DEVSARI H.E. PROJECT, UTTARAKHAND.

SALIENT FEATURES

Location : Chamoli District  
River : Pinder  
Power Generation : 252 MW (84 x 3)  
Maximum Discharge : 6,969 m³/sec  
Type of dam : Concrete Gravity Dam  
Height of dam : 65 m  
Spillway : Sluice spillway of 5 Spans of size 8.5 m (W) x 12.5 m (H)  
Energy dissipator : Ski jump Bucket

PROPOSED STUDIES

1:60 scale 3-D comprehensive model

- Approach flow conditions upstream of spillway and power intake
- Assessment of discharging capacity of sluice and auxiliary spillway
- Water surface and Pressure profiles on sluice spillway
- Performance of energy dissipation arrangement
- Pressures and water profiles on sluice spillway

RESULTS

- Discharging capacity of the spillway is found to be adequate as PMF of 6969 m³/s can be passed at RWL El. 1292.80 m, whereas maximum discharge of 9000 m³/s and 9200 cumec can be passed at FRL and at MWL respectively.
- Recommended to raise the elevation of trunnion axis to avoid its submergence.
- The performance of ski-jump bucket is found to be unsatisfactory for the entire range of discharges.
- Recommended stilling basin as energy dissipator and shifting of auxiliary spillway to centre of spillway.
- Recommended to explore the possibility of shifting auxiliary spillway over the central span of main spillway.
- Flow conditions were satisfactory in the vicinity of power intake.