CHAPTER – I

NEED OF THE PROJECT

The Southwest strip of India, Kerala is bounded with Western Ghat on the east and Arabian sea on the west. Blessed with such a topography, the land of Kerala has rich water wealth owing to the southwest and northeast monsoons. The rivers are originating from western ghat (41nos are flowing to the west to join the Arabian sea and 3nos are flowing to the east to join the river Cauvery), making the state blessed with plenty of river water wealth. As far as our small state is considered, hydropower is the cheapest and environmentally benign source of energy.

The peak demand and energy requirement as per the 17th power survey of Central Electricity Authority, Ministry of Power, Government of India are given in Table - I (4). Accordingly the demand of power by 2011-2012 will be 3528 MW / 19230 Mu. Considering 20% outage of machines, the installed capacity required to meet the above demand shall be 4234 MW. The state is going to witness a giant leap in developmental activities with many prestigious projects on the anvil viz Vallarpadam Container Terminal, Smart city, Vizhinjam port, New town ships, Kannur Airport etc. This demand cannot be met from the power sources already developed in the state. Hence to meet the energy requirements, new power projects have to be taken up.

The details of commissioned generating stations are given in table – I (1). From this 2664.03 MW equivalent 12138.01 Mu is presently available . The projects under construction (details are given in Table- I (2)) will immediately add another 212.3 MW and 566.21 Mu The list of the schemes to be taken up in the near future are given in Table – I (3). This will add another 375.05 MW and 882.44 Mu to the power grid. The availability from the existing schemes, schemes under construction and which are propbsed to be implemented will be

3251.38 MW / 13586.66 Mu. The short fall of Installed Capacity is to be compensated to meet the projected demands. Hence new schemes have to be investigated and implemented.

Priority is being given for hydro stations wherein the environmental & resettlement problems are minimum and which could be executed in minimum time with sophisticated machinery.

Hydel schemes have certain specific advantages such as cheap and simple maintenance, no escalation in cost of production, long service etc. when compared to thermal, nuclear, diesel power plants etc. Due to the above reasons, exploitation of all possible hydel sources including the proposed scheme is the need of the hour. Also, the implementation of the scheme will lead to the socio-economic development of the locality.

The implementation of the proposed scheme imprints minimum impact on environment and the ecology of the area on the initial stages of implementation, which will later be made up very efficiently. The forest land required for the scheme is about 20.50Ha. The Kannankuzhy Small H E P with 7.0 MW installed capacity when completed will add 16.69 Mu to the grid annually, which can partly meet the growing energy needs of the state.