
Water Powers of Canada

winch. The trash racks are placed in the flumes behind the intake gates and are accessible for inspection or repairs.

The natural head of water above the tailrace level is 63 feet at low water stage, but during high water the head is reduced to 56 feet. This difference in head is caused by the contracted area of the channel a short distance below the Falls. When the load demands it, the Company will remove the obstructions in the channel and increase the sectional area to such an extent that the water level below the Falls will be lowered about 5 feet at high stages of the river. A low dam will also be built across the river above the falls which will



Kootenay River Development. No. 2 Plant and City of Nelson Plant, Upper Bonnington Falls.

raise the head at high stages of the river and thus equalize the head between the extremes of high and low water. This work will increase the working head to 70 feet.

Space is provided in the building for four main generating units, two exciter units, and for all transformer and switching apparatus to complete the plant. At present, two units are installed. A 30 ton electrically operated overhead travelling crane spans the main generator room, and railroad cars can be brought into the power house on a spur track under the crane.

The generating equipment of No. 2 Power House consists of two 5,625 K.V.A., 3 phase, 60 cycle, Canadian General Electric "Umbrella" type generators, each driven direct by one 8,000 H.P. "Francis" turbine, at a speed of 180 R.P.M. Two vertical shaft turbine driven exciter sets are provided which are capable of exciting the entire generator equipment when installed.