

technology that is cost effective for use in the vast areas of the Nation with lower wind speeds than are currently economically viable. The low wind speed small wind turbine development activities are planned as cooperative efforts with industry, and guided by several principles: (1) Public/private partnerships will be developed to support continuing innovation. These partnerships are intended to be flexible and adaptive, support multiple pathways, and offer opportunities for new players to enter the program; (2) wind program research and testing activities will be closely aligned to support these partnerships; (3) applied systems integration activities will guide portfolio planning and technology transfer; and (4) program evaluations will be performed regularly using performance-based management techniques as the basis for performance criteria, periodic review, and adjustment.

The goal of this low wind speed technology effort is to develop a class of small wind turbines (100 kW or less) for residential and small business applications that provide cost effective performance in Class 3 wind resources by 2007. To achieve this goal, DOE intends to provide financial support via Grants and Cooperative Agreements for public-private partnerships to complete concept studies, component development, and/or turbine prototype development for multiple technology pathways. Given the range of turbine sizes and applications of interest, performance goals for each partnership effort will be established individually. The objective for each effort is to achieve the level of cost effectiveness in Class 3 wind resources that can be achieved in Class 5 resources with current baseline technology. Applicants will propose an appropriate cost performance target for Class 3 wind resources.

Industry partnerships and related supporting research and testing activities will be coordinated to facilitate technology transfer and transition of conceptual design and component development projects into system development. All partnership activities will be periodically reviewed against established milestones as the basis for funding and planning adjustments needed to optimize the portfolio for success. Under the planned solicitation, DOE will be soliciting applications for: (1) Conceptual Design Studies, (2) Component Development, and (3) Prototype Turbine Development projects, for small-scale turbine designs (less than 100 kilowatts) for distributed power applications.

Conceptual Design Studies (Technical Area 1) are envisioned as 6–12 month efforts with a maximum of DOE funding being \$100,000 for any single award. No cost share will be required. Awards for Conceptual Design Studies are anticipated to be Grants.

Component Development (Technical Area 2) is envisioned as an 18 to 24 month effort with the DOE funding being between \$500,000 and \$1 million for any single award. The program anticipates a cost-shared agreement with a minimum cost share requirement of 30% by the offeror. As the program intends to be substantially involved, awards are expected to be Cooperative Agreements.

Prototype Turbine Development (Technical Area 3) is envisioned as a three-year effort with a maximum DOE funding of \$1,500,000 for any single award. The program intends to use a cost-shared agreement with a minimum cost share requirement of 50% by the offeror. As DOE intends to be substantially involved, awards are expected to be Cooperative Agreements. Initial prototype wind turbines are expected to complete field-testing by 2007.

The program expects to award one to three agreements under each Technical Area with projects incrementally funded on a fiscal year basis. Additional consideration in the evaluation process will be given for cost sharing in excess of the minimum required amount. Applicants may submit more than one application under any or all the Technical Areas. However, diversity of technology and participants within the DOE Wind Program will be factors in selecting applications for negotiation of award.

Throughout the projects, the program will encourage the use of best business and project-management practices. Disciplined engineering development processes, including rigorous laboratory and field tests to verify component and subsystem designs, will be emphasized.

Applications need to include a description of the proposed concept in sufficient detail as to allow evaluation by a group of knowledgeable reviewers; identify planned teaming arrangements; and include a proposed budget and schedule. The program expects a majority of the work to be performed within the United States, and applicants will be asked to demonstrate the economic benefits of the proposed project to the United States. Qualified business and technical professionals will evaluate the written applications. Awards will be based upon technical viability, projected Cost of Energy (COE), capabilities, and the likelihood

of achieving program goals and objectives.

The American World Energy Association (AWEA) U.S. Small Wind Turbine Industry Roadmap document (<http://www.awea.org/smallwind/documents/31958.pdf>) identifies specific areas of interest that relate to future advances in distributed wind technology. These areas of interest include: (1) Reduction in turbine system costs; (2) reduction in manufacturing costs; (3) improvements in reliability; (4) improvements in power electronics design and reliability; (5) reduction of noise; (6) development of better analytical tools; (7) improvement in overspeed control knowledge; and (8) development of more cost-effective, taller towers.

Expressions of interest are sought from potential applicants to the forthcoming solicitation, and comments on the proposed plan are sought from all interested parties. Expressions of interest should not include detailed proposals, but should include the following information: (1) The names, addresses, telephone and facsimile numbers, and electronic mail address of the primary contact person for the planned application; (2) potential participants, their affiliation, and proposed roles, including the need for support from National Laboratories such as the National Renewable Energy Laboratory (NREL) or Sandia National Laboratory (SNL); (3) comments on the proposed solicitation; (4) a statement indicating the Technical Area under which an application for financial assistance should be submitted; and (5) a brief description of the concept to be proposed. Responses to this notice should not exceed five pages.

To be considered, responses should be received by January 24, 2003. Once issued, Solicitation number DE-PS36-03GO93005 will include complete information including technical aspects, funding, application preparation instructions, evaluation criteria, and other factors that will be considered when selecting applications for funding. Issuance of the solicitation is planned for February 2003, with applications due approximately 60 calendar days after the solicitation is issued. Information on Financial Assistance Regulations (10 CFR 600), proposal forms, award format, or post award forms can be obtained through the DOE Golden Field Office Home Page <http://www.golden.doe.gov/businessopportunities.html>.