

To CE (EITC)
Receipt No. 2007
Date 02-MAR-2017
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CHHATTISGARH STATE POWER GENERATION COMPANY LIMITED
(A Govt. of C.G. Undertaking)

Office of the Chief Engineer (C&CP)

NO. 03-09/ Bills-15/109

Raipur Dtd: 28-Feb-2017

To,

The Executive Director (Commercial)
4th Floor Vidyut Seva Bhawan
CSPDCL, Raipur

Sub: Fuel Cost Adjustment calculation for the 5th Bi-Monthly period of FY 2016-17.

Ref: 1) CSERC MYT Regulations 2015.
2) CSERC tariff order dtd. 30/04/2016

In compliance to the CSERC vide order referred above, please find enclosed herewith FCA Calculation amounting to Rs. of **1,640,683,658** /- for the 5th Bi-Monthly period of FY - 2016 - 17 (Dec. 2016 & Jan. 2017). As per CSERC order the above FCA amount shall be cla in two installment w.e.f. **Apr-17**

Chief Engineer (C&CP)
CSPGCL: Raipur

Copy to :-

1. The Secretary, Chhattisgarh State Electricity Regulatory Commission, New Shanti Nagar Raipur. In compliance to directives given in tariff order dtd. 23/05/2015.
2. The E.D. (Fin) CSPGCL, Raipur
3. The C.E. (EITC) CSPDCL, Raipur. -- Kindly upload the same in Company web site (cspc.co.in/cspgcl) under the link Fuel Cost Adjustment- 5th Bi Monthly (Dec 2016 to Jan 2017)
4. The S.O. to M.D. CSPGCL, Raipur
5. The S.O. to M.D. CSPDCL, Raipur
6. The Manager (B&CM) CSPGCL, Raipur

FORMAT-I

Details/Information for Computation of Energy Charge Rates

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : Korba (East) Thermal Power Station - KTPS

	Description	Unit	Considered in Tariff order	For Month of Dec-16	For Month of Jan-17	Total for period
a	Quantity of Coal / Lignite supplied by Coal/Lignite Company	(MMT)		0.17943285	0.16820425	
b	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)				
c	Coal supplied by Coal/Lignite Company (a+b)	(MMT)		0.179432850	0.168204250	
d	Normative Transit & Handling Losses	%	1.15%	1.15%	1.15%	
e	Normative Transit & Handling Losses (cXd)	(MMT)		0.002063478	0.001934349	
f	Net coal / Lignite Supplied (c-e)	(MMT)		0.177369372	0.166269901	
g	Amount charged by the Coal / Lignite Company	(Rs.)		25,89,96,837.76	24,36,40,383.02	
h	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)			6,53,45,439.07	
i	Net amount Charged by Coal Company (g+h)	(Rs.)		25,89,96,837.76	30,89,86,322.09	
j	Rate of Coal for the period Charged by Coal Company = (i/(f*10^6))	Rs/MT		1480.211731	1858.34189	
k	Rate of Bonus payable to Coal Company	Rs/MT				
l	Net Rate of coal payable to coal compnay (j+k)	Rs/MT	1,227.76	1480.211731	1858.34189	
m	Transportation Charge per Ton	Rs/MT	177.98	177.98	177.98	
n	Landed Price of Coal per MT (l+m)	Rs./MT	1,405.74	1638.191731	2036.32189	
o	Average GCV of coal / Lignite as fired as per tariff order	(kCal/Kg)	2,967	2,967	2,967	
p	Normative SHR	Kcal/ KWh	3,110	3,110	3,110	
q	Normative Specific Oil Consumption	ml/ KWh	2.00	2.00	2.00	
r	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10	
s	Normative Auxiliary Consumption	%	11.25	11.25	11.25	
t	ECR for the Period= ((p-(qxr))/(0)*(n/1000))/(1-s)	Rs/ KWh	1.650	1.922	2.390	
u	ECR as considered in Tariff order	Rs/ KWh	1.650	1.650	1.650	
v	Change in ECR (t-u)	Rs/ KWh		0.272	0.740	
w	Net Generation during the Period	KWh		15,37,30,750	11,84,20,750	
aa	FCA Claim for the Period (vXw)	Rs		4,18,14,764	8,76,31,355	12,94,46,119

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Details/Information for Computation of Energy Charge Rates

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : Korba (West) Thermal Power Station - HTPS

	Description	Unit	Considered in Tariff order	For Month of Dec-16	For Month of Jan-17	Total for period
a	Quantity of Coal / Lignite supplied by Coal/Lignite Company	(MMT)		0.398985	0.493120	
b	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)				
c	Coal supplied by Coal/Lignite Company (a+b)	(MMT)		0.398985	0.493120	
d	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%	
e	Normative Transit & Handling Losses (cXd)	(MMT)		0.000797970	0.000986240	
f	Net coal / Lignite Supplied (c-e)	(MMT)		0.398187030	0.492133760	
g	Amount charged by the Coal / Lignite Company	(Rs.)		63,86,25,954.53	79,09,07,644.95	
h	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)		13,44,73,970.24	1,19,40,735.06	
i	Net amount Charged by Coal Company (g+h)	(Rs.)		77,43,99,924.87	80,28,48,380.01	
j	Rate of Coal for the period Charged by Coal Company = (i/(f*10^6))	Rs/MT		1944.814538	1631.362132	
k	Rate of Bonus payable to Coal Company	Rs/MT				
l	Net Rate of coal payable to coal company (j+k)	Rs/MT	1,214.25	1944.814538	1631.362132	
m	Transportation Charge per Ton	Rs/MT	80.75	80.75	80.75	
n	Landed Price of Coal per MT (l+m)	Rs./MT	1,295	2,025.56	1,712.11	
o	Average GCV of coal / Lignite as fired as per tariff order	(kCal/Kg)	3,356	3,356	3,356	
p	Normative SHR	Kcal/ KWh	2,650	2,650	2,650	
q	Normative Specific Oil Consumption	ml/ KWh	0.80	0.80	0.80	
r	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10	
s	Normative Auxiliary Consumption	%	9.70	9.70	9.70	
t	ECR for the Period= ((p-(qxr))/(0*(n/1000))/(1-s)	Rs/ KWh	1.129	1.766	1.493	
u	ECR as considered in Tariff order	Rs/ KWh	1.129	1.129	1.129	
v	Change in ECR (t-u)	Rs/ KWh		0.637	0.364	
w	Net Generation during the Period	KWh		41,74,78,210	47,69,97,240	
x	FCA Claim for the Period (vXw)	Rs		26,59,33,620	17,36,26,995	43,95,60,615

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Details/Information for Computation of Energy Charge Rates

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : - 1x500 MW KW Extn

	Description	Unit	Considered in Tariff order	For Month of Dec-16	For Month of Jan-17	Total for period
a	Quantity of Coal / Lignite supplied by Coal/Lignite Company	(MMT)		0.196515	0.242880	
b	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)				
c	Coal supplied by Coal/Lignite Company (a+b)	(MMT)		0.196515	0.242880	
d	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%	
e	Normative Transit & Handling Losses (cXd)	(MMT)		0.000393030	0.000485760	
f	Net coal / Lignite Supplied (c-e)	(MMT)		0.196121970	0.242394240	
g	Amount charged by the Coal / Lignite Company	(Rs.)		31,51,87,410.51	38,96,51,528.63	
h	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)		6,58,92,803.87	58,80,257.57	
i	Net amount Charged by Coal Company (g+h)	(Rs.)		38,10,80,214.38	39,54,32,784.20	
j	Rate of Coal for the period Charged by Coal Company = (i/(f*10^6))	Rs/MT		1943.077639	1631.362132	
k	Rate of Bonus payable to Coal Company	Rs/MT				
l	Net Rate of coal payable to coal company (j+k)	Rs/MT	1,214.25	1943.078	1631.362	
m	Transportation Charge per Ton	Rs/MT	80.75	80.75	80.75	
n	Landed Price of Coal per MT. (l+m)	Rs./MT	1,295	2,023.83	1,712.11	
o	Average GCV of coal / Lignite as fired as per tariff order	(KCal/Kg)	3,356	3,356	3,356	
p	Normative SHR	Kcal/ KWh	2,375	2,375	2,375	
q	Normative Specific Oil Consumption	ml/ KWh	0.50	0.50	0.50	
r	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10	
s	Normative Auxiliary Consumption	%	5.25	5.25	5.25	
t	ECR for the Period= ((p-(qxr))/(0)*(n/1000))/(1-s)	Rs/ KWh	0.965	1.508	1.276	
u	ECR as considered in Tariff order	Rs/ KWh	0.965	0.965	0.965	
v	Change in ECR (t-u)	Rs/ KWh		0.543	0.311	
w	Net Generation during the Period	KWh		34,37,13,000	34,84,87,000	
x	FCA Claim for the Period (vXw)	Rs		18,66,36,159	10,83,79,457	29,50,15,616

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Details/Information for Computation of Energy Charge Rates

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : Dr. Shyamā Prasad Mukharjee Thermal Power Station - DSPM TPS

	Description	Unit	Considered in Tariff order	For Month of Dec-16	For Month of Jan-17	Total for period
a	Quantity of Coal / Lignite supplied by Coal/Lignite	(MMT)		0.23440986	0.23865740	
b	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)				
c	Coal supplied by Coal/Lignite Company (a+b)	(MMT)		0.23440986	0.23865740	
d	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%	
e	Normative Transit & Handling Losses (cXd)	(MMT)		0.000468820	0.000477315	
f	Net coal / Lignite Supplied (c-e)	(MMT)		0.233941040	0.238180085	
g	Amount charged by the Coal / Lignite Company.	(Rs.)		395798978.90	40,18,96,679.35	
h	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)		7,31,33,275.29		
i	Net amount Charged by Coal Company (g+h)	(Rs.)		46,89,32,253.59	40,18,96,679.35	
j	Rate of Coal for the period Charged by Coal Company = (i/(fX10^6))	Rs/MT		2004.48905	1687.364749	
k	Rate of Bonus payable to Coal Company	Rs/MT				
l	Net Rate of coal payable to coal compnay (j+k)	Rs/MT		2004.48905	1687.364749	
m	Transportation Cost Paid to railways	Rs		45860488.00	49446084.00	
n	Transportation Charge rate paid to Railways (m/(fX10^6))	Rs/MT		196.03	209.28	
o	Other Charges (per Ton) towards transportation	Rs/MT				
p	Total per ton Transportation Charges (n+o)			196.03	209.28	
q	Landed Price of Coal per MT ((l+p)	Rs./MT	1,525.70	2200.52	1896.64	
r	Average GCV of coal / Lignite as fired as per tariff order	(kCal/Kg)	3,280.29	3280.29	3280.29	
s	Normative SHR	Kcal/ KWh	2,500	2,500	2,500	
t	Normative Specific Oil Consumption	ml/ KWh	0.50	0.50	0.50	
u	GCV of Secondary Fuel (Oil)	Kcal/ml	10.00	10.00	10.00	
v	Normative Auxilliary Consumption	%	9.00	9.00	9.00	
w	ECR for the Period= ((s-(txu))/(r)*(q/1000))/(1-v)	Rs/ KWh	1.275	1.839	1.585	
x	ECR as considered in Tariff order	Rs/ KWh	1.275	1.275	1.275	
y	Change in ECR (w-x)	Rs/ KWh		0.564	0.310	
z	Net Generation during the Period	Kwh		31,37,48,000	31,54,87,250	
aa	FCA Claim for the Period (yX z)	Rs		* 17,69,53,872	9,78,01,048	27,47,54,920

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Details/Information for Computation of Energy Charge Rates

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : Marwa Thermal Power Plant : MTPP

	Month	Unit	Considered in Tariff order	For Month of Dec-16	For Month of Jan-17	Total for period
a	Quantity of Coal / Lignite supplied by Coal/Lignite Company	(MMT)	-	0.27392036	0.25136721	
b	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)	-			
c	Coal supplied by Coal/Lignite Company (a+b)	(MMT)		0.27392036	0.25136721	
d	Normative Transit & Handling Losses	%	0.80%	0.80%	0.80%	
e	Normative Transit & Handling Losses (cXd)	(MMT)		0.002191363	0.002010938	
f	Net coal / Lignite Supplied (c-e)	(MMT)		0.271728997	0.249356272	
g	Amount charged by the Coal / Lignite Company	(Rs.)		65,84,84,552.79	61,68,80,737.49	
h	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)				
i	Net amount Charged by Coal Company (g+h)	(Rs.)		65,84,84,552.79	61,68,80,737.49	
j	Rate of Coal for the period Charged by Coal Company = (i/(fX10 ⁶))	Rs/MT		2423.313522	2473.893007	
k	Rate of Bonus payable to Coal Company	Rs/MT				
l	Net-Rate of coal payable to coal company (j+k)	Rs/MT		2423.313522	2473.893007	
m	Transportation Cost Paid to railways	Rs		5,83,37,165.00	5,28,48,783.00	
n	Transportation Charge rate paid to Railways (m/(fX10 ⁶))	Rs/MT		214.69	211.94	
o	Other Charges (per Ton) towards transportation	Rs/MT				
p	Total per ton Transportation Charges (n+o)			214.69	211.94	
q	Landed Price of Coal per MT ((l+p)	Rs./MT	1,535	2,638	2,686	
r	Average GCV of coal / Lignite as fired as per tariff order	(kCal/Kg)	3,280.29	3,280.29	3,280.29	
s	Normative SHR	Kcal/ KWh	2,378	2,378	2,378	
t	Normative Specific Oil Consumption	ml/ KWh	0.50	0.50	0.50	
u	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10	
v	Normative Auxilliary Consumption	%	5.25	5.25	5.25	
w	ECR for the Period= ((s-(tu))/(r)*(q/1000)/(1-v)	Rs/ KWh	1.2	2.014	2.051	
x	ECR as considered in Tariff order	Rs/ KWh	1.20	1.20	1.20	
y	Change in ECR (w-x)	Rs/ KWh		0.814	0.851	
z	Net Generation during the Period	Kwh		29,75,22,500	30,51,97,500	
aa	FCA Claim for the Period (yX z)	Rs		24,21,83,315	25,97,23,073	50,19,06,388

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Fuel Cost Adjustment calculation for the 5th Bi-Monthly period of FY 2016-17.

All Figures in Rs.

Name of Plant	Dec-16	Jan-17	Total
KTPS	41,814,764	87,631,355	129,446,119
HTPS	265,933,620	173,626,995	439,560,615
DSPM TPS	176,953,872	97,801,048	274,754,920
KW Extn	186,636,159	108,379,457	295,015,616
MTTPS	242,183,315	259,723,073	501,906,388
Total	913,521,730	727,161,928	1,640,683,658

Fuel Cost Adjustment calculation for the 5th Bi-Monthly period of FY 2016-17.

1,640,683,658

RUPEES ONE HUNDRED SIXTY FOUR CRORES SIX LAKHS EIGHTY THREE THOUSAND SIX HUNDRED FIFTY EIGHT ONLY

As per CSERC order the above amount of FCA shall be claimed as mentioned below:-

Month	KTPS	HTPS	DSPM TPS	KW Extn	MTTPS	Total
Apr-17	64,723,059	219,780,307	137,377,460	147,507,808	250,953,195	820,341,829
May-17	64,723,060	219,780,308	137,377,460	147,507,808	250,953,193	820,341,829
Total	129,446,119	439,560,615	274,754,920	295,015,616	501,906,388	1,640,683,658

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