EnergyTrust of Oregon, Inc.

Board Decision
Authorizing Funds for the Warm Springs Biomass Project

March 28, 2007

Summary

Authorize the Executive Director to sign contracts associated with the Warm Springs Biomass 15.8-megawatt biomass project (14.1 average megawatts), with Energy Trust providing up to $5,000,000 toward the project's above-market cost. Payment would be made over the first ten years of commercial operation. Due to this long payout term, security and pay-back provisions would not be required. This project is being considered under the PGE Master Agreement, and green tags would be handled pursuant to that agreement.

Background

- In October, 2005, Energy Trust and PGE entered into a Master Agreement reserving funds to offset the above-market costs of new renewable energy projects. Energy Trust identified the Warm Springs Biomass project through its Biopower program. Subsequently, PGE proposed to Energy Trust that the project be funded through the Master Agreement.
- The developer and owner will be Warm Springs Biomass, LLC, which will consist of business enterprises owned by the Confederated Tribes of Warm Springs, plus a third-party investor. The project will require a total capital investment of about $46,000,000.
- The project is a cogeneration project with expected nameplate capacity of 20 megawatts. It will provide steam to Warm Springs Forest Products Industries for lumber-drying purposes and provide at least 15.8 megawatts of electrical generating capacity. The electrical generating portion will operate at an average capacity factor of 89.1% over the twenty-year Energy Trust funding agreement.
- The project will use clean wood fuel, including sawmill residuals, forest-sourced wood and clean urban wood. The project will not use railroad ties, telephone poles, or other wood contaminated by paint, creosote or other chemicals. The fuel mix is compatible with relevant Energy Trust policies. It is also compatible with legislative definitions for acceptable proposed for a renewable energy standard (also known as a portfolio standard) in Oregon.
- Tribal timberlands belonging to the Confederated Tribes of Warm Springs have been certified by the Forest Stewardship Council as sustainably managed.
- An independent, third-party analysis using the above-market methodologies approved by the Board shows returns on investment consistent with those approved by the Oregon Public Utilities Commission. This analysis indicates that the project's cost and technical assumptions are usual and reasonable, and that as currently evaluated, above-market costs will not exceed $5 million. Energy Trust staff and Warm Springs Biomass have identified specific circumstances that could reduce these costs.
- The contract for this project will be standard, with the following exceptions: (1) green tags will be held in trust by PGE for its ratepayers, consistent with the Master Agreement ; (2) the contract will identify specific circumstances in which project costs could change, leading

to lower above-market costs and a lower contribution from Energy Trust; and 3) because funds will be paid out over approximately ten years, default on the part of Warm Springs Biomass will be handled through forfeiture of remaining escrow funds rather than a secured payback obligation.

- The project will meet certain construction and operation milestones, yet to be determined. These will include execution of a power purchase agreement, financing agreements, permits and equipment purchases.
- The contract would commit Warm Springs Biomass to commercial operation by December 31, 2008.

Discussion

- The range for the biomass projects we have funded to date is from $1,463,000 to $227,000 per average megawatt (aMW). Staff believes this project represents excellent value for a biomass project, at about $355,000 per aMW.
- This biomass project will be the third-largest project funded by Energy Trust. Due to its high capacity factor, its expected energy output will be comparable to that of the 41-MW Combine Hills wind project.
- Energy Trust's contribution is equivalent to a green tag purchase price of about $2.69 per megawatt-hour, calculated as an average (levelized) price over the life of the project.
- As the first project in Oregon to rely significantly on forest material gathered as part of forest stewardship activities, this effort will test the viability of the forest biomass concept.
- The Warm Springs team is committed to managing the project in an open, transparent manner, as part of a sustainable management plan.

Recommendation

Authorize the Executive Director to enter into contracts associated with funding up to $5 million toward the above-market costs of the Warm Springs Biomass LLC project consistent with the terms described below, by adopting the following resolution.

RESOLUTION #432

APPROVING BASIC TERMS OF A CONTRACT TO FUND ABOVE-MARKET COSTS OF THE WARM SPRINGS BIOMASS LLC PROJECT

WHEREAS:

1. **In October, 2005, Energy Trust and PGE entered into a Master Agreement reserving funds to offset the above-market costs of new renewable energy projects that benefit PGE customers.**
2. **Energy Trust, following discussions with Warm Springs Biomass LLC, has identified a biomass project, and PGE has proposed that the project be funded through the Master Agreement.**
3. **The project would be located within the boundaries of the Confederated Tribes of the Warm Springs Indian Reservation. It would have a nameplate capacity of 20 megawatts, delivering at least 15.8 net megawatts to the grid (equivalent to at least 14.1 average megawatts).**
4. **Energy Trust has conducted an independent review of the project and applied the above-market methodologies approved by the board and returns on investment approved by the OPUC. As currently evaluated, the project's above-market costs would not exceed $5 million.**
5. **Warm Springs Biomass LLC expects the project to be in commercial operation by the end of 2008.**

It is RESOLVED:

The board of directors of Energy Trust of Oregon, Inc.:

1. **Authorizes the Executive Director to sign a contract to pay Warm Springs Biomass LLC up to $5,000,000 of the above-market costs of the Warm Springs Biomass project, to be deposited into escrow promptly after the contract is executed.**
2. **The Project shall generate at least 15.8 megawatts (net) of baseload electric energy.**
3. **The project shall use clean wood fuel, such as sawmill residuals, forest-sourced wood and clean urban wood, not railroad ties, telephone poles, or other wood that is contaminated by paint, creosote or other chemicals.**
4. **The life of the agreement shall be not less than 20 years.**
5. **Payments from escrow shall be made to Warm Springs Biomass LLC over a ten-year term if performance standards to be specified in the contract are met.**

Moved by: Seconded by:

Vote: In favor: Abstained:

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