

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/BEST/ 2016 2017 00341

Date: 27 June, 2016

To,

The General Manager,

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

Subject:

Post Facto approval of BEST Undertaking's Fuel Adjustment Charges

(FAC) for the period of April, 2013 to March, 2014

Reference:

a) BEST's submission vide letter dated 22 April 2016 for post facto approval

of FAC for the period April, 2013 to March, 2014.

Sir,

Upon vetting the FAC calculations for the months of April, 2013 to March, 2014 submitted vide letters under above reference, the Commission has accorded post facto approval to BEST for charging to its consumers the FAC amount (net of excess T&D loss), as detailed below:

Month	FAC allowed to be recovered / (Refunded) (Rs. Crore)	Month	FAC allowed to be recovered / (Refunded) (Rs. Crore)
April 2013	(28.74)	October 2013	(110.13)
May 2013	(13.00)	November 2013	(68.55)
June 2013	9.11	December 2013	(43.18)
July 2013	(75.09)	January 2014	(138.60)
August 2013	(40.31)	February 2014	(86.20)
September 2013	(20.94)	March 2014	(71.87)

The Commission has notified on 28 November, 2011 the Amendment Regulations for recovery of Fuel Adjustment Cost charges from the consumers in a proportionate manner. Accordingly, the Commission has also approved the category wise and slab wise tabulation for recovery of the said FAC charges by BEST from its consumers.

BEST Undertaking has been charging FAC to its consumers based on the difference between the cumulative amount of FAC allowed to be recovered and cumulative recovery made from

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the Consumers. At the end of March 2014, there was accumulated negative FAC of Rs. 296.60 crore which was due for refund to its Consumers. A Petition was filed by BEST Undertaking in Case No. 88 of 2014 for retaining such negative FAC. The Commission vide its Order dated 25 November, 2014 in Case No. 88 of 2014 has directed BEST Undertaking to refund such accumulated negative FAC of Rs. 296.60 crore to its consumers along with interest in seven equal instalments. Accordingly, BEST has refunded the same in seven equal instalments starting from February 2015 to August 2015.

Yours faithfully,

(Dr. Rajendra Ambekar) Director (Tariff), MERC

Encl: Annexure: Detailed Vetting Report for the months of April, 2013 to March, 2014.

Cc as enclosed:

Names and Addresses of Institutional Consumer Representatives:

Prayas Energy Group,	The President,
Amrita Clinic, Athawale Corner,	Mumbai GrahakPanchayat,
Lakdipool-Karve Road Junction,	GrahakBhavan, SantDynyaneshwarMarg,
Deccan Gymkhana, Karve Road,	Behind Cooper Hospital,
Pune 411 004	Vile Parle (West), Mumbai 400 056
The General Secretary,	The President,
Thane Belapur Industries Association,	Vidarbha Industries Association,
Plot No.P-14, MIDC, Rabale Village,	1st floor, UdyogBhawan,
PO Ghansoli, Navi Mumbai 400 701	Civil Lines, Nagpur 440 001
Maharashtra Chamber of Commerce,	
Industry & Agriculture,	
Oricon House, 6 th Floor,	
12k. DubashMarg, Fort, Mumbai- 400001	
(Nashik Branch)	9
Email: maccia.nsk@gmail.com	



Detailed Vetting Report

Date: 27 June, 2016

Post Facto approval of FAC Charges for the months of April, 2013 to March, 2014 submitted by BEST Undertaking

Subject: Post Facto approval of BEST Undertaking's Fuel Adjustment Charges

(FAC) for the period of April, 2013 to March, 2014

Reference: BEST's submission vide letter dated 22 April, 2016 for post facto approval of

FAC for the period April, 2013 to March, 2014.

1. FAC submission by BEST Undertaking:

- 1.1 In terms of the MERC (Terms and Conditions of Tariff) Regulations, 2005 as amended from time to time, a Distribution Licensee is required to obtain post facto approval of the Commission on quarterly basis for the FAC charges. The utility is permitted to bill the FAC charge to its consumer up to a cap of 10% / (20% with effect from September 2012) of its average variable component of tariff.
- 1.2 Further the Commission has issued an Order in Case No. 171 of 2011 dated 16 May 2012 for Approval of BEST's Aggregate Revenue Requirement and Tariff Determination for the FY 2011-12. In the said Order the Commission has revised the Tariff which is applicable from 1 June 2012.
- 1.3 In the said Order the Commission has stated that,

"The existing Fuel Adjustment Cost (FAC) Charge has been equated to zero, on account of the adoption of the existing fuel costs for projection of the fuel expenses. In case of any variation in the fuel prices with respect to these levels, BEST will be able to pass on the corresponding increase to the consumers through the existing FAC mechanism in accordance with the MERC Tariff Regulations, 2005 subject to the stipulated ceiling of 10% of average variable charges, which works out to average of 72.29 paise/KWh and is to be considered in proportion to the variable charges of each category/consumption slab. The FAC will be charged on a monthly basis in proportion to the variable charges of each category/consumption slab, and the details of the computation and recovery from the same will have to be submitted to the Commission for post facto approval, on quarterly basis."

1.4 Further, the Commission had passed an Order in Case No. 63 of 2012 dated 26 August 2012, for Revision in the ceiling for Levy of Fiel Adjustment Cost (FAC) Charges by

Distribution Licensees in the State of Maharashtra under Regulation 82 of the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005 as amended from time to time.

- 1.5 As per the above mentioned Order, the Commission has revised the average FAC Ceiling to 20% of Variable Tariff for all the Distribution Licensees in the State of Maharashtra, to be recovered as per the respective consumer category wise/ slab wise tariff. The revised FAC Ceiling is came into effect for the FAC (to be charged to consumers) from the month of September 2012 onwards.
- 1.6 BEST, in its submission has computed the FAC for the months of April 2013 to August 2013 in accordance with Tariff Order dated 16 May 2012 in Case No. 171 of 2011, for Tariff determination for FY 2011-12 and for the months of September 2013 to March 2014 in accordance with MYT Order dated 28 August, 2013 in Case No. 26 of 2013.
- 1.7 Accordingly, BEST has submitted its FAC submissions along with the supporting documents and has also furnished adequate replies to the queries raised by the Commission.

2. Power Procurement by BEST:

- 2.1 BEST does not own or operate any generating stations. The entire power requirement for distribution to its consumers is procured by BEST though;
 - a) Purchases from Tata Power Company Ltd. (TPC-G)
 - b) Renewable energy procurement(RPS)
 - c) Bilateral contracts and decrements to the imbalance pool.
 - d) Unscheduled Interchanges (Interstate UI)
- 2.2 BEST has submitted its FAC submission giving details of Power Purchase and Sales along with the copies of all supplementary statements, bills etc.
- 2.3 FAC charge of BEST for the said period has been assessed based on FAC formula approved in Tariff Regulations. The methodology adopted for vetting the FAC computations is as follows:

The FAC claim made by BEST is for charging difference in averaged out "change in variable cost of power" every month, arising out of the difference between the "rate approved by the Commission" in the Tariff Order applicable for the concerned period and the "rate actually paid by the Utility". The submission prepared on the above basis has been scrutinized and vetted with due consideration to excessive distribution loss, if any.



3. Change in variable cost of power purchase:

3.1 The variable cost of power procurement approved by the Commission from the month of June 2012 as per Tariff Order for FY 2011-12 (in the matter of approval of Aggregate Revenue Requirement and Tariff for FY 2011-12, Case No. 171 of 2011, issued on 16 May 2012), is Rs. 3.87/kWh. As explained in Tabulation below:

Source	Approved Annual (MU)	Variable Cost (Rs. Crore)	Rate Rs/kWh	Monthly MU	Monthly Variable Cost (Rs. Crore)
TPC-G (Including Unit-8)	5039.48	2027	4.02	419.96	168.97
RPS Power	239.56	116.44	4.86	19.96	9.70
Bilateral Purchase(as per SLDC)	77.23	30.88	4.00	6.44	2.57
UI Purchase (as per SLDC)	(476.37)	(284.85)	5.98	(39.70)	(23.74)
Total Power Purchase	4879.90	1890.13	3.87	406.66	157.51

Note: The approved annual variable cost for purchases from TPC-G is derived by deducting the Approved annual Fixed cost Rs. 381.57 Crore from Total Annual cost Rs. 2409.23 Crore.

3.2 The variable cost of power procurement approved by the Commission from the month of September 2013 as per Multi Year Tariff Order for FY 2012-13 to FY 2015-16 (in the matter of approval of Truing Up of the Aggregate Revenue Requirement for FY 2010-11 and FY 2011-12 and Multi Year Tariff for the second Control Period, Case No. 26 of 2013, issued on 28 August, 2013), is Rs. 3.62/kWh. As explained in Tabulation below:

Source	Approved Annual (MU)	Variable Cost (Rs. Crore)	Rate Rs/kWh	Monthly MU	Monthly Variable Cost (Rs. Crore)
TPC-G (Including Unit-8)	3722.14	1160.19	3.12	310.18	96.68
RPS Power	498.97	279.71	5.61	41.58	23.31
Bilateral Purchase(as per SLDC)	1119.74	493.57	4.41	93.31	41.13
Total Power Purchase	5340.85	1933.47	3.62	445.07	161.12

Note: The approved annual variable cost for purchases from TPC-G is derived by deducting the Approved annual Fixed cost Rs. 601.75 Crore from Total Annual cost Rs. 1761.94 Crore.



3.3 BEST has submitted that it has incurred additional variable costs towards power procurement. The actual variable cost incurred by the BEST Undertaking for the Quarter I to Quarter IV is as follows:

Sr. No	Parameter	Unit	Apr. 13	May. 13	Jun. 13
1	Weighted Average variable cost of power purchase considered by the Commission	Rs/kWh	3.87	3.87	3.87
2	Weighted Average Normative Actual variable cost power purchase for Month	Rs/kWh	4.10	3.98	4.27
3	Change in variable cost of power purchase	Rs/kWh	0.23	0.11	0.39
4	Net Power Purchase	MU	418.50	460.65	422.09
5	Change in variable cost of power purchase	Rs Lakh	965.75	501.79	1658.05

Sr. No	Parameter	Unit	Jul.13	Aug.13	Sep.13
1	Weighted Average variable cost of power purchase considered by the Commission	Rs/kWh	3.87	3.87	3.62
2	Weighted Average Normative Actual variable cost power purchase for Month	Rs/kWh	3.38	2.76	2.89
3	Change in variable cost of power purchase	Rs/kWh	(0.50)	(1.12)	(0.73)
4	Net Power Purchase	MU	432.97	407.99	412.89
5	Change in variable cost of power purchase	Rs Lakh	(2152.78)	(4555.41)	(3005.15)

Sr. No	Parameter	Unit	Oct. 13	Nov. 13	Dec. 13
1	Weighted Average variable cost of power purchase considered by the Commission	Rs/kWh	3.62	3.62	3.62
2	Weighted Average Normative Actual variable cost power purchase for Month	Rs/kWh	2.87	2.93	3.04
3	Change in variable cost of power purchase	Rs/kWh	(0.75)	(0.69)	(0.58)
4	Net Power Purchase	MU	466.81	407.89	380.42
5	Change in variable cost of power purchase	Rs Lakh	(3503.32)	(2824.56)	(2223.43)

Sr. No	Parameter	Unit	Jan. 14	Feb. 14	Mar. 14
1	Weighted Average variable cost of power purchase considered by the Commission	Rs/kWh	3.62	3.62	3.62
2	Weighted Average Normative Actual variable cost power purchase for Monthson	Rs/kWh	2.84	3.10	2.90
3	Change in variable cost of power	Rs/kWh	(0.78)	(0.52)	(0.72)

Sr. No	Parameter	Unit	Jan. 14	Feb. 14	Mar. 14
	purchase				
4	Net Power Purchase	MU	366.72	337.69	396.71
5	Change in variable cost of power purchase	Rs Lakh	(2847.58)	(1765.07)	(2869.59)

4. Adjustment for over recovery/ under recovery:

BEST has submitted the details regarding under recovery/ over recovery of the variable charges for the said months as given in following table

Month	Adjustment Factor (Rs. Lakh)
April 2013	(3,840.21)
May 2013	(1,802.03)
June 2013	(739.33)
July 2013	(5,356.61)
August 2013	524.80
September 2013	910.73
October 2013	(7,509.39)
November 2013	(4,030.61)
December 2013	(2,094.43)
January 2014	(11,012.71)
February 2014	(6,855.17)
March 2014	(4,317.85)

5. Distribution Loss:

In the Tariff Order MYT Order (Case No. 26 of 2013) the Commission has approved allowable Distribution loss at 7%. The cumulative distribution losses for the said period are as shown in Table below:

Month	Cumulative Distribution Losses
April 2013	5.03%
May 2013	6.81%
June 2013	7.79%
July 2013	6.14%
August 2013	6.16%
September 2013	6.39%
October 2013	9.25%
November 2013	10.90%
December 2013	6.79%
January 2014	6.47%
February 2014	6.22%
March 2014	6.01%

As the cumulative distribution loss for the month of June, 2013 is higher than targeted (7.00%) distribution loss, BEST undertaking has deducted Rs. 7.99 lakh corresponding to such higher distribution loss from the FAC leviable to its consumers. However, such deductions on account of higher distribution losses for the month of November and December, 2013 have not been considered as the FAC amount for these months is refundable.

6. The summary of FAC recoverable and carried forward for recovery in future is as follows:

Sr.	Parameter	Unit	Apr.13	May.13	Jun.13
No.	Calculation of FAC (A)				
1.1	Change in variable cost of power purchase (C)	Rs Lakh	965.75	501.79	1,658.05
1.2	Working Capital Interest (I)	Rs Lakh	0.00	0.00	0.00
1.3	Adjustment for (Over Recovery)/Under Recovery (B)	Rs Lakh	(3840.21)	(1802.03)	(739.33)
1.4	FAC(A) = C + I + B	Rs Lakh	(2874.46)	(1300.25)	918.72
2.0	Calculation of FAC _{kWh}				
2.1	Sale within License Area	MU	384.55	405.36	360.30
2.2	Excess T&D Loss	MU	0.00	0.00	3.16
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(74.75)	(32.08)	25.28
2.4	Cap on monthly FAC Charge	Paise/kWh	144.58	144.58	144.58
2.5	FAC Charge (FAC _{kWh}) considering cap on monthly FAC Charge	Paise/kWh	(74.75)	(32.08)	25.28
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(2874.46)	(1300.25)	910.73
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	0.00	0.00	7.99
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	0.00	0.00

Sr. No.	Parameter	Unit	Jul.13	Aug.13	Sep.13
1.0	Calculation of FAC (A)				
1.1	Change in variable cost of power purchase (C)	Rs Lakh	(2152.78)	(4555.41)	(3005.15)
1.2	Working Capital Interest (I)	Rs Lakh	0.00	0.00	0.00
1.3	Adjustment for (Over Recovery)/Under Recovery (B)	Rs Lakh	(5356.61)	524.80	910.73
1.4	FAC(A) = C + I + B	Rs Lakh	(7509.39)	(4030.61)	(2094.43)
2.0	Calculation of FAC _{kWh}	IEGUI.			
2.1	Sale within License Area	ME	396.78	371.89	367.11

Sr. No.	Parameter	Unit	Jul.13	Aug.13	Sep.13
2.2	Excess T&D Loss	MU	0.00	0.00	0.00
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(189.26)	(108.38)	(57.05)
2.4	Cap on monthly FAC Charge	Paise/kWh	144.58	144.58	187.00
2.5	FAC Charge (FAC _{kWh}) considering cap on monthly FAC Charge	Paise/kWh	(189.26)	(108.38)	(57.05)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(7509.39)	(4030.61)	(2094.43)
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	0.00	0.00	0.00
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	0.00	0.00

Sr. No.	Parameter	Unit	Oct.13	Nov.13	Dec.13
1.0	Calculation of FAC (A)				
1.1	Change in variable cost of power purchase (C)	Rs Lakh	(3503.32)	(2824.56)	(2223.43)
1.2	Working Capital Interest (I)	Rs Lakh	0.00	0.00	0.00
1.3	Adjustment for (Over Recovery)/Under Recovery (B)	Rs Lakh	(7509.39)	(4030.61)	(2094.43)
1.4	FAC(A) = C + I + B	Rs Lakh	(11012.71)	(6855.17)	(4317.85)
2.0	Calculation of FAC _{kWh}				
2.1	Sale within License Area	MU	324.89	289.89	459.61
2.2	Excess T&D Loss	MU	0.00	0.00	0.00
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(338.97)	(236.47)	(93.95)
2.4	Cap on monthly FAC Charge	Paise/kWh	187.00	187.00	187.00
2.5	FAC Charge (FAC _{kWh}) considering cap on monthly FAC Charge	Paise/kWh	(338.97)	(236.47)	(93.95)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(11012.71)	(6855.17)	(4317.85)
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	0.00	0.00	0.00
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	0.00	0.00

Sr. No.	Parameter	Unit	Jan.14	Feb.14	Mar.14
1.0	Calculation of FAC (A)				
1.1	Change in variable cost of power purchase (Change)	y RKS Lakh	(2847.58)	(1765.07)	(2869.59)
1.2	Working Capital Interest (I)	Rs Lakh	0.00	0.00	0.00

Sr. No.	Parameter	Unit	Jan.14	Feb.14	Mar.14
1.3	Adjustment for (Over Recovery)/Under Recovery (B)	Rs Lakh	(11012.71)	(6855.17)	(4317.85)
1.4	FAC(A) = C + I + B	Rs Lakh	(13860.29)	(8620.23)	(7187.45)
2.0	Calculation of FAC _{kWh}				
2.1	Sale within License Area	MU	321.13	298.76	366.12
2.2	Excess T&D Loss	MU	0.00	0.00	0.00
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	(431.62)	(288.54)	(196.31)
2.4	Cap on monthly FAC Charge	Paise/kWh	187.00	187.00	187.00
2.5	FAC Charge (FAC _{kWh}) considering cap on monthly FAC Charge	Paise/kWh	(431.62)	(288.54)	(196.31)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	(13860.29)	(8620.23)	(7187.45)
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	0.00	0.00	0.00
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	0.00	0.00

7. Carried forward FAC:

At the end of QIV -FY 2013-14, the FAC to be carried forward for recovery in future months amounts to *Rs. Nil*.

8. Recovery of FAC

BEST has been charging FAC to its consumers based on the difference between the cumulative amount of FAC allowed to be recovered and cumulative recovery made from the Consumers. The following table shows the cumulative FAC that is to be recovered as per the formula and the cumulative FAC that is recovered from consumers for the billing months of November 2012 to April 2013. The difference of these was to be charged by BEST Undertaking in the subsequent billing month

Rs. Lakhs

Particulars	Apr.13	May.13	Jun.13
Standalone FAC for the month (A)	9.66	5.02	16.58
FAC amount recovered from consumers (B)	38.40	18.02	7.39
FAC to be charged in the month (C = C(previous month)+A-B)	(28.74)	(41.75)	(32.56)



Rs. Lakhs

Particulars	Jul.13	Aug.13	Sep.13
Standalone FAC for the month (A)	(21.53)	(45.55)	(30.05)
FAC amount recovered from consumers (B)	24.82	(18.25)	0.00
FAC to be charged in the month (C = C(previous month)+A-B)	(78.91)	(106.21)	(136.26)

Rs. Lakhs

Particulars	Oct.13	Nov.13	Dec.13
Standalone FAC for the month (A)	(35.03)	(28.25)	(22.23)
FAC amount recovered from consumers (B)	0.00	0.00	0.00
FAC to be charged in the month (C = C(previous month)+A-B)	(171.30)	(199.54)	(221.78)

Rs. Lakhs

Particulars	Jan.14	Feb.14	Mar.14
Standalone FAC for the month (A)	(28.48)	(17.65)	(28.70)
FAC amount recovered from consumers (B)	0.00	0.00	0.00
FAC to be charged in the month (C = C(previous month)+A-B)	(250.25)	(267.90)	(296.60)

The BSET Undertaking has levied the FAC for the month of April 2013 to July, 2013 in the billing month of May 2013 to August, 2013 to its consumers. From September, 2013 to March, 2014, BEST Undertaking has not levied/refunded any FAC amount to its consumers.

At the end of March 2014, there was accumulated negative FAC of Rs. 296.60 crore which was due for refund to its Consumers. A Petition was filed by BEST Undertaking in Case No. 88 of 2014 for retaining such negative FAC. The Commission vide its Order dated 25 November, 2014 in Case No. 88 of 2014 has directed BEST Undertaking to refund such accumulated negative FAC of Rs. 296.60 crore to its consumers along with interest in seven equal instalments. Accordingly, BEST has refunded the same in seven equal instalments starting from February 2015 to August 2015.



9. Slab wise and Category wise FAC for the month of April 2013 to July 2013 to be recovered in billing month of May 2012 to August 2013:

Cotogowy	Slabs	FAC to be recovered in billing month (Rs/kWh)				
Category	Siabs	May 2013	June 2013	July 2013	August 2013	
LT Category						
BPL	0-30	0.04	0.01	0.05	-0.04	
LT-I	1-100	0.17	0.07	0.25	-0.16	
	101-300	0.32	0.13	0.47	-0.30	
	301-500	0.45	0.18	0.66	-0.43	
	>501	0.58	0.23	0.85	-0.55	
LT-II(a)	0-500	0.46	0.18	0.68	-0.44	
	>500	0.69	0.27	1.01	-0.65	
LT-II(b)	all units	0.67	0.27	0.99	-0.64	
LT-II(c)	all units	0.68	0.27	1.00	-0.65	
LT-III	0-500	0.44	0.17	0.64	-0.42	
	>500	0.61	0.24	0.90	-0.58	
LT-IV(a)	all units	0.55	0.22	0.80	-0.52	
LT-IV(b)	all units	0.54	0.21	0.79	-0.51	
LT-V	all units	0.99	0.39	1.45	-0.94	
LT-VI	all units	0.48	0.19	0.70	-0.45	
LT-VII(a)	all units	0.27	0.11	0.40	-0.26	
LT-VII(b)	all units	0.79	0.31	1.16	-0.75	
LT-VIII	all units	0.26	0.10	0.38	-0.25	
LT-IX(a)	all units	0.57	0.23	0.84	-0.54	
LT-IX(b)	all units	0.57	0.23	0.84	-0.54	
HT Category					1	
HT –I	all units	0.50	0.20	0.73	-0.47	
HT –II	all units	0.53	0.21	0.78	-0.51	
HT –III	all units	0.29	0.11	0.42	-0.27	
HT –IV	all units	0.73	0.29	1.07	-0.69	
HT-V	all units	0.47	0.19	0.69	-0.45	

