

## NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY JETALPUR

### ❖ Project detail

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### ❖ Name of project

POWER GENERATION FROM THE DISTRIBUTION LINE OF WATER PUMPING STATION

### ❖ WORKING PRINCIPLE

Overhead tank on buildings stores water for everyday use. Energy can be extracted from flowing water when it is supplied to apartments. A micro hydro turbine may be fitted in water pipe line to convert potential energy of water into electrical energy. A micro-hydropower plant capable of generating about 0.785V from falling water for a housing estate or personal property that is not served by the electrical grid is presented. Three surface tanks, one underground tank, a turbine generator set and one pump with associated pipes constitute the micro hydropower plant. A hydraulic ram pump is used to increase the head of the falling water. The flow rates of water out of tanks and pumping rate of water into a tank are designed to operate optimally. In order that the flow rates are maintained constant, controlled actuator is designed to activate the pump as the need arises while flow regulator is fitted in another tank to keep the flow rate at a predetermined value.



### ❖ APPLICATION

Commercial ,industrial , agriculture

### ❖ COST

8000/-

### ❖ INTERNAL GUIDE

MAHRSHI PATEL	9974742572
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