महाराष्ट्र विद्युत नियामक आयोग
Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2020-21/E-Letter **Date: 5 April, 2021**

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 December 2020.

Reference:

1. FAC submission dated 11 February 2021 of FAC for December 2020.
2. Data gaps communicated vide email dated 16 February 2021.
3. BEST Undertaking's complete submission received on 25 February 2021.

Sir,

Upon vetting the FAC calculations for the month of December 2020 as mentioned in the above reference, the Commission has accorded approval for FAC of **Rs. (30.45) Crore** to its consumers as shown in the table below:

Month	FAC Amount (Rs. Crore)
December, 2020	**0 (Zero)**

The Commission allows the accumulation of FAC amount of **Rs. (208.50) Crore** which shall form part of FAC Fund and shall be carried forward to next FAC billing cycle with holding cost as per the Order dated 30 March, 2020 in Case No 324 of 2019. Further, as directed in the said Order, BEST Undertaking shall maintain the monthly account of FAC Fund and upload it on its website to maintain transparency of FAC Fund and also for information of all the stakeholders.

Yours faithfully,

(Prafulla Varhade)
Director (EE)

Encl: Annexure A: Detailed Vetting Report for the month of December, 2020.

ANNEXURE A

Detailed Vetting Report
Date: 1April, 2021

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF DECEMBER, 2020

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of BEST Undertaking for the month of December, 2020.

Reference:

1. FAC submission dated 11 February 2021 by BEST Undertaking for prior approval of FAC for the month of December 2020.
2. Data gaps communicated to BEST Undertaking vide email dated 16 February 2021.
3. BEST Undertaking's complete submission received on 25 February 2021.

1. FAC submission by BEST Undertaking:

1.1 BEST Undertaking ('BEST') has submitted FAC submissions for the months of December, 2020 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by BEST against the data gaps issued, the Commission has accorded prior approval to BEST for negative FAC amount of Rs. 30.45 Crore. The approved FAC amount shall form part of FAC Fund and shall be carried forward to next FAC billing cycle with holding cost as per the Order dated 30 March, 2020 in Case No 324 of 2019 (herein after referred to as "Tariff Order").

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, 2020.

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 December, 2020 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 December 2020 (MUs)

Consumer Category	Approved by the Commission (MU)	Monthly Approved* (MU)	Actual Sales December 2020 (MU)
	(I)	(II=I/12)	(III)
HT I- Industry	156.73	13.06	12.29
HT II - Commercial	278.98	23.25	15.34
HT III - Group Housing Society (Residential)	30.65	2.55	2.46
HT IV – Railways/Metro/Monorail	2.14	0.18	0.16
HT V - Public Services			
a) Govt. Edu. Inst. & Hospitals	26.59	2.22	1.94
b) Others	196.66	16.39	14.54
HT-VI EV Charging Stations	-	-	-
Total HT Sales	**691.74**	**57.65**	**46.75**
LT I (A)- Residential (BPL)	0.07	0.01	0.00
LT I (B)- Residential	2,075.48	172.96	139.66
LT II - LT Commercial			
(A)- upto 20 kW	919.85	76.65	53.95
(B) >20 kW and <50 kW	211.13	17.59	12.83
(C) - 50 kW	370.00	30.83	22.58
LT III (A) - Industry < 20 kW	43.23	3.60	7.59
LT III (B) - Industry > 20 kW	90.31	7.53	6.68
LT IV - Public Services			
a) Govt. Edu. Inst. & Hospitals	55.68	4.64	3.91
b) Others	185.87	15.49	12.23
LT V(A) – Agriculture Pumpsets	-	-	-
LT V(B) – Agriculture Others	-	-	-
LT VI - EV Charging Stations	0.30	0.03	0.32

Total LT Sales	**3,951.92**	**329.33**	**259.76**
Total	**4,643.66**	**386.97**	**306.51**

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

3.2 **It is observed that the actual sales for the month of December 2020 is 306.51 MU which is lower by 20.79% as compared to the approved energy sales of 386.97 MU**. With respect to the consumption, HT category consumption is 46.754 MU which is on a lower side by 18.90% compared to approved monthly HT energy sales of 57.65 MU and the reduction has been noticed by 21.12% on LT side whereby the actual sales is 259.76 MU as compared to approved monthly LT energy sales of 329.33 MU. The major variation was observed across all categories in view of lower sales except LT Industrial (below 20 KW load) and LT EV Charging Station category. BEST has also submitted the data providing actual billing and estimated billing undertaken for the calculation of total energy consumption for the month of December 2020.

3.3 BEST further submitted the number of actual and estimated meter readings undertaken for the month of December 2020 as shown below:

Table 2: No. of Meters reading on actual and estimated basis for December 2020

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	195	0	195
2	LT	1024509	16960	1041469
	Total	**1024704**	**16960**	**1041664**
	%	**98%**	**2%**	**100%**

3.4 Accordingly, the Commission has also analysed the comparison of estimated sales and sales based on actual meter reading for the month of April 20 to December 20 and is observed that the assessed sales percentage has been reducing gradually and is around 1% in December 2020.

Table 3: Actual and Estimated Sales from April 2020 to December 2020

Particulars	April-20	May-20	June-20	July - 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20
Actual – MUs	39.19	107.16	348.13	289.63	290.56	324.83	349.96	321.23	303.02
Estimated - MUs	264.39	192.94	41.79	21.90	5.78	3.58	2.89	4.38	3.50
Total	**303.58**	**300.11**	**389.91**	**311.53**	**296.34**	**328.41**	**352.85**	**325.61**	**306.51**
% sales based on Estimated Reading	87%	64%	11%	7%	2%	1%	1%	1%	1%

3.5 **As per the data, the 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 98.37% is undertaken as per actual meter readings and balance 1.63% is still assessed on an estimated basis. Also, with respect to consumption, under LT Category, about 98.86% consumption is undertaken as per actual meter readings and balance 1.14% is still assessed on an estimated basis.

3.6 However, the Commission has raised an query seeking explanation for still undertaking 1.63% meter reading and 1.14% sales on estimated basis post lock down and rationale on the statement of BEST stating that the reasons of such estimation is other than the impact of COVID-19 pandemic. BEST in its reply to data gaps dated 25 February, 2021 has justified that the estimation is undertaken when meter reading is not available in cases of defective meters and obstruction when key to consumer premises or service cabin is not available. Since this is a routine activity and meter reading is made available in the subsequent month, the billing system re-estimates as per pre-defined logic in the billing system. The Commission notes the submission made by BEST on estimated sales.

3.7 Further, comparison of sales from April to December 20 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-19	196.59	168.19	57.38	422.16
Apr-20	149.90	114.49	39.19	303.58
May-19	208.00	175.89	61.48	445.37
May-20	158.43	98.95	42.73	300.11
Jun-19	186.91	163.21	61.03	411.15
Jun-20	191.74	156.65	41.52	389.91
Jul-19	176.73	159.26	62.19	398.17
Jul-20	164.72	100.36	46.45	311.53
Aug-19	178.71	157.18	59.68	395.56
Aug-20	159.28	90.03	47.03	296.34
Sep-19	167.06	149.14	56.41	372.61
Sep-20	175.55	106.10	46.76	328.41
Oct-19	183.14	161.18	58.06	402.38
Oct-20	180.80	123.36	58.42	362.58
Nov-19	166.84	154.91	56.63	378.38
Nov-20	160.76	118.91	45.94	325.61
Dec-19	149.08	147.75	55.24	352.07
Dec-20	139.66	120.10	46.75	306.51
April – December 19	**1,613.05**	**1,436.71**	**528.10**	**3,577.86**
April - December 20	**1,480.84**	**1,028.94**	**414.80**	**2,924.58**

3.8 The Commission observes that sales of HT, LT-Residential and LT-others still continue to be lower as compared to last year for the month of December 2020. Also, the reduction in sales of LT-Residential in December 2020 compare to November 2020 is also noticed which is based on seasonal change and has been witnessed last year also. Also, on a cumulative basis from Apr-20 to Dec-20, the total sales are lower by 18% as compared to same period last year.

4. Power Purchase Details

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

a) Tata Power Company Ltd. (TPC-G)

b) Manikaran Power Limited

c) Renewable Energy (Solar and Non-Solar)

d) Short Term Sources (Bilateral and Power Exchange).

4.2 In addition to the aforesaid, there may be some variation in real time (unscheduled interchange) which will be settled through Balancing and Settlement Mechanism approved by the Commission.

4.3 Summary of Power Purchase for BEST is as follows:

<table>
<tr><th>Sr. No.</th><th>Particular</th><th>Compliance</th></tr>
<tr><td>1</td><td>Sources of approved Power Purchase</td><td>BEST has purchased power from approved sources.</td></tr>
<tr><td>2</td><td>Merit Order Dispatch</td><td>BEST has followed merit order for scheduling of power and preference was given to cheapest power.</td></tr>
<tr><td>3</td><td>Fuel Utilization Plan</td><td>Existing contracts of TPC-G 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>Pool Imbalance</td><td>BEST has supplied 31.58 MU to the imbalance pool due to lower demand and also due to higher scheduling of power as per state MOD.</td></tr>
<tr><td>5</td><td>Sale of Surplus Power</td><td>BEST has sold 0.35 MU on IEX at Rs. 2.39/kWh.</td></tr>
<tr><td>6</td><td>Power Purchase</td><td>Actual Net Power Purchase is 360.01 MU as against approved 417.11 MUs 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>299.04</td><td>287.14</td><td>79.76%</td></tr>
<tr><td>Manikaran Power</td><td>62.05</td><td>69.42</td><td>19.28%</td></tr>
<tr><td>RE Sources</td><td>2.63</td><td>2.75</td><td>0.77%</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particular</th><th>Compliance</th></tr>
<tr><td></td><td></td><td><table><tr><td>Net Short Term</td><td>53.40</td><td>0.69</td><td>0.19%</td></tr><tr><td>Total</td><td>417.11</td><td>360.01</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 December, 2020 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 360.01 MU as against approved 417.11 MU from the sources approved by the Commission**. The reduction in Power Purchase is due to reduction in sales of BEST in the month of December 2020.

4.5 The following table show the variation in average power purchase cost (Rs/kWh) for the month of December, 2020 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 December 2020

Particulars	Tariff Order Dated 30.03.2020 FY 2020-21 – Approved			Actual for December, 2020 as submitted by BEST		
	Net Purchase – Monthly*	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	299.04	134.85	4.51	287.14	107.16	3.73
TPC-G (Past Period)$		6.98			3.27	
Manikaran	62.05	27.14	4.37	69.42	27.36	3.94
RE Power	2.63	2.25	8.56	2.75	2.36	8.56

REC		5.39	1.00			
Short Term	53.4	21.36	4.00	1.04	0.36	3.43
Imbalance Pool						-
Gross Total	**417.11**	**197.96**	**4.75**	**360.36**	**140.50**	**3.90**
Less: Sale of Power to IEX				-0.35	-0.08	2.39
Net Power Procurement	**417.11**	**197.96**	**4.75**	**360.01**	**140.41**	**3.90**

[*] - 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

[$] Past Period Expenses approved by the Commission in TPC-G's MYT Order are allowed to be recovered from BEST in FY 2020-21 (Explanation in Para 5.233 to 5.25)

5. Power Purchase Cost

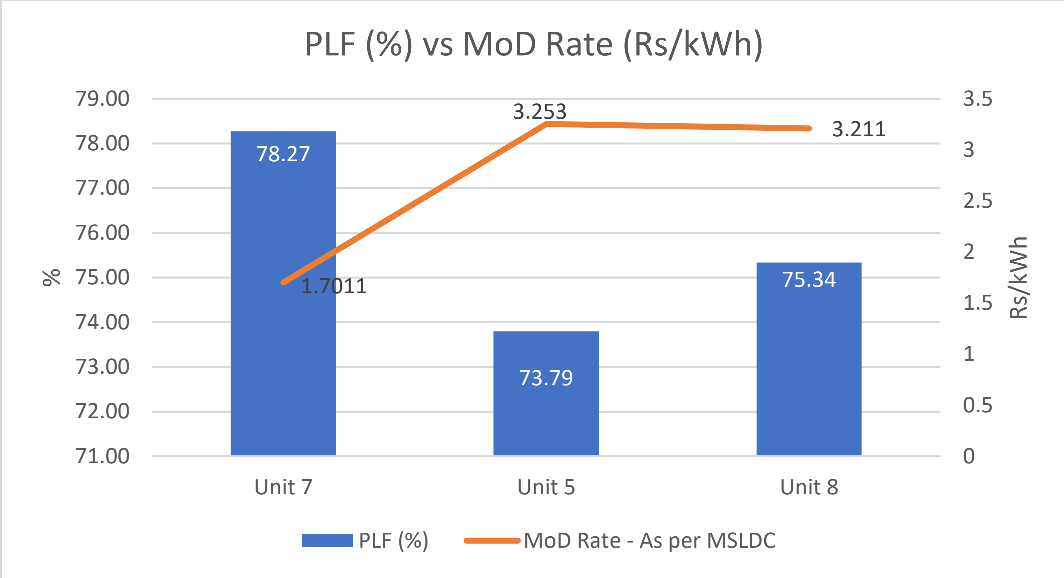
5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of BEST with regards to average power purchase cost for the month of December, 2020. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase 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.

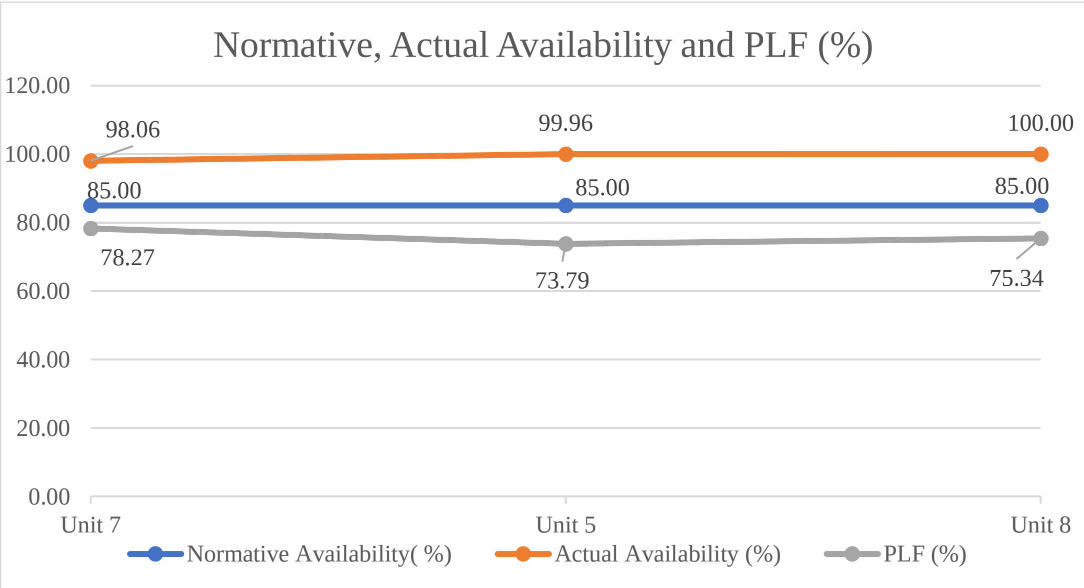
5.3 Since BEST and TPC-D have same generating source i.e. TPC-G, BEST has submitted and relied upon TPC-D's FAC submissions in respect of TPC generating units (TPC-G) to the extent they are relevant to BEST. Analysis of TPC-D's FAC submission for December 2020 in respect of TPC-G's supply has already been undertaken while approving FAC submission of TPC-D for December 2020. Accordingly, the Commission has considered the said submissions of TPC-D in respect of TPC-G.

5.4 TPC-G Units 5,7 and 8 have declared Availability of more than 98% for the month of December 2020. It is observed that Unit-7 having lowest rate in MOD has highest PLF. The graph showing the comparison of Variable Cost in MoD Stack and monthly PLF for TPC-G thermal/gas units is given below:



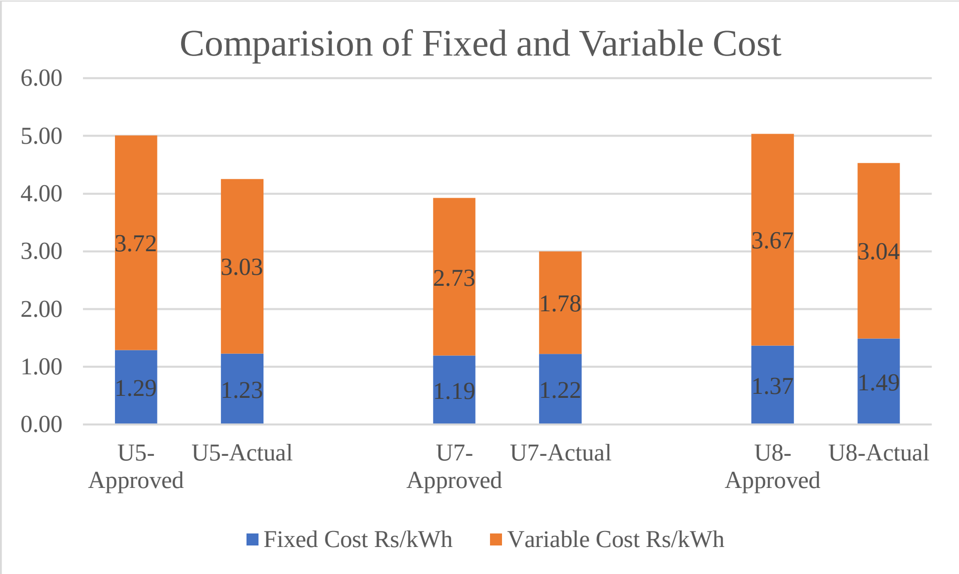
5.5 The Commission has observed that **BEST has purchased 287.14 MUs from TPC-G as against monthly approved quantum of 299.04 MUs. It was observed that Unit-7 having lowest rate in MOD has run at highest PLF of 78.27% thereby benefitting the consumers.**

5.6 All the Units of TPC-G were available during the given period, above normative availability. The graphical comparison of normative availability and actual availability for the month of December 2020 is as given below:



5.7 The entire monthly fixed cost was payable in line with MYT Regulations, 2019 as the cumulative plant availability was higher than the normative availability of 85%. This has resulted into fixed cost being spread over lower net generation due to lower PLF.

However, the impact of increase in fixed cost is offset by lower variable cost. 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.



5.8 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 December 2020

TPC-G Units	Availability - December 2020	Availability – December 2019
Unit 5	99.96%	100%
Unit 7	98.06%	100%
Unit 8	100%	2.34%

5.9 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.

5.10 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.

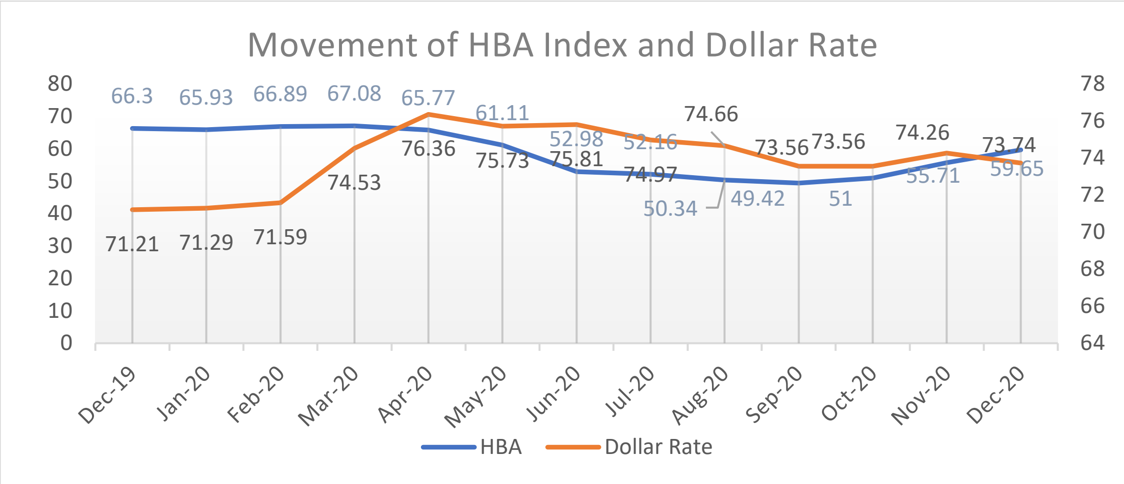
7.17.10 It is the primary responsibility of Generating Companies to ensure supply of fuel for operation of the plant However, the Commission, in the present Order, has reviewed the fuel arrangement to ensure the availability of plant. Further, TPC-G has tied up its capacity with BEST and TPC-D, which 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.”

5.11 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.

5.12 **The APPC for 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. 3.73/ kWh as against the approved rate of Rs. 4.51/kWh.**

5.13 **The variation in APPC is mainly on account of fixed charge payment as explained in paragraph above and also due to lower price of fuel for December 2020. The landed cost of coal for energy charge computation as claimed by TPC-G is Rs. 5412.95/MT as compared to approved rate of Rs. 6705.91/MT.** It can be seen that the actual landed price is lower as compared to approved rate in the Tariff Order and the same is due to decrease in the imported coal price primarily attributed to demand supply position of the global coal market. It is also observed that there is reduction in price of APM Gas to Rs. 10,771.24/SCM as compared to approved rate of Rs.17,139.56/SCM.

5.14 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 an increasing trend from October 2020 onwards. However, the Dollar Exchange rate has witnessed a sharp surge from February 2020.



* - 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)

5.15 The Commission has also sought for coal purchase bills considered for December 2020. The Commission has scrutinised the bills submitted and computed the purchase price of coal for the month of December 2020 as shown in Table below:

Table 7: Computation of Purchase price of Coal by TPC-G for the month of December 2020

Date	Invoice QTY	GCV	HBA	Correction as per FSA	Invoice Rate	Coal Cost	Freight Rate	BF Correction	Freight Payable	Total Coal Cost	
	MT	kcal/kg	$/MT	$/MT	$/MT	$	$/MT	$/MT	$	$	$/MT
a	b	c	D	e	f	g	h	I	j	k	l
13-11-2020	62700	4905	55.71	13.92	41.79	2620233	10.57	2.00	537339	3157572	50.36
23-11-2020	57709	4870	55.71	14.42	41.29	2382805	10.57	1.78	507262	2890067	50.08
27-11-2020	60300	4923	55.71	13.8	41.91	2527173	10.57	1.73	533052	3060225	50.75
10-12-2020	55305	4870	59.65	15.83	43.82	2423465	10.57	1.63	488597	2912062	52.65
10-12-2020	56276	4904	59.65	14.63	45.02	2533546	10.57	1.63	503107	3036653	53.96
Total	**292290**	**4895**	**57.21**	**14.49**	**42.72**	**12487221**	**10.57**	**1.76**	**2569357**	**15056578**	**51.51**

5.16 TPC-D has submitted the detailed coal computation for the coal purchased in December 2020 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.

5.17 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.

5.18 Apart from above, the Commission has also sought for third party sampling report for GCV verifications. TPC-G 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-G has also considered the stacking loss as per norms approved by the Commission while computing the Energy Charges.

5.19 From the Table above, the basic purchase cost of imported coal including freight during the month of December 2020 as per bills submitted worked out at USD 51.51/MT. TPC has booked Rs. 3841.21/MT (i.e. Rs. 3159.46/MT for Coal and Rs. 681.76/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. 5422/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 December 2020 is as given below:

Table 8: Break-up of Coal Cost for the month of December 2020 for TPC-G

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	3,841.21	3,841.21
2	Excise + Custom Duty + CE Cess+ Insurance	As submitted	Rs./MT	629.32	629.32
3	Handling and Wharfage	As submitted	Rs./MT	617.84	617.84
4	Other Fuel Handling Charges	As submitted	Rs./MT	317.84	317.84
5	Other Adjustment	As submitted	Rs./MT	15.79	15.79
6	**Total as per Form 12**	**Sum(3:7)**	**Rs./MT**	**5,422.00**	**5,422.00**

5.20 It is observed that there is difference in coal cost considered in Form 11 and Form 12.

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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 December 2020 of TPC-G

Particulars	Units	TPC Submission	As Approved
Form F12 - Coal Consumption Cost	Rs/MT	5,490.67	5,490.67
Foreign Exchange Rate Variation	Rs/MT	-106.82	-106.82
Employee Cost	Rs/MT	29.10	29.10
Form F11 - Coal Consumption Cost	Rs/MT	5,412.95	5,412.95

5.21 **In view of the above, the Commission has considered APPC of Rs 3.73/kWh as against approved rate of Rs. 4.51/kWh for power purchased from TPC-G. The APPC is lower mainly due to lower Variable Cost of power purchased from Unit-5, Unit-7 and Unit-8.**

5.22 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
December 2020	(4.44)	(23.26)	(27.70)

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

5.23 The Commission in the MYT Order dated 30 March, 2020 in Case No 300 of 2019 in respect of TPC-G has allowed TPC-G to recover the past recoveries approved in the said order from the three Distribution Licensees i.e. BEST, TPC-D and AEML-D in 12 equal instalments in FY 2020-21. As per the ruling given in the TPC-G's MYT Order, the Commission in the Tariff Order of BEST has approved the said past recovery of TPC-G in the Power Purchase Cost of BEST of Rs. 83.78 Crore on an annual basis (Monthly Rs. 6.98 Crore).

5.24 However, vide Order dated 21 December, 2020 in Case No. 163 of 2020, the Commission has directed TPC-G not to recover the component of Standby Charges in the balance instalments amount towards the past recovery from the concerned distribution licensees, viz, BEST, AEML-D and TPC-D. Accordingly, TPC-G has revised the calculation for recovery of past period and calculated the balance amount to be recovered excluding standby component as provided below:

Table 10: Calculation of Past recovery and Carrying cost for balance period (Rs. Crore)

Sr.	Particulars	Number	Amount
1	Impact of Review Order	a	7.03
2	Truing up of FY 2017-18	b	-0.27
3	Truing up of FY 2018-19	c	-42.46
4	Provisional Truing up of FY 2019-20	d	-26.37
5	Recovery of amount of entry tax	e	99.49
6	Difference in Standby Charges as work out by Hon'ble APTEL	f	44.57
7	**Total**	**g = sum (a to f)**	**81.99**
8	Carrying Cost for FY 2020-21	h=((g-f)*9.55%/2)	1.79
9	**Grand Total**	**i = g + h**	**83.78**
10	Total past recovery excluding Standby Charges	j = i - f	39.20
11	Past recovery already recovered in past 8 instalments (excluding Standby Charges)	k = j / 12 * 8 month	26.13
12	**Balance amount to be recovered excluding standby component**	**l = j - k**	**13.07**
13	Balance amount to be recovered excluding standby component in next 4 months	m = l / 4	3.27

5.25 Based on the above calculations, BEST has claimed the revised amount of Rs. 3.27 Crore against Rs. 6.98 Crore as approved in MYT order dated 30 March, 2020 in Case No 300 of 2019 against the TPC-G past recovery claim and the Commission has considered the said amount in FAC computation.

<u>**Manikaran Power Limited (Medium Term PPA)**</u>

5.26 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.

5.27 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.

5.28 **As submitted by BEST, it has purchased 69.42 MU at average rate of Rs. 3.94/kWh as against approved rate of Rs. 4.37/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. Accordingly, the Commission has considered the said purchase from Manikaran Power Limited for the month of December 2020 as per invoice submitted by BEST. The details of approved v/s actual are as shown in the table below:

Table 11: Power Procurement from Manikaran Power Limited for the month of December 2020

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	14.54	2.34	12.60	2.03	27.14	4.37
Actual	69.42	12.65	1.82	14.71	2.12	27.36	3.94

5.29 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
December 2020	2.91	(2.68)	0.22

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

<u>Renewable Sources</u>

5.30 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.

5.31 Further, the Commission has also approved purchase of non-solar and solar REC's at Floor Price of Rs.1.00/kWh for approximately 646 MUs towards shortfall in meeting RPO.

5.32 **BEST has purchased 2.75 MU of Solar Power at Rs 8.56/kWh for December 2020 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.

5.33 The Commission notes that BEST has not purchased any solar/non-solar REC in the month of December 2020.

5.34 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
December 2020	0.11	-	0.11

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

<u>Short Term Purchase</u>

5.35 **With regards to short term purchase, BEST has purchased 1.04 MU at average rate of Rs. 3.43/kWh as compared to approved rate of Rs. 4.00/kWh**. The overall power purchased form Power Exchange is quite minimal (i.e. 1.04 MU out of the total power purchase of 360.36 MU) during the month of December 2020 mainly to meet the shortfall during day time. Accordingly, the Commission has considered the power purchased from power exchange.

5.36 Accordingly. variation in power purchase expenses from Short Term Purchase can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from Short Term (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
December 2020	(17.97)	(3.03)	(21.00)

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

5.37 **To summarise, BEST has optimised its overall power purchase cost by taking following actions:**

(a) Unit 7 is run at highest PLF among all the thermal/gas generators under Section 62 of the Act

(b) Entire power purchased from Manikaran Power Ltd to the extent of its Availability having the least Variable Cost in MOD.

<u>Imbalance Pool</u>

5.38 BEST has submitted that it has considered the actual transmission loss of 2.72% for the month of December 2020 and accordingly has computed the quantum of imbalance pool. **Accordingly, it was observed that BEST has injected 31.58 MU to the imbalance**

pool during the month of December 2020. BEST has not considered any impact of the said pool quantum in FAC Computation.

5.39 The Commission observed that that the deviation between the schedule and actual energy drawl has been on a higher side whereby 31.58 MU i.e. around 10% of the energy metered at T-D interface has been supplied to the grid. Accordingly, a justification was sought from BEST vide data gaps communicated on 16 February 2021. BEST, in its reply on 25 February 2021 has stated that under Intra-state ABT mechanism, Load-Generation balance is carried out by MSLDC on centralized MOD principle. Therefore, the deviation in units to the State pool is not only due to deviation between Scheduled drawl and Actual drawl of any Discom, but also due to variation between Scheduled Generation as per MOD principle and Actual Generation as per MSLDC's real-time instructions based on the system conditions.

5.40 Accordingly, for the day-ahead schedule, BEST matches its forecasted drawl with the availability from its contracted thermal/hydro/RE sources. However, the real-time instructions of MSLDC to vary the target scheduled generation of BEST's contracted generators for the system conditions is the major factor for incremented units in the State pool. The Commission notes the submission made by BEST on the higher quantum of injection of power under imbalance pool.

5.41 Also, the said injection into the pool is result of either decrease in demand of consumers than estimated by the licensee or due to higher generation than scheduled by the generator. In both the scenarios, power incremented in the imbalance pool is not supplied to its consumers.

5.42 The present FAC mechanism includes any variation in power purchase cost which includes both Fixed Charges and Variable Charges. The imbalance pool settlement is done considering Variable Charges on monthly basis and Fixed Cost Reconciliation on yearly basis.

5.43 Accordingly, considering monthly surplus imbalance pool quantum at provisional variable cost as per FBSM mechanism will increase the overall average power purchase cost which is computed considering both Fixed and Variable Charges, thereby burdening the consumers with FAC. Further, due to historical issues of delay in computing imbalance pool quantum and cost of power, for which appropriate orders are already passed by the Commission, non-consideration of surplus imbalance pool quantum at the time of FAC computation on monthly basis will not have any adverse impact on licensee as it would have anyway paid the entire fixed cost to the generator even if lower quantum of power was supplied. Further, for FAC computation total energy purchased by the licensee is being considered for FAC Computation.

5.44 In view of the aforesaid, it would not be prudent to burden the consumers by considering the impact of monthly imbalance pool in FAC computation. Accordingly, to balance overall interest of consumers and licensee, the Commission has not considered the surplus imbalance pool quantum and cost in the monthly FAC computation as it will get adjusted

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Sale of Power

5.45 **BEST has done sale of surplus power to the extent of 0.35 MU during the month at Rs. 2.39/kWh**. As per PPA with TPC, BEST is having allocation of 51.17% from Unit 5 & 7 and Hydro generation and 40% from Unit 8. TPC-G schedule its thermal/hydro plant availability after considering total demand of BEST and TPC-D as a whole and availability from all other contracted sources of both discoms. The surplus power was sold only in some of the 15-min time blocks, when there was surplus power due to higher availability of scheduled Hydro generation over the BEST's demand; particularly in the evening period. TPC Unit 5, which is placed on higher stack in State MOD due to its higher variable charge, was running at its technical minimum level in most of the time blocks due to surplus power situation in the grid.

5.46 In the event of surplus power arising out of demand falling below the technical minimum level of contracted generator (i.e. TPC Unit 5) if injected into the grid, it would have fetched at the rate of Least Variable Charge (LVC) of Intra-state generator under State MoD as per Intra-state FBSM settlement. In the month of December 2020, rate of LVC under State MOD stack was Rs. 1.99/kWh. Further, injection of surplus power in the grid would have attracted Unscheduled Interchange (UI) charges depending on grid scenario. **To avoid this and to optimize power purchase cost, the surplus power of 0.39 MU was sold through power exchange (IEX) from which BEST has earned revenue of Rs. 0.16 Crore**. Accordingly, the Commission has considered the actual quantum and revenue against surplus sale.

Approved Cost of Power Purchase

5.47 In view of the above, the overall cost approved in the Tariff Order and actual for the month of December, 2020 considered by the Commission is as shown below:

Table 12: Approved Power Purchase Cost for the month of December 2020

Particulars	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)
TPC-G*	Approved	299.04	36.66	1.23	98.19	3.28	134.85	4.51
	Actual	287.14	36.66	1.28	70.50	2.46	107.16	3.73
TPC-G - Past Recovery	Approved	-	6.98	-	-	-	6.98	-
	Actual	-	3.27	-	-	-	3.27	-
Manikaran Power*	Approved	62.05	14.54	2.34	12.60	2.03	27.14	4.37
	Actual	69.42	12.65	1.82	14.71	2.12	27.36	3.94
Renewable Power	Approved	2.63	-	-	2.25	8.56	2.25	8.56
	Actual	2.75			2.36	8.56	2.36	8.56
REC	Approved	-	-	-	5.39	1.00	5.39	1.00

Particulars	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)
	Actual	-	-	-	-	-	-	-
Short Term Purchase	Approved	53.40	-	-	21.36	4.00	21.36	4.00
	Actual	1.04			0.36	3.43	0.36	3.43
Sale of Power	Approved	-	-	-	-	-	-	-
	Actual	-0.35			-0.08	2.39	-0.08	2.39
Imbalance Pool	Approved	-	-	-	-	-	-	-
	Actual	-	-	-	-	-	-	-
Total	**Approved**	**417.11**	**58.18**	**1.39**	**139.78**	**3.35**	**197.96**	**4.75**
	Actual	**360.01**	**52.58**	**1.46**	**87.84**	**2.44**	**140.41**	**3.90**

** - Incentives adjusted in the Variable Cost*

5.48 **Considering the above submission, the Commission allows the power purchase quantum of 360.01 MU for total cost of Rs. 140.41 Crore at average power purchase cost of Rs. 3.90/kWh for the month of December, 2020 as shown in Table above. The variation in power purchase cost is mainly on account of lower cost of power purchase from TPC-G, decrease in TPC-G past period recovery, Manikaran Power and power purchased in short term from Power Exchange, as already explained in para above. The actual purchase for same month in FY 2019-20 i.e. December 2019 was 365.58 MU and power purchase cost was Rs. 180.83 Crore with APPC of Rs. 4.95/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 December, 2020 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 lower than the limits Approved per unit Power Purchase Cost hence the Z_{FAC} worked out by the Commission on account of difference in power purchase cost for the month of December, 2020 is negative as shown in the Table below.

Table 13: Computed Z_{FAC} for the month of December 2020

S. No.	Particulars	Units	December 2020
1	Average power purchase cost approved by the Commission	Rs./kWh	4.75
2	Actual average power purchase cost	Rs./kWh	3.90
3	Change in average power purchase cost (=2 -1)	Rs./kWh	(0.85)

S. No.	Particulars	Units	December 2020
4	Net Power Purchase	MU	360.01
5	**Change in fuel and power purchase cost (=3 x 4/10)**	**Rs. Crore**	**(30.45)**

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. As FAC levied for the month of August 2020 was nil, there would not be any adjustment factor for the month of December 2020 while computing the allowable FAC.

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

8.1 As explained in the above paragraph in absence of any adjustment factor for previous month, there is no carrying cost which is to be allowed in FAC for the month of December, 2020.

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 14: Distribution Loss for the month of December 2020

S. N	Particulars	Units	Approved in Tariff Order	December 2020 - Actual	Actual upto December 2020

1	Net Energy Input at Distribution Voltage	MU	4,846.23	319.49	2,952.25
2	BEST Retail Sales	MU	4,643.66	306.51	2,779.33
3	Distribution Loss (1 - 2)	MU	202.57	12.97	172.93
4	Distribution Loss as % of net energy input (3/1)	%	4.18%	4.06%	5.86%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU			49.52
6	**Disallowance of FAC due to excess Distribution Loss**	**Rs. Crore**	**0**	**0**	**0**

9.3 As seen from the above table, for the month of December 2020, the standalone distribution loss is 4.06% and cumulative distribution loss of 5.86% till the month of December 2020. Also, for the month of December 2020, the Commission observes that only 1% of the consumption i.e. 3.50 MU is billed on estimated basis.

9.4 The comparison of Distribution Loss for the April to December 20 as compared to last year is as given below:

Particulars	Approved Loss	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Cumulative upto Dec
FY 2020-21	4.18%	2.79%	13.92%	-24.42%	1.64%	3.37%	1.19%	4.20%	2.62%	4.06%	**5.86%**
FY 2019-20	5.60%	2.25 %	3.77 %	9.26%	6.18%	4.69%	4.06%	5.25%	7.60%	8.92%	**5.76%**

9.5 As seen from the above table, cumulative Distribution Loss upto the month of December, 2020 of 5.86% is higher than the approved Distribution Loss. **The Commission has not worked out any disallowance on account of excess Distribution Loss since the standalone FAC for the month of December, 2020 is negative.**

10. Summary of Allowable ZFAC

10.1 The summary of the FAC amount as approved by the Commission for the month of December, 2020 is as shown in the Table below.

Table 15: Summary of Allowable Z_{FAC} for December, 2020

S. No.	Particulars	Units	December 2020 - As per BEST	December 2020 – 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	(30.45)	(30.45)
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-	-

S. No.	Particulars	Units	December 2020 - As per BEST	December 2020 – As Approved
1.4	**ZFAC = F+C+B**	Rs. Crore	(30.45)	(30.45)
2	**Calculation of Per Unit FAC**			
2.1	Energy Sales within the License Area	MU	306.51	306.51
2.2	Excess Distribution Loss	MU	-	-
2.3	ZFAC per kWh	Rs./kWh	(0.99)	(0.99)
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	(30.45)	(30.45)
4	**Utilization of FAC Fund**			
4.1	Opening Balance of FAC Fund	Rs. Crore	(176.82)	(176.82)
4.2	Holding Cost on FAC Fund	Rs. Crore	(1.23)	(1.23)
4.3	Z_{FAC} for the month (Sr. N. 3.2)	Rs. Crore	(30.45)	(30.45)
4.4	Closing Balance of FAC Fund	Rs. Crore	(208.50)	(208.50)
4.5	Z_{FAC} leviable/refundable to consumer	Rs. Crore	-	-
5.0	Energy Sales within the License Area	MU	306.51	306.51
6.0	ZFAC per kWh [(4.5/5.0)*10]	Rs./kWh	-	-
7.0	**Total FAC based on category wise and slab wise allowed to be recovered in the billing month of January 2021**	**Rs. Crore**	-	-
8.0	**Carried forward FAC for recovery during future period (4.5-7.0)**	**Rs. Crore**	-	-

10.2 **BEST has considered the holding cost considering the MCLR + 150 basis points. This turns out to be 8.50% for December 2020 and holding cost worked out is Rs. 1.23 Crore which is also approved by the Commission. The holding cost as calculated will be contributed to the FAC fund and is outlined as below:**

Table 16: Calculation of Holding Cost for the month of December 2020

Calculation of Carrying Cost									
Month	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Nov-20**	**Dec-20**
Op. Balance	-	(17.43)	(41.80)	(59.05)	(72.38)	(89.03)	(112.31)	(149.89)	(172.98)
FAC fund of the Month	(17.43)	(24.37)	(17.25)	(13.33)	(16.65)	(23.28)	(37.58)	(23.09)	(30.45)
Cl. Balance	**(17.43)**	**(41.80)**	**(59.05)**	**(72.38)**	**(89.03)**	**(112.31)**	**(149.89)**	**(172.98)**	**(203.43)**

Calculation of Carrying Cost									
Month	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Nov-20**	**Dec-20**
Interest Rate		8.79%	8.58%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
Interest for the month		(0.13)	(0.30)	(0.42)	(0.51)	(0.63)	(0.80)	(1.06)	(1.23)
Cumulative Interest	(17.43)	(41.93)	(59.48)	(73.22)	(90.38)	(114.30)	(152.68)	(176.82)	(208.50)
Total	-	(17.43)	(41.80)	(59.05)	(72.38)	(89.03)	(112.31)	(149.89)	(172.98)

10.3 It can be seen from the above table that standalone FAC for the month of December, 2020 is Rs. (30.45) Crore. As the FAC is negative, the said amount will be accumulated in FAC Fund for stabilisation of FAC rate over the period.

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 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. (30.45) Crore for the month of December, 2020 to be accumulated as FAC Fund and shall be carried forward to the next billing cycle with holding cost.

11.4 The Commission in its approval for the month of November, 2020 has directed BEST to carry forward the approved FAC amount of Rs. (176.82) Crore to be accumulated as FAC Fund to be carried forward to the next billing cycle with holding cost. The opening balance of FAC fund along with holding cost is Rs. (178.05) Crore.

11.5 **Accordingly, considering the approved standalone FAC amount of Rs. (30.45) Crore for the month of December, 2020 and opening balance FAC Fund of Rs. (178.05) Crore, the total amount of Rs. (208.50) Crore is accumulated in the FAC Fund.**

11.6 **The Commission in its FAC approval dated 21 September, 2020 for the month of**

June 2020 has decided to accumulate the FAC fund arising out of negative monthly FAC up to March 2021 along with the holding cost. Accordingly, the Commission allows the BEST to carry forward the accumulated FAC fund of Rs. (208.50) Crore to the next billing cycle with holding cost.

11.7 **In view of the above, the per unit Z_{FAC} for the month of December, 2020 to be levied on the consumers of BEST in the billing month of February 2021 is Nil.**