KURICHU DAM SPILLWAY, BHUTAN

SALIENT FEATURES

- Location: Mongar District, Bhutan
- River: Kurichu
- Power Generation: 60 MW
- Maximum Discharge: 12200 m$^3$/s
- Type of dam: Concrete Gravity Dam Height 55 m
- Spillway: 5 Spans of 10.5 m wide separated by 7 m thick piers
- Radial Gates: 14 m (H) 10.5 m (w)
- Energy dissipator: Stilling Basin

MAJOR STUDIES

- Comprehensive model scale 1: 50
  - Approach flow conditions upstream of spillway and power intake
  - Assessment of discharging capacity & pressures on breast wall spillway
  - Performance of stilling Basin
  - Layout of Power House Tail Race Channel

BENEFITS

- Finalised Design of Spillway and Power Intake
  - Number of intakes recommended 2 instead of 4
  - Optimised design of stilling basin from the considerations of dissipation of energy and flushing of silt
  - Five alternative layouts of tail race channel wall studied & finalised considering water level fluctuations, return velocities and silt deposition