



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 06'2023

Notation	Particulars	Unit	Value mentioned in Tariff Order
TL	Normative Transmission Loss in %	%	0
DL	Normative Distribution Loss in % (As per WBERC Tariff Regulation (Fourth Amendment), 2023 applicable from 01.04.2023)	%	2.75
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	40.87	22.93
UI_{out}	Net Power exported (MU) in UI mode	MU	31.64	17.75
E_p	Total Power purchase (MU) against bill	MU	604.29	338.94
E_g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	4666.61	2617.50
E_x	Energy sold (MU) to person other than licensee and consumers including swapout.	MU	0	0.00
E_{P_PPSP}	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.	3344210998	1875767949
FC	Total fuel cost of own generation as per normative parameter fixed by the Commission in Rs.	Rs.	0	0.00
$UICost_{in}$	Power purchase cost for UI_{in} in Rs.	Rs.	551958313	309593418
CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	19.33	10.84
$R-E_x$	Revenue earned in Rs. On account of part of variable cost only due to Energy sold against E_x	Rs.	0	0.00
$R-UI_{out}$	Revenue earned in Rs due to power exported in UI mode.	Rs.	230738228	129421072

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.	8331385854	4673074325
FC _{Proj}	Projected fuel Cots 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	1681.15	942.95
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	13999.83	7852.51
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_x_Proj}	Projected Revenue earned on account of part of variable cost only due to Energy sold against Ex_Proj during balance period of the year	Rs.	0.00	0.00

E) Computation of MVCA

Tot _{ENR}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11763.99
Tot _{ENR_Consumer}	$Tot_{ENR} - UI_{out} - E_x - E_{x_Proj} - (E_{P_PSP} + E_{P_PSP_Proj}) / (1-TL)$	11746.25
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	6858435692
MVC _{consumer}	$MVC - (R - E_x + R - UI_{out} + R - E_{x_Proj})$	6729014620
E _{sc}	$Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11423.23
MVC _{unit_consumer}	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.59
mvc _{consumer}	$pp_{cost} + fc - pp_{cost_ex}$	5070207000
mvc _{unit_consumer}	$mvc_{consumer} / (e_{sc} \times 10^6)$	0.57
MVCA	$(MVC_{unit_consumer} - mvc_{unit_consumer} - Adhoc_V_{cost}) \times 100$ Paisa/kWh	1.71
MVCA rounded to nearest lower integer		1.00

Actual details of Power Purchase upto June'2023 in FY 2023-24

Sources	Upto previous Month			Current Month (June'23)			Cumulative of Current Month (Upto June'23)		
	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	2638546	24099822	9.13	1305680	8022676	6.14	3944226	32122498	8.14
KBUNL	0	0		6851983	34458086	5.03	6851983	34458086	5.03
NHPC									
Rangit	2998575	16708765	5.57	2920850	11801409	4.04	5919425	28510174	4.82
Teesta	38031552	96190278	2.53	28525738	57601472	2.02	66557290	153791750	2.31
Supplementary Bill		5304592			688273			5992865	
PTC									
Chukha	17162	41216	2.40	14623682	35120235	2.40	14640844	35161451	2.40
Kurichu	0	0	0.00	3055640	6966859	2.28	3055640	6966859	2.28
Tala	15286	34699	2.27	4326543	9821253	2.27	4341829	9855952	2.27
Supplementary Bill					2573865			2573865	
MPL	199929200	980238494	4.90	89838800	381285106	4.24	289768000	1361523600	4.70
Exchange Purchase	68396290	476918023	6.97	63114438	304663418	4.83	131510728	781581441	5.94
Renewable	50008206	348836496	6.98	27688131	197699735	7.14	77696337	546536231	7.03
Transmission and POSOCO Charge etc.	0	236012425			109123802			345136227	
Total	362034817	2184384810	6.03	242251485	1152859330	4.76	604286302	3344210998	5.53

Projection for rest of year of the FY 2023-24

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	11.83	G*9/3	8.14	96367493
KBUNL	54.97	20.56	G*9/3	5.03	103374258
NHPC					
Rangit	32.53	26.61	J-G	4.82	128166524
Teesta	207.33	140.77	J-G	2.31	325278890
PTC					
Chukha	169.23	154.59	J-G	2.40	371261320
Kurichu	49.25	46.19	J-G	2.28	105323138
Tala	179.05	174.71	J-G	2.27	396587564
MPL	1005	869.30	G*9/3	4.70	4084570800
Exchange Purchase	135	3.49	J-G	5.94	20737096
Renewable	73.16	233.09	G*9/3	7.14	1664310090
Transmission and POSOCO Charge etc.					1035408681
Total		1681.15		4.96	8331385854