

2.0 Salient Features:

1 Location

- (i) District - Chamoli
 - (ii) Tehsil - Chamoli
 - (iii) Place - Near Gauna village
 - (iv) Stream - Birahi Ganga
 - (v) Nearest rail Head - Rishikesh (215km)
 - (vi) Geographical Co-ordinates
- Weir Site - Lat- 30^o 22' 30" and Long-79^o 30' 00"
- Power house site - Lat- 30^o 22' 00" and Long-79^o 29' 00"

2 Hydrology

- (i) Catchment Area - 214 sq km
- (ii) Snowbound Catchment Area - 31 sq km
- (iii) Maximum Flood discharge - 795 cumecs

3 Diversion arrangement

- (i) Type of diversion - Trench weir, 20 m long and 2.0 m wide
- (ii) Intake structure - Gate well type, RCC structure
- (iii) Power duct - RCC Box section

4 Desilting Chamber

- (i) Size of the Desilting chamber - 30 m x 8m x 3.05 m
- (ii) Removal of Particle size upto - 0.2 mm size

5 Water Conductor System

- (i) Type of WCS - RCC rectangular channel.
- (ii) Length of Channel - 2.0 km long.
- (iii) Size of Channel - 1.75 m x 2.0 m
- (iv) Maximum discharge - 4.88 cumecs

6 Forebay

- (i) Type - RCC, Circular type for 2 minutes storage
- (ii) Size - 10 m diameter and 10 m depth.

Birahi Ganga Small Hydel Scheme-II
Pre-Feasibility Report

7 Penstock

- (i) Type - Surface Penstock of ERW pipe.
- (ii) Diameter of pipe - 1200 mm dia, bifurcating into 900 mm dia two pipes

8 Power house

- (i) Type - Surface, Francis turbine
- (ii) Maximum Gross head - 141.88 m
- (iii) Installed capacity - 2 units of 2.8 MW each.
- (iv) Energy generation - 32.22 million units.

