Hydro Power Introduction

Surfers enjoy the forces of the alternative energy form of water power. These force of the ocean are very similar to the forces that exist in rivers or inland bodies of water. The water moves from a higher elevation to a lower elevation, as seen when a wave crashes into the beach. The water molecules on the top of the wave eventually crash down to the beach because of the force of gravity pulling it toward the center of the earth. Waves actually form because of the forces of the moon pulling the water into the air, but because the gravitational force of the earth is stronger, the waves fall to the beach. There are other forces involved in the production of energy through hydro power. The Hydro physics page discusses not only these forces, but how the work done on a turbine produces energy.

Most alternative energy forms come in at least two varieties, hydro power included. Hydro means water, and can be used alone, or with the word electricity attached to the end of it. When hydro power is not used to produce electricity, it is classified "passive." When hydro power is used for electricity production, it is classified "active."

Hydro power, because it is an alternative power form, relies heavily on the latest technology. Technology is another word for the latest change. The history of hydro power is very long because technology has changed so much since man first became interested in tapping into the power of water. Sailboats led prey to the larger, stronger powered boats that operated on principles similar to the nuclear power process or the steam engine. For more information about this procedure, read the nuclear power pages.

It must be human nature to put want to throw a rock into a lake. This same predicament is the basis for throwing (or placing) rocks in the middle of a river. Someone a long time ago must of thought of engineering a dam that could stop the water from flowing, and started the more than thousand year evolution of hydro power technology.

As all alternative energy forms are used, they are not physically limited by geography. While using solar power in a less radiant place will produce less power, setting up a hydroelectric dam where little water flows correspondingly means a smaller amount of energy is produced. The best way to categorize the way many alternative energy forms are located is through economics. For example, putting a hydroelectric power station at the bottom of a series of rapids will produce a far greater amount of energy than placing it at the beginning of the rapids. The end of the rapids will produce more energy and also more income. This linked page holds information about where the best locations are to place a hydro power plant. The links page tells the internet location of many of the hydro plants listed at the geography page.