

1. LOCATION

i)	State	:-	Arunachal Pradesh
ii)	District	:-	Lower Subansiri
iii)	Town	:-	Yachuli (about 16 km from project area)
iv)	Access	:-	Joram-Tallo village Road
v)	Nearby village	:-	Tallo
vi)	Geographical Coordinates	:-	Latitude = 27°32'08" N Longitude = 93°45'35" E
vii)	Toposheet Reference	:-	83 E/14
viii)	Nearest Railhead	:-	Naharlagun (92 Kms)
ix)	Nearest Airport	:-	Guwahati (482 Kms)

2. HYDROLOGY

i)	Name of the Stream	:-	Pein Nala
ii)	River Basin	:-	Panyor River
iii)	Catchments Area	:-	24 km ²
iv)	Type of Stream	:-	Perennial
v)	Design Flood	:-	210 m ³ /s
vi)	Average Annual Inflow	:-	45.10 MCM
vii)	75% dependable inflow	:-	38.50 MCM
viii)	Design Discharge	:-	0.95 m ³ /s

3. TRENCH WEIR

i)	Shape	:-	Rectangular drop type
ii)	Length	:-	12 m
iii)	Width	:-	1 m
iii)	Discharge	:-	1.505 m ³ /s
iv)	Top level of trench	:-	EL 1280 m
v)	Size of gate	:-	1.0 m (H) x 1.1 m (W)
vi)	Invert Level of Intake	:-	EL 1278.10 m

4. INTAKE CHANNEL

i)	Length	:-	10 m
ii)	Shape	:-	RCC Rectangular Section
iii)	Size	:-	1.0 m (W) x 1.1 m (H)
iv)	Full Supply Depth	:-	0.9 m
v)	Discharge	:-	1.254 m ³ /s
vi)	Bed Slope	:-	1 in 500

5. DESILTING BASIN

i)	Size	:-	14.0 m long x 5.0 m wide
ii)	Slope Height	:-	1.50 m
iii)	Vertical Height	:-	3.0 m
iv)	Silt Catch Drain	:-	0.5 m x 0.5 m
v)	Full Supply Level	:-	EL 1279.26 m

6. POWER CHANNEL

i)	Length	:-	370 m
ii)	Shape	:-	RCC Rectangular Section
iii)	Size	:-	1.0 m (W) x 1.0 m (H)
iv)	Full Supply Depth	:-	0.8 m
v)	Discharge	:-	1.045 m ³ /s
vi)	Bed Slope	:-	1 in 600

7. FOREBAY TANK

i)	Size	:-	16.0 m long x 4.0 m wide
ii)	Storage	:-	3 Minutes
iii)	Capacity	:-	128 m ³
iv)	Full Reservoir Level	:-	EL 1278.64 m
v)	Min. Draw Down Level	:-	EL 1276.64 m
vi)	C/L of penstock	:-	EL 1275.28 m

8. PENSTOCK

i)	Size	:- 700 mm (ID) bifurcating into 450 mm (2 nos.) & 350 mm (1 no.)
ii)	Length (main penstock)	:- 135 m
iii)	Discharge	:- 1.045 m ³ /s
iv)	Liner Thickness	Varies from 8 mm to 10 mm

9. POWER HOUSE

i)	Type	:- Surface
ii)	Head	:-
	Gross	48.0 m
	Design (net)	42.0 m
iii)	Design Discharge	:- 1.045 m ³ /s (Including 10% overload)
iv)	Size of Power House	:-
	Length	:- 22 m
	Width	:- 7 m
	Height from Machine Floor Level	:- 8 m
	Machine Floor Level	:- EL.1234 m
v)	Installed Capacity	:- 250 KW
vi)	Turbines	
	Type	:- Francis (Horizontal)
	Number	:- 3 Nos.
	Capacity	:- 100 kW (2 nos.) + 50 kW (1 no.)
vii)	Generator	
	Type	:- Synchronous
	Voltage	:- 415 V
	Frequency	:- 50 Hz

10. TAIL RACE CHANNEL

i)	Type	:- Open RCC Channel
ii)	Shape	:- Rectangular
iii)	Size	:- 2 m (W) x 0.9 m (H)
iv)	Discharge	:- 1.045 m ³ /s
v)	Quantity	:- 1 no.
vi)	Length	:- 20 m

11. LAND REQUIREMENT

i)	Submergence	:-	NIL
ii)	Permanent Land Requirement	:-	0.846 Ha.
iii)	Temporary Land Requirement	:-	0.27 Ha.

12. GENERATION

i)	Annual Generation in 75% Dependable Year	:-	1.64 MU
ii)	Annual Energy Generation at 95 % plant Availability	:-	1.56 MU
iii)	Annual Load Factor (%)	:-	71.05 %
iv)	Generation in Lean Period (Nov.-Mar.)	:-	0.51 MU

13. COST ESTIMATE & FINANCIAL PROJECTIONS

i)	Land & Preliminary expenses	:-	Rs. 0.56 Cr.
i)	Civil and HM Works	:-	Rs. 4.87 Cr.
ii)	Electro-mechanical works	:-	Rs. 3.35 Cr.
iii)	Evacuation	:-	Rs. 0.09 Cr.
iv)	Total Project Cost	:-	Rs. 8.87 Cr.
v)	IDC and Escalation	:-	Rs. 1.89 Cr.
vi)	Project cost (including escalation and IDC)	:-	Rs.10.76 Cr.
vii)	Cost per KW	:-	Rs. 4.30 Lacs
	Cost of generation (Rs/ kWh)		
viii)	a) 1 st Year	:-	Rs. 12.78/ Unit
	b) Levelised Cost	:-	Rs. 10.02/ Unit

14. SCHEDULE

i)	Pre construction Activities	:-	9 months
ii)	Construction Period	:-	12 months