

4906-17-06 Financial Data

(A) OWNERSHIP

IBR is the sole member and manager of the Applicant. IBR is the largest owner and operator of wind generating assets with more than 10,000 MW of wind power capacity in operation globally. In the United States, IBR owns and operates approximately 3,500 MW of wind facilities and employs more than 800 people. IBR currently operates wind farms in 20 states and constructed five new projects in 2009. The Applicant and its parent company, IBR, are well capitalized and committed to providing the necessary financial resources to develop and build the Facility.

Applicant currently owns all leases and other Facility assets. Before construction, a Facility-specific entity, for example Blue Creek Wind Farm, LLC, would be created and own all assets of the Facility, including leases, permits, wind turbines and related facilities, and other assets. Electricity generated by the Facility would be integrated into the existing transmission 345 kV transmission line system for delivery of the power to the PJM transmission grid system.

The majority of the land to be used in the construction and operation of the Facility is privately owned by approximately 140 participating landowners. The Applicant has entered into voluntary lease agreements with the landowners under the Applicant's standard Wind Energy Lease Agreement to construct and operate the Facility. These lease agreements are long-term leases that could extend for up to 60 years, if all lease agreement extensions are exercised. The lease agreements allow the Applicant to capture the flow of wind across the property and install the facilities necessary to do so, among other privileges. The landowners are paid an annual fee per acre plus a portion of the production of the wind turbines. This type of lease agreements represents approximately 99 percent of the agreements for total leased area.

The Applicant also has Good Neighbor Agreements (GNAs) that allow for reduced property line setbacks and other rights. Some of the GNAs are for relatively large (greater than 20-acre) parcels where construction of wind turbines would be feasible; however, most of the GNAs are for small parcels within the Project area where construction of wind power facilities is impracticable. The purpose of these agreements is to allow all landowners in the Project area to

be a part of the Facility and share in the financial gain. The GNAs are fundamentally about communication, giving owners of small parcels a direct line to IBR to better address any issues that come up during development, construction, and operations. A signed GNA also demonstrates that the neighboring landowner understands the implications of having a large wind energy generating facility in their neighborhood, and they accept any possible inconveniences, such as sound, shadow flicker, and television interference.

At the time of application submission, the Applicant estimates that greater than 99 percent of the land agreements that would be necessary to construct the Facility have been obtained. No changes in current landownership patterns are anticipated. Gaps in ownership and other details of land title would be discovered during the ALTA[®] survey, expected to be performed in Spring 2010. At that time, any additional agreements would be entered into, as necessary, to allow for the construction of the Facility.

A model wind energy lease agreement and GNA, which the Applicant considers to be proprietary and a trade secret, will be provided for OPSB staff inspection at the offices of Bricker & Eckler, LLP.

Before construction, the Applicant would exercise multiple land purchase options to acquire ownership of the land where the substations would be located. It is expected that eventually the transmission operator, AEP, would own the land under the interconnection substation.

(B) CAPITAL AND INTANGIBLE COSTS

(1) Capital and Intangible Cost Estimates

IBR's business model requires each project site nationwide to demonstrate that it is cost competitive. While the Applicant is not presently able to provide cost comparisons for other sites within the state of Ohio, IBR will consider this Facility against other projects around the country. The Facility would need to demonstrate a competitive return in order to be constructed. In relative terms, the Project area has a low wind resource. Because of the lower average wind speed, a move to taller towers and larger rotor diameters can yield more power production. The tradeoff for increased power production is that these

taller and larger turbines are more expensive to build than other turbine models that have recently been constructed by IBR at other Midwestern projects.

In addition, property taxes in Ohio are dramatically higher than in other states. The combination of high construction costs and high operating costs would require a certain power price to meet IBR's target for economic viability. Moreover, if operating costs can be lowered by reducing property taxes, the Facility's power can be sold at a competitive rate to Ohio utilities that will make it more likely the Facility will be built. Because of the cost cap in the Ohio alternative energy portfolio standard, and costs to generate wind energy in other states within the PJM market, a reduction in these taxes is necessary to make the Facility viable.

Based on the Applicant's experience constructing utility scale wind facilities in 20 different states in the past few years, it expects the overall capital cost of the Facility would be in excess of \$2,200 per kilowatt (kW) of installed capacity. Full construction and installation cost of the Facility is estimated to be in excess of \$700 million, including intangible costs, such as costs associated with project management, insurance, permitting costs, and financing.

Final costs would depend on final wind turbine pricing, material costs, design details, and contractor bids.

A more detailed breakdown of the Applicant's highly confidential and trade secret estimate of construction costs will be made available for inspection by OPSB staff at the offices of Bricker & Eckler, LLP.

(2) Cost Comparison

The largest component of the cost to build a wind farm is the cost of the wind turbines themselves. If the Applicant elects to build wind turbines with higher towers, for example 328-foot (100-meter) tower height instead of a more traditional 256-foot (78-meter) height, construction costs increase due to larger foundations, taller turbine towers, and increased transportation and construction costs. More specific construction

cost estimates for the Facility are available to the OPSB Staff as indicated above, but clearly show higher construction costs for this site than others around the Country.

IBR has recently received federal grants from the United States Treasury Department for eight different projects in six different states as part of the American Recovery and Reinvestment Act, commonly known as the Stimulus Bill. Excluding the operations and maintenance buildings and fixtures, transmission lines and interconnection upgrades, intangible and development costs, spare equipment, and land purchases, the average cost to construct these projects in Texas, Pennsylvania, Minnesota, Iowa, and Missouri was \$1,931/kW. If the Applicant added in the excluded facility components listed above, the total construction cost would increase by approximately 10 percent. IBR's two facilities in Oregon are excluded from this number because they were eligible for additional state tax credits that lowered their cost. Table 6-1 provides the details of these projects.

TABLE 6-1
Cost Comparisons for Other IBR Projects

Project	Location	Size (MW)	Turbine	ITC Qualifying Cost per kW	Reason Different than Blue Creek
Penascal	Kenedy County, Texas	202	MHI MWT92/2.4	\$1,882	A
Locust Ridge II	Schuylkill County, Pennsylvania	102	Gamesa G87	\$1,933	A
Hay Canyon	Sherman County, Oregon	101	Suzlon S88	\$1,554	A, B
Pebble Springs	Gilliam County, Oregon	99	Suzlon S88	\$1,567	A, B
Moraine II	Murray County, Minnesota	50	GE 1.5SLE	\$1,868	A
Barton Windpower	Worth County, Iowa	160	Gamesa G87	\$1,946	A
Farmers City	Atchison County, Missouri	146	Gamesa G87	\$1,940	A
Barton Chapel	Jack County, Texas	120	Gamesa G87	\$2,016	A

- A Project's wind resource makes it economically feasible with 256- or 262-foot (78 or 80 meter) hub height, which lowers construction costs substantially vs. the planned 328-foot (100-meter) hub height for the Facility.
- B Project is in Oregon. It also gets a state tax credit, Business Energy Tax Credit that is not reflected in the ITC Qualifying Cost.

This cost is consistent with the U.S. Department of Energy (DOE) Lawrence Berkeley National Laboratory data, which indicates that the average installed costs for wind facilities ranges from \$1,240 to \$2,600/kW, with an average cost of \$1,710/kW (DOE, 2007). Accounting for larger turbine towers, the capital costs per kilowatt for the

proposed Facility are consistent with the capital expenditures of other wind facilities that IBR has constructed in other states.

(3) Tabulation of Present Worth and Annualized Capital Costs

Capital costs would include development costs, wind farm design, project planning, equipment procurement, construction, and maintenance for the first two years of operation. These costs would be incurred within one to two years of the start of construction. As such, the present value of these costs is essentially the same as the costs presented in Section 4906-17-06(B)(1), *Capital and Intangible Cost Estimates*. Capital cost calculations are limited to this wind farm.

(C) OPERATION AND MAINTENANCE EXPENSES

(1) Estimate of Annual Operation and Maintenance Costs

Based on the Applicant's experience operating and maintaining its other wind farms in the U.S., the Applicant estimates that annual O&M costs for the Facility would average about \$10 million per year. A more detailed breakdown of the Applicant's highly proprietary and trade secret estimated operating costs will be made available at the offices of Bricker & Eckler, LLP for inspection by OPSB staff.

(2) Cost Comparison

Based on the Applicant's experience, O&M costs for the wind farm, not including costs for taxes or land leases, should not be substantially different from O&M costs for other U.S. wind farms.

(3) Present Worth and Annualized Capital Costs

The estimated annual O&M cost is shown above. Assuming a 10 percent discount rate, over the 20-year lifespan of the wind farm, the present worth of the O&M costs is approximately \$71 million.

(D) DELAYS

Costs for delays can vary widely based on the timing of the delay and the duration of the delay. Any delays that would affect the in-service date beyond December 2011 would have a significant impact on the Facility and could result in the Facility being significantly delayed or cancelled.

Based purely on lost revenue, a delay is expected to cost approximately \$250,000 a day, \$1.9 million a week, or \$7.5 million a month. Delays that extend into winter months (January and February) are costlier, as these are typically high-wind months. Additionally, a delay in issuing a Certificate that would postpone the start of construction beyond 2010 would jeopardize the Facility's eligibility for the federal ITC. The ITC provides significant incentive to build renewable energy projects and would enhance the viability of this Facility if it were eligible.