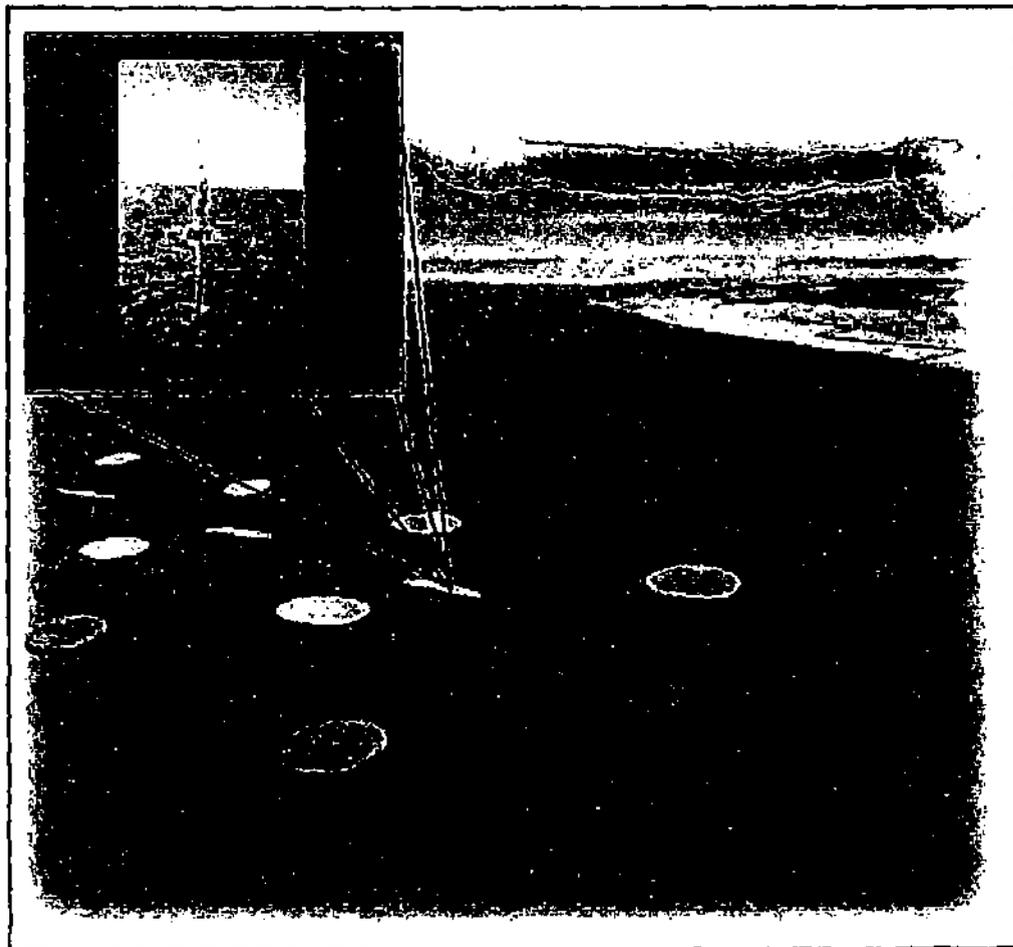


OCEAN POWER TECHNOLOGIES, INC



PowerBuoy™ Operation



OPT power station showing multiple buoys and underwater transmission cable. Inset shows individual PowerBuoy™. A 10-Megawatt OPT power station would occupy only approximately 4 acres of ocean space.

OPT's PowerBuoy™ wave generation system uses a "smart," ocean-going buoy to capture and convert wave energy into a controlled mechanical force which drives an electrical generator

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The rising and falling of the waves off shore causes the buoy to move freely up and down.

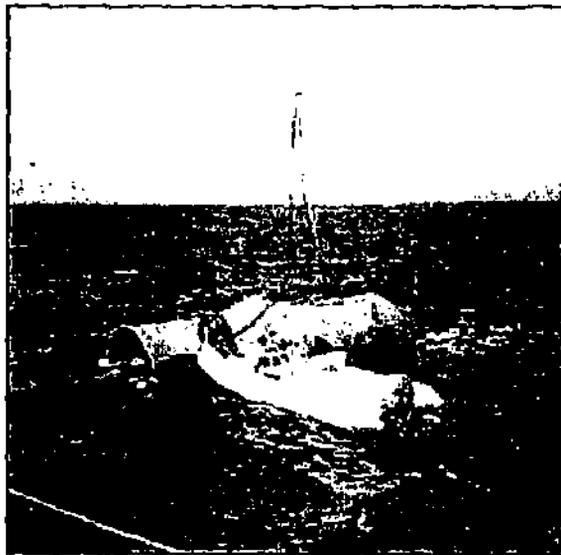


The resultant mechanical stroking drives the electrical generator.

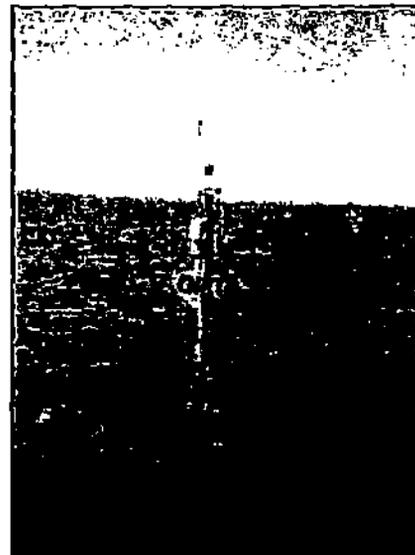


The generated AC power is converted into high voltage DC and transmitted ashore via an underwater power cable.

The PowerBuoy™ is enhanced with sensors which continuously monitor the performance of the various subsystems and surrounding ocean environment. In the event of very large oncoming waves, the system automatically disconnects. When the wave heights return to normal, the system reconnects and recommences energy conversion and transmission.



OPT PowerBuoy™ in process of deployment off the coast of New Jersey.



Installed and in operation, the OPT PowerBuoy™ is invisible from the shoreline.

Cost Advantages

The total operating cost of generating power from an OPT wave power station is projected to be only (US) 3-4¢/kWh for 100MW systems and (US) 7-10¢/kWh for 1MW plants, including maintenance and operating expenses, as well as the amortized capital cost of the equipment.

Total Operating Cost Comparison (US cents/kWh)

	Secondary Power (1MW)	Primary Power (100 MW)
OPT PowerBuoy™	7-10	3-4
Fossil Fuel	N/A	3-5
On-Shore Wind	10	5-6
Off-Shore Wind	15	8-9
Diesel	12-100	N/A
Solar	25-50	10-25

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OPT's Wave Energy vs. Conventional, Wind and Solar

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OPT's Wave Energy vs. Conventional Energy

The OPT wave energy system is highly modular and, therefore, less costly to implement and easier to scale as needs change. Conventional power stations must be built on a large scale to be economical, making them difficult to maintain, and vulnerable to failure and acts of terrorism.

The footprint of a 100MW conventional power plant superstructure, including surrounding grounds, fuel unloading areas, waste settling ponds, and additional facilities can require up to 2 square miles of valuable real estate. A comparable OPT power plant would occupy less than 1 square mile of unused ocean surface out of sight from the shore.

OPT's Wave Energy vs. Wind & Solar Energy

OPT's wave power offers many advantages over wind and solar power stations.

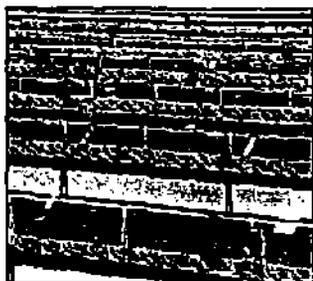


OPT's PowerBuoy™ system is placed between 0.5 and 5 miles offshore, meaning energy can be generated without sacrificing land or creating an eyesore.



Conversely, large wind farms require hundreds of acres of valuable open land or ocean space, create noise pollution, and become the dominant visual element of the landscape or seascape.

Solar farms also require considerable open space for installation. More



important is their dependence on consistent sunny weather, making them a viable alternative in a relatively small portion of the world.

The table below shows OPT's wave energy is a concentrated, predictable form of energy, and has a high availability (percentage of time the system is producing energy).

Energy Type	Energy Density	Predictability	Availability	Potential Sites
OPT's Wave Energy System	High	Predictable in most sites	80-90%	Extensive
Conventional (Fossil Fuel)	Very High	Predictable	80-90%	Extensive
Wind	Low	Unpredictable except in limited number of sites	30-45%	Limited
Solar	Low	Unpredictable except in limited number of sites	20-30%	Limited

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