

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 : April- 2020
Name of Customer :- U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
GST Reg. No: 09AAACU5088M4ZM

Main Bill : UNL/Energy Bill (SG/ESO)/2020-04/01
Bill Date : 14.05.2020
Due Date : 30 Days from the billing date
Reference: (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 UPRVUNL to UPPCL for Anpara A, Anpara B, Anpara D, Obra B, Parichha Extn, Parichha Extn Stage-2, Harduaganj & Harduagnaj Extn on Schedule Generation (SG).

Projects	Approved Plant capacity as per UPERC T.O. (MW)	No. of Months w.e.f April 2020 n	Cum.Plant Availability		Total capacity charges approved by UPERC (Rs. Crs)	Percentage to be recovered (%)	Capacity charges (Fixed Charges)			Energy Charge(E.C)			Total Amount Capacity Charges+ Energy Charges (Rs. Crs)
			Target by UPERC (%)	Actual till current month w.e.f April.2020 (%)			Amount of annual capacity charges corresponding to Column 6 (ACC2) (Rs. Crs)	Amount of capacity charges payable for the month (Rs. Crs)	Annual Cumulative Capacity Charge billed till last month (Rs. Crs)	Scheduled Generation by SLDC/ Energy Sent Out by Plants (MU)	Rate of Energy Charges (REC) (Rs/kwh)	Total Energy Charges (Rs. Crs)	
	1	2	3	4#	5	6##	7=(Col 5X6)/100	8###	9	10	11	12=(Col 10x11)/10	13=(Col 8+12)
Anpara 'A'	630	1	85	73.99	306.96	87.05	267.2086800	22.2673900	0.0000000	268.960550	1.87	50.2956229	72.5630129
Anpara 'B'	1000	1	85	93.94	307.88	100.00	307.8800000	25.6566667	0.0000000	586.968073	1.62	95.0888278	120.7454945
Anpara 'D'	1000	1	85	44.69	1088.75	52.58	572.4647500	47.7053958	0.0000000	258.823608	1.44	37.2705996	84.9759954
Obra 'B'	1000	1	80	66.45	421.89	83.06	350.4218340	29.2018195	0.0000000	324.549778	1.52	49.3315663	78.5333858
Harduaganj Extn	500	1	85	90.23	532.38	100.00	532.3800000	44.3650000	0.0000000	94.165173	2.67	25.1421012	69.5071012
Parichha Extn.	420	1	85	50.00	333.66	58.82	196.2588120	16.3549010	0.0000000	0.000000	3.21	0.0000000	16.3549010
Pari.Extn. Stage2	500	1	85	98.86	498.79	100.00	498.7900000	41.5658333	0.0000000	151.033848	3.21	48.4818652	90.0476985
Harduaganj (U#7)	105	1	65	100.01	78.98	100.00	78.9800000	6.5816667	0.0000000	0.000000	3.47	0.0000000	6.5816667
	5155				3569.29		2804.3840760	233.6986730	0.0000000	1684.5010300		305.6105830	539.3092560

Total Amount Payable

Rs Crs. 539.3092560

(Rs. Five hundred and thirty nine crore, thirty lacs, ninety two thousand, five hundred and sixty 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)x100% else 100%

Column No.8 : Computed as per UPERC Generation Regulation 2019, dt 11.09.2019 para 25 , for n month=(nxACCn-(n-i)xACCn-i)/12

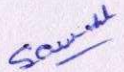
Effective Annual Capacity charges on 2% RoE of Harduaganj (U#7) TPS having capacity 105 MW due to deletion of U#5 as per O.M. NO. 592/CE(TO)/Harduaganj dt. 15.07.2017 = 124.11*105/165= 78.98 Cr.

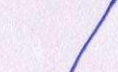
Effective Annual Capacity charges on 2% RoE of 2x500 MW Anpara 'D' TPS as per calculation sheet of Verified Bill of March'18 by UPPCL letter no. 1512/EIE&PC/UPRVUNL/U-4, dt. 03.05.2018 is Rs 1088.75 Crs.

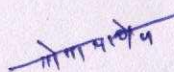
Prepared as per DC/SG received from ABT/SLDC & Bill from TPS

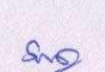
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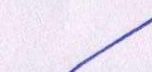
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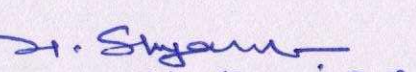

(Saurabh Grover)
EA (Comml.)


(Sukesh Kr. Vij.)
AE (Comml.)


(Goga Pandey)
Accountant


(S.P. Yadav)
Dy CAO (F)


(Sandeep Agrawal)
AE(Comml.)


(Hari Shyam)
SE(Comml.)
14.5.2020

Cumulative Availability for FY 2020-21

Month	Days	Cum. Days N	MW 630 AUXn 8.5				MW 1000 AUXn 6.55				MW 1000 AUXn 6.25				MW 1000 AUXn 9.7			
			Anpara "A"				Anpara "B"				Anpara D U6 & 7				Obra "B"			
			Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	
Apr-20	30	30	307.086000	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	61																
Jun-20	30	91																
Jul-20	31	122																
Aug-20	31	153																
Sep-20	30	183																
Oct-20	31	214																
Nov-20	30	244																
Dec-20	31	275																
Jan-21	31	306																
Feb-21	28	334																
Mar-21	31	365																
Total			307.086000				632.033150				301.654625				432.018750			

Month	Days	Cum. Days N	MW 105 AUXn 9.5				MW 500 AUXn 9.0				MW 420 AUXn 9.0				MW 500 AUXn 9.0			
			#Harduaganj (U#7)				Harduaganj Extn U#8 & 9				Parichha Extn.(2x210)				Parichha Extn.Stage-2 (U#5&6)			
			Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	Declared Cap.(MW)	Cum.Decl. Cap.(MW)	Cum.Ava (%)	
Apr-20	30	30	68.414400	2851	2851	100.01	295.618750	12317	12317	90.23	137.589600	5733	5733	50.00	323.858125	13494	13494	98.86
May-20	31	61																
Jun-20	30	91																
Jul-20	31	122																
Aug-20	31	153																
Sep-20	30	183																
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Dec-20	31	275																
Jan-21	31	306																
Feb-21	28	334																
Mar-21	31	365																
Total			68.414400				295.618750				137.589600				323.858125			

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

DC_i = Average declared capacity for the ith 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.

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

Samal
EA (Comml.)

[Signature]
AE (Comml.)

[Signature]
SE (Comml.) 14.5.2020

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

Bill of supply of Power for Month: April, 2020
Name of Customer :- U.P. Power Corporation Ltd.
Shakti Bhawan, Extn.
14, Ashok Marg, Lucknow
GST Reg. No: 09AAACU5088M4ZM

FCA Bill No.- UNL/FCA/2020-04/02
Bill Date- 29.05.2020
Due Date 30 Days from the billing 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 April'2020 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.	Pari Extn.	Pari Extn. Stage-2	Total
	Unit No.			U#1,2&3	U#4&5	U#6&7	U#9 to 13	U#8&9	U#3&4	U#5&6	
A	Energy Exported & Billed (ESO)	ESO	MU	268.960550	586.968073	258.823608	324.549778	94.165173	0.000000	151.033848	1684.501030
	Normative Operating Parameters										
B	Gross Station Heat Rate (GSHR)	H	Kcal/kwh	2430	2390	2374	2755	2430	2430	2430	
C	Sp. Oil Cons.	(Qs)n	ml/kwh	0.50	0.50	0.50	2.10	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	
	Fuel Data for the month										
E	Price of Primary fuel (Coal)	Pp	Rs. kg	2.28559	2.36775	2.30334	2.89140	4.68724	4.83214	4.83214	
F	Price of Secondary fuel (Oil)	Ps	Rs. ml	0.05112037	0.05112037	0.05112037	0.04553947	0.05272075	0.05173467	0.05173467	
G	Gross Calorific Value of Primary fuel (Coal)	Cp	Kcal kg	3449.00	3618.00	3608.00	4007.00	3834.00	3633.04	3633.04	
H	Gross Calorific Value of Primary fuel (Coal) less 85 Kcal/kg on account of variation during storage (Cp1= Cp-85)	Cp1	Kcal kg	3364.00	3533.00	3523.00	3922.00	3749.00	3548.04	3548.04	
I	Gross Calorific Value of Secondary fuel (oil)	Cs	Kcal lit	9639.63	9639.63	9639.63	9001.00	9482.00	9698.26	9508.70	
	Formula of REC										
J	Rate of Energy Charge for the month(REC)	REC	Rs./kwh	1.8287	1.7379	1.6795	2.3397	3.3611	3.6579	3.6581	
K	Already claimed rate of energy charge (REC1)	REC1	Rs./kwh	1.8700	1.6200	1.4400	1.5200	2.6700	3.2100	3.2100	
L	Diff in REC (J-K)	REC2	Rs./kwh	-0.0413	0.1179	0.2395	0.8197	0.6911	0.4479	0.4481	
M	Amt. of Energy Charge due to variation in fuel data (AxL)/10		Rs.Crs	-1.1108071	6.9203536	6.1988254	26.6033453	6.5077551	0.0000000	6.7678267	51.8872990

Total Amount Payable (Cr)

51.8872990

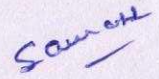
(Rs Fifty one crore, eighty eight laes, seventy two thousand, nine hundred and ninety only)

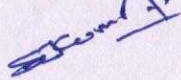
Normative Parameters have been taken as per UPERC Generation Tariff Regulation-2019, dt. 11.09.2019 for various TPS of UPRVUNL.

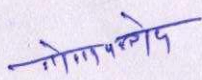
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
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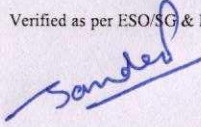
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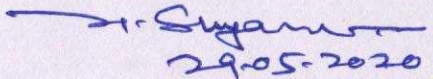

(Saurabh Grover)
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Accountant


(S.P. Yadav)
Dy CAO (F)


(S.K. Yadav)
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(Hari Shyam)
SE(Comml.)

29.05.2020

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

Projects	Approved Plant capacity as per UPERC T.O. #	No. of Months	Target Availability by UPERC #	Cumulative Availability *	Total capacity charges at 15.5% RoE#	Total capacity charges at 2% RoE#	Percentage to be recovered *	Amount of annual capacity charges at 15.5% RoE corresponding to Column 6	Total capacity charges for month at 15.5% RoE	Amount of annual capacity charges at 2% RoE corresponding to Column 6	Total capacity charges for month at 2% RoE *	Foregoing Capacity Charges for the month	Energy Charge as per Main Energy Bill *	Variable Charge as per FCA Bill **	Total Variable Cost - Foregoing Fixed Cost	Scheduled Generation by SLDC/ Energy Sent Out by Plants*	Revised Rate of Variable Cost for MOD
	(MW)		(%)	(%)	(Rs. Crs)	(Rs. Crs)	(%)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(Rs. Crs)	(MU)
	1	2	3	4	5	6	7=(Col. 4X6)/100	8=(Col. 7/12)	9=(Col. 5X6)/100	10=(Col. 9/12)	11=(Col. 8-10)	12	13	14=(Col. 12+13-11)	15	16=(Col 14/Col 15)*10	
Anpara 'A'	630	1	85	73.99	339.55	306.96	87.05	295.5782750	24.6315229	267.2086800	22.2673900	2.3641329	50.2956229	-1.1108071	46.8206829	268.960550	1.741
Anpara 'B'	1000	1	85	93.94	485.68	307.88	100.00	485.6800000	40.4733333	307.8800000	25.6566667	14.8166667	95.0888278	6.9203536	87.1925147	586.968073	1.485
Anpara 'D'	1000	1	85	44.69	1323.02	1088.75	52.58	695.643916	57.9703263	572.4647500	47.7053958	10.2649305	37.2705996	6.1988254	33.2044945	258.823608	1.283
Obra 'B'	1000	1	80	66.45	453.56	421.89	83.06	376.7269360	31.3939113	350.4218340	29.2018195	2.1920918	49.3315663	26.6033453	73.7428198	324.549778	2.272
H'dnj. Extn	500	1	85	90.23	658.65	532.38	100.00	658.6500000	54.8875000	532.3800000	44.3650000	10.5225000	25.1421012	6.5077551	21.1273563	94.165173	2.244
Pari.Extn.	420	1	85	50.00	381.95	333.66	58.82	224.6629900	18.7219158	196.2588120	16.3549010	2.3670148	0.0000000	0.0000000	-2.3670148	0.0000000	3.174
Pari.Extn. Stage-2	500	1	85	98.86	607.06	498.79	100.00	607.0600000	50.5883333	498.7900000	41.5658333	9.0225000	48.4818652	6.7678267	46.2271919	151.033848	3.061
TOTAL					4249.47	3490.31		3344.0021170	278.6668431	2725.4040760	227.1170063	51.5498368	305.6105830	51.8872990	305.9480453	1684.501030	

UPPCL letter no. 766/CE/PPA, dt. 23.05.2018

* Taken from Energy Bill of the month.

As per UPERC Generation Tariff Regulation-2019, dt. 11.09.2019.

** 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 n month=(n x ACCn - (n-1) x ACCn-1) / 12

Pari.chha Extn. TPS remain closed due to Thermal Backing in April'2020, hence SG is 0 (Zero). Therefore, rate of previous month variable charge for MOD has been taken.

Saurabh
EA (Comml.)

Sandeep
AE (Comml.)

Dr. Shyam
29.05.2020
SE (Commercial), UPRVUNL