

U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th Floor, Shakti Bhawan Extn., Lucknow
GST Reg. No. 09AAACU4749D2Z9

Main Bill : (1-11-2020)

Bill Date : 30 Days from the billing date
Due Date : (i) UPERC Tariff Order DL29.04.2016 & 18.01.2017
(ii) UPERC Gen Reg-19 Dt. 11.09.2019
(iii) PPA for various Thermal Power Stations.

Oct-20
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAACU5088M4ZM

GST Reg. No.

Provisional Main Energy Bill of UPRVUNL to UPPCL for Anpara A, Anpara B, Anpara D, Obra B, Parichha Extn Stage-2, Hardoungani & Hardoungani Extn on Schedule Generation (SG).

Projects	Approved Plant Capacity as per UPERC T.O.	No. of Months	Com. Plant Availability Target by UPERC	Actual bill month as of April 2020	Total capacity charges approved by UPERC	Percentage to be recovered	Capacity charges (Fixed Charges)		Annual Cumulative Capacity Charges corresponding to last month (ACC-)	Scheduled Generation by SLDC Energy Sent Out by Plants	Energy Charges (EC)		Total Energy Charges	Total Amount Capacity Charges
							Amount of annual capacity charges corresponding to Column 6 (ACC-)	Amount of annual capacity charges payable for the month (ACC-)			Energy Charge Rate (ECR)	Energy Charges		
	(MW)	#	(%)	1-4	(Rs. Cr.)	(%)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(MWh)	(Rs/Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)
Anpara 'A'	630	7	85	67.82	306.96	79.79	244.9233840	18.8447860	248.0543760	257.966488	1.87	48.2397327	67.0845187	
Anpara 'B'	1000	7	85	87.23	307.88	100.00	307.8800000	25.6566667	307.8800000	633.292005	1.62	102.5933048	128.2499715	
Anpara 'D'	1000	7	85	48.79	1088.75	57.40	624.9425000	52.7317917	623.6360000	339.190993	1.44	48.8438030	101.5752947	
Obra 'B'	1000	7	80	58.42	421.89	73.03	308.1062670	28.7975083	301.8022950	411.347348	1.52	62.5247969	91.3223052	
Hardoungani Extn	500	7	85	88.43	537.38	100.00	532.3800000	44.3650000	532.3800000	193.594793	2.67	51.6898097	96.0548097	
Parichha Extn.	420	7	85	87.23	333.66	100.00	333.6600000	27.8050000	333.6600000	85.346203	3.21	27.3961312	55.2011312	
Par. Extn. Stage2	500	7	85	93.63	498.79	100.00	498.7900000	41.5658333	498.7900000	121.560525	3.21	38.9567285	80.5225618	
Hardoungani (U#7)	105	7	65	23.14	78.98	35.60	28.1168800	-0.0381737	32.8793740	0.000000	3.47	0.0000000	-0.0381737	
	5155				3569.29		2878.7990310	239.7284123	2879.1420450	2042.0983520		380.2440068	619.9724191	
TCS 0.075% as per New Clause no. 206 C (1H) of Finance Bill 2020														0.464679314
Total Amount Payable														620.4373984

(Rs. Six hundred and twenty crore, forty three lacs, seventy three thousand, nine hundred and eighty four only)

From Commulative Availability Sheet
Column No. 6 : If Col. No. 4 is less than Col No.3, then (Col. No.4/Col. No. 3)*100% else 100%
Column No. 8 : Computed as per UPERC Generation Regulation 2019, dt 11.09.2019 para 25. for n month-(acc-)/(a-1)*100%
Effective Annual Capacity charges on 2% ROE of Hardoungani (U#7) TPS having capacity 105 MW due to deletion of L205 as per O.M. No. 592/CE(TO)/Hardoungani dt. 15.07.2017-124.1)*105/165-78.98 Cr.
Effective Annual Capacity charges on 2% ROE of Anpara 'D' TPS as per calculation sheet of Verified Bill of March 18 by UPPCL letter no. 15/12/EIE&PC/UPRVUNL/J-4, dt. 05.05.2018 is Rs 1088.75 Cr.

Prepared as per DC/SG received from ABT/SLDC & Bill from TPS
Checked as per DC/SG received from ABT/SLDC & Bill from TPS
Verified as per DC/SG received from ABT/SLDC & Bill from TPS

(Saurabh Grover)
EA (Comm.)

(Ritu Singh)
AE (Comm.)

(Ritu Singh)
Accounts Officer

(Ritu Singh)
Accounts Officer

(Ritu Singh)
Accounts Officer

(Ritu Singh)
Accounts Officer

Month	Days Comm. N	MW	AUX ₁ 6.30		AUX ₂ 6.5		AUX ₃ 6.55		AUX ₄ 6.55		AUX ₅ 6.25		AUX ₆ 6.25		AUX ₇ 6.25		Cum Ave (%)	Cum Ave (%)
			Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)		
Apr-20	30	307.0860000	12795	12795	73.99	632.033150	26335	26335	93.94	301.654625	12569	12569	44.69	432.018750	18001	18001	66.45	
May-20	31	315.625750	13151	25946	73.79	496.153225	20673	47008	82.46	332.737250	13864	20433	46.22	351.065750	14628	32629	59.24	
June-20	30	318.257000	13261	39207	74.74	608.867750	25569	72377	88.11	336.777875	14032	40465	47.43	342.416500	14267	46896	57.07	
July-20	31	330.232250	13760	52967	75.32	590.581800	24608	96985	85.07	348.085438	14504	54969	48.06	315.055750	13127	60023	54.48	
Aug-20	31	254.728250	10614	63581	72.09	567.449000	23644	120629	84.37	348.181125	14508	69477	48.44	411.612000	17151	77174	55.86	
Sept-20	30	213.237500	8885	72466	68.69	647.060750	26961	147590	86.30	337.447875	14050	85537	48.69	417.855500	17411	94585	57.24	
Oct-20	31	268.741250	11198	83664	67.82	614.601240	26858	174448	87.23	344.575113	14357	97894	48.79	439.277000	18303	112888	58.42	
Nov-20	30	244																
Dec-20	31	275																
Jan-21	31	306																
Feb-21	28	314																
Mar-21	31	365																
Total		2007.9090000												2709.301250				

Month	Days Comm. N	MW	AUX ₁ 5.5		AUX ₂ 5.5		AUX ₃ 5.5		AUX ₄ 5.5		AUX ₅ 5.5		AUX ₆ 5.5		AUX ₇ 5.5		Cum Ave (%)	Cum Ave (%)	
			Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)	Declared Cap (MW)	Cum Decl. Cap (MW)			
Apr-20	30	68.414400	2851	2851	100.01	295.618750	12317	12317	90.23	137.589600	5733	5733	50.00	323.838125	13494	13494	98.86		
May-20	31	44.493175	1854	4705	81.17	212.686375	8862	21179	76.31	211.889050	8829	14562	62.46	320.993750	13375	26869	96.81		
June-20	30	91	0.000000	0	4705	54.41	301.757500	12573	37522	81.52	271.299400	11304	25866	74.37	303.987500	12666	39535	95.48	
July-20	31	122	0.00000000	0	4705	40.58	280.937500	11706	45458	81.89	265.893625	11079	36945	79.23	284.027875	11834	51369	92.84	
Aug-20	31	153	0.000000	0	4705	32.36	326.953250	13623	59081	84.87	280.619100	11692	48637	83.17	333.948125	13915	65284	93.78	
Sept-20	30	183	0.00000000	0	4705	27.06	315.173250	13132	72213	86.73	272.339150	11347	59984	85.76	298.843125	12452	77736	93.36	
Oct-20	31	214	0.00000000	0	4705	23.14	333.476250	13895	86108	88.43	272.743050	11364	71348	87.23	322.317000	13430	91166	93.63	
Nov-20	30	244																	
Dec-20	31	275																	
Jan-21	31	306																	
Feb-21	28	334																	
Mar-21	31	365																	
Total		112.007515												2066.604875					

Cumulative Availability (%) = $10000 \times DC / (N \times I \times C \times (100 - A \times N_{a1}))$

DC = Average declared capacity for the 1st day of the period in MW.
 N = Number of days during the period, and
 A = Normative Auxiliary Energy Consumption as a percentage of gross generation.

Availability have been calculated as per new Auxiliary Consumption norms as per L 01.04.2019 for MYT 2019-24 specified by UPERC. (Terms & conditions of Generation Tariff) Regulation 2019, dt. 11.09.2019.

Signature
 EA (Comml.)

Signature
 AE (Comml.)

Signature
 11.11.2020
 #EComml - SEC Com

U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th Floor, Shakti Bhawan Extn.,
Lucknow - 226001

GST Reg. No.- 09AAAACU4749DZ9

October, 2020
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAAACU5085M4ZM

Bill of supply of Power for Month:
Name of Customer :-

GST Reg. No:

FCA Bill No.-
Bill Date-
Due Date
Reference-

UN/FCA/2020-1002
11.11.2020
30 Days from the billing date
(i) UPERC Tariff Order Dt. 29.04.2016 & 18.01.2017
(ii) UPERC Gen Regn., 2019 Dt. 11.09.2019
(iii) Fuel data from Plants (certified by Cost Accountant)

Provisional Fuel Cost Adjustment Bill due to variation in Cost & GCV of fuel of Parichin 'B' and 'C' TPS of UPRVNL for the month of Oct-2020 raised to UPPCL as per UPERC Gen. Tariff Regn., 2019 Dt. 11.09.2019

S.No.	Parameters	Unit	Parichin 'B'	Parichin 'C'	Total
A	Energy Exported & Billed (ESO)	MU	14384	14586	28970
B	Normative Operating Parameters				
C	Gross Station Heat Rate (GSHR)	Kcal/kwh	2430	2430	2430
D	Sp. Oil Cons.	ml/kwh	0.50	0.50	0.50
E	Auxiliary Energy Consumption	%	9.00	9.00	9.00
F	Fuel Data for the month				
G	Price of Primary fuel (Coal)	Rs. kg	4.73282	4.73282	4.73282
H	Price of Secondary fuel (Oil)	Rs. ml	0.03469024	0.03469024	0.03469024
I	Gross Calorific Value of Primary fuel (Coal)	Kcal/kg	3575.00	3575.00	3575.00
J	Gross Calorific Value of Secondary fuel (Oil)	Kcal/kg	3490.00	3490.00	3490.00
K	Formula of ECR				
L	Energy Charge Rate for the month (ECR)	Rs./kwh	9608.59	9608.59	9608.59
M	Already claimed energy charge rate (ECR1)	Rs./kwh	3.6332	3.6332	3.6332
N	Diff in ECR (J-K)	Rs./kwh	3.2100	3.2100	3.2100
O	Amount of Energy Charge due to variation in fuel data (ASL)/10	Rs./kwh	0.4232	0.4232	0.4232
P	TCS 0.075% as per New Clause no. 206 C (1H) of Finance Bill 2020 (M*0.075/100)	Rs./kwh	3.6118513	3.6118513	3.6118513
Q	Total FCA Billed Amount (Cr) (M+N)				8.7478287
					0.0065609
					8.7543896

(Rs Eight crore, seventy five lacs, forty three thousand, eight hundred and ninety six only)

Normative Parameters have been taken as per UPERC Generation Tariff Regulation-2019, dt. 11.09.2019 for various TPS of UPRVNL

Prepared as per ESO/SG & Bills /Fuel data received from TPS

Sarabjit Grover
EA (Comm.)

Groga Pandey
Accountant

Checked as per ESO/SG & Bills /Fuel data received from TPS

Verified as per ESO/SG & Bills /Fuel data received from TPS

S.K. Yadav
AE (Comm.)

S.K. Yadav
AE (Comm.)

Khyati Singh
Accounts Officer

S.K. Yadav
AE (Comm.)

S.K. Yadav
AE (Comm.)

U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th Floor, Shakti Bhawan Extn.,
Lucknow - 226001

GST Reg. No. 09AAACU4749D2Z9

October, 2020
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAACU5088M4ZM

Bill of supply of Power for Month:
Name of Customer :-

FCA Bill No.:-
Bill Date:-
Due Date:-
Reference:-

UNL/FCA/2020-1002A
28.11.2020
30 Days from the billing date
(i) UPERC Tariff Order Dt. 29.04.2016 & 18.01.2017
(ii) UPERC Gen Regn., 2019 Dt. 11.09.2019
(iii) Fuel data from Plants (certified by Cost Accountant)

Provisional FCA Bill due to variation in Cost & GCV of fuel of Anpara A, B & D of UPRVUNL for the month of October-2020 raised to UPPCL as per UPERC Gen. Tariff Regn., 2019 Dt. 11.09.2019

S.No.	Parameters	Symbol	Unit	Anpara A	Anpara B	Anp D	Total	
A	Energy Exported & Billed (ESO)	ESD	MU	257.966485	633.292005	339.190993	1230.449483	
B	Normative Operating Parameters							
C	Gross Station Heat Rate (GSHR)	H	Kcal/kwh	2430	2390	2374		
D	Sp. Oil Cons.	(Qsh)	ml/kwh	0.50	0.50	0.50		
E	Auxiliary Energy Consumption	AUXa	%	8.50	6.55	6.25		
F	Fuel Data for the month							
G	Price of Primary fuel (Coal)	Pp	Rs/kg	2.49640	2.47332	2.52692		
H	Price of Secondary fuel (Oil)	Ps	Rs/ml	0.04196473	0.04196473	0.04196473		
I	Gross Calorific Value of Primary fuel (Coal)	Cp	Kcal/kg	3366.00	3658.00	3825.00		
J	Gross Calorific Value of Secondary fuel (Oil)	Cs	Kcal/ltr	9584.34	9584.34	9584.34		
K	Formula of ECR	ECR	Rs/kwh	$ECR = 100(Pp * H - (Qsh) * C_s) / (1000) * C_p + P_s * (Q_{sh}) / (100 * A_{UXa})$	2.0396	1.7893	1.7298	
L	Energy Charge Rate for the month (ECR)	ECR1	Rs/kwh	1.8700	1.6200	1.4400		
M	Already claimed energy charge rate (ECR1)	ECR2	Rs/kwh	0.1696	0.1693	0.2898		
N	Diff in ECR (2-K)		Rs/Crs	4.3751116	10.7216336	9.8297550	24.9265002	
O	Amt. of Energy Charge due to variation in fuel data (ASL)/10		Rs/Crs				0.0186949	
	TCS 0.075% as per New Clause no. 206 C (1H) of Finance Bill 2020. (M*0.075/100)						24.9451951	
	Total FCA Billed Amount (Cr) (M+N)							

(Rs Twenty four crore, ninety four lacs, fifty one thousand, nine hundred and fifty one only)

Normative Parameters have been taken as per UPERC Generation Tariff Regulation-2019, dt. 11.09.2019 for various TPS of UPRVUNL. FCA Bill for Panchha 'B' & 'C' for the month October 2020 has already been sent. FCA Bill of Obra 'B' and Harduaganj Extn. TPS could not be prepared due to non receipt of Certified Fuel Data for October 2020 till date.

Prepared as per ESO/SG & Bills. Fuel data received from TPS

Checked as per ESO/SG & Bills. Fuel data received from TPS

Verified as per ESO/SG & Bills. Fuel data received from TPS

[Signature]
28/11/2020
(R. K. Jaiswal)
EA (Commnl.)

[Signature]
28/11/2020
(Gagan Pandey)
Accountant

[Signature]
28/11/2020
(Khayati Singh)
Accounts Officer

[Signature]
28/11/2020
(Hari Shyam)
SH (Commnl.)

U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th Floor, Shakti Bhawan Extn.,
Lucknow - 226001

GST Reg. No.- 09AAACU4749D2Z9

October, 2020
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAACU5088M4ZM

Bill of supply of Power for Month:
Name of Customer :

GST Reg. No:

FCA Bill No.-
Bill Date-
Due Date
Reference-

UNL/FCA/2020-1002B
10.12.2020
30 Days from the billing date
(i) UPERC Tariff Order Dt. 29.04.2016 & 18.01.2017
(ii) UPERC Gen Regu., 2019 Dt. 11.09.2019
(iii) Fuel data from Plants (certified by Cost Accountant)

Provisional FCA Bill due to variation in Cost & GCV of fuel of Obra-B & Harduaganj Exn TPS of UPRVNL for the month of October-2020 raised to UPPCL as per UPERC Gen. Tariff Regn., 2019 Dt. 11.09.2019

S.No.	Parameters	Symbol	Unit	Obra B	Harduaganj Extn.	Total
A	Energy Exported & Billed (ESO)	ESO	MU	411.347348	193.594793	604.942141
B	Normative Operating Parameters	H	Kcal/kwh	2755	2430	
C	Gross Station Heat Rate (GSHR)	(Qs)in	ml/kwh	2.10	0.50	
D	Sp. Oil Cons.	AUXn	%	9.70	9.00	
E	Auxiliary Energy Consumption					
F	Fuel Data for the month					
G	Price of Primary fuel (Coal)	Pp	Rs. kg	3.34787	4.69645	
H	Price of Secondary fuel (Oil)	Ps	Rs. mf	0.04644814	0.04320115	
I	Gross Calorific Value of Primary fuel (Coal)	Cp	Kcal/kg	3583.00	3542.00	
J	Gross Calorific Value of Secondary fuel (oil)	Cs	Kcal/ltr	9656.00	10570.00	
K	Formula of ECR	ECR	Rs./kwh	3.0065	3.6436	
L	Energy Charge Rate for the month (ECR)	ECR1	Rs./kwh	1.5200	2.6700	
M	Already claimed energy charge rate (ECR1)	ECR2	Rs./kwh	1.4865	0.9736	
N	Drift in ECR (J-K)					
O	Amt. of Energy Charge due to variation in fuel data (A x L) / 10		Rs. Crs	61.1467833	18.8483890	79.9951723
P	TCS 0.075% as per New Clause no. 206 C (1H) of Finance Bill 2020 (M*0.075/100)					0.0599964
Q	Total FCA Billed Amount (Cr) (M+N)					80.0551687

(Rs Eighty Crore, Five Lacs, Fifty One Thousand, Six Hundred and Eighty Seven only)

Normative Parameters have been taken as per UPERC Generation Tariff Regulation-2019, dt. 11.09.2019 for various TPS of UPRVNL. FCA Bill for Parichha 'B' & 'C', Anpara- 'A', 'B' 'D' for the month October-2020 have already been sent. FCA Bill of Obra B and Harduaganj Extn. TPS are delayed in waiting of CA Certified Fuel Data for October-2020 from Power Stations.

Prepared as per ESO/SG & Bills /Fuel data received from TPS

Checked as per ESO/SG & Bills /Fuel data received from TPS

Verified as per ESO/SG & Bills /Fuel data received from TPS

Prepared by
10/12/2020
(R. K. Jaiswal)
EA (Comm.)

Checked by
10/12/2020
(Gagan Pradeep)
Accountant

Verified by
10/12/2020
(Har. Shyam)
SE (Comm.)

Rate of Variable Cost for MOD w.e.f. 15.12.2020 as per UPERC Order dt. 21.06.2016 against Petition no.- 1070/2015 according to Energy/FCA Bill for the month of Oct'2020

Project	Approved Capacity as per UPERC T.O.#	No. of Months	Target Availability by UPERC #	Commutative Availability %	Total capacity charges at 15.5% Staff	Percentage to be recovered	Amount of annual capacity charges at 15.5% Staff corresponding to Column 6	Total capacity charges at 15.5% Staff	Amount of annual capacity charges at 2% Staff corresponding to Column 6	Total capacity charges at 2% Staff	Energy Charge per MWh Energy MWh	Variables Charge as per PCA Bill **	Total Variable Cost - Forgoing Fixed Cost	Scheduled Generation by SLDC/ Energy State Out by Plants #	Revised Rate of Variable Cost for MOD
	(MW)		(%)	(%)	(Rs. Cro)	(%)	(Rs. Cro)	(Rs. Cro)	(Rs. Cro)	(Rs. Cro)	(Rs. Cro)	(Rs. Cro)	(Rs. Cro)	(MWh)	(Rs/MWh)
Angara 'A'	630	7	85	67.82	339.55	79.79	270,92,69,450	20,84,55,404	244,92,33,840	18,84,78,60	48,23,97,327	4,37,51,116	50,61,40,899	257,96,64,85	1,962
Angara 'B'	1000	7	85	87.23	485.68	106.00	485,68,00,000	40,47,33,333	307,88,00,000	25,65,66,667	102,59,33,048	10,72,16,336	98,49,87,718	633,29,20,05	1,555
Angara 'D'	1000	7	85	48.79	1,323.02	57.40	759,41,34,800	64,07,82,687	624,94,25,000	52,73,17,917	48,84,35,030	9,82,97,550	47,32,67,810	339,19,08,930	1,395
Other 'B'	1000	7	80	58.42	453.56	73.03	331,23,48,680	30,95,92,497	308,10,62,670	28,79,75,083	62,52,47,969	61,14,67,833	121,50,98,388	411,34,74,48	2,954
H'ina, Exm.	500	7	85	88.43	658.65	100.00	658,65,00,000	54,88,75,000	532,38,00,000	44,36,50,000	51,68,98,097	18,84,83,890	60,01,56,987	193,59,47,930	3,100
Pari, Exm.	420	7	85	87.23	381.95	333.66	381,95,00,000	31,82,91,667	333,66,00,000	27,80,50,000	27,39,61,312	3,61,18,513	26,98,381,58	85,34,62,03	3,162
Pari, Exm. Stage-2	500	7	85	93.63	607.06	100.00	607,06,00,000	50,58,83,333	498,79,00,000	41,56,58,333	38,95,67,285	5,13,59,774	35,07,02,059	121,36,05,25	2,890
H'ina, (UP7) \$	105	7	65	23.14	82.82	35.60	29,48,62,355	-0,04,00,279	38,11,68,800	-0,03,81,737	0,00,00,000	0,00,00,000	0,00,00,000	0,00,00,000	3,374
TOTAL					4332.29	3569.29	3524,39,79,185	293,69,98,265	2878,79,90,310	239,72,84,123	53,89,29,519	380,244,0068	113,66,97,5012	440,01,87,019	2042,09,83,520

UPPCL letter no. 766/CE/PPA, dt. 23.05.2018
 * Taken from Energy Bill of the month.
 # As per UPERC Tariff Order.

** Taken from FCA Bill of the month.
 # Column No. 8 & 10 computed as per UPERC Generation Regulation 2014, dt. 16.12.2014 para 34(v), for a month = (mACC_n - (n-1)ACC_{n-1}) / 12
 \$ Hardwarij (UP7) remain closed in October'2020, hence SG is 0 (Zero). Therefore, rate of previous variable charge for MOD has been taken.

FCA Bill of Parichha- 'B' & 'C' and Anpara- 'A', 'B', 'D' TPS for the month of Oct-2020 has already been sent.

Approved
 10/12/2020
 AE (Comm.)

Sampled
 10.12.2020
 AE (Comm.)

ai. Sujan
 10.12.2020
 SE (Commercial), UPRVUNL