The initial investigation of the Kundah River was undertaken by the Madras Department of Electricity in 1949, and the first report was issued in 1951. However, the proposals incorporated in that report have been modified and the project will now be developed in the following four stages (see sketch of project area on page 184):

STAGE I

Masonry dams about 190 feet high will be built across the Avalanche and Emerald Rivers to form storage reservoirs that would merge into one lake at upper levels. Two power plants will also be constructed with installed capacities of 40,000 kilowatts and 105,000 kilowatts respectively. In addition, a pondage and diversion dam is to be built on the Kundah River below the junction with the Kanara River to make the unregulated flow between that point and the Avalanche-Emerald available to the lower plant.

STAGE II

A storage reservoir, involving the construction of two dams, is to be created on the headwaters of the Upper Bhavani and its water carried by tunnel through the height of land to the Avalanche-Emerald reservoir. The generating capacity of the lower plant will be increased to 140,000.

STAGE III

A storage reservoir would be created on the east and west Varahapallam Rivers and the water carried by tunnel through the height of land to the Avalanche-Emerald reservoir. A small drainage area on the western slope of the Nilgiri Hills, known as the Western Catchment, would also be diverted into the Porthimund basin high up on the Pykara drainage area and either used elsewhere or diverted by tunnel to the Avalanche-Emerald reservoir. The generating installations in the upper and lower plants might also be increased to 60,000 kilowatts and 175,000 kilowatts respectively in this stage. Under present planning Stage III would involve the construction of ten dams.

STAGE IV

A third power station would be added near the confluence of the Kundah-Bhavani Rivers. The capacity of this power station has not yet been specified, but it will probably be of the order of 100,000 kilowatts.

In addition to the four stages described above, it has been suggested that power may also be developed on the three drops between the Upper Bhavini, Porthimund, and Varahapallam storages and the Avalanche-Emerald reservoir.