B Metered Tariff (Pumpsets) (0.00) 0.035 0.042	8 m	B) HP -7.5 HP			
B Metered Tariff (Pumpsets) (0.00) 0.035 0.042		C) Above 7.5 HP			
C M. 17 'CC(O1)	В				
	C				

Sr. No.	Categories	ZFAC to be levied in billing month of Jul'2018 (Rs./kWh)	ZFAC to be levied in billing month of Aug'2018 (Rs./kWh)	ZFAC to be levied in billing month of Sept'2018 (Rs./kWh)
5	LT Industries (LT-V)			
A	Power Loom			
I	0-20 KW	0.005	0.098	0.288
Ii	Above 20 KW	0.007	0.127	0.364
В	General		Propuls')	
I	0-20 KW	0.006	0.108	0.318
Ii	Above 20 KW	0.008	0.157	0.446
6	Street Light (LT-VI)			TA D
A	Grampanchayat A, B & C Class Municipal Council	0.005	0.096	0.292
В	Municipal corporation Area	0.006	0.117	0.364
7	Temporary Connection (LT-VII)			
A	Temporary Connection (Religious)	0.005	0.088	0.261
В	Temporary Connection (Other Purposes)	0.013	0.243	0.722
8	Advertising and Hording (LT-VIII)	0.016	0.306	0.706
9	Crematorium & Burial (LT-IX)	0.004	0.080	0.236
10	Public Services (LT X)	(Income Diversi		B &
A	Government		diel - TH (di)	
A	0-20 kw	Luises	mx7-111:11	H D
I	0-200 units	0.008	0.145	0.300
Ii	> 200 units	0.007	0.126	0.356
В	>20 -50 kw	0.010	0.179	0.397
С	>50 kw	0.010	0.178	0.432
В	Others		SIONLES IN BY	
A	0-20 KW		in desirence	
I	0-200 Units	0.006	0.114	0.316
Ii	Above 200 units	0.008	0.151	0.436
В	>20-50 KW	0.009	0.175	0.456
С	>50 KW	0.010	0.180	0.469



<u>Table B- Fuel Adjustment Charges for the Month of April, 2018 to June, 2018 to be levied</u> <u>in July, 2018 to September, 2018 respectively</u>

Sr. No.	Categories	ZFAC to be levied in billing month of Jul'2018 (Rs./kWh)	ZFAC to be levied in billing month of Aug'2018 (Rs./kWh)	ZFAC to be levied in billing month of Sept'2018 (Rs./kWh)
	HT Category		(========	(LESO/ILVVII)
1	HT Category - EHV (66 kV & Above)		W 2(05-0)	
A	HT I(A): HT - Industry (General)	0.007	0.138	0.384
В	HT I(B): HT - Industry (Seasonal)	0.010	0.191	0.529
C	HT II: HT – Commercial	0.012	0.226	0.625
D	HT III: HT - Railways/Metro/Monorail	0.008	0.154	0.428
E	HT IV: HT - Public Water Works (PWW)	0.006	0.118	0.327
F	HT V(A): HT - Agricultural – Pumpsets	0.004	0.074	0.205
G	HT V(B): Agricultural – Others	0.000	0.000	0.000
H	HT VI: HT - Group Housing Society	1 11	et all and a second P	0.000
	(Residential)	0.000	0.000	0.000
I	HT VIII (A): HT - Temporary Supply			
or n	Religious (TSR)	0.000	0.000	0.000
J	HT VIII(B): HT - Temporary Supply Others			
	(TSO)	0.000	0.000	0.000
K	HT IX(A): HT - Public Services-Government	0.000	0.000	0.000
L	HT IX(B): HT - Public Services-Others	0.010	0.178	0.494
2	HT Category -33 kV			
Α	HT I(A): HT - Industry (General)	0.008	0.140	0.388
В	HT I(B): HT - Industry (Seasonal)	0.010	0.192	0.533
С	HT II: HT – Commercial	0.012	0.217	0.602
D	HT III: HT - Railways/Metro/Monorail	0.008	0.146	0.405
E	HT IV: HT - Public Water Works (PWW)	0.006	0.110	0.304
F	HT V(A): HT - Agricultural – Pumpsets	0.004	0.065	0.181
G	HT V(B): Agricultural – Others	0.005	0.092	0.255
H	HT VI: HT - Group Housing Society			
	(Residential)	0.006	0.120	0.331
I	HT VIII (A): HT - Temporary Supply			
	Religious (TSR)	0.000	0.000	0.000
J	HT VIII(B): HT - Temporary Supply Others (TSO)	0.012	0.217	0.602
K	HT IX(A): HT - Public Services-Government	0.007	0.137	0.380
L	HT IX(B): HT - Public Services-Others	0.009	0.170	0.471
3	HT Category –22 kV and 11 kV			
A	HT I(A): HT - Industry (General)	0.008	0.152	0.422
В	HT I(B): HT - Industry (Seasonal)	0.011	0.205	0.567
		V. V. L.	0.200	0.507

Sr. No.	Categories	ZFAC to be levied in billing month of Jul'2018 (Rs./kWh)	ZFAC to be levied in billing month of Aug'2018 (Rs./kWh)	ZFAC to be levied in billing month of Sept'2018 (Rs./kWh)
D	HT III: HT - Railways/Metro/Monorail	0.009	0.158	0.439
Е	HT IV: HT - Public Water Works (PWW)	0.007	0.122	0.338
F	HT V(A): HT - Agricultural – Pumpsets	0.004	0.078	0.215
G	HT V(B): Agricultural – Others	0.005	0.092	0.255
Н	HT VI: HT - Group Housing Society (Residential)	0.007	0.132	0.366
I	HT VIII (A): HT - Temporary Supply Religious (TSR)	0.000	0.000	0.000
J	HT VIII(B): HT - Temporary Supply Others (TSO)	0.012	0.230	0.637
K	HT IX(A): HT - Public Services-Government	0.008	0.149	0.414
L	HT IX(B): HT - Public Services-Others	0.010	0.182	0.505



ANNEXURE: A

1. Revised monthly MoD Stack for FY 2018-19

Energy Procure d at	Gen. Bus	Mar-19	93	97	274	103	12	4	5	1,262	316	335				359	82	171	388	29	208	205	173	102	268	465	768	116	295	-	109	109	259	259
Energy Procure d at	Gen. Bus	Feb-19	84	88	248	93	10	4	5	1,183	296	302				324	74	155	351	26	188	185	156	92	242	420	694	105	266		86	86	234	234
Energy Procure d at	Gen. Bus	Jan-19	93	76	274	103	12	4	5	1,208	302	335				359	82	171	388	29	208	205	173	102	268	465	292	911	295	-	601	109	259	259
Energy Procure d at	Gen. Bus	Dec-18	93	97	274	103	12	4	5	1,159	290	335				359	82	171	388	29	208	205	173	102	268	465	892	116	295	•	109	109	259	259
Energy Procure d at	Gen. Bus	Nov-18	06	94	266	66	- 11	4	5	1,178	295	324				347	79	166	376		201	198	167	66	260	450	743	113	286	•	105	105	250	250
Energy Procure d at	Gen. Bus	Oct-18	93	97	274	103	12	4	5	1,184	296	335	•			359	82	171	388		208	205	173	102	268	465	892	116	295		109	109	259	259
Energy Procure d at	Gen. Bus	Sep-18	96	94	266	66	- 11	4	5	1,107	277	324	•	•		347	62	166	376	ı	201	198	167	66	260	450	743	113	286	•	105	105	250	250
Energy Procure d at	Gen. Bus	Aug-18	93	97	274	103	12	4	5	1,082	271	335			•	359	82	171	388	-	208	205	173	102	268	465	892	116	295	1	109	109	259	259
Energy Procure d at	Gen. Bus	Jul-18	93	76	274	103	12	4	5	1,088	272	335	•			359	82	171	388	•	208	205	173	102	268	465	892	911	295		109	109	259	259
Energy Procure d at	Gen. Bus	Jun-18	96	94	266	66	11	4	5	1,164	291	324	•	•		347	79	166	376	*	201	198	167	66	260	450	743	113	286	•	105	105	250	250
Energy Procure d at	Gen. Bus	May-18	93	64	274	103	12	4	5	1,217	304	335	•		•	359	82	171	388	•	208	205	173	102	268	465	768	116	295		109	109	259	259
Energy Procure d at	Gen. Bus	Apr-18	06	94	266	66	11	4	5	1,189	297	324	•			347	42	166	376	-	201	198	167	66	260	450	743	113	286		105	105	250	250
	Generator Name		KAPP	TAPP 1&2	TAPP 3&4	SSP	Pench	Dodson I	Dodson II	Renewable - Non- Solar	Renewable - Solar	Hydro		GHATGHAR	Lara	SIPAT TPS 1	KSTPS III	SIPAT TPS 2	KSTPS	Gadarwara	VSTP II	VSTP IV	VSTP III	VSTP V	VSTP I	Mundra UMPP	Adani power 1320 MW	EMCO Power	GTPS URAN	Khargone	CHANDRAPUR - 3	CHANDRAPUR - 4	CHANDRAPUR - 5	CHANDRAPUR - 6
	S.No		-	2		4			7	∞	6	10	Rank	1	2	3		5		7	8	6	10	=======================================	12	13	14	15 1	91	17 1	18	61	2000	

uat	dat	d at	Procure	Procure
Gen. Gen. Bus Bus		Gen. Bus	Gen. Bus	
Sep-18 (•	3 Jul-18	Jun-18	100
250		259	250	
		297	288	
288 297		297	288	
	69	69	99	_
288 297	297	297	288	
169 175	175	175	169	
	0/	0/	89	
-	392	392	380	
380 392	392	392	380	
	73	773	200	
	499	543	676	
		3 .	83	
188 256			248	
			86	
. 101			86	
- 44	•	•	185	
	•			
	•			The state of the s
1	•	•		
,		-		
		,		
		-		
1				
,				
		•		
		1		
		2000		١

2. Revised monthly MoD Stack for FY 2019-20

re Procure Procure dat dat Gen Gen		.19 Feb-19 Mar-19			257 274		11 12		5	1,272 1,356	387 413									27 29					251 268		1		276 295			102 109			242 259	
Energy Energy Procure Procure d at d at		Dec-18 Jan-19					12 12	4 4		•	379 395						2 82			9 29		505 205						892 298				601 60				7 297
Energy Energy Procure Procurd at dat		Nov-18 De					11	4		2	385 37	- 30							376 38	28 29		198 205		99 102	260 268			743 768	286 29			105 109				288 297
Energy Procure d at	Bus	Oct-18	93	65	274	103	12	4	5	1,271	387	335		-	133	359	82	171	388	29	208	205	173	102	268	465	116	892	295	29	109	109	259	259	259	297
Energy Procure d at	Bus	Sep-18		94	266	99	11	4	5	1,187	361	324		-	128	347	79	166	376	28	201	198	167	66	260	450	113	743	286	14	105	105	250	250	250	288
Energy Procure d at	Bus	Aug-18		65	274	103	12	4	5	1,161	353	335		•	133	359	82	171	388	29	208	205	173	102	268	465	116	892	295	15	109	109	259	259	259	297
Energy Procure d at	Bus	Jul-18	93	97	274	103	12	4	5	1,167	355	335		•	133	359	82	171	388	29	208	205	173	102	268	465	116	892	295	15	109	109	259	259	259	297
Energy Procure d at	Bus	Jun-18	06	94	599	66	==	4	5	1,250	381	324		•		347	62	166	376	28	201	198	167	66	260	450	113	743	286	14	105	105	250	250	250	288
Energy Procure d at	Bus	May-18	93	26	274	103	12	4	5	1,306	398	335	•	•		359	82	171	388	29	208	205	173	102	268	465	116	892	295	15	109	109	259	259	259	297
Energy Procure d at Gen	Bus	Apr-18	06	94	566	66	11	4	5	1,277	389	324	•	•	•	347	42	166	376	28	201	198	167	66	260	450	113	743	286	14	105	105	250	250	250	288
	Generator Name		KAPP	TAPP 1&2	TAPP 3&4	SSP	Pench	Dodson I	Dodson II	Renewable - Non- Solar	Renewable - Solar	Hydro		GHATGHAR	Lara	SIPAT TPS 1	KSTPS III	SIPAT TPS 2	KSTPS	Gadarwara	VSTP II	VSTP IV	VSTP III	VSTP V	VSTP I	Mundra UMPP	Adani power 1320 MW	EMCO Power	GTPS URAN	Khargone	CHANDRAPUR - 3	CHANDRAPUR - 4	CHANDRAPUR - 5	CHANDRAPUR - 6	CHANDRAPUR - 7	Chandrapur 8
S. S.			1	2	3	4	S	9	7	8	6	10	Rank	1	2	3	4	5	9	7	8	6	10	-	12	13	14	15	91	17	18	19	20	21	77	1237m



