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Wind Energy Utilization: A Bibliography

In support of the national effort to develop alternate sources of energy, a bibliography of reports and papers related to the practical utilization of wind energy has been compiled and published. The bibliography cites documents published to and including 1974 with abstracts and references, and is indexed by topic, author, organization, title, and keywords. Topics include: Wind Energy Potential and Economic Feasibility, Utilization, Wind Power Plants and Generators, Wind Machines, Wind Data and Properties, Energy Storage, and related topics (e.g., control and regulation, blade design, etc.).

Wind energy systems have been used for centuries to provide energy for uses ranging from pumping water and grinding grain to, more recently, generating electricity. From 1930 to 1960, considerable interest existed in Europe, and during the 1940s in the United States, in developing large wind driven generating systems as sources of electric power. Interest in these systems declined because they were not cost competitive with the oil, gas and coal-fired central power systems of that era. These efforts were generally individual projects and were not supported by a sustained research and development program.

With the increasing concern about traditional energy sources, the National Science Foundation (NSF), the Energy Research and Development Administration (ERDA), and the National Aeronautics and Space Administration (NASA) are cooperating in a program to develop practical, cost effective wind energy systems to help meet our national energy needs. NASA is contributing its experience and expertise in modern-day aerodynamics, materials, electric power systems and management techniques to the development of large (50 to 3000 kW) wind-driven electric power generating systems.

In support of this program, this bibliography was compiled by the Energy Information Center of the NASA-sponsored Technology Application Center (TAC) at the University of New Mexico, for the NASA Lewis Research Center. The publication results from the interests of NSF, ERDA, and NASA in making energyrelated information widely available.

Copies of "Wind Energy Utilization: A Bibliography," TAC W 75-700, may be obtained at cost from:

> **Technology Application Center** University of New Mexico Albuquerque, New Mexico 87131 Telephone: 505-277-3622

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