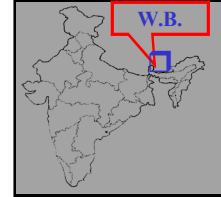


TEESTA LOW DAM SPILLWAY, STAGE – III, WEST BENGAL



SALIENT FEATURES

Location	: Dist. Darjeeling, West Bengal
River	: Teesta
Power Generation	: 132 MW (33 x 4)
Maximum Discharge	: 10,430 m ³ /s
Type of dam	: RCC Raft Barrage
Spillway	: 7 Spans of size 14 m (W) x 14 m (H) with breast wall
Energy dissipator	: Stilling basin

MAJOR STUDIES

1: 60 scale 3-D comprehensive model

- ☺ Approach flow conditions upstream of spillway and power intake
- ☺ Assessment of discharging capacity, pressures and water profiles on spillway
- ☺ Performance of spillway and energy dissipator
- ☺ Performance of power intake and tail race channel.



RESULTS / BENEFITS

- 📄 Design of crest profile was modified
- 📄 The discharging capacity of the spillway is adequate
- 📄 Approach flow conditions in the vicinity of spillway and power intake are satisfactory
- 📄 Performance of stilling basin is satisfactory
- 📄 The trunnion elevation of radial gates was raised by 2 m
- 📄 The alignment of right bank of tail race channel was modified considering water level fluctuations, return velocities and silt deposition
- 📄 Design of extensive protection/training works upstream and downstream of spillway were reviewed.