

SALIENT FEATURES

Sl. No		
1	State	Madhya Pradesh
2	District	Mandla
3	Latitude	22° 49' 43" N
4	Longitude	80° 29' 01" E
5	River	Narmada
6	Location	50 km from Mandla and 15 km from Mandla-Dindori Highway.
7	Catchment area upto dam site	4836 Sq. km
8	Total Land to be acquired	2416 ha
9	Maximum annual rainfall (1926)	2212 mm
10	Minimum annual rainfall (1966)	682 mm
11	Average annual rainfall	1400 mm
12	Design flood (SPF)	32463 cumecs
13	Probable Maximum Flood	36100 cumec
14	Available runoff at ROSARA	
	i) At 50% dependability	2624.8 MCM
	ii) At 75% dependability	1576.2 MCM
	iii) At 90% dependability	1177.5 MCM
15	Reservoir data	
	i) Average River Bed Level	452.00 m
	ii) Maximum water level	489.20 m
	iii) Full reservoir level	488.00 m
	iv) Silt Elevation	461.40 m
	v) Minimum Draw Down Level (MDDL)	474.00 m
	vi) Water spread at FRL (Submergence)	2116.10 ha
	vii) Gross storage at FRL	195.30 MCM
	viii) Dead storage (MDDL)	19.75 MCM
	ix) Live storage	175.55 MCM

Sl. No		
x)	Maximum tail water level	454.62 m
xi)	Minimum tail water level	454.50 m
xii)	TWL against Flood	473.53 m
16	DAM	
(A)	Overflow Dam	
i)	Top of dam	491.00 m
ii)	Length of spillway	267.80 m
iii)	Crest level	470.0 m
iv)	Foundation drainage gallery level	446.52 m
v)	Maximum height from deepest bed level	45.50 m
vi)	No. & size of crest gates	13 gates of size 16.10 m x 18 m
vii)	Type of Energy Dissipater	Slopping type Stilling Basin
viii)	Width of road on top of dam including parapets	7.5 m
(B)	Non overflow dam	
i)	Top of dam	E L 491.00
ii)	Length of non-overflow (concrete) dam	LHS 112.15 m RHS 29.70 m
iii)	Length of Earthen dam	RHS 556.00 m
iv)	Maximum height above foundation level	43.00 m
(C)	Power Dam	
i)	Top of dam	EL 491.00
ii)	Length of power dam	40 m
iii)	Maximum height above foundation	43.00 m
iv)	No. & diameter of penstocks	2 No.& 3.10 m dia.
v)	Length of penstock	59.50 m
vi)	Thickness of Penstock liner	10 mm
vii)	Center line level of penstocks at bell mouth intake	466.96 m

Sl. No		
viii)	Design discharge	89.00 Cumecs(44.5 cumecs each)
(D)	Power generation	
i)	Type of Power House	Surface type
ii)	Size of Power House	50.25 m x 25.5 m
iii)	Foundation level of Power House	EL 445.00 m
iv)	No. & size of units to be installed	2 units of 10.00 MW
v)	Type of turbine	Francis
vi)	Installed capacity	2 x 10 MW
vii)	Gross head	28.83 m
viii)	Net rated design head	27.45 m
ix)	Total Head Loss	1.38 m
x)	Size of draft tube gate	3.75 m x 2.5 m
xi)	Size of Tail pool	22.00 m x 33.25 m
xii)	Length of TRC	50 m
xiii)	Size of switch yard	75 m x 100 m
(E)	Total Length of Composite Dam	965.65 m
17	ESTIMATE OF COST	
i)	Land	64.49 crore
ii)	Concrete Dam with diversion work and HM equipments	127.22 crore
iii)	Earthen Dam	4.77 crore
iv)	Power Plant and Civil Works	14.13 crore
v)	Other Expenditures	61.93 crore
vi)	Electrical and Mechanical Works	34.16 crore
vii)	Total cost chargeable to power (without IDC))	306.70 crore
viii)	Cost per MW of installed capacity	17.25 crore per MW
18	Levellised Tariff	Rs 5.61/Unit
19	Design Annual Energy Generation	79.20 MU