SELA URTHING H.E. PROJECT

SALIENT FEATURES

LOCATION

State	Uttaranchal
District	Pithoragarh
River	Dhauliganga (Sarda basin) Dam site 450 m D/s of confluence of Sela Yankti with Dhauliganga River
Nearest Airport	Delhi
Nearest rail head	Tanakpur
Location of Dam Site	
Latitude	30^{o} 08’ 29” N
Longitude	80^{o} 36’ 23” E

HYDROLOGY

Catchment area at dam site	921 sq km
Maximum average Discharge at dam site	64.84 cumec
Minimum average Discharge at dam site	42.77 cumec

RESERVOIR

Full reservoir level (FRL)	2470
Minimum drawdown level (MDDL)	2455
Gross storage at FRL	3.06 M cum
Live storage	1.705 M cum
Area under Submergence at FRL	15.723 ha

DIVERSION TUNNEL

Number	1
Size	7.5 m D-shaped
Length	300 m
Diversion discharge	255.32 cumec

DAM

Type	Concrete Gravity Dam
Top elevation of dam	2473 m
Height of dam above	73 m

deepest foundation level	
Length of dam at top	185 m
River bed level	2415 m

SPILLWAY

Design flood	4603.03 cumec
Type	Sluice spillway
Crest elevation	2440 m
Number	4
Length of spillway	56 m
Energy dissipation type	Stilling basin

INTAKE

Invert level	2440.9
Number	2
Size of gate opening	4m x 4m
Trash rack	5m x 14.1m x 8 no.

DESILTING CHAMBER

Number	2
Size	12.50m (W) x 18m(H)
Length	220 m
Design discharge	62.59
Particle size to be removed	0.2 mm and above

HEAD RACE TUNNEL

Number	1
Size	5.5 m dia
Shape	Horse shoe
Length	2.01 km

SURGE SHAFT

Number	1
Size	10 m dia
Height	70.4 m

PENSTOCK

Numbers	1 bifurcating to 2 nos.
Size	4.8 m dia bifurcated & reduced to 3.4 m
Length	410 m

POWER HOUSE

Type	Surface
Installed capacity	230 MW
Number of units	2
Power house size	20 m x 69 m
Type of turbine	Vertical Francis
C.L. of turbine	2194 m
Rated Head	255.5 m

TAIL RACE

Size	12.75 m – bed width
Type	Open channel
Length	30 m
Design Discharge	100.14cumec
River Bed Level	2198.0
Normal TWL	2203 m

SWITCHYARD

Size	200 m x 150 m

POWER GENERATION

Installed capacity	230 MW
Annual energy generation	
i) 90% dependable year	816.73 GWh
ii) Energy in 90% year on 95% availability	803.42 GWh

CONSTRUCTION PERIOD 5 years and 6 months