

Analyzing the Technology of Hybrid Power Systems Utilizing Renewable Energies

<https://marketpublishers.com/r/ACE9E0D4280EN.html>

Date: June 2011

Pages: 153

Price: US\$ 350.00 (Single User License)

ID: ACE9E0D4280EN

Abstracts

Hybrid power systems are combinations of two or more energy conversion devices, or two or more fuels for the same device, that when integrated, overcome limitations that may be inherent in either.

The most common examples of hybrid power systems include:

Wind generation combined with diesel generation

Photovoltaic generation combined with battery storage or diesel generation

Fuel cell generation combined with microturbine generation.

The system efficiencies of hybrid power systems are generally greater than that of the individual technologies used separately, and higher reliability can be accomplished with redundant technologies and/or energy storage.

Aruvian's R'search presents its research report on hybrid power systems which utilize renewable energy such as wind energy or solar photovoltaics. Analyzing the Technology of Hybrid Power Systems Utilizing Renewable Energies covers the various types of hybrid power systems using renewable energy, such as wind-diesel hybrid power systems, fuel cell-gas turbine hybrid systems, and of course, the more common solar PV hybrid power systems.

The report covers the basics of a hybrid power system, such as what the technology involves, understanding the workings of a hybrid power station, energy storage options

in such types of systems, and much more.

The report covers the leading manufacturers of hybrid power systems using renewable energy such as 1stPower, Advanced Energy Systems Inc, BluWav Systems LLC, Direct Power and Water Corporation, Eaton Corporation, among others, and also researches various case studies that have successfully incorporated such hybrid power systems along with renewable energy.

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L.2 Advanced Energy Systems Inc

L.3 BluWav Systems, LLC

L.4 Direct Power and Water Corporation

L.5 Eaton Corporation

L.6 Enerex LLC

L.7 Hydro Fuel Systems

L.8 ISE Corporation

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