



AMERICAN DEVELOPMENT  
INSTITUTE

Web: [www.ADIenergy.com](http://www.ADIenergy.com)  
E-mail: [info@ADIenergy.com](mailto:info@ADIenergy.com)

**SUMMARY**

As part of its renewable energy evaluation contract with the Commonwealth of Massachusetts, ADI Energy completed a feasibility study of a potential Wind Power and Geothermal Energy project to offset electric and heat loads on Spectacle Island in Boston Harbor

# Spectacle Island Energy Study

## Boston Harbor, MA



**SERVICES**

- Site evaluation
- System evaluation and design
- Resource assessment
- Consumption usage analysis
- Technical feasibility assessment
- Regulatory feasibility
- Economic feasibility
- Wind and geothermal heat pump feasibility
- Preliminary assessment for energy
- Energy conservation
- Energy financial analysis
- Energy reduction

**MEASURES**

- Wind turbine
- Geothermal heat pump systems

**UNIQUE VALUE TO CUSTOMER**

ADI Energy completed a feasibility study for various renewable energy options for the Spectacle Island site including large-scale wind and geothermal heat pump installations. ADI Energy evaluated three different locations for Spectacle Island's wind turbine. The electrical energy consumption at Spectacle Island is estimated to be 175,000 kWh/yr based on available data reflecting the current configuration on the island. At this time there are no plans for future development that would significantly alter these loads.

ADI Energy concluded that the feasibility analysis of implementing a wind project was dependent on the proposed location of the site, the proposed wind turbine, the frequency distribution of wind speed as well as physical restrictions anticipated due to FAA regulations regarding obstructions to navigable air space.

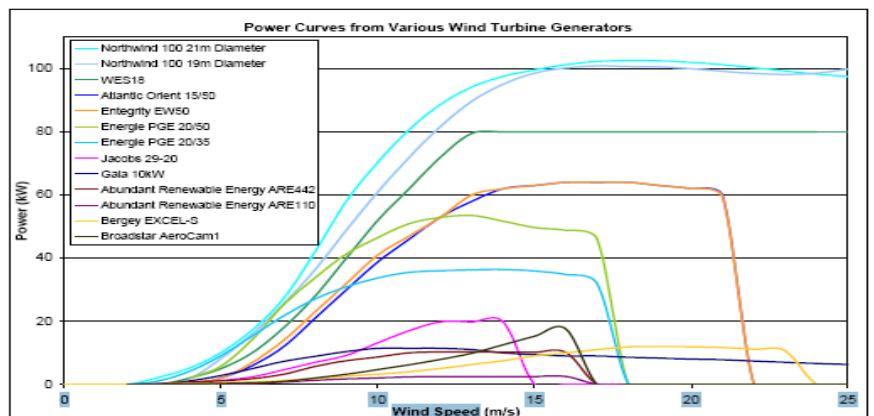


Figure 3-3 Power Curves of Candidate Wind Turbine Generators