Ref. No. MERC/FAC/2023-24/0370 **Date: 17 July, 2023**

To,
The General Manager
The Brihanmumbai Electric Supply and Transport Undertaking
BEST Bhavan, BEST Marg
Post Box No. 192
Mumbai 400 001.

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of BEST Undertaking for the month of January, 2023.

Reference: FAC submission dated 20 February, 2023 by BEST Undertaking for prior approval of FAC for the month of January, 2023.

Sir,

Upon vetting the FAC calculations for the month of January, 2023 as mentioned in the above reference, the Commission has accorded approval for charging FAC of **Rs. 77.89 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)
January, 2023	**0 (Zero)**

*FAC already allowed to be recovered as approved in FAC approval dated 26 December 2022 for the period from July 2022 to September 2022 for recovery in three months period between January 2023 to March 2023.

Yours faithfully,

(Dr. Prafulla Varhade)
Director (Elect. Engg.), MERC

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

ANNEXURE A

Detailed Vetting Report

Date: 17 July, 2023

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF JANUARY 2023

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of BEST Undertaking for the month of January, 2023.

Reference: FAC submission dated 20 February, 2023 by BEST Undertaking for prior approval of FAC for the month of January, 2023.

1. **FAC submission by BEST Undertaking:**

1.1 BEST Undertaking ('BEST') has submitted FAC submissions for the month of January, 2023 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by BEST, the Commission has accorded prior approval to BEST for FAC amount of Rs. 77.89 Crore for the month of January, 2023. 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 BEST (Case No.324 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, 2021.

2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:

"8.2.15 Stabilising variation in consumer bill on account of FAC

………………

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

a. 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:

(i) Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost;

(ii) 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;

(iii) 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 BEST, such limit shall be Rs. 59 Crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism;

(iv) 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.

8.2.15.5 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 created a FAC fund as stated above to address 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.

8.2.15.6 The details of the FAC as per the Regulations, shall be submitted by the 15th of the every month prior to the month in 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, BEST has filed FAC submissions for the month of January, 2023 for prior approval of the Commission. The Commission has scrutinized the submissions provided by BEST 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 BEST in the FAC submission and as approved by the Commission are as shown in the table below:

Table 1: Energy Sales Approved and Actual for the Month of January 2023(MUs)

Consumer Category	Approved by the Commission (MU)	Monthly Approved * (MU)	Actual Sales January, 2023 (MU)
	(I)	(II=I/12)	(III)
HT I- Industry	156.56	13.05	13.00
HT II - Commercial	295.54	24.63	18.26
HT III - Group Housing Society (Residential)	30.61	2.55	0.18
HT IV – Railways/Metro/Monorail	2.14	0.18	1.96
HT V - Public Services			
a) Govt. Edu. Inst. & Hospitals	26.56	2.21	13.56
b) Others	196.45	16.37	0.19
HT-VI EV Charging Stations	-	-	-
Total HT Sales	**707.85**	**58.99**	**47.14**
LT I (A)- Residential (BPL)	0.07	0.01	0.00
LT I (B)- Residential	2,129.66	177.47	139.99
LT II - LT Commercial			
(A)- upto 20 kW	934.60	77.88	60.81
(B) >20 kW and <50 kW	210.90	17.57	14.30
(C) - 50 kW	369.60	30.80	29.12
LT III (A) - Industry < 20 kW	43.19	3.60	8.43
LT III (B) - Industry > 20 kW	90.21	7.52	6.56
LT IV - Public Services			
a) Govt. Edu. Inst. & Hospitals	56.59	4.72	4.72
b) Others	183.84	15.32	14.66
LT V(A) – Agriculture Pumpsets	-	-	-
LT V(B) – Agriculture Others	-	-	0.00
LT VI - EV Charging Stations	0.46	0.04	1.71
Total LT Sales	**4,019.14**	**334.93**	**280.31**
Total	**4,726.99**	**393.92**	**327.45**

**- Monthly approved sales is derived based on average of annual sales for comparison purpose.*

3.2 With respect to sales submitted by BEST as per Guidelines dated 19 May 2021, it is observed that the actual sales for the month of January 2023 is 327.45 MU which is lower by 16.87% as compared to the approved energy sales of 393.92 MU. With respect to the consumption, HT category consumption is 47.14 MU which is on a lower side by 20.08% compared to approved monthly HT energy sales of 58.99 MU and decrease in the sales has been noticed of 16.31% on LT side whereby the actual sales is 280.31 MU as compared to approved monthly LT energy sales of 334.93 MU. The major variation was observed across various categories due to seasonal variation.

3.3 However, HT – Railway/Metro/Monorail, HT Public Service (Govt. Edu. Inst. & Hospitals), LT Industrial (below 20 kW) and LT Public Service (Govt. Edu. Inst. & Hospitals) have witnessed sales higher than the approved monthly sales whereas other categories have witnessed lower sales than the approved monthly sales.

3.4 BEST has also submitted the data providing actual billing and estimated billing undertaken for the calculation of total energy consumption for the month of January 2023. BEST further submitted the number of actual and estimated meter readings undertaken for the month of January 2023 as shown below:

Table 2: No. of Meters reading on actual and estimated basis for January 2023

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	196	0	196
2	LT	1036070	11251	1047321
	Total	**1036266**	**11251**	1047517
	%	**98.93%**	**1.07%**	**100%**

3.5 Accordingly, the Commission has also analysed the comparison of estimated sales and sales based on actual meter reading for last 6 months and it was observed that the assessed sales percentage has been constant for past several months and is around 1% to 2%.

Table 3: Actual and Estimated Sales of past 6 months

Particulars	August-22	Sept-22	Oct-22	Nov-22	Dec-22	Jan-23
Actual – MUs	376.19	379.13	356.57	374.70	342.39	**324.88**
Estimated – MUs	4.08	9.20	29.50	3.69	3.03	**2.57**
Total	**380.28**	**388.34**	**386.07**	**378.38**	**345.42**	**327.45**
% Sales based on Estimated Reading	1.07%	2.37%	7.64%	0.97%	0.88%	**0.79%**

3.6 **As per the data, 100% of HT billing is undertaken on actual basis due to Automatic Meter Reading (AMR) in place whereas under LT category, the billing of about 98.93% is undertaken as per actual meter readings and balance 1.07% is on estimated basis. Also, with respect to consumption, under LT Category, about 99.08% consumption is undertaken as per actual meter readings and balance 0.92% is on estimated basis.**

3.7 Further, comparison of sales of January 2023 as compared to last year are as shown below:

Table 4: Monthly Comparison of Sales for Residential, LT (Others) and HT Category

Particulars	LT - Residential (MU)	LT Others (MU)	HT (MU)	Total (MU)
Apr-21	180.21	126.59	48.81	355.61
Apr-22	180.93	155.77	55.55	392.25
May-21	199.05	108.25	49.44	356.73

May-22	216.56	171.07	60.05	447.69
Jun-21	187.16	105.33	50.67	343.16
Jun-22	195.61	162.95	58.17	416.73
Jul-21	170.11	116.94	51.97	339.02
Jul-22	172.68	152.05	57.50	382.24
Aug-21	176.58	128.43	49.86	354.87
Aug-22	175.34	148.81	56.13	380.28
Sep-21	169.56	133.18	49.57	352.31
Sep-22	181.42	152.17	54.74	388.34
Oct-21	180.08	147.72	51.34	379.14
Oct-22	175.91	154.98	55.18	386.07
Nov-21	179.57	143.57	48.56	371.71
Nov-22	173.52	152.43	52.44	378.38
Dec-21	156.21	133.69	48.17	338.06
Dec-22	150.04	142.46	52.92	345.42
Jan-22	136.60	119.23	41.75	297.58
Jan-23	139.99	140.32	47.14	327.45
April 21 – January 22	**1,735.12**	**1,262.93**	**490.14**	**3,488.19**
April 22 – January 23	**1,751.96**	**1,530.87**	**544.05**	**3,826.88**

3.8 The Commission observes that overall sales for the month of January 2023 is higher than January 2022 mainly due to higher sales in LT Other and HT categories as compared to last year. This was mainly due to relaxation in COVID-19 curbs, increase in industrial and commercial activities as compared to last year.

4. Power Purchase Details

4.1 The Commission has approved following sources in the Tariff Order for power purchase by BESTs.

a) Tata Power Company Ltd. (TPC-G)
b) Manikaran Power Limited
c) Renewable Energy (Solar and Non-Solar)

4.2 In addition to the aforesaid, there may be some variation in real time (unscheduled interchange) which will be settled through Deviation Settlement Mechanism as approved by the Commission from 10 October 2021.

4.3 Summary of Power Purchase for BEST is as follows:

Sr. No.	Particular	Compliance
1	Sources of approved Power Purchase	BEST has purchased power from approved sources.
2	Merit Order Dispatch	BEST has followed merit order for scheduling of power and preference was given to cheapest power.
3	Fuel Utilization	Existing coal contracts of TPC-G at the time of issue of tariff order

<table>
<tr><td></td><td>Plan</td><td>has expired in July 2020. TPC-G has entered into new coal contracts for 2.2 MT for 2 years further extendable by 2 years as per directions of the Commission in TPC-G MYT Order through Competitive Bidding.</td></tr>
<tr><td>4</td><td>Deviation Quantum</td><td>BEST has underdrawn 3.22 MU as compared to Schedule under Deviation Settlement Mechanism.</td></tr>
<tr><td>5</td><td>Sale of Surplus Power</td><td>BEST has sold 5.13 MU of surplus power in January 2023 (para 5.37 below).</td></tr>
<tr><td>6</td><td>Power Purchase</td><td>Actual Net Power Purchase is 310.23 MU as against approved 424.60 MU due to lower sales.</td></tr>
<tr><td>7</td><td>Source wise Power Purchase</td><td>
<table>
<tr><th>Source Name</th><th>Approved (MU)</th><th>Actual (MU)</th><th>Proportion of each Source in Actual Purchase</th></tr>
<tr><td>TPC-G</td><td>292.58</td><td>205.37</td><td>66.20%</td></tr>
<tr><td>Manikaran Power</td><td>62.05</td><td>65.83</td><td>21.22%</td></tr>
<tr><td>RE Sources</td><td>69.97</td><td>2.89</td><td>0.93%</td></tr>
<tr><td>Net Short Term</td><td>-</td><td>39.37</td><td>12.69%</td></tr>
<tr><td>DSM Pool</td><td>-</td><td>(3.22)</td><td>-1.04%</td></tr>
<tr><td>Total</td><td>424.60</td><td>310.23</td><td>100.00%</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Power Purchase:
a. Section 62 of Electricity Act, 2003

b. Section 63 of Electricity Act, 2003</td><td>BEST is procuring power from only one source i.e., TPC-G under Section 62 of EA, 2003.

As part of verification of fixed cost claimed by BEST, the same has been verified from the BEST MYT Order in Case No.324 of 2019.

As part of verification of energy charges claimed by BEST, verification of operational parameters, fuel cost, GCV etc. vis-à-vis the MYT Order/Tariff Regulations is carried out

The Power procurement from Manikaran Power is through competitive bidding and as approved by Commission.

Cost and MUs verified as per Invoice</td></tr>
<tr><td>9</td><td>RE Purchase</td><td>Cost and MUs verified as per Invoice</td></tr>
<tr><td>10</td><td>Short Term Power Purchase</td><td>Short-term power purchase invoices of January, 2023 are submitted by BEST. All the power purchase quantum and rate are verified from the invoices and has been considered for FAC calculation.</td></tr>
</table>

4.4 **The BEST has purchased 310.23 MU as against approved 424.60 MU from the sources approved by the Commission.** The reduction in Power Purchase is due to reduction in sales of BEST as compared to approved Sales in the month of January, 2023.

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

Table 5: Approved and Actual Power Procurement source wise for the Month of January 2023

Particulars	Tariff Order Dated 30.03.2020 FY 2022-23 – Approved			Actual for January 2023 as submitted by BEST		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	292.58	138.41	4.73	205.37	160.04	7.79
Manikaran	62.05	27.67	4.46	65.83	27.84	4.23
RE Power	69.97	21.65	3.09	2.89	2.47	8.56
REC	-	-	-	-	-	-
Short Term	-	-	-	44.50	24.67	5.54
Deviation Quantum	-	-	-	(3.22)	(1.15)	3.56
Gross Total	**424.60**	**187.73**	**4.42**	**315.36**	**213.88**	**6.78**
Less: Sale of Power to IEX				(5.13)	(5.07)	9.87
Net Power Procurement	**424.60**	**187.73**	**4.42**	**310.23**	**208.81**	**6.73**

*Although, power purchase quantum is not approved on monthly basis, the monthly quantum is arrived at based on yearly approved quantum and shown for comparison purpose only

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 BEST with regards to average power purchase cost for the month of January, 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. BEST has purchased power from approved sources as per the Tariff Order.

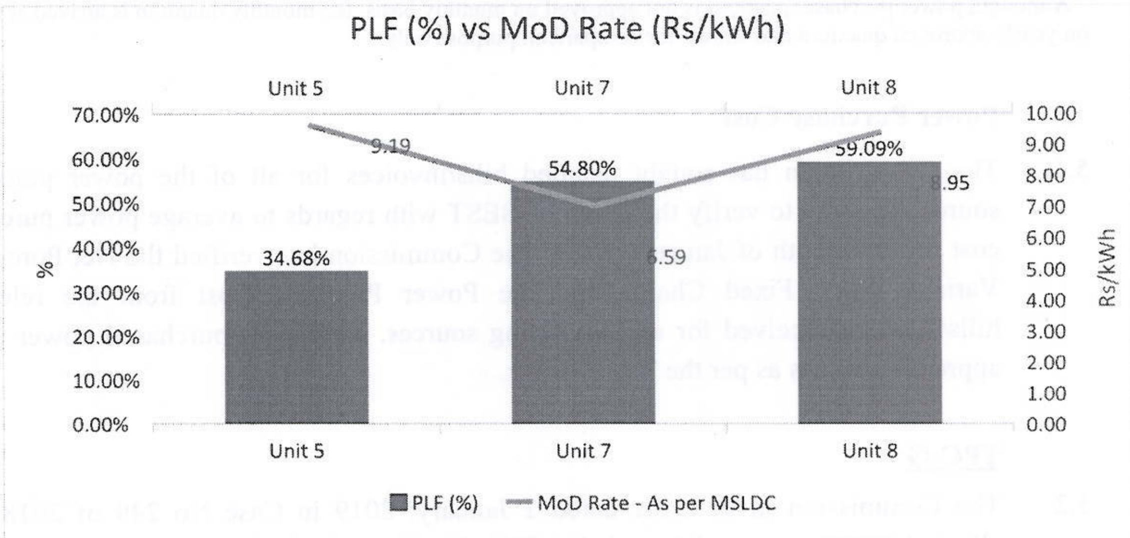
TPC-G

5.2 The Commission in its order dated 2 January, 2019 in Case No 249 of 2018 has allowed BEST to extend its existing PPA for 676.69 MW for a period of five years from 1 April, 2019 to 31 March, 2024. In line with the said Order, BEST share is 51.17% of the total capacity of TPC-G Unit 5, 7 and Hydro, whereas its share is 40% in TPC-G Unit 8.

5.3 Since BEST and TPC-D have same generating source i.e., TPC-G, BEST has submitted and relied upon TPC-D's FAC submissions in respect of TPC generating units (TPC-G) to the extent they are relevant to BEST. The Commission has considered the said submissions of TPC-D in respect of TPC-G, while reviewing the power purchase cost for BEST.

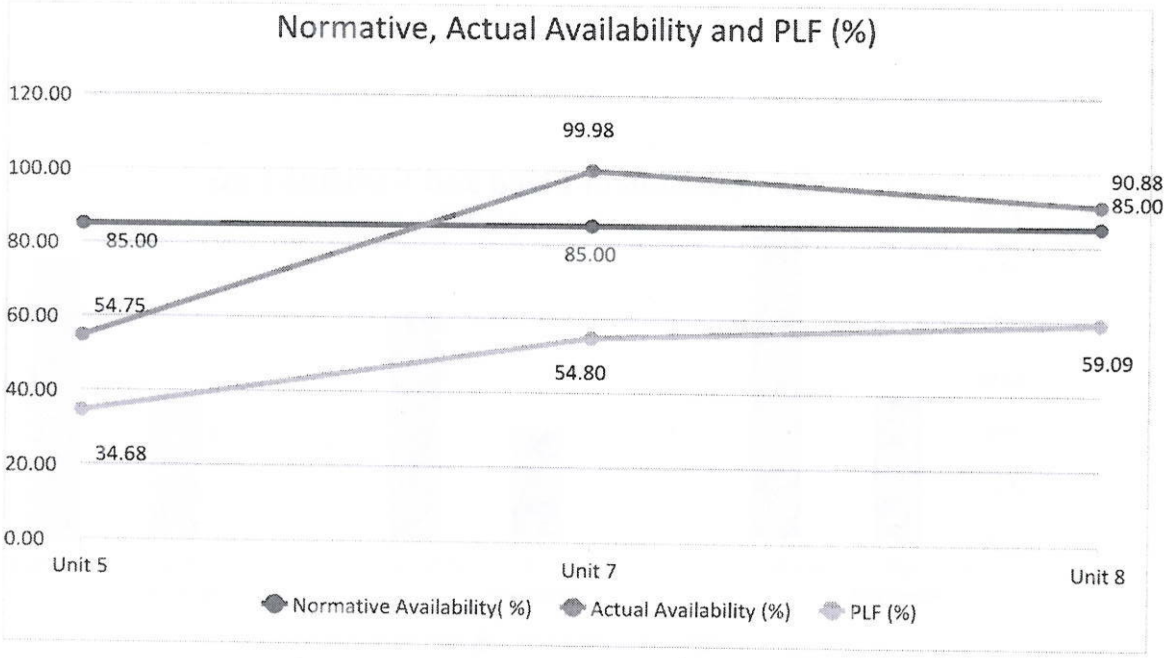
5.4 TPC-G Unit 7 has declared Availability of more than 99% which is higher than the normative Availability of 85%. Unit-8 declared Availability is 90.88% which is higher than the normative Availability. However, Unit-5 have declared Availability of 54.75% due to planned outage from 18 January, 2023 to 11 February, 2023. Further, the PLF of Unit 5, 7 and 8 are lower i.e., 34.68%, 54.80% and 59.09% respectively. In response to data gaps raised by the Commission for lower PLF of Unit 5, 7 and 8, TPC submitted that Unit 5 and 8 are lower due to lower schedule by beneficiaries and Unit 7 PLF is lower due to lower APM gas availability and reserve shutdown from 13.01.2023 (21:28) to 14.01.2023 (15:04) and 25.01.2023 (23:15) to 26.01.2023 (20:30) respectively. TPC further submitted that BEST & TPC-D have taken the decision to avoid RLNG consumption in Unit-7 and to schedule power from Unit-7 on APM only, to protect consumer's interest with a reasonable and competitive tariff. Further, BEST and TPC-D had provided consent to schedule power from Unit-7 only on APM. The Commission notes the submission of TPC. The graph showing the comparison of Variable Cost in MoD Stack and monthly PLF for TPC-G thermal/gas units is given below:

Figure 1: PLF of TPC Generating Units



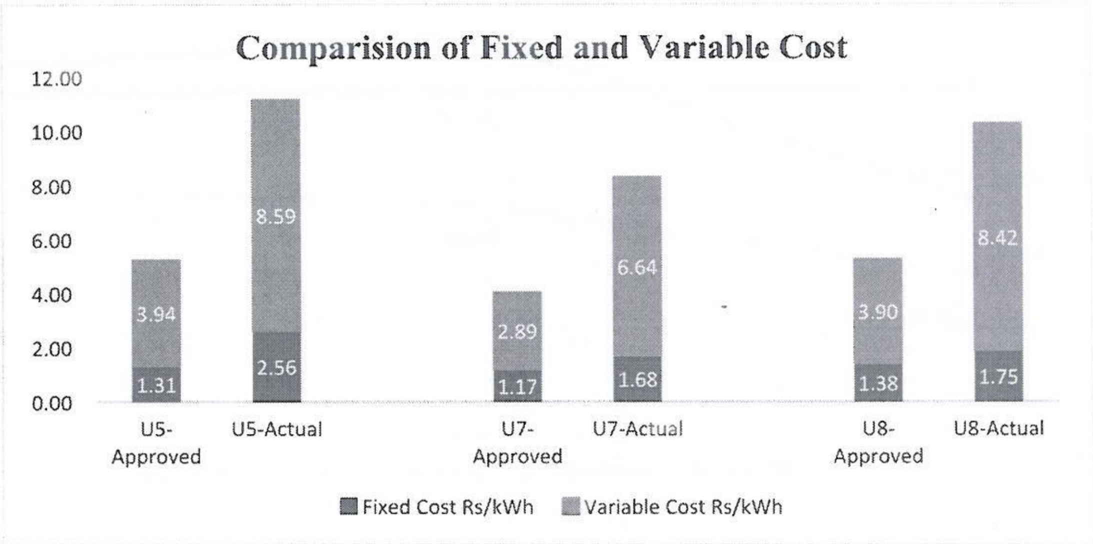
5.5 The graphical comparison of normative availability and actual availability for the month of January, 2023 is as given below:

Figure 2: PAF and PLF of TPC Generating Units



5.6 The entire monthly fixed cost was payable in line with MYT Regulations, 2019 as the cumulative plant availability of Units 5, 7 and 8 were higher than the normative availability of 85%. It is observed that Unit 7 has lower PLF and lower generation resulting in higher fixed cost per unit than approved by the Commission. The lower PLF of Unit-5 is a result of a planned outage that has affected its generation. Also, the Variable Cost of the Units 5 and 8 was substantially higher than the approved cost mainly due to higher prices of imported coal. Further, Variable Cost of Unit 7 has also increased due to revision in APM gas price from October 22. The comparison of Actual and Approved Fixed and Variable Cost of Units as shown in the graph below shows the impact of fixed cost due to actual generation.

Figure 3: Comparison of Fixed and Variable Cost of TPC Generating Units



5.7 The Availability of TPC-G units as compared to last year is as given below:

Table 6: Availability of TPC-G plant for the month of January 2023

TPC-G Units	Availability – January 2023	Availability – January 2022
Unit 5	54.75%	87.75%
Unit 7	99.98%	99.82%
Unit 8	90.88%	100%

5.8 The Commission has observed that **BEST has purchased 205.37 MU from TPC-G as against monthly approved quantum of 292.58 MU.** Further, the Commission has verified that the payment of Fixed Charges for all the Thermal/Gas Units as well as Hydro Units have been worked out based on the cumulative availability as per the provisions of MYT Regulations, 2019.

5.9 The Commission in its Order dated 30 March, 2020 in Case No 300 of 2019 in respect of Fuel Utilisation Plan of TPC-G as held as follows:

"7.17.7 Regarding the imported coal, it is submitted that Thermal Generating Station at Trombay needs ultra-low sulphur, low ash and Mid GCV coal to adhere with the stringent environment norms. Since, PPAs were not finalised during the year 2019 and there was uncertainty with respect to future tie-ups, the coal tie-ups were done only for a period of one year. The long term contract with Adaro is valid till 2020. Also, annual contract with Kideco and with Avra are valid upto July 31, 2020.

7.17.8 Regarding further fuel arrangement, the Commission notes the TPC-G's submission that, existing PPAs are valid till March 31, 2024 and hence, it is exploring the options to tie up Coal on annual basis or on term basis, to get competitive prices for the required quantity in the best interest of consumers.

7.17.9 As regards Gas Contract, the Commission notes that existing APM gas Contract with GAIL is valid upto December 31, 2020. TPC-G submitted that it *will be approaching GAIL for renewal of the contracts for further period as per usual practice.*

7.17.10 It is the primary responsibility of Generating Companies to ensure supply of fuel for operation of the plant However, the Commission, in the present Order, has reviewed the fuel arrangement to ensure the availability of plant. Further, TPC-G has tied up its capacity with BEST and TPC-D, which are supplying power to Consumers in Mumbai city. The Commission notes that TPC-G has entered into Fuel Supply arrangement for shorter period in view of uncertainty of PPAs. The existing Coal contracts are valid upto July & August 2020 and Gas Contract upto December 2020. There is limited time available for entering into Fuel Supply contract. Hence, the Commission directs TPC-G to enter into fuel supply contracts or arrangement so as to ensure the supply of fuel till the validity of PPA, i.e., upto March 31, 2024 through transparent process of Competitive Bidding. Further, TPC-G is directed to submit its Status report, on arrangement of Fuel Supply for future period, to the Commission within three (3) months from the date of this Order."

5.10 TPC-G's existing contracts for coal purchase expired in July 2020. Vide its letter dated 8 July, 2020, TPC-G informed that it has entered into coal contracts for 2.2 Million MT for two years from 1 August, 2020 onwards and further extendable by two years through competitive bidding. The Commission notes that the purchase of coal has been from the contracts entered into by TPC-G. The existing contracts which were approved by the Commission in the MYT Order as part of Fuel Utilisation Plan have expired and new contract have been entered through Competitive Bidding. Accordingly, the new contracts for purchase of imported coal will now be considered as part of Fuel Utilisation Plan. TPC-D has also signed contract with GAIL for supply of APM Gas for the period 7 July, 2021 to 6 July, 2026. It is observed that TPC-G has entered into contract to procure Indonesian origin coal with coal specification similar to TPC-D's long term contracted coal, with price linked to ICI3 index and the same offers significant cost advantage over HBA pricing.

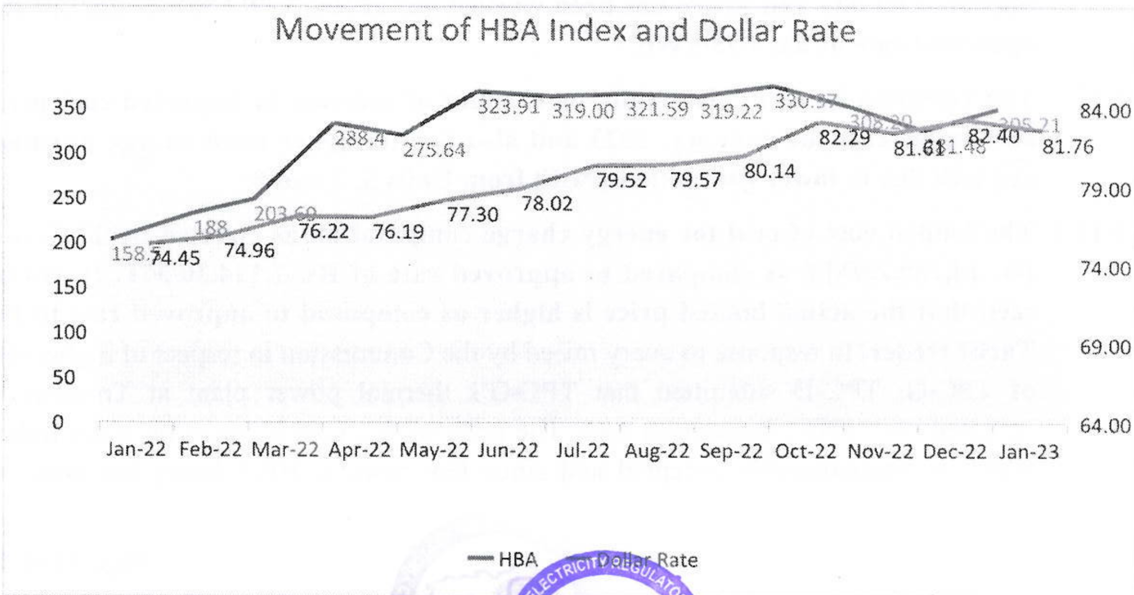
5.11 **The APPC for power procured from TPC-G, which generates power on Imported Coal, Domestic Natural Gas (under APM mechanism), Oil (LSHS), imported RLNG and hydro has been worked out at Rs. 7.79/ kWh as against the approved rate of Rs. 4.73/kWh.**

5.12 **The variation in APPC is mainly on account of increase in imported coal price and dollar rate for January, 2023 and also due to higher fixed charge payment per unit due to lower generation (PLF) from Units 5, 7 and 8.**

5.12.1 **The landed cost of coal for energy charge computation as claimed by TPC-G is Rs. 14,189.25/MT as compared to approved rate of Rs. 7,114.30/MT. It can be seen that the actual landed price is higher as compared to approved rate in the Tariff Order.** In response to query raised by the Commission in respect of higher rate of TPC-G, TPC-D submitted that TPC-G's thermal power plant at Trombay is operated with 100% Indonesian coal. The price of this coal is based on HBA Index, which is internationally accepted and since few months, HBA Index has gone up substantially (e.g. HBA Index for October'22-330.97$/MT, November'22-308.20$/MT, December'22-281.48$/MT and January'23-305.21$/MT) and as an effect imported coal prices have gone up, owing to which Trombay Cost of Generation has increased in month of January, 23. The Commission observes that there has been increasing trend in the imported coal price primarily attributed to demand supply position of the global coal market which is reflected in the HBA index for the last few months. It is seen that HBA index is more than 2 times as compared to January, 22. As mentioned above, TPC-G has also purchased Indonesian origin coal linked to ICI3 index in January 23 which is cheaper to optimise the cost. The Commission notes that MYT Regulations, 2019 permit use of alternate source of fuel for optimization of economical operation through blending. It is also observed that the price of APM Gas was Rs 41,351.35/SCM in January, 23 which is also higher than the approved rate of Rs. 18,183.36/SCM in MYT Order. The Commission notes that prices of APM Gas have increased due to increase in notified APM gas price from $6.10/MMBTU to $8.57/MMBTU from October, 22 by Ministry of Petroleum and Natural Gas, Government of India.

5.13 TPC-G mainly procures imported coal from Indonesian market. As per the Contract, the coal reference price is HBA index i.e., Harga Batubara Acuan for Indonesian coal which is set by Ministry of Energy and Mineral Resources (Indonesia). The Commission has sought for prevailing HBA index during the aforesaid period along with the detailed computation of FOB price at which the coal has been procured by TPC-G. The graph below shows the trend of HBA index which is considered by TPC-G for energy charge calculations. It can be observed that the HBA index has witnessed substantial increase from January, 2022 onwards. HBA index has increased from 281.48$/MT to 305.21$/MT in January 23. Also, the Dollar Exchange rate has witnessed a slight decrease in January 2023 as compared to December 2022.

Figure 4: Movement of HBA indices and Dollar Rate



* - HBA indices at 6,322 kcal/kg GAR coal with 8% total moisture, 15% ash as received and 0.8% sulphur
$ - Dollar Rate source - www.x-rates.com (Average rate for the month for representation purpose and may not be a reference rate at which Coal is procured)

5.14 The Commission has also sought coal purchase bills considered for January, 2023. The Commission has scrutinised the bills submitted and computed the purchase price of coal for the month of January, 2023 as shown in Table below:

Table 7: Computation of Purchase price of Coal by TPC-G for the month of January 2023

Date	Invoice QTY	GCV	Invoice Rate	Coal Cost	Freight Rate	BF Correction	Freight Payable	Total Coal Cost	
	MT	kcal/kg	$/MT	$	$/MT	$/MT	$	$	$/MT
15-Dec-22	45,000.00	4756	169.62	7632900	14.65	0.44	679050	8311950	184.71
31-Dec-22	60,000.00	4645	160.70	9642000	14.65	0.67	919200	10561200	176.02
09-Jan-23	66,000.00	4652	113.78	7509480	14.65	0.35	990000	8499480	128.78
Total	**171000**	**4677**	**144.94**	**24784380**	**14.65**	**0.49**	**2588250**	**27372630**	**160.07**

5.15 TPC-G has submitted the detailed coal computation for the coal purchase considered in January, 2023 and also the reconciliation of coal cost considered in Form F12 along with each coal invoice. The coal cost is arrived on the basis of Goods Receipt Note (GRN) in the SAP system which is dependent on the rate of coal purchase (in Rs./MT or USD/MT) considered at the time of coal order (PO) booking. However, the coal cost mentioned in the coal invoice is as per the base price of coal purchase (in Rs./MT or USD/MT) arrived on the basis of actual gross calorific value, Moisture content, Ash content, Sulphur content, HBA indices etc. Once the invoice is booked in the SAP system after GRN of full coal quantity of a shipment, the cost as per coal invoice gets booked against each shipment in the SAP system in order to make payment to the supplier. To facilitate this, the difference between coal cost in Goods Receipt Note (GRN) and coal cost in the invoice is booked as adjustment entry in the SAP. Hence, the coal inventory gets valued ultimately at the invoice values and at the coal purchase rate (in Rs./MT or USD/MT) prevailing on the date of billing.

5.16 Further, as the coal purchase during a month is generally not utilised in the same month, hence, there is a variation in above computed coal price vis-à-vis coal price as considered by TPC-G for energy charge calculations. The cost of coal for energy charge computation pertains to coal consumed during the respective months which is arrived based on the actual cost of coal inventory as well as the purchased coal cost received in the coal yard.

5.17 From the Table above, the basic purchase cost of imported coal including freight during the month of January, 2023 as per bills submitted worked out at USD 160.07/MT. TPC-D has booked Rs. 13,837.42/MT (i.e. Rs. 12,500.80/MT for Coal and Rs. 1,336.62/MT for freight). Also, other coal handling charges such as insurance, handling and wharfage charges, taxes and duties, clean energy cess and other miscellaneous charges considered by TPC-D are in line with the average prices approved in the previous quarters and accordingly, the total landed cost of coal arrived is Rs. 15,391.37/MT. Accordingly, the break-up of the cost as submitted by

TPC-D and as considered by the Commission against the procurement of coal for the month of January, 2023 is as given below:

Table 8: Computation of Coal cost for the month of January 2023

Sr. No	Particular	Source / Formula	Units	As Submitted – Coal Cost	As Approved – Coal Cost
1	Basic Coal cost + Freight in Rs.	As submitted	Rs./MT	13,837.42	13,837.42
2	Excise + Custom Duty + CE Cess+ Insurance	As submitted	Rs./MT	1,101.12	1,101.12
3	Handling and Wharfage	As submitted	Rs./MT	674.49	674.49
4	Other Fuel Handling Charges	As submitted	Rs./MT	671.51	671.51
5	Other Adjustment	As submitted	Rs./MT	(893.16)	(893.16)
6	Total as per Form 12	Sum (1:5)	Rs./MT	**15,391.37**	**15,391.37**

5.18 Apart from above, the Commission has also sought for third party sampling report for GCV verifications. TPC has submitted the third-party sampling certificate for the respective period. The Commission has verified the document submitted and found to be in order. TPC has also considered the stacking loss as per norms approved by the Commission while computing the Energy Charges.

5.19 The Commission notes that TPC in Form 12 had considered coal consumption cost during the month based on usage of coal and not on weighted average of opening inventory and coal purchased during the month. The Commission in its FAC approval for the month of December, 2022 for TPC-D has already directed TPC-G that weighted average rate of computing coal cost should be followed by TPC-G as similar methodology is also being followed by other generators within the State and accordingly raise the FAC bill from April 2023 onwards as per the weighted average method of computation of coal cost as TPC-G would have already raised FAC bills for the month as per its existing methodology and that provisional truing-up of FY 2022-23 is already done by the Commission in the MTR Order dated 31 March, 2023.

5.19.1 It is observed that there is difference in coal cost considered in Form 11 and Form 12. TPC-D submitted that the difference in the cost is due to Foreign exchange variation due to difference in dollar rate at the time of booking of Purchase Order and the actual payment made to vendor and the employee cost. Accordingly, the coal consumption cost considered by the Commission as per Form 11 is as given below:

Table 9: Coal Consumption Cost for the month of January 2023 of TPC-G

Particulars	Units	TPC Submission	As Approved
Form F12 - Coal Consumption Cost	Rs/MT	14,503.47	14,503.47
Foreign Exchange Rate Variation	Rs/MT	(367.56)	(367.56)
Employee Cost	Rs/MT	53.34	53.34
Form F11 - Coal Consumption Cost	Rs/MT	14,189.25	14,189.25

5.20 **In view of the above, the Commission has considered APPC of Rs 7.79/kWh as against approved rate of Rs. 4.73/kWh for power purchased from TPC-G. The APPC varies due to increase in imported fuel price resulting in higher variable cost of Unit-5 & 8, and higher Fixed Cost/unit of power purchased from Unit-7 due to lower generation.**

5.21 Variation in power purchase expenses from TPC-G can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from TPC-G (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
January 2023	(67.96)	89.58	21.62

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

Manikaran Power Limited (Medium Term PPA)

5.22 The Commission in its Order in Case No. 249 of 2018 dated 2 January, 2019, allowed BEST to tie up 100 MW Power with M/s. Manikaran Power Ltd. through M/s. Sai Wardha Power Generation Ltd for 5 years from 1 April, 2019 to 31 March, 2024 and accordingly Medium Term PPA was signed on 24 May 2019.

5.23 The Commission has noted that there was delay in signing of agreement along with subsequent events as stated by BEST in its MYT Order which has led to the power supply not commencing on 1 April, 2019. However, the power supply has started from April 2020 which was envisaged at the time of issue of Tariff Order.

5.24 As submitted by BEST, it has purchased 65.83 MU at average rate of Rs. 4.23/kWh as against approved rate of Rs. 4.46/kWh. The reduction in rate is due to higher Availability and PLF of the said plant which has resulted in higher quantum above 85% PLF being available at only Variable Charge and Incentive as per terms of the PPA. The incentive is payable at the rate of 50% of the Fixed Charge for Availability in excess of Normative Availability and shall be payable only to the extent of despatch of the power station above Normative Availability.

5.25 Accordingly, the Commission has considered the said purchase from Manikaran Power Limited for the month of January 2023 as per invoice submitted by BEST. The details of approved v/s actual are as shown in the table below:

Table 10: Power Procurement from Manikaran Power Limited for the month of January 2023

Source	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs. /kWh)	Total Cost (Rs. Crore)	APPC (Rs. /kWh)
Approved	62.05	14.70	2.37	12.97	2.09	27.67	4.46
Actual	65.83	13.03	1.98	14.82	2.25	27.84	4.23

5.26 Variation in power purchase expenses from Manikaran Power Limited (MPL) can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from MPL (Rs. Crore)

	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
January 2023	1.60	(1.43)	0.17

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

Renewable Sources

5.27 BEST has entered into Long term PPA for 20 MW with M/s Walwahn Solar MH Ltd (earlier Welspun) to meet its Solar RPO. The Commission in the Tariff Order has approved the purchase of solar power from the said PPA at Rs. 8.56/kWh.

5.28 **BEST has purchased 2.89 MU of Solar Power at Rs 8.56/kWh for January 2023 from M/s. Walwahn Solar MH Ltd.** The Commission has verified the said purchase from the invoice submitted by BEST and has accordingly considered the said solar purchase for FAC.

5.29 Apart from the above approved power procurement source from Walwahn Solar MH Ltd., no additional Long term Solar and Non-Solar power has been procured under bidding route for the month of January 2023. Also, the Commission notes that BEST has not purchased any solar/non-solar REC and solar/non-solar power under GTAM and GDAM in the month of January 2023.

5.30 As per the Tariff order dated 30 March 2019, the Commission has approved the purchase of solar energy at generic tariff of Rs. 2.90 per kWh and non-solar energy at generic tariff of Rs. 2.87 per kWh from FY 2022-23 onwards. However, it was observed that no additional quantum of Solar and Non-Solar Power has been procured by BEST. However, BEST has initiated the process of renewable power procurement through SECI Bid of 400 MW Hybrid RE project, whereby in Case No. 16 of 2021, the Commission has adopted tariff at Rs. 2.41/kWh plus trading margin of Rs. 0.07/kWh. With respect to 400 MW Hybrid RE project, BEST in Case No. 46 of 2022 has submitted that anticipated flow of power shall be from February 2023 onwards, and hence no additional RE power has been sourced. Further, the Commission in its Order dated 30 November 2022 in Case No 120 of 2022 has approved PPA for 234 MW of solar power with SECI. This will also help in meeting the RPO target of BEST.

5.31 Accordingly, as submitted by BEST, it has purchased overall renewable power of 2.89 MU at average rate of Rs. 8.56/kWh as against approved rate of Rs. 3.09/kWh.

5.32 Variation in power purchase expenses from RE Sources can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from RE Sources (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total

January 2023	(57.42)	38.24	(19.18)

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

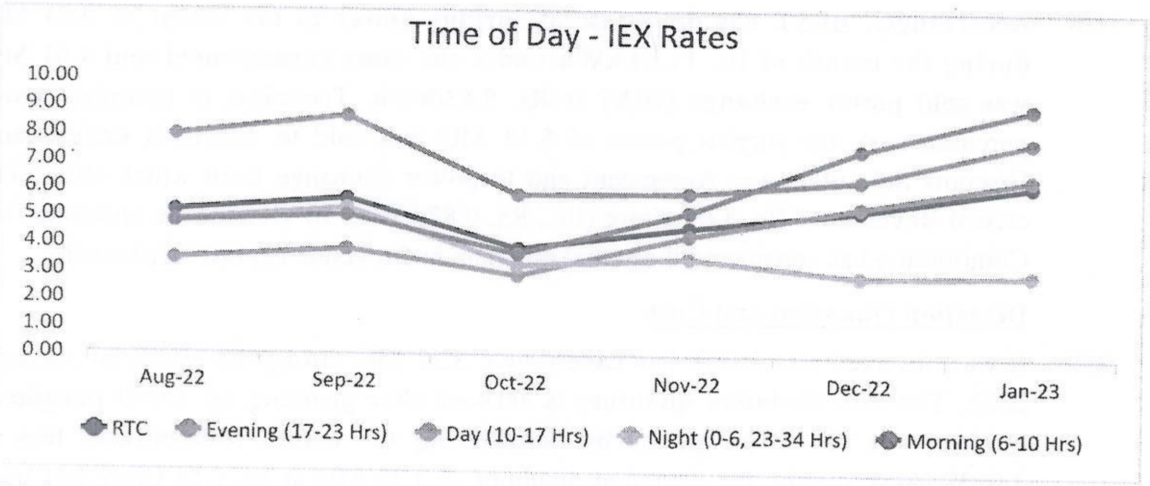
Short Term Purchase

5.33 **With regards to short term purchase, BEST has purchased 44.50 MU at an average rate of Rs. 5.54/kWh.** The overall power purchased from Power Exchange was about 14.35% of Net power procured during the month of January, 2023 mainly to meet the shortfall during day-time.

5.34 BEST has purchased 23.89 MU at Rs. 5.39/kWh and 20.53 MU at Rs. 5.72/kWh from DAM and RTM respectively through IEX in the month of January 2023.Further, BEST has not purchased power from any new short term source.

5.35 The market trend of past six months has been provided in the following graph with different time slot whereby it can be witnessed that from August 2022 onwards, the price has witnessed an upward trend in peak hours and is above Rs. 7.00/kWh.

Figure 5: Price Trend of past months at IEX for different time slots



5.36 Considering the upward trend of prices in the short-term market, the Commission has approved the short-term purchase by BEST for January, 2023.

Sale of Power

5.37 The Commission has observed that BEST and AEML-D has executed the agreement of Inter-Discom Sale of Power under MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 read with Scheduling and Dispatch code, which inter alia provides guiding principles for exchange of power between utilities on Day-ahead and Intra-day basis.

"Para 6.3 of Statement of Reasons of DSM Regulations, 2019

6. 3. ..... Accordingly, the Commission has modified the provisions such that, such inter-se or bilateral sale / purchase of power on day to day basis may be undertaken by respective licensee entirely at the discretion and time block wise rate for settlement of such inter-se exchange of unrequisitioned surplus power for load generation balance during day ahead scheduling may be mutually agreed.

It is expected that these decisions shall be taken by the distribution licensees on the commercial principles."

Para 8.4.10 and 8.4.11 of Scheduling and Despatch Code:

8.4.10 As the sellers have contracted their generation capacity through long term / medium term contract with buyers, such exchange of available surplus capacity shall be effected inter-se amongst buyers without need to amend existing PPAs with their respective sellers.

8.4.11 MSLDC shall maintain and publish separate account of exchange of surplus power capacity if any amongst the buyers / distribution licensees."

5.38 **Accordingly, BEST has done sale of surplus power to the extent of 0.53 MU during the month at Rs. 11.94/kWh under the same arrangement and 4.61 MU was sold power exchange (IEX) at Rs. 9.63/kWh.** Therefore, to optimize power purchase cost, the surplus power of 5.13 MU was sold to AEML-D under Inter-Discoms Sale of Power Agreement and to power exchange from which BEST has earned Revenue of Rs. 5.07 Crore (i.e., Rs. 9.87/kWh). In view of the aforesaid, the Commission has considered the actual quantum and revenue against surplus sale.

Deviation Quantum and Cost

5.39 It was observed that BEST has underdrawn 3.22 MU during the month of January, 2023. **The said deviation quantum is arrived after grossing up T<>D periphery quantum to G<>T periphery by considering the actual transmission loss of 3.09%.** Accordingly, the deviation quantum of 3.22 MU at Rs 1.15 Crore has been considered as per provisional weekly invoice raised by MSLDC for the period 1 January, 2023 to 31 January, 2023. Further, it is observed that TPC-G has not considered DSM and ADSM charges for calculation of energy charges as well as fixed charges. Also, BEST has considered only DSM charges and not considered ADSM charges for calculation of power purchase cost for deviation quantum.

5.40 **In view of the same, the Commission has considered total deviation quantum of 3.22 MU (Underdrawl), which contributes to around 1.04% of the total power procurement, for Rs 1.15 Crore.**

Approved Cost of Power Purchase

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

Table 11: Approved Power Purchase Cost for the month January 2023

Particulars	Source	Power Purchase	Fixed Cost	Fixed Cost	Variable Cost	Variable Cost	Total Cost	APPC (Rs.

		Quantum (MU)	(Rs. Crore)	(Rs. /kWh)	(Rs. Crore)	(Rs. /kWh)	(Rs. Crore)	/kWh)
TPC-G	Approved	292.58	36.93	1.26	101.48	3.47	138.41	4.73
	Actual	205.37	37.76	1.84	122.28	5.95	160.04	7.79
Manikaran Power	Approved	62.05	14.70	2.37	12.97	2.09	27.67	4.46
	Actual	65.83	13.03	1.98	14.82	2.25	27.84	4.23
Renewable Power	Approved	69.97	-	-	21.65	3.09	21.65	3.09
	Actual	2.89			2.47	8.56	2.47	8.56
REC	Approved	-	-	-	-	-	-	-
	Actual	-	-	-	-	-	-	-
Short Term Purchase	Approved	-	-	-	-	-	-	4.00
	Actual	44.50			24.67	5.54	24.67	5.54
Sale of Power	Approved	-	-	-	-	-	-	-
	Actual	(5.13)			(5.07)	9.87	(5.07)	9.87
Deviation Quantum	Approved	-	-	-	-	-	-	-
	Actual	(3.22)	-	-	(1.15)	3.56	(1.15)	3.56
Total	**Approved**	**424.60**	**51.63**	**1.22**	**136.10**	**3.21**	**187.73**	**4.42**
	Actual	**310.23**	**50.79**	**1.64**	**158.02**	**5.09**	**208.81**	**6.73**

5.42 **Considering the above submission, the Commission allows the power purchase quantum of 310.23 MU for total cost of Rs. 208.81 Crore at average power purchase cost of Rs. 6.73/kWh for the month of January, 2023 as shown in Table above. The actual purchase for same month in FY 2021-22 i.e., January, 2022 was 300.58 MU and power purchase cost was Rs. 197.84 Crore with APPC of Rs. 6.58/kWh.**

<u>Summary</u>

5.43 **To summarise, the overall average power procurement cost has increased due to increase in variable cost for power procurement from TPC Unit 5 & 8 cause of increase in imported coal price coupled with higher dollar rate fluctuations and higher per unit fixed charges for power procured from TPC-G purchase due to lower PLF of Unit 5, 7 and 8, lower availability of cheaper power from Manikaran Power Limited and no additional renewable power procurement through competitive bidding as envisage in the tariff order.**

5.44 **However, BEST has optimised its overall power purchase cost by selling the surplus power of quantum 5.13 MU in IEX at Rs. 9.87/kWh and by procuring power from Manikaran Power Limited of quantum 65.83 MU at Rs. 4.23/kWh.**

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 January, 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 It is noted that BEST has incurred the per unit Power Purchase cost which is higher than the limits Approved per unit Power Purchase Cost hence the Z_{FAC} January, 2023 is positive as shown in the Table below.

Table 12: Computed Z_{FAC} for the month of January 2023

S. No.	Particulars	Units	January 2023
1	Average power purchase cost approved by the Commission	Rs./kWh	4.42
2	Actual average power purchase cost	Rs./kWh	6.73
3	Change in average power purchase cost (=2 -1)	Rs./kWh	2.31
4	Net Power Purchase	MU	310.23
5	**Change in fuel and power purchase cost (=3 x 4/10)**	**Rs. Crore**	**71.64**

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

7.1 After Adjustment for over / under recovery, the adjustment factor to be added / reduced is as below:

S. No.	Particulars	Units	Jan-23
1.0	**Adjustment for over-recovery/under-recovery (B)**		
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	40.89
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	34.69
1.3	(over-recovery)/under-recovery (= 1.1-1.2)	Rs. Crore	6.20
2.0	**Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit for previous month**	Rs. Crore	-
3.0	**Adjustment factor for over-recovery/under-recovery (1.3+2.0)**	**Rs. Crore**	6.20

7.2 BEST submitted FAC recovery of Rs. 34.69 Crore for the month of January, 2023 as against approved amount of Rs. 40.89 Crore. The adjustment for over recovery/under recovery has to be done for the (n-4)th month as per provisions of MYT Regulations, 2019. Thus, the adjustment factor to be considered towards under recovery is Rs. 6.20 Crore while computing the allowable FAC for the month January, 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 January 2023:

S. No.	Particulars	Units	Jan-23

1	Adjustment factor for over-recovery/under-recovery	Rs. Crore	6.20
2	Interest rate	%	9.80%
3	**Carrying cost for over-recovery/under-recovery**	**Rs. Crore**	**0.05**

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

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

"10.8 The total 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.

Table 13: Distribution Loss for the month of January 2023

S. N	Particulars	Units	Approved in Tariff Order	January – 2023 Actual	Cumulative Actual April - 2022 to January - 2023	Annual Sliding Loss – February -2022 to January - 2023
1	Net Energy Input at Distribution Voltage	MU	4,933.20	309.90	3,946.24	4,622.06
2	BEST Retail Sales	MU	4,726.99	327.45	3,844.85	4,443.67
3	Distribution Loss (1 - 2)	MU	206.21	-17.56	101.39	178.39
4	Distribution Loss as % of net energy input (3/1)	%	4.18%	-5.67%	2.57%	3.86%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved (4)] x Net Energy Input (1)	MU	-	-	-	-
6	**Disallowance of FAC due to excess Distribution Loss**	**Rs. Crore**	**0.00**	**0.00**	**0.00**	**0.00**

9.3 As seen from the above table, for the month of January, 2023 the standalone distribution loss is negative and lower than the approved distribution loss. By considering net energy input at distribution voltage of 309.90 MU for the month of January, 2023 and actual energy sales of 327.45 MU for the month of January, 2023, the Standalone Actual Distribution Loss works out to -5.67%, however annual sliding distribution loss (from February, 2022 to January, 2023) works out to 3.86%, which is lower than the approved distribution loss. The standalone distribution loss for the month may give erratic figure due to consideration of energy sales with different bill generation period. However, the cumulative sliding distribution loss of last 12 months may give figure near to target distribution loss. Hence, to determine the actual distribution loss for a month, sum of purchase and sales for a period of 12 months is required to be considered. The Commission notes that cumulative loss of 2.57% up to January, 2023 as per the related financial year and annual sliding distribution loss of 3.86% for the period February, 22 to January, 23 is lower than approved loss.

9.4 Further, the comparison of standalone Distribution Loss for the January, 2023 as compared to last year is as given below:

Table 14: Monthly Distribution Loss of FY 2021-22 and FY 2022-23

Particulars	FY 2022-23	FY 2021-22
Approved Loss	**4.18%**	**4.18%**
April	11.09%	2.65%
May	3.26%	4.30%
June	1.83%	3.15%
July	2.10%	8.47%
August	2.84%	2.87%
September	0.25%	2.19%
October	4.11%	6.59%
November	-3.18%	0.30%
December	6.66%	-1.54%
January	-5.67%	-3.11
Cumulative upto January	**2.57%**	**2.80%**

9.5 **It is observed that annual sliding Distribution Loss of 3.86% is lower than the approved loss of 4.18%. Accordingly, the Commission has not worked out any disallowance on account of Distribution Loss for the month of January, 2023.**

10. Summary of Allowable ZFAC

10.1 The summary of the FAC amount as approved by the Commission for the month of January, 2023 is as shown in the Table below.

Table 15: Summary of Allowable Z_{FAC} for January, 2023

S. No.	Particulars	Units	January 2023 - As per BEST	January 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	71.64	71.64

1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.05	0.05
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	6.20	6.20
1.4	**ZFAC = F+C+B**	Rs. Crore	77.89	77.89
2	**Calculation of Per Unit FAC**			
2.1	Energy Sales within the License Area	MU	327.45	327.45
2.2	Excess Distribution Loss	MU	-	-
2.3	ZFAC per kWh	Rs./kWh	2.38	2.38
3	**Allowable FAC**			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	-	-
3.2	FAC allowable [1.4-3.1]	Rs. Crore	77.89	77.89
4	**Utilization of FAC Fund**			
4.1	Opening Balance of FAC Fund	Rs. Crore	788.47	-
4.2	Carrying Cost on FAC Fund	Rs. Crore	19.43	-
4.3	Z_{FAC} for the month (Sr. N. 3.2)	Rs. Crore	807.90	77.89
4.4	Closing Balance of FAC Fund	Rs. Crore	77.89	77.89
4.5	Z_{FAC} leviable/refundable to consumer	Rs. Crore	885.79	-
5.0	Energy Sales within the License Area	MU	327.45	327.45
6.0	ZFAC per kWh [(4.5/5.0)]	Rs./kWh	27.05	-
7.0	**Total FAC based on category wise and slab wise allowed to be recovered in the billing month of March 2023***	**Rs. Crore**	885.79	-
8.0	**Carried forward FAC for recovery during future period (4.5-7.0)**	**Rs. Crore**	885.79	-

10.2 The Commission notes that BEST has considered the opening FAC Fund and added the standalone monthly FAC amount to the said fund and deducted FAC recovery amount in the month of January 2023 to arrive at the closing fund. The Commission in its FAC approval for September 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 along with any under recovery / over recovery 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

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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 The Commission had invoked power of removing difficulties under MYT Regulation, 2019 and made following changes for computation of FAC.

8.2.15.4 Therefore, using its powers for Removal of Difficulties under Regulations 106 of MYT Regulations, 2019, the Commission is making following changes in FAC mechanism stipulated under Regulation 10 of MYT Regulations, 2019:

a. 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:

i. Negative FAC amount shall be carried forward to the next FAC *billing cycle with holding cost.*

ii. 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.

iii. 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 BEST such limit shall be Rs. 59 Crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism.

iv. 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.

11.3 **Accordingly, the Commission allows the FAC amount of Rs. 77.89 Crore for the month of January, 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.**

11.4 **In a view of above, the per unit ZFAC for the month of January, 2023 to be levied on consumers of BEST is Nil.**