

Salient Features

Sl. No		
1	State	Madhya Pradesh
2	District	Narsinghpur
3	Latitude	23° 02'00" N
4	Longitude	79° 05' 24" E
5	River	Narmada
6	Location	19 km from Kareli on NH-26, and 15 km from Narsinghpur, near village Pipariya.
7	Catchment area upto dam site	4377 Sq. km
8	Total Land to be acquired	6237.00 ha
9	Maximum annual rainfall (1926)	2008 mm
10	Minimum annual rainfall (1966)	780 mm
11	Average annual rainfall	1390 mm
12	Design flood (SPF)	52200 Cumecs
13	Probable Maximum Flood	67000 Cumecs
14	Available runoff at Chinki	
i)	At 50% dependability	5110.2 MCM
ii)	At 75% dependability	2851.4 MCM
iii)	At 90% dependability	2020.2 MCM
15	Reservoir data	
i)	Deepest River Bed Level	313.08 m

Sl. No		
ii)	Maximum water level	340.10 m
iii)	Full reservoir level	338.0 m
iv)	Silt Elevation	324.54 m
v)	Minimum Draw Down Level (MDDL)	335.00 m
vi)	Water spread at FRL (Submergence)	5937.00 ha
vii)	Gross storage at FRL	217.84 MCM
viii)	Dead storage (MDDL)	95.24 MCM
ix)	Live storage	122.60 MCM
x)	Average Tail water level	321.50 m
xi)	Minimum tail water level	320.00 m
16	DAM	
(A)	Overflow Dam	
i)	Top of dam	341.5 m
ii)	Length of spillway Main River Saddle	264.00 m 374.00 m
iii)	Crest level Main River Saddle	323.00 m 326.50 m
iv)	Deepest Foundation level Main River Saddle Average Foundation Level Main River Saddle	308.26 m 313.06 m 316.00 m 322.00 m
v)	Maximum height from deepest bed level Main River Saddle	33.24 m 28.44 m

Sl. No		
vi)	No. & size of crest gates Main River Saddle	12 gates of size 18.0 x 15.0 17 gates of size 18.0 x 11.5
vii)	Type of Energy Dissipater	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 341.50
ii)	Length of non-overflow (concrete) dam along the main spillway LHS RHS	76.0 m 21.0 m
iii)	Length of non-overflow (concrete) dam along the Saddle spillway LHS RHS	31.0 m 31.0 m
iv)	Maximum height of NOF above foundation level Main Dam Saddle Dam	26.50 m 19.08 m
v)	Length of Earthen dam LHS RHS In between main and saddle dam	381.45 m 171.0 m and 194.0 m 38.23 m and 319.53 m
vi)	Total Length of Earthen Dam	1104.21 m
vii)	Maximum height above foundation level	18.50 m
(C)	Power Dam	
i)	Top of dam	EL 491.00

Sl. No		
ii)	Length of power dam	45.00 m
iii)	Maximum height above foundation	26.50 m
iv)	No. & diameter of penstocks	3 No.& 3.80 m dia.
v)	Length of penstock	49.57 m
vi)	Thickness of Penstock liner	12 mm
vii)	Center line level of penstocks at bell mouth intake	328.16 m
(D)	Power generation	
i)	Type of Power House	Surface type at dam toe
ii)	Size of Power House	63.00 m x 175 m
iii)	Foundation level of Power House	EL 312.00 m
iv)	No. & size of units to be installed	3 units of 8.33 MW
v)	Type of turbine	Kaplan
vi)	Installed capacity	3 x 8.33 MW
vii)	Maximum net design head	16.85 m
viii)	Total Head Loss	1.15 m
ix)	Size of draft tube gate	3.5 m x 4.0 m
x)	Size of Tail pool	37.50 m x 67.67 m
xi)	Length of TRC	150 m
xii)	Size of switch yard	75 m x 100 m
(E)	Total Length of Composite Dam	1902.00 m
17	Estimate of cost	
i)	Land	157.36 crore



Sl. No		
ii)	C-Works	206.51 crore
iii)	Power Plant and Civil Works	20.58 crore
iv)	Electrical and Mechanical Works	54.24 crore
v)	Total cost chargeable to power (without IDC))	578.03 crore
vi)	Cost per MW of installed capacity	23.12 crore per MW
18	Energy generation	71.63 MU
19	Levellised Tarrif	Rs. 8.57/- per unit

(i)