

**STATE WIND ENERGY SUPPORT – COASTAL AND BARRIER ISLAND TALL TOWERS:  
DE-PS26-05NT42396-08A**

**ESTIMATED FUNDS AVAILABLE: \$225k**

**ESTIMATED NUMBER OF PROJECTS: 3-4**

**FUNDING CEILING: \$50–75k**

**COST SHARE: 25% minimum cost share is required.**

**BACKGROUND AND OBJECTIVES:** The Wind and Hydropower Technologies Program recognizes that states are critical partners in the nationwide effort to advance the use of wind energy.

There has been increased public and private interest expressed in exploring offshore wind development, particularly on the U.S. Eastern Seaboard, Gulf Shore of Texas and Louisiana, and Pacific Northwest. A significant issue hindering wind power development in offshore areas is the uncertainty of wind resources. This is especially true at heights for new and future wind turbines.

Current research on offshore wind resources projects land-based data resources and captures limited offshore information such as surface buoys. While this data suggests significant offshore wind resources, it is not currently verifiable. In addition, installation of anemometers in offshore areas is expensive and involves significant regulatory requirements. Metering existing tall towers on coastal areas and barrier islands would provide additional information on the potential character of offshore wind resources. This metering can be done at low cost and in timely fashion without triggering significant regulatory review.

**PROJECTS REQUESTED/TECHNICAL AREA OF INTEREST:** The Department seeks better information on U.S. offshore wind resource at levels above normal measurements. States are requested to propose projects that implement instrumentation of existing coastal and barrier island tall towers (100 meters or taller). Data should be collected for one year at three heights using duplicate anemometers at each location to avoid tower shadow. The Program will give special consideration to proposals that are multi-state/regional in nature.

Meteorological experts at the National Renewable Energy Laboratory will be available for technical assistance in the selection of instrumentation, siting, and subsequent data processing. The cost of instrumenting, retrieving, and analyzing data from two or three existing tall towers, such as a communications tower, is estimated to be about \$50,000-\$75,000 for one year. This cost includes redundant wind measurement equipment at three levels.

**EVALUATION CRITERIA:**

1. Expected project contribution to improve understanding of offshore wind energy resources and overcome barriers to wind development. **(Weight 30)**
2. Technical quality of proposed work plan for the project. **(Weight 25)**
3. Capabilities and experience of the project team for completing proposed work plan. **(Weight 20)**

4. Cost of the proposed project accurately reflects anticipated project benefits; degree to which proposed cost share exceeds the minimum required. **(Weight 20)**

5. Projects that are multi-state or regional in nature. **(Weight 5)**