



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 10'2022

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	115.16	64.59
UI_{out}	Net Power exported (MU) in UI mode	MU	29.64	16.63
E_p	Total Power purchase (MU) against bill	MU	1754.99	984.38
E_g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	10501.46	5890.27
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.	8380975444	4700889126
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.	784588138	440075487
CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	40.96	22.97
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.	24263661	13609488

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.	4647058642	2606535192
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	831.16	466.20
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	7501.04	4207.33
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}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11589.80
Tot _{ENR_Consumer}	$Tot_{ENR} - UI_{out} - E_x - E_{X_Proj} - (E_{P_PSP} + E_{P_PSP_Proj}) / (1-TL)$	11573.17
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	7747499805
MVC _{consumer}	$MVC - (R - E_x + R - UI_{out} + R - E_{X_Proj})$	7733890317
E _{sc}	$Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11318.56
MVC _{unit_consumer}	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.68
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	11.13
MVCA rounded to nearest lower integer		11.00

Actual details of Power Purchase upto Sep'2022

Sources	Upto previous Month (Sep'22)			Current Month (Oct'22)			Cumulative of Current Month (Upto Oct'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	6448393	23988076	3.72	1328506	6459115	4.86	7776899	30447191	3.92
KBUNL	0	43658571		0	0			43658571	
NHPC									
Rangit	21554025	81512378	3.78	4227200	14347380	3.39	25781225	95859758	3.72
Teesta	169014869	347711945	2.06	28228435	58064186	2.06	197243304	405776131	2.06
PTC									
Chukha	131138801	314942944	2.40	24863671	59712592	2.40	156002472	374655536	2.40
Kurichu	0	0	0.00	9368560	20329775	2.17	9368560	20329775	2.17
Tala	110928452	251319443	2.27	17660358	40089013	2.27	128588810	291408456	2.27
MPL									
MPL	581607648	2421544424	4.16	95837020	392958118	4.10	677444668	2814502542	4.15
IEX									
IEX	267543400	1561467578	5.84	45406115	226923091	5.00	312949515	1788390669	5.71
Renewable									
Renewable	204277669	1436185710	7.03	35561168	211219574	5.94	239838836.5	1647405284	6.87
Transmission and POSOCO Charge etc.									
Transmission and POSOCO Charge etc.		761338427			107203103			868541530	
Total	1492513257	6438672498	4.31	262481033	1137305948	4.33	1754994290	8380975444	4.78

Projection for rest of year of the FY 2022-23

Sources	Energy	Projected	Basis of	Applicable Rate	Projected
	(MU)	(MU)		Rs./Kwh	Rs.
	J	K		L = Max of I & F	M = K *L
NTPC					
TSTPS	19.42	5.55	G*5/7	4.86	27007721
KBUNL	54.97	0.00	PPA surrendered		0
NHPC					
Rangit	32.53	6.75	J-G	3.72	25093297
Teesta	207.33	10.09	J-G	2.06	20750720
PTC					
Chukha	169.23	13.23	J-G	2.40	31767231
Kurichu	49.25	39.88	J-G	2.17	86542726
Tala	179.05	50.46	J-G	2.27	114546901.3
MPL	1005	483.89	G*5/7	4.15	2010358959
IEX	135	50.00	Past Trend	5.71	285731497.2
Renewable	73.16	171.31	G*5/7	6.87	1176718060
Transmission and POSOCO Charge etc.					868541530
Total		831.16		5.59	4647058642