

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2022-23/0441

Date: 23 August, 2023

To,

The Chairman and Managing Director

Maharashtra State Electricity Distribution Company Ltd.,
5th Floor, Prakashgad, Plot No. G-9

Bandra (East), Mumbai 400 051

Subject:

Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for

the month of March, 2023.

Reference:

1. MSEDCL's FAC submission dated 19 June, 2023 for prior approval of FAC

for the month of March, 2023.

2. Data gaps communicated to MSEDCL vide email dated 25 June, 2023.

3. MSEDCL's response to data gaps by email dated 7 July, 2023, 28 July, 2023

and 31 July, 2023

Sir,

Upon vetting the FAC calculations for the month of March, 2023 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. 506.37 Crore. As FY 2022-23 is already over and Provisional Truing-up of FY 2022-23 has also been done by the Commission in the recent MTR Order dated 31 March, 2023, the revised power purchase cost resulting in FAC is already adjusted in the said MTR Order. Accordingly, the FAC chargeable to consumers is as shown in the table below:

Month	FAC Amount* (Rs. Crore)
March 2023	0 (Zero)

^{*}FAC already allowed to be recovered as approved in FAC approval dated 28 February, 2023 for March, 2023.

Yours faithfully,

(Dr. Rajendra G. Ambekar) Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the month of March, 2023.

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Detailed Vetting Report
Date: 23 August, 2023

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF MARCH 2023

Subject:

Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for

the month of March, 2023.

Reference:

MSEDCL's FAC submission dated 19 June, 2023, 7 July, 2023, 28 July, 2023

and 31 July, 2023 for prior approval of FAC for the month of March, 2023.

1. FAC submission by MSEDCL:

1.1 MSEDCL has submitted FAC submissions for the month of March, 2023 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MSEDCL against the data gaps issued, the Commission has accorded prior approval to MSEDCL for FAC amount of Rs. 506.37 Crore. The approved FAC amount is adjusted at the time of Provisional Truing-up of FY 2022-23 in the MTR Order dated 31 March, 2023.

2. Background

- 2.1 On 30 March, 2020, the Commission has issued Tariff Order for MSEDCL, (Case No.322 of 2019) for True-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. Revised Tariff has been made applicable from 1 April, 2020.
- 2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:

"8.5.12 Therefore, using its powers for Removing Difficulty under Regulations 106 of the MYT Regulations, 2019, the Commission is making following changes in the FAC mechanism stipulated under Regulation 10 of MYT Regulations, 2019:

Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:

- Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost;
- Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost;



- Such carry forward of negative FAC shall be continued till the accumulated negative FAC becomes 20% of monthly tariff revenue approved by the Commission in Tariff Order. In case of MSEDCL, such limit shall be Rs. 1500 crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism;
- In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism.

8.5.13 In order to maintain transparency in management and use of such FAC Fund, the Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders. Further, till date, the Distribution Licensees have been levying FAC up to the prescribed limit of 20% of variable component of tariff without prior approval in accordance with the MYT Regulations, 2015, and submitting the FAC computations on a quarterly basis within 60 days of the close of each quarter, for post facto approval. However, as the Commission has now created a FAC fund as stated above to stabilise the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC.

8.5.14 The details of the FAC as per the Regulations, shall be submitted by the 15th of the every month prior to the month on which the FAC is proposed to be levied and the Commission will endeavour to decide on the same within 10 days so that the same can be levied from the 1st of the subsequent month. This prior approval will facilitate the addressing of any difficulties that may arise in giving effect to this fund. All the details will be submitted by the Distribution Licensee as is being done for approval of FAC on post facto basis. Thus the FAC to the consumers shall now be levied with prior approval of the Commission"

- 2.3 Vide its letter dated 20 April, 2020, the Commission communicated the excel formats along with the checklist to file FAC submissions for prior approval to all Distribution Licensees. The Commission also directed all Distribution Licensees to file FAC submissions by 15th of every month prior to the month for which the FAC is proposed to be levied for prior approval.
- 2.4 Accordingly, MSEDCL has filed FAC submissions for the month of March, 2023 for prior 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. Energy Sales of the Licensee

3.1 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:

Consumer Category	Yearly Approved by the	Monthly Approved	Actual Sales
	Commission (MU)	(MU)	March 2023 (MU)
HT Category			
Industry (General)	36,590.51	3,160.37	3,243.56
Industry (Seasonal)	102.93	12.96	18.69
Commercial	1,968.12	163.49	144.62
Railways/Metro/Monorail	83.72	6.42	9.39
Public Water Works (PWW)	2,101.00	180.11	183.70
Agricultural – Pump sets	1,323.16	123.99	146.89
Agricultural – Others	275.94	27.58	25.59
Group Housing Society (Residential)	243.80	20.25	17.49
Public Services – Government	298.91	25.70	27.87
Public Services – Others	902.93	78.90	68.70
Electric Vehicle Charging Stations	0.31	0.03	5.93
MSPGCL Auxiliary	183.74	16.99	20.14
Other Adjustment	4,842.00	403.50	582.31
Sub-total (A)	48,917.06	4,220.28	4,494.88
LT Category		1,220.20	7,774.00
BPL	49.63	7.34	2.66
Residential	25,151.26	2,303.35	1,682.66
Non-Residential	8,120.69	764.47	480.70
Public Water Works	993.84	93.79	76.47
AG Metered (Pump-sets)	18,612.07	1,535.04	2,498.59
AG Metered (Others)	140.00	14.26	19.62
Industrial	10,571.64	1,040.35	1,051.04
Street Lights	2,571.73	223.43	97.50
Public Services	649.79	60.42	60.08
Electric Vehicle Charging Stations	0.23	0.02	0.42
Sub-total (B)	66,860.87	6,042.48	5,969.74
Total – Metered ($C = A + B$)	1,15,777.93	10,262.75	10,464.62
Unmetered Sale (D)	8,783.32	774.34	1,382.79
Other Adjustment is related to Salas to Once	1,24,561.25	11,037.09	11,847.42

^{*} Other Adjustment is related to Sales to Open Access Consumer (Conventional and Renewable)

3.2 For the month of March, 2023, it is observed that actual sales of 11847.42 MU is higher as compared to the approved energy sales of 11037.09 MU.



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- 3.3 MSEDCL has submitted the data providing actual billing and estimated billing undertaken for the calculation of total energy consumption for the month of March, 2023. As per the data, the billing of about 97.6% of sales is undertaken as per actual meter readings and balance 2.4% is assessed on an estimated basis. 100% of HT billing is undertaken on actual basis and estimation is only for LT category. The figures do not include the agriculture sales which is on estimated basis for the month of March, 2023.
- 3.4 The number of actual and estimated meter readings undertaken by MSEDCL for the month of March, 2023 except for agriculture consumers are as given below:

Sr. No.	Particulars	No. of Meters for which actual meter reading is done either manually or through AMR	No. of Meters for which meter reading are estimated.	Total Meters
1	HT	22944	0	22944
2	LT	22657028	2441334	25098362
	Total	22679972	2441334	25121306

3.5 Further, comparison of sales for April, 2022 to March, 2023 as compared to last year is as shown below:

Particulars	LT - Residential (MU)	dential Others		Ag- Unmetered	Total (MU)
Apr-21	2010	3231	3734	677	9652
Apr-22	2241	3281	4262	779	10563
May-21	2024	3091	3508	677	9300
May-22	2522	3334	4453	779	11088
June-21	2026	3126	3553	677	9382
June-22	2577	3977	4229	1059	11842
July-21	2032	2879	3716	665	9293
July-22	2135	3219	4184	786	10323
August-21	2037	3084	3876	752	9749
August-22	1964	3212	4170	786	10132
September-21	2041	3101	3818	752	9712
September-22	2000	3242	4054	786	10083
October-21	1830	3121	4528	840	10320
October-22	1914	3209	3981	791	9895

Particulars	LT - Residential (MU)	LT Others (MU)	HT (MU)	Ag- Unmetered	Total (MU)
November-21	1801	3060	3720	840	9421
November-22	1854	3240	3991	791	9876
December-21	1621	3109	3965	840	9535
December-22	1599	3252	4147	791	9790
January-22	1456	3271	3986	808	9521
January-23	1617	4170	4210	1322	11320
February-22	1445	3210	3776	808	9239
February-23	1567	4028	4013	1272	10881
March-22	1558	3301	4217	808	9884
March-23	1683	4287	4495	1383	11847
April-21 to March-22	21881	37584	46396	9146	115008
April-22 to March-23	23673	42452	50190	11326	127641

- 3.6 The Commission observes that overall sales in March, 2023 has increased as compared to March, 2022 due to increase in sales across all categories.
- 3.7 MSEDCL has considered agriculture sales are estimated based on consumption norms as per Tariff Order and previous three-year trend is used for estimation of monthly sale. The Commission while approving the FAC for the month of February, 2023 has restricted the agriculture sales to approved sales (based on the approved norm of Consumption/HP) as specified in MYT Tariff Order. MSEDCL in response to data gaps raised by the Commission has submitted the load (HP) details of agriculture connections. Further, the Commission has approved monthly sales for the agriculture connections. Accordingly, the Commission has computed the norm of consumption/HP based on the monthly approved agriculture sales and considered the norms based on monthly approved sales for allowing the sales for the month of March, 2023. Any adjustment in sales due to HP variation will be reconciled while actual data is submitted as per actual billing undertaken by MSEDCL. Based on the norms approved by the Commission in the Tariff Order, the agriculture sales metered and unmetered approved by the Commission are as given below:

		Metered			Unmetered	esamenta h	Total		
Particulars	Sale in MU's	Cumulative Load (HP)	Consumpti on / HP – Units	Sale in MU's	Cumulative Load (HP)	Consumpti on / HP - Units	Sale in MU's	Cumulative Load (HP)	Consumpti on / HP -
MSEDCL - April 22- Mar 23	21312	181032439	118	11326	96739341	117	32637	277771780	Units 117
As Approved – April 22- Mar 23	17491	181032439	97	9276	96739341	96	26766	277771780	96

3.8 Based on the agriculture sales approved in the above table, the Commission has restricted 1020.13 MU for metered and 521.05 MU of unmetered agriculture sales for the month of March, 2023 and considered in computation of Distribution Loss to restrict the consumption based on actual sales per HP or approved Sales per HP, whichever is lower.



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4. Power Purchase Details

- 4.1 The Commission has approved following sources in the Tariff Order for power purchase by MSEDCL.
 - a) MSPGCL
 - b) Central Generating Stations i.e., NTPC, TAPP etc.
 - c) IPPs i.e., JSW, Adani Power, Mundra UMPP, Emco, Rattan India and Sai Wardha
 - d) Renewable Energy (Solar and Non-Solar)

In addition to the aforesaid, MSEDCL procures power in short term, though the said source is not approved by the Commission, in case of any shortfall of approved sources or to optimize the power purchase cost. Also, there may be some variation in real time (unscheduled interchange) which will be settled through Balancing and Settlement Mechanism approved by the Commission.

4.1 Summary of Power Purchase from MSEDCL is as follows:

Sr. No.	Particular		Co	mpliance				
1	Sources of	MSEDCL has	purchased 1	power from ap	proved sources. I			
edmille.	approved Power	1 SYCOMO 14			nge to optimise th			
	Purchase	power purchase	cost		- (- (in			
2	Merit Order	MSEDCL has f	followed mer	it order for sched	duling of power an			
	Dispatch	preference was	given to chea	apest power.				
3	Fuel Utilization	Usage of coal	is not as p	er approved Fu	el Utilisation Pla			
	Plan			below - Para 5.8				
4	Deviation Quantum	MSEDCL has u	nderdrawn (1	63.78 MU) from	the actual schedu			
5	Sale of Surplus Power	MSEDCL has sold 18.10 MU at Rs 6.19/kWh during the month						
6	Power Purchase	Actual Net Power Purchase is 14468.96 MU as against approved 12787.90 MU.						
7	Source wise Power Purchase	Source Name	Approved (MU)	Actual (MU)	Proportion of each Source in Actual Purchase			
		MSPGCL	4,740.60	5,155.08	36%			
		NTPC	2,498.21	3,334.68	23%			
	committee O with sales	IPP	2,501.11	3,233.23	22%			
	est and commission for	Renewable	2,504.90	1,803.59	12%			
	n and model exect	Must Run	543.09	407.67	3%			
		Short Term	0.00	716.58	5%			
		Sale of Power	0.00	-18.10	0%			
		DSM	0.00	-163.78	-1%			
		Total	12,787.90	14,468.96				

Sr. No.	Particular	Compliance
8	Power Purchase: a. Section 62 of	A. MSPGCL
	Electricity Act, 2003	As part of verification of fixed cost claimed by MSEDCL, the same has been verified from the MYT Order in Case No.322 of 2019 and invoice submitted by MSEDCL.
		As part of verification of energy charges claimed by MSEDCL, verification of operational parameters, fuel cost, GCV etc. vis-à-vis the MYT Order/Tariff Regulations is carried out and invoice submitted by MSEDCL.
		B. CGS- NTPC etc
		Cost and MUs are verified as per invoice.
	b. Section 63 of	
	Electricity Act, 2003 – IPPs	Cost and MUs verified as per Invoice.
9	RE Purchase	Cost and MUs verified as per summary of renewable purchase details submitted by MSEDCL and invoices of power purchased from SECI, NVVN and other IPPs.
10	Short Term Power Purchase	Short-term power purchase invoices of March, 2023 are submitted by MSEDCL. All the power purchase quantum and rate are verified from the invoices and has been considered for FAC calculation.

4.2 The following table show the variation in average power purchase cost (Rs/kWh) for the month of March, 2023 submitted by MSEDCL as compared to average power purchase cost approved in Tariff Order:

		er Dated 30 d for March		Actual for M	larch, 2023 a by MSEDCL		Variation			
Particulars	Quantum PP Cost		Averag e PP Cost Power Purcha se Cost	Quantum	PP Cost	Average Power Purchase Cost	Quantum	PP Cost	Average Power Purchase Cost	
	MU	Rs. Crore	Rs/kW h	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	
MSPGCL - Thermal	4,460.62	1,903.25	4.27	4,838.50	2,639.39	5.45	377.88	736.15	1.19	
MSPGCL- Hydro (including Lease Rent)	279.98	70.19	2.51	316.58	64.25	2.03	36.60	(5.94)	(0.48)	
NTPC	2,498.21	970.15	3.88	3,334.68	1,423.47	4.27	836.46	453.32	0.39	



		er Dated 30		Actual for M	larch, 2023 a	s submitted		Variation	
	Approve	d for March	1, 2023	1	y MSEDCL				
Particulars	Quantum	PP Cost	e Power Purcha se Cost	Quantum	PP Cost	Average Power Purchase Cost	Quantum	PP Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kW h	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
1.JSW	164.28	66.05	4.02	101.99	83.84	8.22	(62.29)	17.79	4.20
2.Mundra UMPP	438.07	137.12	3.13	ry one Editori	-38.22	-	(438.07)	(175.34)	(0.40)
3.Adani Power	1,782.40	693.30	3.89	1,966.21	692.30	3.52	183.81	(1.00)	(0.37)
4.Emco	116.36	57.64	4.95	140.71	60.36	4.29	24.35	2.72	(0.66)
5.Rattan India	0.00	57.71		851.39	309.65	3.64	851.39	251.94	3.64
6. Sai Wardha	0.00	0.00	Algen	172.93	77.00	4.45	172.93	77.00	4.45
Total IPPs (1 to 6)	2,501.11	1,011.82	4.05	3,233.23	1,184.93	3.66	732.12	173.11	(0.38)
7.Non-Solar	1,389.30	627.31	4.52	1,001.43	354.29	3.54	(387.87)	(273.02)	(0.98)
8.Solar	1,115.60	389.90	3.49	802.16	294.03	3.67	(313.44)	(95.87)	0.17
Renewable Energy including REC (7 to 8)	2,504.90	1,017.21	4.06	1,803.59	648.32	3.59	(701.31)	(368.90)	(0.47)
Must Run - KAPP, TAPP, Dodson etc	543.09	150.29	2.77	407.67	129.20	3.17	(135.41)	(21.09)	0.40
Short Term	0.00	0.00		716.58	201.33	2.81	716.58	201.33	2.81
Sale of Power	0.00	0.00	- Lon	18.10	11.19	6.19	18.10	11.19	6.19
DSM	0.00	0.00		-163.78	-30.07	1.84	(163.78)	(30.07)	1.84
PGCIL	0.00	305.16			475.99		- I	170.83	
Total	12,787.90	5,428.06	4.24	14,468.96	6,725.60	4.65	1,681.06	1,297.54	0.40

4.3 Thus, for the month of March, 2023, total variation in power purchase cost is Rs. 1297.54 Crore, out of which Rs. 713.55 Crore was on account of higher quantum (1681.06 MU) of power purchase and Rs. 583.99 Crore was on account of higher rate of average power purchase by Rs.0.40/kWh. FAC mechanism allows only impact of variation in power purchase rate to be passed through as FAC rate over and above approved tariff. The Commission observes that decrease in power purchase with higher corresponding decrease in sales than approved by the Commission has resulted in higher distribution loss than approved by the Commission in the Tariff Order.





4.4 The detailed explanation in respect of approval of cost of power purchase of each of the source mentioned in the above table is given in subsequent paragraphs.

5. Power Purchase Cost

- 5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of MSEDCL with regards to average power purchase cost for the month of March, 2023. 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. MSEDCL has purchased power from approved sources as per the Tariff Order.
- 5.2 It was observed that due to planned/forced outages during the month, the availability of some of the MSPGCL and IPP generating stations was lower than normative availability.
- 5.3 The Commission notes that CGS stations having lower variable cost were dispatched almost to the extent of availability declared by the generator.
- 5.4 The Commission has also verified the PLF% and MOD rates of all the operational State Generating Stations and IPPs and has found that units having lower rates in MOD had higher PLF. The graph showing the comparison of Variable Cost in MoD Stack and monthly Plant Availability Factor and PLF for SGS and IPPs is given below:

Availability%, PLF% and MOD Rate 120.00% 8.0000 7.0000 100 00% 6.0000 80.00% 5.0000 60.00% 4.0000 40.00% 3.0000 2.0000 20.00% 1 0000 0.00% APPAL AND MAN Rotal Unit of Op 10 during of the party of the part Wager Heda Unit of aper nucus unit 108 08 0.0000 THE BULL AND LINE OF A OF thandadur Init Date. Parliumit of and of RRI 450 KM PRI TSO MAN Brue and Unit 03 PLF% MOD Rate -

SGS/IPPs Stations are considered for comparison and MOD Rate considered is as applicable from 16 March, 2023 to 31 March, 2023.

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- 5.5 The Commission has observed that MSEDCL has purchased 4395.64 MU from MSPGCL Thermal and Gas Stations. It was observed that MSEDCL has purchased energy from Parli 6-7, Parli 8, Bhusawal 3 generating stations of MSPGCL even though not included in MoD stack approved by the Commission in the Tariff Order to meet the demand due to outage of units and also lower schedule was given to IPPs such as JSW and CGPL using imported coal as rates notified were higher under Section 11 of EA 03.
- 5.6 The total overall generation was higher than approved during the month. The monthly fixed cost was payable in line with the MYT Regulations, 2019 considering the availability of the Plant. The Commission has verified that the fixed cost for all the Thermal/Gas Units as well as Hydro Units has been considered as per invoice raised by MSPGCL for March, 2023. The comparison of Actual and Approved Fixed and Variable Cost of MSPGCL Thermal/Gas units as shown in the table below shows the impact of fixed cost due to lower actual generation.

	Approved for March, 2023					Actual for March, 2023				Variations						
Particular s	Quantum	vc	vc	FC	FC	APPC	Quantu m	VC	vc	FC	FC	APPC	Quantum	VC	FC	APP C
	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./k Wh
MSPGCL - Thermal	4,460.62	2.83	1,263.69	639.56	1.43	4.27	4,838.50	4.02	1,947.05	692.35	1.43	5.45	377.88	1.19	(0.00)	1.19

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

- 5.7 The Commission has verified that fixed cost for all the Thermal/Gas Units as well as Hydro Units has been considered as per invoice raised by MSPGCL and as submitted by MSEDCL for the said units.
- 5.8 The Commission in its Order dated 30 March, 2020 in Case No 296 of 2019 has approved Fuel Utilisation Plan of MSPGCL. The Commission in the said Order has given in principle approval for the various measures proposed by MSPGCL including coal beneficiation and procurement of imported coal to meet the requirement of coal for maintaining normative availability and accordingly approved the variable/energy charges for the MSPGCL Stations.
- 5.9 The Commission notes that while approving the FUP, the washed coal and imported coal was required to be used in all the MSPGCL stations except Paras and Parli Stations. However, MSPGCL has finalised tie up for imported coal through competitive bidding from May 2022. The imported coal and washed coal were used as per FUP except at Koradi 6 and Chandrapur 3-7/ Nashik respectively in March, 2023.
- 5.10 MSEDCL submitted that CIMFR reports for most of the coal samples for coal supplied in March, 2023 are yet to be received, hence MSPGCL has raised provisional FAC bill considering GCV as per the methodology submitted by MSPGCL in Case No 97 of 2020 as given below:
 - a. GCV- As Billed: Consideration of certified loading end GCV data wherever available and where certified data is not available, use mid-point of declared grade GCV.

b. GCV – As Received: GCV is considered based on the results available at each Station from their respective Station Laboratory.

Accordingly, MSPGCL has raised provisional FAC bill dated 13 April, 2023 considering the aforesaid methodology.

5.11 The comparison of Approved and Actual Energy Charge (including FAC) is as given below:

Power Station	Approved Energy Charge Rs/kWh	Actual Energy Charge Rs/kWh	Difference Rs/kWh	Difference %
Bhusawal Unit 03	4.102	4.446	0.344	8.39%
Bhusawal Unit 04 & 05	3.436	3.434	-0.002	-0.06%
Khaperkheda Unit 1 to 4	2.945	3.914	0.969	32.90%
Khaperkheda Unit 05	2.583	3.390	0.807	31.24%
Nashik TPS	3.569	4.166	0.597	16.73%
Chandrapur Unit 03 to 07	2.658	3.854	1.196	45.00%
Chandrapur Unit 08 and 09	2.573	3.335	0.762	29.62%
Paras Unit 03 and 04	3.146	3.427	0.281	8.93%
Parli Unit 06 and 07	4.240	4.884	0.644	15.19%
Parli Unit 08	4.060	4.851	0.791	19.48%
Koradi Unit 06	2.920	3.040	0.120	4.11%
Koradi Unit 08,09,10	2.398	3.144	0.746	31.11%
GTPS Uran	2.847	6.793	3.946	138.60%

- 5.12 The Commission notes that for the month of March, 2023 energy charge of all stations have increased in view of usage of imported coal. The imported coal rate was higher (Rs 16200/MT to Rs 17000/MT) as compared to approved by the Commission (Rs 7000/MT to 8000/MT) in the Tariff Order leading to higher Energy Charge. As mentioned above, MSPGCL has awarded contract for washing of coal and such washed coal is being used for to Bhusawal, Koradi 8,9,10, Koradi 6, Khaperkheda 1-4 and 5 and Chandrapur 7-8 units in March, 2023. Further, actual Energy Charge is being computed considering GCV loss of 600 kCal/kg applicable from April, 2022 as allowed by the Commission in review Order dated 1 March, 2021 of MSPGCL as against 475 kCal/kg considered by the Commission while approving Energy Charge in the Tariff Order. This has also resulted in an increase of Energy Charge for the aforesaid stations.
- 5.13 It is also observed that Energy Charge of Uran has also increased considerably for March, 2023. This is due to the fact that prices of APM Gas have increased due to increase in notified APM gas price from \$6.10/MMBTU (up to September 2022) to \$8.57/MMBTU from October 2022 by Ministry of Petroleum and Natural Gas, Government of India.
- 5.14 MSPGCL has undertaken Case-4 bidding and accordingly entered into contract with Ideal Energy Projects Limited (IEPL) at Rs. Rs. 3.359/kWh for supply of 180 MW net sent out in lieu of power from one unit of at Nashik by transfer of corresponding linkage coal



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quantity to IEPL unit up to March 2023. The power from IEPL started from October 2022. For the month of March, 2023, IEPL has supplied 130.88 MU at Rs 3.359/kWh. The Commission has accordingly considered the said purchase of 130.88 MU for Rs 43.95 Crore at Rs 3.36/kWh.

- 5.15 The Commission has verified that actual quantum of power purchase and cost from the detailed summary bills/invoices submitted by MSEDCL and found to be in order.
- 5.16 Considering the overall cost of MSPGCL thermal/gas stations, the average power purchase cost is Rs. 5.45/kWh as against Rs. 4.27/kWh approved in the Tariff Order. The average power purchase cost is higher due to higher variable cost by Rs 1.19/kWh.
- 5.17 Variation in power purchase expenses from MSPGCL can be divided on account of change in quantum and per unit rate as follows:

	Increase in Expenses for	power purchase from MSPG	CL (Rs. Crore)
Month	On Account of change Quantum of Power	On Account of change in Per Unit rate of	Total
	Purchase	Power Purchase	
March, 2023	161.23	574.91	736.15

5.18 Out of above, variation on account of per unit rate is only considered for FAC computation.

NTPC:

- 5.19 MSEDCL has purchased total 3334.68 MUs of power from NTPC's stations as compared to approved MoD stack of 2498.21 MUs during the month of March, 2023.
- 5.20 The Table below shows the variation in power purchase in terms of per unit variable charge, per unit fixed charge and average power purchase cost for NTPC's generating stations for March, 2023.

		Ap	proved for M	March 2023			4116	Acti	ual for Marc	h 2023				Variat	ions	
Particul	Quantum	vc	VC	FC	FC	APP C	Quantu m	VC	VC	FC	FC	AP PC	Quantum	VC	FC	APPC
ars	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./ kW h	MU	Rs./k Wh	Rs./k Wh	Rs./kW
NTPC	2,498.21	2.12	529.66	440.48	1.76	3.88	3,334.68	2.96	985.48	437.99	1.31	4.27	836.46	0.84	(0.45)	0.39

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

5.21 In response to data gaps raised by the Commission in respect of increase in variable cost, NTPC submitted that due to coal shortage scenario and MoP notification, non-pit head NTPC stations (KhSTPS-II, Muada -I and II, Solapur, Gadarwara and Khargone) are utilizing imported coal for blending. Imported coal being costly, variable cost of these stations has increased than approved rates. The Commission has verified that actual quantum of power purchase and cost from the detailed summary bills/invoices submitted

by MSEDCL and found to be in order and accordingly considered the same in FAC computation.

5.22 Variation in power purchase expenses from NTPC can be divided into on account of change in quantum and per unit rate as follows:

	Increase in Expenses	for power purchase from NT	PC (Rs. Crore)	
Month	On Account of change	On Account of		
Wollen	Quantum of Power	increased Per Unit rate	Total	
	Purchase	of Power Purchase		
March, 2023	324.83	128.49	453.32	

Out of above, variation on account of per unit rate is only considered for FAC computation.

IPPs

- 5.23 MSEDCL has long term PPA's with IPP's viz: JSW, CGPL Mundra, APML, Emco and Rattan India. The said PPAs are approved by the Commission and power availability from the said sources is considered as per Tariff Order issued by the Commission. Further, MSEDCL has signed PPA with Sai Wardha Power Generation Ltd (SWPGL) for 240 MW as per the Order dated 15 June 2020 in Case No 91 of 2020. SWPGL started delivering 240 MW power to MSEDCL from 5 July 2020.
- 5.24 During scrutiny of the invoices submitted by MSEDCL it was observed that there were differences in the other charges related to Change in Law as considered in FAC computations. The Commission sought clarifications on the same along with reconciliation and additional bills, if any. MSEDCL submitted the reconciliation and clarified that the aforesaid differences are mainly on account of Change in Law (CIL) claim by IPPs in addition to monthly energy bills during the respective period.
- 5.25 Change in Law (CIL) events in respect of IPPs are related to imposition of GST compensation cess, change in royalty, custom duty, change in NCDP, shortfall in domestic coal etc. These Change in Law events have been approved by the respective Commission's through various Orders, as the case may be, under the provisions of respective PPAs. MSEDCL has submitted the CIL invoices for the concerned period. Further, while scrutinizing the CIL bills it was observed that the amount shown in CIL bills/invoices were not matching against the respective amount considered in FAC computation. In fact, the amounts considered in FAC calculations were observed to be lesser than that of CIL bills/invoices except for claim related to SHAKTI. Change in Law claims raised by the generators are according to their technical parameters, whereas MSEDCL works out the CIL claim amount based on normative / actual parameters. These parameters include SHR of power plant, Auxiliary consumption, GCV of coal, etc. which have impact of coal consumption. Therefore, there is difference in CIL amount claimed



by generator and that worked out by MSEDCL. MSEDCL has submitted the detailed reconciliation of CIL, as summarised in Table below:

IPP	As pe	r Vendor -	-Rs Cr	As per	MSEDCL	- Rs Cr
H.F.	CIL	Shakti	Total	CIL	Shakti	Total
JSW	2.71	4 W. H.	2.71	1.90	_	1.90
CGPL	(38.27)		(38.27)	(38.27)	-	(38.27)
APML 125 MW	3.37	18.25	21.62	2.44		2.44
APML 1320 MW	38.28	270.59	308.87	33.51	15.48	48.99
APML 1200 MW	32.31	175.24	207.55	32.67	-	32.67
APML 440 MW	11.40	61.82	73.21	5.07	120	5.07
EMCO Power	18.23	-	18.23	15.70	-	15.70
RIPL 450 MW	16.20	-	16.20	12.47	-	12.47
RIPL 750 MW	26.99	s - wheet	26.99	20.78	-	20.78
Sai Wardha	7.23	-	7.23	7.18		7.18
Total	118.44	525.90	644.34	93.46	15.48	108.93

- 5.26 Thus, on an overall basis considering the above impact, the average power purchase cost from IPPs stands at Rs. 3.66/kWh as compared to monthly approved rate of Rs. 4.05/kWh for the month of March, 2023. The said cost is being considered for the FAC computation based on the scrutiny of invoices and details submitted by MSEDCL.
- 5.27 The table below shows the variation in power purchase in terms of per unit variable charge, per unit fixed charge and average power purchase cost for IPPs for March, 2023.

Method	Ap	proved for N	Iarch, 2023			(5)(40)	Ac	tual for Mar	ch, 2023				Varia	tions	
Quantum	VC	vc	FC	FC	APP C	Quantu m	vc	vc	FC	FC	APPC	Quantum	VC	FC	APPC
MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./kW
164.28	3.23	53.03	13.01	0.79	4.02	101.99	6.62	67.51	16.32	1.60	8.22	(62.29)	3.39	0.81	4.20
438.07	2.22	97.17	39.96	0.91	3.13	-		(38.22)		-	-	(438.07)	-	-	-
1,782.40	2.62	466.45	226.85	1.27	3.89	1,966.21	2.45	481.44	210.86	1.07	3.52	183.81	(0.17)	(0.20)	(0.37)
116.36	3.67	42.74	14.90	1.28	4.95	140.71	3.18	44.72	15.64	1.11	4.29	24.35	(0.50)	(0.17)	(0,66)
-			57.71		-	851.39	2.85	242.25	67.40	0.79			-	-	-
-		-	-	-		172.93	3.03	52.38	24.61	1.42				-	
						Lai Lei	ub larrery	- Innexa					(0.00		(0.38)
	MU 164.28 438.07 1,782.40 116.36	Quantum VC MU Rs./k Wh 164.28 3.23 438.07 2.22 1,782.40 2.62 116.36 3.67 - - - -	Quantum VC VC MU Rs./k Wh Rs. Crore 164.28 3.23 53.03 438.07 2.22 97.17 1,782.40 2.62 466.45 116.36 3.67 42.74 - - - - - -	MU Rs./k Wh Crore Crore 164.28 3.23 53.03 13.01 438.07 2.22 97.17 39.96 1,782.40 2.62 466.45 226.85 116.36 3.67 42.74 14.90 57.71 57.71	Quantum VC VC FC FC MU Rs./k Wh Rs. Crore Rs. Crore Rs./k Wh Rs./k Wh Rs./k Wh 0.79 164.28 3.23 53.03 13.01 0.79 438.07 2.22 97.17 39.96 0.91 1,782.40 2.62 466.45 226.85 1.27 116.36 3.67 42.74 14.90 1.28 - - - 57.71 - - - - - -	Quantum VC VC FC FC APP C C C MU Rs./k Wh Rs. Rs. Crore Rs./k Wh Rs./k Wh Rs./k Wh Rs./k Wh Rs./k Wh Wh <td>Quantum VC VC FC FC APP C C C mm Quantum m MU Rs./k Wh Rs. Crore Rs. Rs. 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Variable charge inclusive of other charges, CIL etc.

5.28 Variation in power purchase expenses from IPPs can be divided into increased on account of change in quantum and per unit rate as follows:



	Increase in Expense	s for power purchase from IP	P (Rs. Crore)
Month	On Account of change		
Month	Quantum of Power	increased Per Unit rate	Total
	Purchase	of Power Purchase	
March, 2023	296.18	(123.07)	173.11

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Short Term Power Purchase

5.29 MSEDCL has purchased 716.58 MU at average rate of Rs. 2.81/kWh from Power Exchange. The Commission notes that it has not approved any short-term purchase in the Tariff Order. However, MSEDCL has purchased short term power to meet the demand in view of lower availability of contracted thermal Plants. The Commission notes that quantum of short term power also includes power (374.12 MU) received under banking arrangement with Punjab/Delhi. The Commission has verified the details of power purchase cost from the Daily Obligation Summary Report issued by Power Exchange and accordingly considered the said purchase in FAC computation of March, 2023.

Must-Run Sources

- 5.30 The sources of Must Run Stations include KAPP, TAPP 1&2, TAPP 3&4, SSP, Pench, Dodson I and Dodson II, Renewable Energy and MSPGCL Hydro (including Ghatghar) etc.
- 5.31 A detailed comparison of approved against actual purchase from Must Run Stations is shown in Table below:

		A	pproved for	March 2023	112			Ac	tual for Mar	ch, 2023				Varia	tions	
Particular s	Quant um	VC	VC	FC	FC	APP C	Quantu m	vc	VC	FC	FC	APPC	Quantu m	VC	FC	APPC
	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./kW
MSPGCL- Hydro*	279.98		-	23.87	0.85	0.85	316.58	0.23	7.20	14.06	0.44	0.67	36,60	0.23	(0.41)	(0.18)
MSPGCL- Hydro Lease rent			7	46.32			11			42.99	V.,1	0.07	30.00	0.23	(0.41)	(0.18)
l.Non- Solar	1,389.3 0	4.52	627.31	- 11//	-	4.52	1,001.43	3.50	350.73	3.56	0.04	3.54	(387.87)	(1.01)	0.04	(0.98)
2.Solar	1,115.6 0	3.49	389.90			3.49	802.16	3.67	294.03		-	3.67	(313.44)	0.17		0.17
Renewabl e Energy including REC (1 to 2)	2,504.9 0	4.06	1,017.21		-	4.06	1,803.59	3.57	644.76	3,56	0.02	3.59	(701.31)	(0.49)	0.02	(0.47)
Others- KAPP, TAPP, Dodson etc	543.09	2.75	149.50	0.79	0.01	2.77	407.67	3.15	128.41	0.79	0.02	3.17	(135.41)	0.40	0.00	0.40

*Variable Cost for Hydro Power is approved in MSPGCL Order whereas total cost is considered under Fixed Cost in the Tariff Order of MSEDCL.



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- 5.32 As seen from the aforesaid table, MSEDCL has purchased 316.58 MU of Hydro Power as per variable cost approved by the Commission. This being the cheapest source of power helps in reduction of overall average cost of power purchase. The Koyna generation works on the principle of water year (1st June to 30 May) and hence the available water is used for the peak requirement based on the requirement of MSEDCL. It is observed that hydro purchase is higher than 279.98 MU approved by the Commission due to lower demand and demand was catered from the thermal & other must run generation and Koyna hydro was utilized during peak demand hours as per daily requirements.
- 5.33 It is observed that Solar and Non-Solar energy purchased in March, 2023 i.e., 1803.59 MU was lower than approved i.e., 2504.90 MU by the Commission in the Tariff Order. The generation is lower mainly due to lower capacity addition than new PPAs executed by MSEDCL for Wind Power. MSEDCL has not purchased any RECs in the month of March, 2023. The Commission observes that MSEDCL has purchased 2.16 MU of RE power from G-DAM Market at Rs 5.02/kWh. The Commission has considered the renewable purchase as per details submitted by MSEDCL and invoices of power purchased from SECI, NVVN and other IPPs.

ISTS Charges - CTU

5.34 As per Regulation 10 of the MYT Regulations, 2019, any variation in Inter-State Transmission Charges shall be pass through under FAC component of Z-factor charge as an adjustment in Tariff on monthly basis. The ISTS charges paid by MSEDCL to Central Transmission Utility of India Ltd (CTU) are considered under FAC computation. Accordingly, the Commission has considered the amount of Rs. 475.99 Crore towards ISTS charges payable to payable to CTU as against Rs. 305.16 Crore approved in the Tariff Order towards FAC computation as per invoice raised by CTU.

Sale of Power

5.35 MSEDCL has sold 18.10 MU on Power Exchange at Rs 6.19/kWh with realisation of Rs 11.19 Crore and same is considered in the FAC computation for the month of March, 2023.

Deviation Quantum and Cost

5.36 MSEDCL has submitted that the deviation quantum (underdrawl) of 163.78 MU. As per invoice raised by MSLDC, the quantum is 163.78 MU and corresponding realisation is Rs 30.07 Crore. Accordingly, the Commission has considered the said Deviation quantum and cost in the FAC computation for the month of March, 2023.

Approved Cost of Power Purchase

5.37 In view of the above, the overall cost approved in the Tariff Order and actual for the month of March, 2023 considered by the Commission is as shown below:

		Ap	proved for M	March, 2023				Ac	tual for Mar	ch, 2023				Varia	tions	
Particul ars	Quantum	VC	VC	FC	FC	APP C	Quantum	VC	vc	FC	FC	AP PC	Quantum	VC	FC	APPC
ars	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./kW h	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./ kW	MU	Rs./k Wh	Rs./k Wh	Rs./kW
MSPGC L Thermal	4,460.62	2.83	1,263.69	639.56	1.43	4.27	4,838.50	4.02	1,947.05	692.35	1.43	5.45	377.88	1.19	(0.00)	1.19
MSPGC L-Hydro	279.98	-	-	23.87	0.85	0.85	316.58	0.23	7.20	14.06	0.44	0.67	36.60	0.23	(0.41)	(0.18)
MSPGC L- Hydro Lease Rent		-	-	46.32	-		-	-	D III	42.99			-	-	(0.22)	(0.10)
NTPC	2,498.21	2.12	529.66	440.48	1.76	3.88	3,334.68	2.96	985.48	437.99	1.31	4.27	836.46	0.84	(0.45)	0.39
IPPs	2,501.11	2.64	659.39	352.43	1.41	4.05	3,233.23	2.63	850.09	334.84	1.04	3.66	732.12	(0.01)	(0.37)	(0.38)
RE includin g REC	2,504.90	4.06	1,017.21	_		4.06	1,803.59	3.57	644.76	3.56	0.02	3.59	(701.31)	(0.49)	0.02	(0.47)
Must Run - KAPP, TAPP, Dodson							27000107	0.07	011.70	3.30	0.02	3.39	(701.51)	(0.49)	0.02	(0.47)
etc	543.09	2.75	149.50	0.79	0.01	2.77	407.67	3.15	128.41	0.79	0.02	3.17	(135.41)	0.40	0.00	0.40
Short Term	<u> </u>	-	100	12.00	ni.	-	716.58	2.81	201.33	ana mari <u>b</u> e	-	2.81	716.58	-	-	-
Sale of Power	_	44			-	-	18.10	6.19	11.19		_	6.19	18.10	-	-	-
DSM		-	-		-	-	(163.78)	1.84	(30.07)	_		1.84	(163.78)	-	-	-
PGCIL		-	-	305.16	-	-	-	-	-	475.99	-	-	-	-	-	-
Total	12,787.90	2.83	3,619.45	1,808.61	1.41	4.24	14,468.96	3.27	4,723.05	2,002.56	1.37	4.65	1,681.06	0.44	(0.04)	0.40

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

- 5.38 The overall power purchase cost is higher mainly due to variable cost of power supplied by MSPGCL and NTPC. However, the higher variable cost is offset by lower fixed cost/unit due to higher despatch than approved by the Commission from NTPC and IPPs.
- 5.39 Considering the above, the Commission allows the average power purchase cost of Rs.4.65/kWh for the month of March, 2023 as against Rs. 4.24/kWh approved in the Tariff Order.

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

- 6.1 The Commission has worked out the average power purchase cost for the month of March, 2023 as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 30 March, 2020 and accordingly arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.
- 6.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the month of March, 2023.



S. No.	Particulars	Units	March, 2023
1	Average power purchase cost approved by the Commission	Rs./kWh	4.24
2	Actual average power purchase cost	Rs./kWh	4.65
3	Change in average power purchase cost (=2 -1)	Rs./kWh	0.40
4	Net Power Purchase	MU	14,468.96
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	583.99

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

7.1 The adjustment for over recovery/under recovery has to be done for the (n-4) month as per provisions of MYT Regulations, 2019. MSEDCL submitted FAC recovery of Rs 1137.09 Crore for the month of January, 2023 as against approved amount of Rs 1127.37 Crore. Thus, the adjustment factor to be considered towards over recovery is Rs 9.72 Crore while computing the allowable FAC for March, 2023.

8. Carrying Cost for over recovery/under recovery (C)

8.1 The following table shows the interest rate and amount worked as carrying / holding cost for under/ over recovery for the month of March, 2023:

S. No.	Particulars	Units	Mar-23
1	Adjustment factor for over-recovery/under-recovery	Rs. Crore	(9.72)
2	Interest rate	%	10.00%
3	Carrying cost for over-recovery/under-recovery	Rs. Crore	(0.08)

8.2 The Commission is also in receipt of the letter dated 12 May, 2023 from MSEDCL in respect of carrying cost for under recovery in prior approval of FAC for September 2022 to November 2022. The Commission has perused the letter and is of the view that any additional recovery in respect of allowing additional carrying cost will have no impact in respect of FAC recovery as the said amount is subsumed and already adjusted in provisional truing-up of FY 2022-23 and accordingly the same is not considered in the present FAC approval.

9. Disallowance due to excess Distribution Loss

9.1 Regulation 10.8 of MYT Regulations, 2019 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 Z_{FAC} 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 Z_{FAC} 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 annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} 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. N	Particulars	Units	Approved in Tariff Order	Actual for March 2023	Actual – cumulative up to March 2023	Annual Sliding Distribution Loss – Apr 22 to Mar 23
1	Net Energy Input at Distribution Voltage	MU	1,27,414.02	12,724.00	1,36,395.41	1,36,395.41
2	MSEDCL Metered Sales (excluding sales at EHV level)	MU	1,00,813.73	7,711.44	95,194.07	95,194.07
3	Estimated Consumption of unmetered Sales	MU	8,783.32	861.74	9,275.86	9,275.86
4	Distribution Loss (1-2-3)	MU	17,816.97	4,150.83	31,925.48	31,925.48
5	Distribution Loss as % of net energy input (4/1)	%	14%	32.62%	23.41%	23.41%
6	Excess Distribution Loss = [Actual Distribution Loss (5) - Distribution loss approved] x Net Energy Input (1)	MU	e e e e e e e e e e e e e e e e e e e	1,196.89	= 200 mmus = = = = 000 Mm	- ·
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	- 1	67.82	» - »	-

9.3 As seen from the above table, the standalone distribution loss for the month of March, 2023 is higher at 32.62% as against approved loss of 14%. The standalone loss for March, 2023 is higher mainly due to estimated Ag sales and sales considered as per billing cycle whereas power purchase is considered for the standalone month. Also, the Commission has restricted the Ag Sales as per norms approved in the Tariff Order leading to higher loss.



9.4 The comparison of Distribution Loss for the April, 2022 to March, 2023 as compared to last year is as given below:

Particulars	FY 2022-23	FY 2021-22		
Approved Loss	14%	16%		
April	30.33%	30.44%		
May	26.19%	27.15%		
June	16.83%	13.31%		
July	7.35%	16.05%		
August	15.19%	19.36%		
September	14.98%	13.93%		
October	12.16%	9.86%		
November	24.19%	20.73%		
December	33.02%	22.70%		
January	28.41%	23.95%		
February	28.56%	25.64%		
March	32.62%	35.14%		
Cumulative up-to March	23.41%	22.14%		

- 9.5 As Annual Sliding Distribution Loss of 23.41% is higher than the approved loss of 14%, the Commission has disallowed Rs 67.82 Crore towards the same.
- 10. Summary of Allowable ZFAC
- 10.1 The summary of the FAC amount as approved by the Commission for the month of March, 2023 is as shown in the Table below:

S. No.	Particulars	Units	March, 2023 -As submitted	March, 2023 - As Approved
1	Calculation of ZFAC			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	1,657.20	583.99
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	(0.08)	(0.08)
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	(9.72)	(9.72)
1.4	ZFAC = F+C+B	Rs. Crore	1,647.40	574.19
2	Calculation of Per Unit FAC			
2.1	Energy Sales within the License Area	MU	11,827.28	10306.24*
2.2	Excess Distribution Loss	MU	830.93	1,196.89
2.3	ZFAC per kWh	Rs. /kWh	1.40	0.57
3	Allowable FAC	- diag		

S. No.	Particulars	Units	March, 2023 -As submitted	March, 2023 - As Approved
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	40.96	67.82
3.2	FAC allowable [1.4-3.1]	Rs. Crore	2,909.86	506.37
4	Utilization of FAC Fund			
4.1	Opening Balance of FAC Fund	Rs. Crore	7064.28	-
4.2	Carrying Cost/(Holding Cost) on FAC Fund	Rs. Crore	58.87	
4.3	Z _{FAC} for the month (Sr. N. 3.2)	Rs. Crore	1606.44	506.37
4.4	Closing Balance of FAC Fund	Rs. Crore	8729.59	-
4.5	Z _{FAC} leviable/(refundable) to consumer	Rs. Crore	8729.59	.=
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	_	~

^{*} Sales considered after disallowance of excess Ag Sales as per norms approved in the MYT Order

- 10.2 The approved amount is lower than claimed by MSEDCL in view of higher disallowance due to excess distribution loss after allowing Ag Sales as per norms approved by the Commission in the Tariff Order. Further, the Commission notes that MSEDCL has considered the truing-up gap of Rs 1073.21 Crore of MSPGCL up to FY 2022-23 based on the invoice dated 12 April, 2023 raised by MSPGCL as per MTR Order in Case No 227 of 2022. The Commission notes that the said truing-up gap has already been allowed by the Commission for recovery in FY 2023-24 in the MTR Order of MSEDCL and accordingly is not being considered in FAC for March 2023.
- 10.3 The Commission notes that MSEDCL has considered the opening FAC Fund (unrecovered FAC as on March 2023) and added the standalone monthly FAC amount since December 2022 to the said fund to arrive at the closing fund. The Commission in its FAC approval for November 2022 has allowed FAC recovery at ceiling rate up to March 2023 and held that any unrecovered FAC at the end of March 23 will get subsumed in the provisional true-up of FY 2022-23 and any gap arising thereof will be allowed to be recovered in tariff of FY 2023-24. The Commission, thereafter, has issued MTR Order on 31 March, 2023 and approved the revised power purchase cost in the Provisional Truing-up of FY 2022-23 and accordingly determined tariff for FY 2023-24 and FY 2024-25. Thus, the Commission is approving the monthly FAC for standalone month as per provisions of MYT Regulations, 2019 and has not considered any adjustment towards FAC fund as the said amount is subsumed and already adjusted in provisional truing-up of FY 2022-23.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MYT Regulations, 2019 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:—

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

 $Z_{FAC\ Cat} = Z_{FAC}$ 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 Z_{FAC} 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 Z_{FAC} 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 Accordingly, the Commission allows the FAC amount of Rs. 506.37 Crore for the month of March, 2023. As FY 2022-23 is already over and Provisional Truing-up of FY 2022-23 has also been done by the Commission in the recent MTR Order dated 31 March, 2023, the revised power purchase cost resulting in FAC is already adjusted in the said MTR Order.
- 11.3 In a view of above, the per unit Z_{FAC} for the month of March, 2023 to be levied on consumers of MSEDCL is Nil.

