

Eastern Gandak Canal H.E. Project, Valmikinagar (3x 5 MW)

GENERAL REPORT

1.01 The Gandak Barrage at Valmikinagar partly in Bagaha Block II of the West Champaran District intercepts water of a catchment which lies partly in Nepal and partly in India. The government of India and His Majesty's Government of Nepal entered into an agreement in December, 1959 for the purpose of the construction of this barrage and sharing of water. Some modification were subsequently made in this agreement in 1964 for the protection of Nepal's riparian rights. Basically there is an agreed share of water for 'western Canal System including a power station in Nepal and Eastern canal System. The barrage was constructed on the Gandak river at Valmikinagar in 1968-69 for providing irrigation to Nepal, U.P. and Bihar. The Eastern Gandak Canal Project was taken up in 1960 and Main Canal system was completed in 1975. A hydroelectric generating station with an installed capacity of 15 MW(3x5 MW) has already been constructed and commissioned on the fall of 5.3 m at RD 6.0 on by pass to Eastern Gandak Canal.

SALIENT FEATURES

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| 1. | Catchment area of Gandak at Barrage | : | 37,410 Sq. Kms. |
| 2. | Water Conductor System | | |
| | (a) Power Channel | : | 1400 M |
| | (b) Tail Race Channel | : | 4223 M |
| 3. | Power House | | |
| | (a) Installed capacity | : | 3x5 MW |
| | (b) Rated Head | : | 5.3 m |
| | (c) Design Discharge | : | 357.3 cumecs |
| | (d) Annual Energy Gen. | : | 98 GWH |
| 4. | Turbine (s) | : | 5.670 MW, 107 rpm, Bulb Type, Horizontal shaft with movable wicket gates & movable blades. |
| 5. | Generator (s) | : | Type –GDH 6435T-28, 5.556 MW, 6112 KVA, 486 Amp., 0.9 p.f., 50 Hz, 107 rpm. |
