companying illustration. This distant control removes from the generating station the possible dangers incident to the operation of high voltage switches for generators, as well as for transformers, and also concentrates the management of both in a single operating room. On a raised gallery, indicator switches on individual pedestals afford control of speed, voltage and connections. Just back of each control pedestal there is an instrument stand which carries a full set of indicating instruments.

The control circuits pass from the generating station in insulated cables carried through inclined tunnels in the cliff, extending to a point on the hillside a little above the main conduits, thence up the bluff under ground to the distributing station. The electrical energy from the generating station is transmitted by heavy cables, insulated with paper and lead, and protected with layers of jute and steel, which follow the same route to the distributing station. They are laid in tile ducts imbedded in the sides of the tunnels.

In a separate switch room at the distributing station, the automatic oil switches for the 12,000 volt circuits from generators, are mounted in concrete cells, an isolated group for each unit. They are of the vertical plunger type and are magnetically actuated.

Transformers occupy the central place through the length of distributing station building, except in the middle, where space is given to the control gallery. Fireproof masonry walls separate low tension switch room, control gallery, the two transformer rooms and high tension switching rooms, from one another. The rating of each transformer is 2,500 kilowatts, or 3,350 horse-power, and each one weighs about 40 tons. They are set in concrete pits, in groups of three, and are water cooled. The potentials for which they are designed are 30,000 and 60,000 volts.

Three pole high tension switches of special design, to break a maximum current of 10,000 horse-power, thus necessarily involving some novel construction, connect the secondary coils of transformers to high tension bus bars. Transmission circuits will be taken off from these bus bars, although current may also be delivered to transmission circuits at generator voltage direct.