

Office of Chief Engineer
Commercial Unit



U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th Floor, Shakti bhawan Extn.
Lucknow -226001
Tel No.- 0522-2288056 / 2287030
CIN : U 40101UP1980SGC005065
gm.commercial@uprvunl.org

cecommercialunl@gmail.com

No. 61 /UNL/CE(Comml.)/Energy Bill/FY (2020-21)

Date: 11, February, 2021

Superintending Engineer
Electricity Import-Export & Payment Circle
U.P. Power Corporation Ltd
11th floor, Shakti Bhawan Extn.
Lucknow-226001.

Subject: Provisional Main Energy Bill of various TPS of UPRVUNL for the month January-2021.

The Provisional Main Energy bill of various Thermal Power Stations of UPRVUNL against Electricity supplied by U.P. Rajya Vidyut Utpadan Nigam Ltd. to U.P. Power Corporation Ltd. during month **January, 2021** as detailed below, is being enclosed for payment:-

Main Bill No.:-UNL/Energy Bill(SG/ESO)/2021-01/01, dt. 11.02.2021 **Rs. 684.1552340 Crs**
(Rs. Six hundred and eighty four crore, fifteen lacs, fifty two thousand, three hundred and forty only)

It is therefore requested that the payment of this Bill in accordance with Operational parameters of UPERC Generation Regulation-2019 dt. 11.09.2019 & Fixed Cost as per Tariff Order dt. 29.04.2016 & 18.01.2017 and PPA signed between UPRVUNL and UPPCL may kindly be ensured.

Last Energy Account from SLDC/ABT received on dt. 10.02.2021 for Anpara Project.

(Avikshit Singh)
Chief Engineer (Commercial)

Date: 11, February, 2021

No. 61/UNL/CE(Comml.)/Energy Bill/FY (2020-21)

Copy forwarded to the following for their kind information :-

1. PS to Managing Director, UPRVUNL, 7th floor, Shakti Bhawan, Lucknow.
2. Senior Advisor to Managing Director, UPRVUNL, 8th floor, Shakti Bhawan Extn, Lucknow
3. Director (Technical), UPRVUNL, 8th floor, Shakti Bhawan Extn, Lucknow
4. Director (Finance), UPRVUNL, 8th floor, Shakti Bhawan Ext, Lucknow.

Copy forwarded to the following for their kind information & necessary action :-

1. CE (TO/Fuel), UPRVUNL, 14th floor, Shakti Bhawan Extn, Lucknow.
2. Chief Engineer (Project Coordinator), Anpara/Obra/Harduaganj/Parichha TPS.
3. Dy CAO (Accounts), UPRVUNL, 9th floor, Shakti Bhawan Extn, Lucknow.
4. Dy CAO (Finance), UPRVUNL, 8th floor, Shakti Bhawan Extn, Lucknow.
5. Chief Manager (CMU), UPRVUNL, 7th floor, Shakti Bhawan Extn, Lucknow.
6. Dy CAO (CFA&BO), Anpara/Obra/Harduaganj/Parichha TPS.

→ Summary file.

(Avikshit Singh)
Chief Engineer (Commercial)

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

Bill of supply of Power of the month : **Jan-21**
Name of Customer : **U.P. Power Corporation Ltd.**
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAACU5008MAZN

Main Bill : **UN/Energy Bill (SG/ESO/2017-01/06)**
Bill Date : **11-02-2021**
Due Date : **30 Days from the billing date**
Reference : **(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.

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

Projects	Approved Plant capacity as per UPERC T.O.	No. of Months w.c.f April 2020	Com-Plant Availability		Total capacity charges approved by UPERC	Percentage to be recovered	Capacity charges (Fixed Charges)		Amount of capacity charges payable for the month	Annual Cumulative Capacity Charges corresponding to last month (ACC-1)	Scheduled Generation by SLDG Energy Sent Out by Plants (MUE)	Energy Charges (E.C.)		Total Energy Charges	Capacity Charges	Energy Charges	Total Amount
			Target by UPERC	Actual Bill w.c.f April 2020			(%)	(%)				(Rs. Cr.)	(Rs. Cr.)				
Anpara 'A'	630	10	85	65.81	306.96	77.42	237.6484320	16.9953520	241.3933440	309.353845	1.87	39.1491690	56.1445210				
Anpara 'B'	1000	10	85	88.78	307.88	100.00	307.8800000	25.6566667	307.8800000	641.796930	1.62	103.9711027	129.6277694				
Anpara 'D'	1000	10	85	48.61	1088.75	57.19	622.6561250	53.4394792	620.5875000	346.577585	1.44	49.9071722	103.3466514				
Ohra 'B'	1000	10	80	62.25	421.89	77.81	328.2776990	32.1972385	321.8176920	350.813128	1.52	53.3234985	85.5208340				
Harduaganj Extn	500	10	85	91.51	532.38	100.00	532.3800000	44.3600000	532.3800000	211.391730	2.67	56.4415919	100.8065919				
Parichha Extn.	420	10	85	90.78	333.66	100.00	333.6600000	27.8050000	333.6600000	123.428990	3.21	39.6207058	67.4257058				
Puri, Extn. Stage2	500	10	85	94.83	498.79	100.00	498.7900000	41.5658333	498.7900000	309.112145	3.21	99.3249985	140.7908318				
Harduaganj (U#7)	105	10	65	16.18	78.98	24.89	19.6381220	-6.0204032	21.8695620	0.0006000	3.47	0.0000000	-0.0204032				
	5155				3569.29		2880.9452880	242.0041665	2878.3780980	2192.4743530		441.6383356	683.6425021				
Total Amount Payable																Rs Crs.	684.1552340

TCS 0.075% as per New Clause no. 206 C (1H) of Finance Bill 2020

(Rs. Six hundred and eighty four crore, fifteen lacs, fifty two thousand, three hundred and forty only)

From Commutative Availability Sheet

Column No. 6 - If Col No. 4 is less than Col No.3, then (Col No. 4/Col No. 3)x100% else 100%.

Column No. 8 - Computed as per UPERC Generation Regulation 2019, dt. 11.09.2019 para 25, for n months (n=ACCn-(n-1)XACCn-1)/12

Effective Annual Capacity charges on 2% RoE of Harduaganj (U#7) TPS having capacity 105 MW due to definition of U#5 as per O.M. No. 592/CECTO/Harduaganj dt. 15.07.2017 = 124.11*105/165 = 78.98 Cr.

Effective Annual Capacity charges on 2% RoE of 2x500 MW Anpara D TPS as per calculation sheet of Verified Bill of March 18 by UPPCL, letter no. 1512/ELE&PC/UPRVUNL-3-4, dt. 03.05.2018 is Rs 1088.75 Crs

Prepared as per DCSG received from ABT/SLDC & Bill from TPS

Checked as per DCSG received from ABT/SLDC & Bill from TPS

Verified as per DCSG received from ABT/SLDC & Bill from TPS

[Signature]
(Saurabh Grover)
EA (Comm.)

[Signature]
(Goya Pandey)
Accountant

[Signature]
(Khyati Singh)
Accounts Officer

[Signature]
(Rajeev Kumar Jha)
EE(Comm.)

Office of Chief Engineer
Commercial Unit



U.P. Rajya Vidyut Utpadan Nigam Ltd.
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Tel No.- 0522-2288056 / 2287030
CIN : U 40101UP1980SGC005065
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No. 90 /UNL/CE(Comm.)/FCA/FY (2020-21)

Date: 25, February 2021

Superintending Engineer
Electricity Import-Export & Payment Circle
U.P. Power Corporation Ltd
11th floor, Shakti Bhawan Extn.
Lucknow-226001.

Subject: Supplementary Bill of FCA of various TPS of UPRVUNL for January'2021.

The Supplementary bill of Fuel Cost Adjustment (FCA) for variation in fuel data certified by Cost Accountants of various Thermal Power Stations of U.P. Rajya Vidyut Utpadan Nigam Ltd against electricity supplied to U.P. Power Corporation Ltd. during the month **January-2021**, is being enclosed herewith for payment :-

(1) FCA Bill No.:-UNL/FCA/2021-01/02, dt. 25.02.2021 **Rs 95.3391449 Crs**
(Rs Ninety five crore, thirty three lacs, ninety one thousand, four hundred and forty nine only)

It is, therefore, requested that the payment of these Bills in accordance with UPERC Generation Tariff Regulation-2019, dt. 11.09.2019 and Power Purchase Agreements signed between UPRVUNL and UPPCL may kindly be ensured.

Last Fuel data received on dt. 25.02.2021 of Harduaganj TPS.

The Calculation sheet for Rate of Variable Cost of MOD stack for the month of March-2020 is attached herewith.

Encl.: As above.

(Avikshit Singh)
Chief Engineer (Commercial)

Date: 25, February, 2021

No. 90/UNL/CE(Comm.)/FCA/FY (2020-21)

Copy forwarded to the following for their kind information :-

1. PS to Managing Director, UPRVUNL, 7th floor, Shakti Bhawan, Lucknow.
2. Senior Adviser to MD, UPRVUNL, 8th floor, Shakti Bhawan Extn, Lucknow.
3. Director (Technical/Finance), UPRVUNL, 8th floor, Shakti Bhawan Extn, Lucknow.

Copy forwarded to the following for their kind information & necessary action :-

1. Chief Engineer (TO/Fuel), UPRVUNL, 14th floor, Shakti Bhawan Extn, Lucknow.
2. Chief Engineer (Project Coordinator), Anpara, Obra, Parichha, Harduaganj TPS.
3. Dy CAO (Finance), UPRVUNL, 8th floor, Shakti Bhawan Extn, Lucknow.
4. Dy CAO (Accounts), UPRVUNL, 9th floor, Shakti Bhawan Extn, Lucknow.
5. Chief Manager (CMU), UPRVUNL, 7th floor, Shakti Bhawan Extn, Lucknow.
6. Dy CAO (CFA&BO), Anpara, Obra, Parichha, Harduaganj Thermal Power Project.

→ Summary file

(Avikshit Singh)
Chief Engineer (Commercial)

U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th Floor, Shakti Bhawan Extn.,
Lucknow - 226001
GST Reg. No. - 09AAACU4749D2Z9

January, 2021
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAACU5088M4ZM

FCA Bill No. - UNL/FCA/2021-01/02
Bill Date - 25.02.2021
30 Days from the billing date
Due Date -
Reference -
(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 Fuel Cost Adjustment Bill due to variation in Cost & GCV of fuel of various TPS of UPRVUNL for the month of January-2021 raised to UPPCL as per UPERC Gen. Tariff Regu., 2019 Dt. 11.09.2019

S.No.	Parameters	Symbol	Unit	Anpara A	Anpara B	Anp D	Obra B	Harduaganj Extn. U#8&9	Pari Extn. U#3&4	Pari Extn. Stage-2 U#5&6	Total
A	Energy Exported & Billed (ESO)	ESQ	MU	U#1,2&3 209.353845	U#4&5 641.796930	U#6&7 346.577585	U#9 to 13 350.813128	211.391730	123.428990	309.112145	2192.474353
B	Normative Operating Parameters										
B	Gross Station Heat Rate (GSHR)	H	Kcal/kwh	2430	2390	2374	2755	2430	2430	2430	2430
C	Sp. Oil Cons.	(O)in	ml/kwh	0.50	0.50	0.50	2.10	0.50	0.50	0.50	0.50
D	Auxiliary Energy Consumption	AUXn	%	8.50	6.55	6.25	9.70	9.00	9.00	9.00	9.00
E	Fuel Data for the month										
E	Price of Primary fuel (Coal)	Pp	Rs. kg	2.33101	2.44598	2.44171	2.74885	4.73229	4.70573	4.70573	4.70573
F	Price of Secondary fuel (Oil)	Ps	Rs. ml	0.04601318	0.04601318	0.04601318	0.04281320	0.04288258	0.03469024	0.03469024	0.03469024
G	Gross Calorific Value of Primary fuel (Coal)	Cp	Kcal/kg	3523.00	3824.00	3845.00	3719.00	3211.00	3438.00	3438.00	3438.00
H	Gross Calorific Value of Primary fuel (Coal) less 85 Kcal/kg on account of variation during storage (Cp - Cp-85)	Cp1	Kcal/kg	3438.00	3739.00	3760.00	3634.00	3126.00	3353.00	3353.00	3353.00
I	Gross Calorific Value of Secondary fuel (oil)	Cs	Kcal/kg	9116.33	9116.33	9116.33	9034.00	10570.00	9608.59	9608.59	9608.59
J	Formula of ECR	ECR	Rs./kwh	1.8224	1.6945	1.6658	2.3915	4.0572	3.7593	3.7593	3.7593
K	Energy Charge Rate for the month (ECR)	ECR1	Rs./kwh	1.8700	1.6300	1.4400	1.5200	2.6700	3.2100	3.2100	3.2100
L	Already claimed energy charge rate (ECR1)	ECR2	Rs./kwh	-0.0476	0.0745	0.2258	0.8715	1.3872	0.5493	0.5493	0.5493
M	Diff in ECR (J-K)										
M	Amt. of Energy Charge due to variation in fuel data (MxL)/10		Rs./kwh	-0.9965243	4.7813871	7.8257219	30.5733641	29.3242608	6.7799544	16.9795301	95.2676941
N	TCS 0.075% as per New Clause no. 206 C (11) of Finance Bill 2020 (M*0.075/100)		Rs./kwh								
O	Total FCA Billed Amount Payable (Cr) (M+N)										
											0.0714508
											95.3391449

(Rs Ninety five crore, thirty three lacs, ninety one thousand, four hundred and forty nine only)

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

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

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

Saurabh Grover
(Saurabh Grover)
EA (Comml.)

Chitra Pandey
(Chitra Pandey)
Accountant

Sankar
(S.K. Yadav)
AE (Comml.)

Rajeev Kumar
(Rajeev Kumar)
E (Comml.)
S.E. (Comml.)

Rate of Variable Cost for MOD of the month Mar'2021 as per UPERC Order dt. 21.06.2016 against Petition no.- 1070/2015 according to Energy/FCA Bill for the month of Jan'2021.

Project	Approved Plant capacity as per UPERC T.O.#	Target Availability % by UPERC #	Compliance Availability %	Total capacity charges at 15.5% Billed	Percentage to be recovered	Amount of annual capacity charges at 15.5% Billed incorporating	Total capacity charges for month at 15.5% Billed	Amount of annual capacity charges at 2% Billed incorporating	Total capacity charges for month at 2% Billed	Forgoing Capacity Charges for the month	Energy Charge as per Meter Energy Bill	Variable Charges per FCA Bill	Total Variable Cost - Forgoing Fixed Cost	Scheduled Generation by Energy Dept. Due to 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.)	(Rs. Cro.)	(MWh)	(Rs/Cwh)
Ampera 'A'	630	85	65.81	339.55	306.96	77.42	237.6484320	18,7997517	16,9953520	1,8043997	39,1491690	-0.9965243	36,3482450	209,353845	1.736
Ampera 'B'	1000	85	88.78	485.68	307.88	100.00	485.6800000	40,4733333	25,6566667	14,8166666	103,9711027	4,7813871	93,9388332	641,796030	1.464
Ampera 'C'	1000	85	48.61	1323.02	1088.75	87.19	756.6351380	64,9382317	53,4394792	11,4987525	49,9071722	7,8257219	46,2344416	346,577585	1.334
Orin 'B'	1000	80	62.25	453.56	421.89	77.81	352,9150360	34,6141873	32,1972385	2,4169488	53,3235955	30,5733641	81,4800108	350,813128	2.323
H'dnj, Esim.	500	85	91.51	658.65	532.38	100.00	658.6500000	54,9875000	44,3650000	10,6225000	56,4415919	29,3245608	75,2433527	211,391730	3.559
Pari Esim.	420	85	90.78	381.95	333.66	100.00	381,9500000	31,8291667	27,8050000	4,0241667	59,6207058	6,7799544	42,3764935	123,428990	3.433
Pari Esim. Soage	500	85	94.83	607.06	498.79	100.00	607,0600000	50,5883333	41,5658333	9,0225000	99,2249985	16,9795301	107,1830386	309,112145	3.467
H'dnj, UWT'S	105	65	16.18	82.82	78.98	24.89	20,6129929	-0,0213942	-0,0204032	-0,0009910	0,0000000	0,0000000	0,0000000	0,0000000	3,374
TOTAL				4332.29	3569.29		2880,9452880	293,8652314	242,0041665	54,1049433	441,6383356	95,2676941	482,8000954	2192,4743530	

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 2019, dt. 11.09.2019 para 25, for a month-(vACCn-(n-1)*ACCn-1)/12

\$ Hareduaganj (UWT) remain closed in January'2020, hence SC is 0 (Zero). Therefore, rate of previous variable charge for MOD has been taken.

Sourabh
EA (Comml.)

Sourabh
AE (Comml.)

Dr. Suresh Kumar
AE (Commercial), UPRVUNL