EnergyTrust of Oregon, Inc.

Board Decision
Authorizing Funds for the Madison Wind Project

December 19, 2008

Summary

Authorize up to $908,500 to offset the above-market cost of the Madison Wind project, to be paid based on production over the first six years.

Background

- Madison Wind, LLC proposes to construct the Madison Wind Project, consisting of 16 turbines, each with a name-plate capacity of 50 kW. Total nameplate capacity would be 0.8 MW, generating 1,616 megawatt-hours (MWh) per year.

- The facility will be installed on land leased from the Madison farm at Ward Butte, near Hermiston, Oregon in Umatilla County.

- The project is expected to be completed in February 2009 pending approval of a loan from the State Energy Loan Program. The Madison farm will gain a 50% share in Madison Wind, LLC upon project commissioning.

- The proposed facility would be a Qualifying Facility, with output sold to PacifiCorp under standard rates and terms approved by the Oregon Public Utilities Commission.

- The project would offset about 614 tons of CO_2 per year and generate enough electricity to power 143 homes.

Analysis

- Total costs for the installed project are expected to be about $3.32 million, or $4,145/kW. Staff and an outside consultant reviewed capital and operating costs and found them reasonable. The project's wind speed forecast seemed optimistic, so staff evaluated it at a slightly reduced level.

- Staff has determined that over a 20-year operating lifetime the project has an above – market cost $1,276,618 on a net-present-value basis. The calculation includes installation and operating costs, and is net of power sales revenues, an Oregon Business Energy Tax Credit, the value of accelerated depreciation and the federal production tax credit for wind. The Oregon Department of Energy is still reviewing the project for a loan under the State Energy program.

- Staff proposes a cash incentive of $908,500 to be paid over six years. The total cash stream represents an Energy Trust cost of $4.94 million per aMW. In comparison, the

standard commercial incentive from Energy Trust for a single 50 kW wind system averages about $5.62 million/aMW.

- This incentive will meet the project's minimum financial threshold. The six years of payments represent a net present value to the project of $617,503. The six-year payment period also matches the project's projected cash needs, given what are expected to be relatively low power prices in the initial years.

- The proposed incentive represents 48% of the above-market costs on the basis of the net present value. Pursuant to Energy Trust policy, Energy Trust would receive at least that share of green tags.

- The project would be the largest project funded by our efforts to support small-scale wind in Oregon. It also offers a solution to the difficulties in financing and securing utility-scale wind turbines.

- The project will help expand the market for small and community wind projects by introducing a turbine that is new to Oregon but commonly installed in other states.

- The project will also help establish a feasible model for locally owned wind projects in Oregon, and demonstrate the idea of using multiple turbines at a site rather than the standard single-turbine model.

- Funds for the project are within the 2008 Wind program budget.

Recommendation

Approve funding for the project by adopting resolution number #495

RESOLUTION 495
APPROVING FUNDS FOR THE MADISON WIND PROJECT

WHEREAS:

1. **Madison Development LLC proposes to construct the Madison Wind Project. The project will have a name-plate capacity of 0.8 MW, expected to generate 1,616 megawatt-hours (MWh) per year.**
2. **The project would sell its output to Pacific Power under standard QF terms and offset about 614 tons of CO_2 per year.**
3. **Energy Trust analysis shows the project's above-market costs to be about $1.277 million.**
4. **The applicant seeks an incentive of $908,500, which would cost Energy Trust about $4.94 million per aMW, calculated on a cash basis. In comparison, the Small Wind program standard commercial incentive for one 50 kW Entegrity wind system costs about $5.62 million/aMW.**

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

1. **An incentive payment to Madison Development LLC of up to $908,500 to be paid on production over 6 years from the 2008 Wind program budget for the proposed project; and**
2. **Energy Trust shall take ownership of at least 48% of the project's green tags annually for the project's first 20 operating years.**
3. **The executive director may negotiate and sign an agreement consistent with the terms of this resolution.**

Moved by: Seconded by:

Vote: In favor: Abstained

Opposed: