Board Decision
Authorizing Funds for the PáTu Wind Farm Project

July 29, 2009

Summary

Authorize funding of up to $1,203,557 paid over five years to offset the above-market cost of a 9 megawatt (MW) wind energy generation facility, located in Sherman County, owned and operated by Oregon Trail Wind Farm LLC.

Energy Trust Goals

- The PáTu Wind Farm project supports Goals 2 and 5 of the 2007-2012 Strategic Plan: to provide 10% of Oregon's electric energy from renewables by 2012, and to encourage and support Oregonians to integrate renewable resources into their daily lives.
- This project supports the Wind program goal of supporting community wind projects that can secure turbines and financing.
- At 9 MW, the PáTu Wind Farm project would be a significant increase in the Wind program portfolio. Currently, Energy Trust has 0.1 MW of small and community wind systems in operation.
- The project also supports Oregon's goal to have community energy projects (defined as less than or equal to 20MW) help meet a portion of the state's renewable portfolio standard.

Background

- Oregon Trail Wind Farm LLC proposes to construct the PáTu Wind Farm, consisting of 6 turbines, each with a name-plate capacity of 1.5 MW. Total name-plate capacity would be 9 MW, generating 26,103 megawatt-hours (MWh) per year.
- The facility will be installed on land leased from the Hilderbrand family in Wasco, Oregon in Sherman County.
- The project has already secured all lease agreements, distribution easements, and permits.
- The project is expected to be completed in December 2009.

Technical Analysis

- The proposed facility would:
    - install a new generation facility, including six 1.5 MW turbines;
    - generate an expected 2.98 average megawatts (aMW) operating at an annual capacity factor of 33%;
    - be a Qualifying Facility, with output sold to PGE under standard rates and terms.

Financial Analysis

- Energy Trust determines project incentives based on a project's above-market cost, i.e., the difference between the cost to produce the power from the project over its life and the market value of the equivalent grid power at standard rates. The analysis Includes tax credits and other benefits available to the project. Above-market costs are calculated as a net present value, which is the sum of the discounted value of the installation costs and the annual operating expenses of the project over its lifetime.
- A project financial summary is displayed below:

Project Financial Summary - NPV Basis

Size (MW)	9
Annual Output (mwh)	26,103
Evaluated Resource Life (years)	20
Revenues	
Power Sales	$ 14,305,659
State BETC Pass-through	$ 4,276,681
Federal ITC Grant	$ 6,449,210
USDA Grant	$ 500,000
Total Revenue	$ 25,531,550
Costs	
Capitalized Cost	$ 20,112,643
Operations Expense	$ 2,691,606
Maintenance Expense	$ 1,568,942
Land Lease and Admin Expense	$ 1,332,371
Taxes	$ 3,127,700
Total Project Cost	$ 28,833,262
Gross Above Market Cost (Total Revenue - Total Project Cost)	$ (3,301,712)
Tax Benefits	$ 1,780,404
Net Above Market Cost	$ (1,521,308)
Equivalent Value Paid Over Five Years	**$ 2,127,835**

- Staff and an independent contractor reviewed the project design and costs and found them to be standard and reasonable for projects of similar size, type and design.
- The project's above-market, net-present value is $1,521,308 over 20 years, including installation and operating costs, and assuming the project qualifies for state and federal tax benefits.
- Staff proposes to pay $1,203,557 into an escrow account to be disbursed over 5 years. The net present value of this 5-year payment is $865,509.

- Disbursements from escrow would be in approximately equal amounts, based on project performance: the first payment would be made on project commissioning; the next four would be paid annually.
- At a total payment of $1,203,557, the project's energy would cost Energy Trust about $404,000 per average megawatt (aMW). On a net present value basis the cost to Energy Trust is $306,000/aMW.
- This cost is low in comparison with what we are contributing to other wind projects. The 2009 Wind program budget goal for project cost to Energy Trust ranges from $5.82 - $8.32 million/aMW.
- On a net-present-value basis the proposed funding from Energy Trust is 58% of the full above-market costs. Energy Trust will receive 58% of the green tags (environmental attributes of renewable energy that can be used to meet renewable portfolio standards and/or sold apart from the underlying energy) produced annually by the project.
- The green tag allocation is based on board policy, which requires Energy Trust to take ownership of green tags in proportion to its contribution to above-market costs (58% in this case), unless the value of these tags are below the forecast for market prices. If the market value is above Energy Trust's offer, we may negotiate a lower share.
    - The levelized price of the tags to Energy Trust is $4.76. This value is below our current market forecast of $11.25 per green tag.
    - Under board policy we could lower the Energy Trust's share of tags to meet the market value for tags. However, the project agreed to the higher share for Energy Trust
- Funds for the project are within the 2009 Wind program budget.

Recommendation

Approve $1,203,557 in funding for the PáTu Wind Farm project, by adopting resolution #519, below.

RESOLUTION 519

APPROVING FUNDS FOR THE PÁTU WIND FARM GENERATION PROJECT

WHEREAS:

1. **Oregon Trail Wind Farm LLC will develop a 9 megawatt wind facility (expected to generate 2.98 average megawatts)**
2. **Staff and an independent contractor reviewed the project design and costs and found them to be standard and reasonable for projects of similar type and design.**
3. **Staff proposes a $1,203,557 incentive payment for above-market costs, paid over five years, which has a net-present value to the project of $865,509 over a 20-year operating lifetime.**
4. **At the proposed payment, the project's energy would cost Energy Trust about $0.404 million per average megawatt (aMW), which is low in comparison to other Energy Trust wind projects.**
5. **Energy Trust's wind generation portfolio is currently 0.1 MW. At 9 MW, the PáTu Wind Farm project would be a dramatic increase.**

It is therefore RESOLVED, that the board of directors of Energy Trust of Oregon, Inc. authorizes:

1. **Payment of up to $1,203,557 into escrow, to be paid to Oregon Trail Wind Farm LLC over five years to offset the above-market costs of the Douglas PáTu Wind Farm generating project;**
2. **Energy Trust will take ownership of 58% of the green tags produced annually; and**
3. **The executive director to enter into contracts consistent with this resolution.**

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed: [list name(s) and, if requested, reason for "no" vote]