The Kouris Centri Turbine Generator

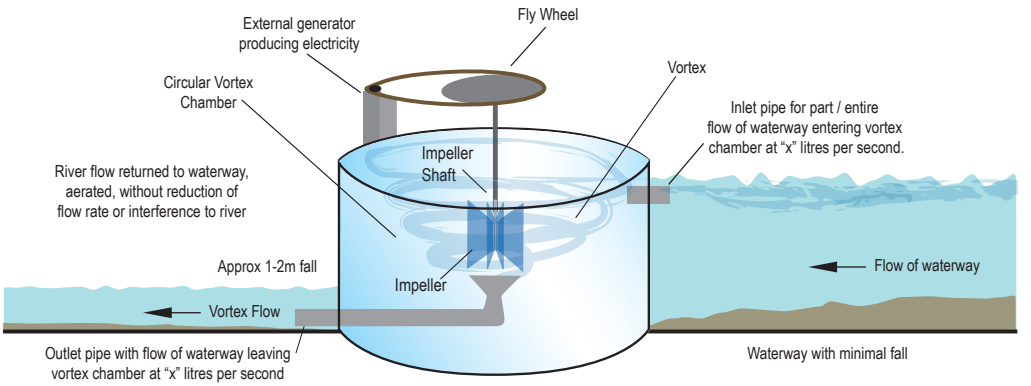
An improved hydroelectric power generator operated using the kinetic energy created by the Earth's rotation.

The New Hydroelectric Turbine

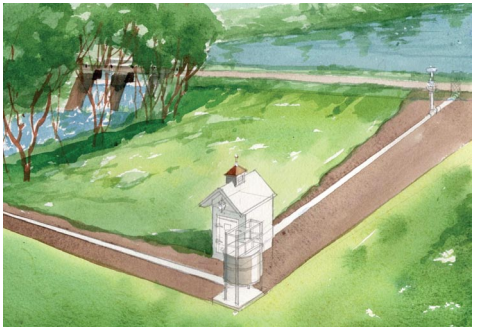
KOURIS CENTRI TURBINE GENERATOR (KCT) APPLICATIONS

KCT WATERWAY SCENARIO
KCT VORTEX TURBINE OPERATING ON SPIN OF WATER

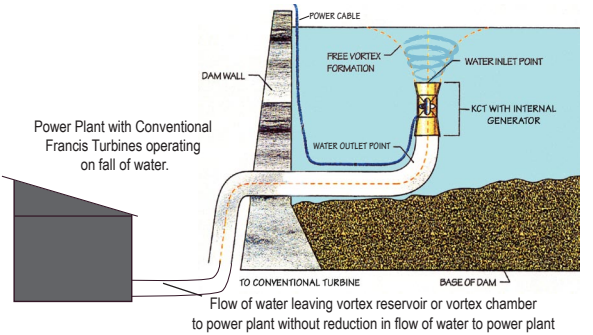
A. WATERWAY EMBODIMENT OF KCT



KCT CONVENTIONAL HYDRO SCHEME RETROFIT SCENARIO
KCT VORTEX TURBINE OPERATING ON SPIN OF WATER



B. TRANSPORTABLE EMBODIMENT OF KCT



C. DAM OR RESERVOIR EMBODIMENT OF KCT

Explanation of Applications

The Kouris Centri Turbine Generator (KCT) is a patented invention that harnesses the rotational kinetic energy contained within a vortex of water in order to generate continuous, emission-free and renewable electrical energy.

The system can be utilised within:
(A) A flowing waterway, without interference to the waterway or its flow rate; or
(B) A field with access to flowing water; or
(C) A dam, whether or not connected to a conventional, hydroelectric plant

As to (A), pilot plant testing demonstrates conclusively that there is no interference with the stream flow caused by the KCT. The water enters and leaves the KCT with no backup or flooding.

As to (B), the installation can be brought on site as required, and if necessary, removed.

As to (C), prototype testing reveals that the flow of water to the conventional hydroelectric plant is not impeded or diminished, but is in fact increased.

DESIGN FEATURES: The K.C.T.

• Unit incorporates a cylindrical, elongated turbine which is installed in a vertical orientation to utilize gravity/Coriolis forces and produce electrical or mechanical power

• Turbine wheel is housed in a precision enclosure and features a vertically oriented rotor shaft

• Rotor shaft is supported by top and bottom end-plate assemblies for ease of access and maintenance

• The generator unit is operationally coupled to the rotor unit so that the rotational energy is transformed directly into electrical energy

• Water is delivered to the inlet manifold on upper portion of enclosure, passes through the vertical turbine blades, and exits via a lower discharge manifold

• The elongated shape of the turbine and its direction of rotation is intended to maximise energy conversion process from both gravitational and Coriolis forces

TARGET MARKETS:

• Hydroelectric Schemes
• Waterway Authorities
• Utility Companies
• Businesses
• Farms

MARKETING OUTLETS:

• Distributors of generators

• Wholesalers of general-purpose industrial machinery, equipment and parts

• Farm equipment and tractor dealers

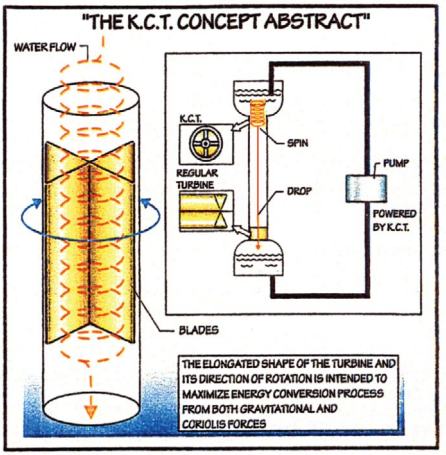
SIC CODES (USA):

• 3621

PATENT STATUS:

• U.S Patent and International Patents granted

• Further Patents pending



DESIGN ADVANTAGES: The Concept

• Harnesses spinning motion produced naturally in a body of a water by natural forces imposed upon it

• Produces abundant, free and clean power with minimal interference with existing hydroelectric systems

• A safer alternative to nuclear energy

• Will not pollute air or water or cause other environmental damage

• Helps protect dwindling natural resources used to create energy

• Multi-purpose unit can be used in a number of medium to large power-generating applications and in simple power-production applications for operating well pumps, grain mills etc.

• The K.C.T. generator can work independently in a waterway or reservoir
or in conjunction with a standard gravity-fed hydroelectric system

• The K.C.T. generator can derive extra energy out of an existing conventional hydroelectric system by incorporating the K.C.T. as a secondary system

• An entirely new means of generating additional energy without offending the Conservation of Energy Principle