



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 11'2022

Notation	Particulars	Unit	Value mentioned in Tariff Order
TL	Normative Transmission Loss in %	%	0
DL	Normative Distribution Loss in %	%	2.2
e_{sc}	Energy Sale to consumer and Licensee in MU as per Tariff Order	MU	8863.9
pp_{cost}	Power Purchase Cost allowed in the Tariff order in Rs.	Rs.	5070207000
fc	Fuel Cost allowed in the tariff order in Rs,	Rs.	0
pp_{cost_ex}	Power Purchase cost/fuel cost for sale to person other than licensee and consumers as allowed in the tariff order in Rs.	MU	0

B) Value taken upto the month under consideration

Notation	Particulars	Unit	Total for DVC	Apportionment for the state of West Bengal @ 56.09%
UI_{in}	Net Power drawal (MU) in UI mode	MU	120.78	67.75
UI_{out}	Net Power exported (MU) in UI mode	MU	36.93	20.71
E_p	Total Power purchase (MU) against bill	MU	1909.22	1070.88
E_g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	11980.25	6719.72
E_x	Energy sold (MU) to person other than licensee and consumers including swapout.	MU	0	0.00
E_{p_PSP}	Net power drawal from pumping energy of Pumped Storage Project	MU	0	0.00
PP_{cost}	Total cost of Power purchase from different sources in Rs.	Rs.	9151329218	5132980558
FC	Total fuel cost of own generation as per normative parameter fixed by the Commission in Rs.	Rs.	0	0.00
UI_{cost_in}	Power purchase cost for UI_{in} in Rs.	Rs.	809779821	454205501
CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	55.92	31.37
$R-E_x$	Revenue earned in Rs. On account of part of variable cost only due to Energy sold against Ex	Rs.	0	0.00
$R-UI_{out}$	Revenue earned in Rs due to power exported in UI mode.	Rs.	28585766	16033756

C) Value taken from order of Adhoc Variable cost or Adhoc Power Purchase Cost if any

Notation	Particulars	Unit	Total for DVC	Apportionment for the state of West Bengal @ 56.09%
Adhoc_V _{cost}	Adhoc_Adhoc Variable Cost or Adhoc Power Purchase Cost in Rs./kWh	Rs.	0	0

D) Value to be taken for the balance period of the year.

Notation	Particulars	Unit	Total for DVC	Apportionment for the state of West Bengal @ 56.09%
P _{Proj}	Projected power purchase cost in Rs for the balance period of the year	Rs.	3455055112	1937940412
FC _{Proj}	Projected fuel Costs for the balance period of the year	Rs.	0.00	0
E _{proj}	Projected energy in MU to be purchased for the balance year	MU	672.25	377.07
E _{P_PSP_Proj}	Projected net drawal in MU of Pumping energy from pumped storage project during the balance period of the year	MU	0.00	0.00
E _{G_Proj}	Total projected energy to be sent out from own generation during the balance period of the year	MU	5990.12	3359.86
E _{x_Proj}	Projected energy to be sold (MU) to person other than licensee and consumers during the balance period of the year	MU	0.00	0.00
R _{E_xProj}	Projected Revenue earned on account of part of variable cost only due to Energy sold against E _x Proj during balance period of the year	Rs.	0.00	0.00

E) Computation of MVCA

Tot _{ENR}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11563.91
Tot _{ENR_Consumer}	$Tot_{ENR} - UI_{out} - E_x - E_{x_Proj} - (E_{P_PSP} + E_{P_PSP_Proj}) / (1-TL)$	11543.20
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	7525126472
MVC _{consumer}	$MVC - (R - E_x + R - UI_{out} + R - E_{x_Proj})$	7509092716
E _{sc}	$Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11289.25
MVC _{unit_consumer}	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.67
mvc _{consumer}	$PP_{cost} + fc - PP_{cost_ex}$	5070207000
mvc _{unit_consumer}	$mvc_{consumer} / (e_{sc} \times 10^6)$	0.57
MVCA	$(MVC_{unit_consumer} - mvc_{unit_consumer} - Adhoc_V_{cost}) \times 100 \text{ Paisa/kWh}$	9.31
MVCA rounded to nearest lower integer		9.00

Actual details of Power Purchase upto Nov'2022

Sources	Upto previous Month (Oct'22)			Current Month (Nov'22)			Cumulative of Current Month (Upto Nov'22)		
	Energy	Amount	Rate	Energy	Amount	Rate	Energy	Amount	Rate
	kWh	Rs	Rs/kWH	kWh	Rs	Rs/kWH	kWh	Rs	Rs/kWH
	A	B	C = B/A	D	E	F = E/D	G = A+D	H = B+E	I = H/G
NTPC									
TSTPS	7776899	30447191	3.92	1221982	5930423	4.85	8998881	36377614	4.04
KBUNL	0	43658571		0	0			43658571	
NHPC									
Rangit	25781225	95859758	3.72	2645200	11058448	4.18	28426425	106918206	3.76
Teesta	197243304	405776131	2.06	12684730	40114002	3.16	209928034	445890133	2.12
Supplementary Bill					82874157				
PTC									
Chukha	156002472	374655536	2.40	7846447	18844027	2.40	163848919	393499564	2.40
Kurichu	9368560	20329775	2.17			0.00	9368560	20329775	2.17
Tala	128588810	291408456	2.27			0.00	128588810	291408456	2.27
MPL	677444668	2814502542	4.15	99110500	401423474	4.05	776555168	3215926016	4.14
IEX	312949515	1788390669	5.71	1264000	7054765	5.58	314213515	1795445434	5.71
	0	0							
Renewable	239838837	1647405284	6.87	29457212	174213034	5.91	269296048.5	1821618318	6.76
	0	0							
Transmission and POSOCO Charge etc.	0	868541530			111715601			980257131	
Total	1936508040	8167938625	4.22	154230071	853227931	5.53	1909224361	9151329218	4.79

Projection for rest of year of the FY 2022-23

Sources	Energy Approved in Order dtd. 17.06.2022	Projected energy for balance period	Basis of projection	Applicable Rate for balance energy	Projected Amount
	(MU)	(MU)		Rs./Kwh	Rs.
	J	K		L = Max of I & F	M = K *L
NTPC					
TSTPS	19.42	4.50	G*4/8	4.85	21836316
KBUNL	54.97	0.00	PPA surrendered		0
NHPC					
Rangit	32.53	4.10	J-G	4.18	17155289
Teesta	207.33	25.00	Past Trend	3.16	79059629
PTC					
Chukha	169.23	5.38	J-G	2.40	12923204
Kurichu	49.25	39.88	J-G	2.17	86542726
Tala	179.05	50.46	J-G	2.27	114355343
MPL					
	1005	388.28	G*4/8	4.14	1607963008
IEX					
	135	20.00	Past Trend	5.71	114281871.9
Renewable					
	73.16	134.65	G*5/7	6.76	910809158.8
Transmission and POSOCO Charge etc.					
					490128565.5
Total		672.25		5.14	3455055112