

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. 140 /UNL/CE(Comml.)/Energy Bill/FY (2021-22)

Date: 12, April, 2022

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 March-2022.

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 **March, 2022** as detailed below, is being enclosed for payment:-

Main Bill No.:- UNL/Energy Bill(SG/ESO)/2022-03/01, dt. 12.04.2022

Rs 765.7431598 Crs

(Rs Seven hundred sixty five crore, seventy four lacs, Thirty one thousand, five hundred and ninety eight 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. 11.04.2022 for Parichha Project.

(Arvind kumar Singh)
Chief Engineer (Commercial)

No. 140 /UNL/CE(Comml.)/Energy Bill/FY (2021-22)

Date: 12, April, 2022

Copy forwarded to the followings for their kind information :-

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

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

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

→ Summary file.

(Arvind kumar 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 :
Name of Customer :-

Mar-22
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAACU5088M4ZM

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

UNL/Energy Bill (SG/ESO)/2022-03/01
12/04/2022
30 Days from the billing date
(i) UPERC Tariff Order Dt.29.04.2016 & 18.01.2017
(ii) UPERC Gen Reg.'19 Dt. 11.09.2019
(iii) PPA for various Thermal Power Stations.

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

Projects	Approved Plant capacity as per UPERC T.O. (MW)	No. of Months w.e.f April 2021	Cum. Plant Availability		Total capacity charges approved by UPERC (Rs. Crs)	Percentage to be recovered	Capacity charges (Fixed Charges)		Amount of capacity charges payable for the month (Rs. Crs)	Scheduled Generation by SLDC/ Energy Sent Out by Plants (MU)	Energy Charge (F.C)		Total Amount Capacity Charges Energy Charges (Rs. Crs)
			Target by UPERC (%)	Actual bill current month w.e.f April 2021 (%)			Amount of annual capacity charges corresponding to Column 6 (ACCC) (Rs. Crs)	Rate of Energy Charges (REC) (Rs/kwh)			Total Energy Charges (Rs. Crs)		
Anpara 'A'	630	12	85	71.48	306.96	84.09	258.1226640	21.5664980	306.5687600	1.87	57.3283581	78.8948561	
Anpara 'B'	1000	12	85	88.12	307.88	100.00	307.8800000	25.6566667	611.9404550	1.62	99.1343537	124.7910704	
Anpara 'D'	1000	12	85	72.47	1088.75	85.26	928.2682500	103.5038333	671.0386350	1.44	96.6295634	200.1333967	
Obra 'B'	1000	12	80	61.13	421.89	76.41	322.3661490	27.5212910	403.1643725	1.52	61.2809846	88.8022756	
Harduaganj Extn	500	12	85	78.94	532.38	92.87	494.4213060	52.2309145	151.4743375	2.67	40.4436481	92.6745626	
Parichha Extn.	420	12	85	88.04	333.66	100.00	333.6600000	27.8050000	103.9703525	3.21	33.3744832	61.1794832	
Pari. Extn. Stage2	500	12	85	88.28	498.79	100.00	498.7900000	41.5658333	200.5665650	3.21	64.3818674	105.9477007	
Harduaganj (U#7)	105	12	65	68.33	78.98	100.00	78.9800000	6.5816667	19.4184375	3.47	6.7381978	13.3198645	
	5155				3569.29		3222.4883690	306.4317035	2468.1419150		459.3114563	765.7431598	

Total Amount Payable

Rs Crs. 765.7431598

(Rs. Seven hundred sixty five crore, seventy four lacs, thirty one thousand, five hundred and ninety eight only)

DC up to Month: 31791.6094000 MU SG up to Month: 24773.3500850 MU

From Cumulative 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 month - (nxAACn-(n-1)xACCn-1)/12

Effective Annual Capacity charges on 2% RoE of Harduaganj (U#7) TPS having capacity 105 MW due to deletion of U#5 as per O.M. No. 592/CE(TO)/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/EIE&PC/UPRVUNI/J-4, dt. 03.05.2018 is Rs 1088.75 Crs.


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


(R. K. Jaiswal)
EA (Comml.)


(Raj Kumar Verma)
AE (Comml.)


(Goga Pandey)
Accountant


(S. K. Sinha)
Accounts officer


(Raj Kumar Verma)
AE (Comml.)


(Ritu Singh)
EE (Comml.)

Cumulative Availability for FY 2021-22 UPRVUNL Thermal Power Stations

Month	Days	Cumulative Days	6.30			6.55			6.75			7.00			Total
			MW		AUXN	MW		AUXN	MW		AUXN	MW		AUXN	
			Declared	Cum Avail	Annara D UG & 87	Declared	Cum Avail	Annara D UG & 87	Declared	Cum Avail	Annara D UG & 87	Declared	Cum Avail	Others	
Apr-21	30	30	363,188,500	15133	87.51	496,417,160	20684	73.78	337,428,438	14060	49.99	447,245,500	18635	68.79	
May-21	31	61	308,213,750	12842	79.56	668,931,000	27872	85.18	347,278,063	14470	49.89	417,824,500	17409	65.44	
Jun-21	30	91	259,967,500	10832	38807	609,271,500	25386	73.94	297,922,688	12413	40.943	347,246,500	14469	61.47	
Jul-21	31	122	299,378,000	12474	51281	582,879,580	24287	86.16	313,482,125	13062	54.005	404,363,000	16848	61.14	
Aug-21	31	153	316,303,500	13179	64460	581,752,510	24240	122469	358,317,500	14930	68.935	325,048,000	13544	80.905	
Sep-21	30	183	323,806,000	13492	77952	577,354,460	24056	146525	429,573,875	17899	86.834	365,050,750	15210	96.115	
Oct-21	31	214	298,451,750	12435	90387	629,183,500	26216	172741	619,916,750	25830	112664	378,851,000	15785	111,900	
Nov-21	30	244	265,868,500	11078	101465	637,832,750	26576	199317	628,611,188	26192	138856	470,056,000	19586	131,486	
Dec-21	31	275	223,219,250	9301	110766	605,192,750	25216	224533	652,763,875	27198	166054	457,440,500	19060	150,546	
Jan-22	31	306	346,440,000	14435	125201	639,541,000	26648	251181	696,382,000	29016	195070	468,975,750	19541	170,087	
Feb-22	28	334	297,060,750	12378	137579	571,747,000	23823	275004	596,637,250	24860	21,9930	332,508,000	13855	183,942	
Mar-22	31	365	307,580,500	12816	150395	613,937,500	25581	300585	673,048,125	28044	24,7974	420,568,500	17524	201,466	
Total			3609,478000		7214,040710				5951,361877			4835,178000			

Month	Days	Cumulative Days	9.5			9.9			9.0			9.0			Total
			MW		AUXN	MW		AUXN	MW		AUXN	MW		AUXN	
			Declared	Cum Avail	#Hardground (MU)	Declared	Cum Avail	Hardground Estm (9.8 & 9)	Declared	Cum Avail	Prithiba Estm (231D)	Declared	Cum Avail	Prithiba Estm (DMS&G)	
Apr-21	30	30	41,406,680	1725	3179	153,008,750	6375	46.70	273,987,650	11416	11416	99.56	278,025,500	11584	84.86
May-21	31	61	34,889,485	1454	5662	154,499,000	6437	12812	284,356,800	11848	23264	99.78	306,965,000	12790	87.82
Jun-21	30	91	59,594,805	2483	2592	159,230,875	6635	19447	264,005,775	11000	34264	98.52	323,076,500	13462	91.38
Jul-21	31	122	62,212,910	2592	8254	201,357,000	8390	27837	208,695,160	8696	42960	92.13	250,767,500	10449	86.98
Aug-21	31	153	24,407,470	1017	9271	317,127,375	13214	41051	269,433,730	11226	54186	92.66	320,889,375	13370	88.57
Sep-21	30	183	0,000,000	0	9271	267,770,750	11157	52208	251,271,510	10470	64656	92.44	298,592,250	12441	88.99
Oct-21	31	214	13,659,120	569	9840	245,570,445	10232	62440	184,678,993	7695	72351	88.46	246,156,750	10257	86.63
Nov-21	30	244	68,414,400	2851	12691	327,600,000	13650	76090	275,184,000	11466	83817	89.88	327,600,000	13650	88.28
Dec-21	31	275	70,694,880	2946	15637	338,520,000	14105	90195	283,278,825	11803	95620	90.98	314,519,375	13105	111,108
Jan-22	31	306	70,694,880	2946	18583	338,520,000	14105	104300	283,869,100	11828	107448	91.87	310,385,625	12933	124,041
Feb-22	28	334	63,853,440	2661	21244	305,760,000	12740	117040	256,009,100	10667	118115	92.53	305,573,750	12732	136,773
Mar-22	31	365	58,915,195	2455	23699	337,311,940	14055	131095	112,896,465	4704	122819	88.04	236,312,680	9846	146,619
Total			568,743265		3146,276135				2947,667108				3518,864305		

Cumulative Availability (%) = $10000 \times \sum_{i=1}^N DC_i / [N \times (C \times 100 - AUXN)]$

DC = Average declared capacity for the i^{th} day of the period in MW.

N = Number of days during the period, and

AUXN = Normative Auxiliary Energy Consumption as a percentage of gross generation.

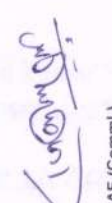
DC up to Month: 31791.6094000 MU

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

SG up to Month: 24773.3500850 MU

AE (Comml.)


EA (Comml.)


AE (Comml.)


EB (Comml.)

Office of Chief Engineer
Commercial Unit



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Tel No.- 0522-2288056 / 2287030
CIN : U 40101UP1980SGC005065
gm.commercial@uprvunl.org

cecommercialunl@gmail.com

No. 166/UNL/CE(Comm.)/FCA/FY (2021-22)

Date: 30, April, 2022

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

Subject: Provisional Bill of FCA of various TPS of UPRVUNL for March -2022.

The Provisional 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 **March, 2022**, is being enclosed herewith for payment :-

(1) FCA Bill No.: -UNL/FCA/2022-03/02, dt. 30.04.2022

Rs 94.4050270 Crs

(Rs Ninety four crore, forty lacs ~~lacs~~, fifty thousand, two hundred and seventy only)

It is, therefore, requested that the payment of this Bill in accordance with UPERC Generation (Terms & Conditions for 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. 29.04.2022 of Harduaganj Thermal Power Plant.

Encl.: As above.

(Arvind Kumar Singh)
Chief Engineer (Commercial)

Date: 30, April, 2022

No. 166/UNL/CE(Comm.)/FCA/FY (2021-22)

Copy forwarded to the following for their kind information :-

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

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

1. Chief Engineer (TO/Fuel), UPRVUNL, Lucknow.
2. Chief Engineer (L-1), UPRVUNL, Anpara, Obra, Parichha, Harduaganj Projects.
3. Dy CAO (Finance-1), 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.

→ Summary file

(Arvind Kumar Singh)
Chief Engineer (Commercial)

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

GST Reg. No.- 09AAAACU4749D2Z9

March, 2022
U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
09AAAACU5088M4ZM

UNL/FCA/2022-03/02

30/04/2022

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)

Bill No.-
Bill Date-
Due Date
Reference-

GST Reg. No:

Provisional Fuel Cost Adjustment Bill due to variation in Cost & GCV of fuel of various TPS of UPRVUNL raised to UPPCL as per UPERC Gen. Tariff Regu., 2019 Dt. 11.09.2019

S.No.	Parameters	Symbol	Unit	Anpara A	Anpara B	Anpara D	Obra B	Harduaganj Extn.	Pari Extn. U#3&4	Pari Extn. Stage-2 U#5&6	Harduaganj U#7	Total
A	Unit No.	ESO	MU	U#1,2&3	U#4&5	U#6&7	U#9 to 13	U#8&9	U#3&4	U#5&6	U#7	2468.1419150
	Energy Exported & Billed (ESO)			306.568760	611.940455	671.038635	403.164373	151.474338	103.970353	200.566565	19.418438	
B	Normative Operating Parameters	H	Kcal/Kwh	2430	2390	2374	2755	2430	2430	2430	2625	
C	Gross Station Heat Rate (GSHR)	(Q)h	ml/Kwh	0.50	0.50	0.50	2.10	0.50	0.50	0.50	2.50	
D	Sp. Oil Cons.	AUXn	%	8.50	6.55	6.25	9.70	9.00	9.00	9.00	9.50	
E	Auxiliary Energy Consumption											
F	Fuel Data for the month	Pp	Rx. Kg	2.24323	2.45149	2.16083	2.91597	4.48034	4.59874	4.59874	4.52225	
G	Price of Primary fuel (Coal)	Ps	Rx. ml	0.06566795	0.06566795	0.06566795	0.06772608	0.05823333	0.07278476	0.07278476	0.05823333	
	Price of Secondary fuel (Oil)	Cp	Kcal/Kg	3290.00	3659.00	3644.00	3449.00	3371.00	3667.21	3667.21	3378.00	
H	Gross Calorific Value of Primary fuel (Coal)	Cp1	Kcal/Kg	3205.00	3574.00	3559.00	3364.00	3286.00	3582.21	3582.21	3293.00	
I	less 85 Kcal/kg on account of variation during storage (Cp1= Cp-85)	Cs	Kcal/Lit	9334.50	9334.50	9334.50	9139.23	10570.00	9404.57	9404.57	10570.00	
	Gross Calorific Value of Secondary fuel (oil)											
J	Formula of ECR	ECR	Rs./Kwh	1.8911	1.7860	1.5695	2.7837	3.6650	3.4615	3.4615	4.1041	
K	Energy Charge Rate for the month (ECR)	ECR1	Rs./Kwh	1.8700	1.6200	1.4400	1.5200	2.6700	3.2100	3.2100	3.4700	
L	Already claimed energy charge rate (ECR1)	ECR2	Rs./Kwh	0.0211	0.1660	0.1295	1.2637	0.9950	0.2515	0.2515	0.6341	
M	Diff in ECR (J-K)											
	Amt. of Energy Charge due to variation in fuel data (AxL)/10		Rs.Crs	0.6468601	10.1582116	8.6899503	50.9478818	15.0716966	2.6148544	5.0442491	1.2313231	94.4050270

Total Amount Payable (Cr)

(Rs Ninety four crore, forty lacs, fifty thousand, two hundred and seventy 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

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

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

(Saurabh Grover)
EA (Comml.)

(Raj Kumar Verma)
AE (Comml.)

(Goga Pandey)
Accountant

(S.K. Sinha)
Accounts Officer

(Raj Kumar Verma)
AE (Comml.)

(Ritu Singh)
EE (Comml.)