



## Project Matching: Facilitating New Renewable Energy Projects Project Proposal Submittal Form

### Project Summary

**Project name:** Chocolate Bayou Wind Energy

**Developer name:** Pioneer Green Energy

**Developer contact:** Bruce R. Thompson | **phone:** 512-751-5623 | **email:** bruce.thompson@pioneergreen.com

**Renewable energy type:** Wind

**Project city/state:** Brazoria County, Texas

**Project geographic coordinates (To find, use: [www.latlong.net/](http://www.latlong.net/)):**

**Latitude** N 29° 15' 39.566" **Longitude** W 95° 10' 50.335"

**Grid system operator (ISO, RTO) that the project will interconnect to:** ERCOT

**Total planned megawatt (MW DC) size:** 130 MW

**Are there phases? If so, how many and in what size tranches?** N/A

**What is the expected annual output of the completed project (MWh)?** 461,957 MWh/year

**Expected date of construction commencement:** Q4 2016

**Expected date of commercial operation:** December 1, 2017

**What is the largest development hurdle and how is it anticipated to be overcome?**

The Project has nearly completed development. Some development work remains, including completing the FAA study process, and tax abatement. All are normal development items well within Pioneer's scope of recent experience and capabilities.

**Can you provide examples of similar projects you have developed?**

Miami Wind Energy Center – 288.6 MW, Roberts/Hemphill/Gray Counties, Texas (operating)  
Logan's Gap Wind Farm – 200 MW, Comanche County, Texas (operating)  
Green Pastures Wind – 300 MW, Baylor & Knox Counties, Texas (operating)  
Pumpjack Solar I & Wildwood Solar I – 40 MW, Kern County, California (operating)  
San Roman Wind – 93 MW, Cameron County, Texas (under construction)  
Great Bay Solar I – 75 MW, Salisbury County, Maryland (COD December 2016)

## Site Readiness

**Has the project received all necessary federal, state, and local permits to proceed with construction and operation? If not, please outline the key permits required to proceed with project construction/operation and describe the steps you have taken in order to evaluate and address permitting risk for this project.**

There are no local or County permit requirements and no significant state level permit requirements. Pioneer has begun the tax abatement process.

**Have you secured long-term site control? If so, please describe the nature of the agreement (lease, ownership, etc.)?**

Pioneer has secured all land rights for approximately 13,000 acres of agricultural and ranch land in Brazoria County, Texas.

**Have land leases been filed with the county?** To be filed within 30 days.

**Does the project require either an Environmental Impact Statement or Environmental Assessment? If so, what is the status?**

Chocolate Bayou Wind does not anticipate any requirement for an EIS or an EA. The project will comply with any and all county, state, and federal environmental compliance requirements. Environmental studies are complete.

## Interconnection

**What is the status of interconnection, and have system impact and facility studies been completed? (Distribution or transmission level projects are both eligible)**

The proposed point of Interconnection is along CenterPoint Energy's Amoco – Mustang Bayou 138V line, which passes through the project site. This line has an excellent available transmission capacity as indicated by the completed "Full Interconnection Study" report. An Interconnection Agreement will be negotiated with CenterPoint Energy and ready for execution and securitization in Q2 2016.

**When do you expect the interconnection study process will be complete?**

The ERCOT study process has been completed and no upgrades are needed up to 149.5 MW of capacity.

**Does the transmission owner (TO) or independent system operator (ISO) have a process to study the project's impact on the local or regional grid and the subsequent cost to interconnect?**

The ERCOT study process has been completed and no upgrades are needed up to 149.5 MW of capacity.

## Operation & Financing

**What is the long- and short-term plan for operating and maintaining the project?**

The project owner will operate and maintain Chocolate Bayou through a dedicated O&M facility located on the project site.

**Briefly describe why this site is a good candidate for renewable energy development and the process you used to reach this conclusion (e.g., meteorological tower data collection).**

The Chocolate Bayou Project has the benefit of many years of wind data measured at the site. Currently, there are three 60-meter meteorological towers in operation, which have each been measuring wind data since their installation in 2009. Even beyond these six recent years of wind data, the Project possesses historical data measured from three 60-meter towers that collected data from 2004 to 2008. This abundance of wind data sets Chocolate Bayou apart from competing projects, and allows for a strong degree of confidence when analyzing the Project's energy output.

**Provide a short summary of how you view project finance and structure/ownership taking shape for this project:**

Sponsor Equity typically approaches lenders a few months prior to construction to provide construction financing and Tax Equity funding commitments. The construction loan combined with Sponsor equity will raise sufficient capital to fund the construction cost of Chocolate Bayou. On or shortly after start of Commercial Operation, the construction financing is replaced by more permanent financing, such as a term loan or tax equity investment. The security and collateral package during the term loan period is usually the same as that during the construction period, a pledge of the equity in the project company, a pledge of all project assets and collateral assignment of certain material project contracts.

### Partners

**In what ways can organizations participate in the project? (Check all that Apply)**

- ✓ **Power purchase agreement for bundled power and RECs**
- ✓ **Financial hedge or contract for differences**
- ✓ **Long term REC offtake**
- ✓ **REC arbitrage / REC swap (e.g., Partner would not own the RECs associated with the project)**
- ✓ **Financial investment / ownership stake**
- ✓ **Other, please specify: \_\_Pioneer is open to discussions with interested buyers regarding other contract structures that may be of interest to them.**

**Is the project's ability to secure financing or enter the development phase contingent on finding a partner as detailed in previous question?**

The development phase of Chocolate Bayou Wind is nearly complete and Pioneer did not require partners for this investment. However, securing tax equity financing and/or long-term project financing commitments requires hedging of expected project revenues through either a power purchase agreement, financial hedge or contract for differences to meet investor requirements.

**What are some of the characteristics of your ideal power purchaser, investor, or other partner?**

In the past five years, Pioneer has concluded power purchase agreements with commercial/industrial end users, government agencies and utilities as well as arranged hedge agreements with leading commodity traders or banks. The ideal power purchaser is able to contract for a term greater than ten years.

Pioneer has also recently concluded renewable generation project sale transactions with independent power producers, infrastructure investment funds, private equity investors, institutional equity investors and integrated utilities. We are happy to offer investors well-executed, low-risk renewable energy projects in high-value energy markets.

**What marketing opportunities exist at the project for the partnering entity? Examples might include, naming rights, press support, ribbon cutting ceremonies etc.**

Pioneer works to ensure that project owners retain all potentially valuable marketing options and that there are no constraints upon the form or content of the messaging or image campaign they might wish to pursue.