

Tetra Tech's technical expertise is based upon years of experience supporting the energy industry. We have been recognized by *Engineering News-Record* (ENR) as #1 in Wind, #1 in Water, and #4 in Solar. Within the last few years, Tetra Tech has worked on more than 450 wind projects across North America, totaling 22,000 MW of wind generation in operation or scheduled for construction. We provide support to 20 of the top 25 wind power project developers and owners in North America.



Tetra Tech is also an industry leader in the permitting of offshore energy facilities and transmission interconnection lines. Our wind energy specific expertise, coupled with our history of supporting the offshore energy industry, provides us with extraordinary insight into the unique issues associated with offshore wind energy development. Our depth of knowledge gives us the ability to respond to each unique project, whatever the challenge. As a result of our extensive and practical experience, Tetra Tech has become an industry leader in providing services to support the emerging offshore renewable energy industry.

Tetra Tech offers unparalleled experience and understanding of the requirements for executing large-scale projects located in coastal and offshore environments involving interactions among federal, state, and local governing agencies. We have supported the development of hundreds of offshore facilities including deepwater ports, oil and gas platforms, subsea pipelines and transmission cables, and renewable energy projects including wind, wave, and hydrokinetic projects across North America.

## PERFORMANCE HIGHLIGHTS

- Currently providing siting, permitting, and/or resource evaluation support to four of North America's leading offshore wind energy developers
- Supporting offshore renewable energy projects in 10 jurisdictions along the Atlantic, Gulf, and Pacific coasts and in the Great Lakes of North America
- Ranked #1 in Wind by *Engineering News-Record* (2010)
- Supported the negotiations of the first offshore wind Power Purchase Agreement in the U.S.
- Supported the acquisition of two of the first alternative energy leases from the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to support the installation of offshore meteorological data collection facilities (e.g., buoys and towers)
- Provided environmental services that supported the U.S.'s first decision to begin exclusive lease negotiations between BOEMRE and a wind-power developer under new federal Outer Continental Shelf Renewable Energy Rules
- Completed port analyses to ascertain accommodation capability for staging of offshore wind generation projects
- Supporting avian and bat studies off the Atlantic Coast, the Gulf of Mexico, and in the Great Lakes
- Actively participating in the streamlining of the BOEMRE leasing process as active members of the Offshore Wind Development Coalition and AWEA Offshore Wind Working Group

## Representative Clients and Projects

- NRG Bluewater Wind Delaware, LLC, Mid-Atlantic Wind Park, Delaware
- NRG Bluewater Wind Jersey Energy LLC, New Jersey Offshore Wind Park, Federal Waters New Jersey
- NRG Bluewater Wind, LLC, Various Projects, U.S. Atlantic Coast and Great Lakes
- Deepwater Wind Rhode Island, LLC, Block Island Offshore Wind Project, State Waters Rhode Island
- Deepwater Wind New England, LLC, Deepwater Wind Energy Center, Federal Waters Rhode Island
- Garden State Offshore Energy, Offshore Wind Project, Federal Waters New Jersey
- Massachusetts Clean Energy Center, Offshore Wind Port Feasibility Analysis Project, New England
- Vestas Offshore, North American Market Study for Offshore Wind Development, USA and Canada
- Superior Watershed Partnership, State Waters Northern Lake Michigan
- Gamesa Energy, Offshore Constraint Mapping, Mid-Atlantic USA
- Lake Erie Economic Development Co., State Waters Lake Erie
- Outer Banks Ocean Energy, North Carolina Hybrid Energy Preserve Project, Federal Waters North Carolina
- OffshoreMW, LLC, Various Projects, Atlantic Coast USA
- Northwind & Power, Various Projects, Atlantic Coast USA



“[Tetra Tech has] consistently demonstrated a high degree of competence, professionalism and creativity. We have been very pleased with the monitoring program Tetra Tech has designed, their execution of such program and their communications with both us and the agencies. I would not hesitate to use Tetra Tech on another project.”

- Clint Plummer, Vice President - Development  
Deepwater Wind

## Services

Tetra Tech offers extensive experience providing a full array of environmental permitting, marine mapping and geophysical survey, engineering, construction, and operations and maintenance services. To date, we have supported offshore renewable energy projects in 10 jurisdictions along the Atlantic, Gulf, and Pacific coasts and the Great Lakes of North America. Our experience includes supporting the negotiations of the first offshore wind Power Purchase Agreement in the U.S.; supporting two of the first Alternative Energy Leases from BOEMRE in support of

offshore energy site assessment; and supporting the U.S.'s first determination to conduct exclusive lease negotiations between BOEMRE and a wind-power developer.

1.800.580.3765 • [www.tetrattech.com](http://www.tetrattech.com)  
[windenergy@tetrattech.com](mailto:windenergy@tetrattech.com)

### Due Diligence

#### GIS Applications and Data Management

#### Site Selection

- Facility Siting and Selection
- Constraint Mapping
- Critical Issues (Fatal Flaw) Analysis
- Alternative Site Identification

#### Licensing and Permitting

- Federal, State, Provincial, Territorial, and Local Permits
- Permit Strategy Development
- Agency Consultation and Negotiations
- National Environmental Policy Act (NEPA)

#### Planning and Engineering

- Coastal Planning and Engineering
- Facility Planning and Engineering
- Port Planning
- Submarine Cable Planning and Design

#### Construction and Operation

- Environmental Training
- Environmental Compliance Management and Inspection
- Environmental Resource Monitoring
- Noise and Air Compliance Monitoring

### Resource Surveys, Assessments, and Plans

- Coastal and Marine Resources Analyses
- Oceanographic, Hydrographic, Geophysical, and Geotechnical Surveys and Assessments
- Wave, Current, and Tidal Analysis
- Coastal and Marine Biological and Ecological Resource Studies
- Avian and Bat Acoustic Sampling
- Threatened and Endangered Species Analysis
- Cultural Resource and Shipwreck Analysis
- Socioeconomic, Ocean Use, and Recreational Use Assessment
- Visual Impact Assessments and Simulations
- Underwater Noise Analyses
- Air Quality Modeling
- Mitigation and Monitoring Plans
- Public Outreach and Communications
- Navigational Safety Studies
- Spill Prevention, Containment, and Countermeasure Plans
- Dredging Disposal Planning and Design
- Innovative and Cost-Effective Study Techniques

### Transmission

- Transmission Interconnect Routing and Analysis
- Substation and Converter Terminal Siting
- Phase I and II Environmental Site Assessments
- Federal, State, Provincial, Territorial, and Local Permitting