JELAM TAMAK (2X30 =60 MW)
SALIENT FEATURES

LOCATION

State	Uttaranchal
District	Chamoli
River	Dhauliganga

Dam site

Location	Near village Jelam
Latitude	30^{o} 38' 45" N
Longitude	79^{o} 49' 57.7" E
Nearest Airport	Dehradun
Nearest rail head	Rishikesh

HYDROLOGY

Catchment area at dam site	1510 sq km
Maximum average discharge at dam site	140.8 cumec
Minimum average discharge at dam site	10.3 cumec

RESERVOIR

Full reservoir level (FRL)	El 2642.50 m
Minimum Drawdown level (MDDL)	El 2632.0 m
Gross storage at FRL	1.6 M cum
Gross storage at MDDL	0.7 M cum

Live storage	0.9 M cum
Area under Submergence at FRL	13.9 ha

DIVERSION TUNNEL

Number	1
Size	5.0 m dia
Length	250 m
Diversion discharge	60 cumecs

DAM

Type	Concrete Gravity Dam
Top elevation of dam	2644.50 m
Height of dam above river bed level	24.50 m
Length of dam at top	136.0 m
River bed level	El 2620.0 m

SPILLWAY

Design flood	5845.0 cumecs
Type	Ogee spillway with breast wall
Crest elevation	2623.50 m
Number	4
Size of Gate opening	14.0 m x 13.5 m
Length of spillway	72.0 m
Energy dissipation type	Trajectory type bucket

INTAKE

Design discharge	41.0 cumecs
Invert level	2625.0 m
Number	1
Size of gate opening	4 m x 4m
Trash rack	5 of 5.0 m x 9.0 m

DESILTING CHAMBER

Number	1
Size	200m x 10m x 15m
Design discharge	41.0 cumecs
Particle size to be removed	0.2 mm & above
Flushing Discharge	6.87 cumecs
Flushing Tunnel Size	1.7 m Φ
Length of flushing tunnel	210 m

HEAD RACE TUNNEL

Number	1
Size	3.5 m diameter
Shape	Horse shoe
Length	5.70 km
Design Discharge	34.13 cumecs

SURGE SHAFT

Number	1
Size	8 m diameter
Height	100.0 m

PRESSURE SHAFT

Numbers	1
Size	2.6 m diameter bifurcating into Two of 2.0 diameter
Length	247.0 m

POWER HOUSE

Type	Underground
Installed capacity	60 MW
Number of units	2 of 30 MW
Power house cavern size	56 m x 22.5 m(W) x 30 m (H)
Type of turbine	Vertical axis Francis turbine
C.L. of turbine	2418.0 m
Rated Head	195.58 m

TAIL RACE

Size	4.0 m dia
Type	D-Shape
Length	320.0 m
Design Discharge	34.13 cumecs
River Bed Level	2420.0 m
Normal TWL	2424.0 m

SWITCHYARD

Size	Gas Insulated Switchyard (GIS) on the floor above the transformer/s in P/H cavern

POWER GENERATION

Installed capacity	60 MW
Annual energy generation	
i) 90% dependable year	268.12 GWh
ii) Energy in 90% year on 95% availability	260.85 GWh

CONSTRUCTION PERIOD 5 years