

Town of Orleans, Massachusetts

Challenge

As far back as 1635, the landscape of the Town of Orleans on Cape Cod in Massachusetts has included windmills; the Town's seal features an old-time windmill. In 2003, the Town decided to evaluate the economic and practical feasibility of installing and operating a modern wind turbine to power a drinking water treatment facility. The Town established a wind energy committee to oversee the review (the "Committee"). The Committee sought the assistance of the Massachusetts Technology Collaborative (the "MTC"). As the state's clean energy fund, the MTC actively promotes renewable power development in Massachusetts, including facilitating the development of community-scale wind power projects by dozens of municipalities across the state. The Town of Orleans became the first town to join the MTC's Community Wind Collaborative program.

With the MTC's financial and technical support, the Committee commissioned a study that indicated a two turbine, 3 MW project would be technically and economically feasible in the Town. At the end of 2005, the Town and the MTC agreed to work out the financial details of implementing the project. The MTC hoped to structure the project to be attractive to private sector investors, while the Town's goal was to ensure that the project would provide sufficient financial compensation and other mitigants to warrant acting as the project host. These included considerations of the price of power sold by the project to the town, property tax and other project payments. In the background, both sides were grappling with the financial impact on the project's economics of significant turbine price increases. The MTC adapted a financial model earlier developed by Birch Tree Capital for the Community Wind Collaborative program (for more information, see the MTC Case Study) as the basis for evaluating and negotiating specific financial terms. Neither the Town nor the volunteer Town Committee, however, had experience in evaluating such pro forma financial models. In early 2006, the Committee asked Birch Tree Capital for help.

Approach

The Town engaged Birch Tree Capital to provide context on the economics and financing of wind projects and to assist in the financial negotiations with the MTC. Birch Tree Capital invited Deacon Harbor Financial, L.P., an independent advisory firm experienced in modeling power project investments, to join in helping the Town. The team reviewed the MTC's model and the Town's financial compensation objectives with the Committee. The team identified the model's electricity pricing and other operating assumptions relating to the Town, compared them with industry norms, and identified options for adjusting the model structure and assumptions to reflect the Town's needs. At the Town's request, Birch Tree Capital modified the MTC's model to incorporate certain of the options and prepared a memo explaining the model changes and their impact on the project's overall projected financial results. The Committee adopted and delivered the modified model and the Birch Tree Capital memo to the MTC as the Town's official position in the negotiations with the MTC.

Solution

Birch Tree Capital's familiarity with developing financial models for community wind power projects and with financing options for such projects helped the Committee to clarify its financial goals first to Town Selectman and then to the Town's negotiating partner. The Town and the MTC are moving forward with the project.

"Birch Tree Capital provided valuable assistance in explaining how wind power projects are financed. They worked hard on our behalf translating our needs into the precise language of a financial model and delivered what we asked for."

– Kevin Galligan, *Chairman, Town of Orleans Wind Energy Committee.*