

Oregon Zoo – PV Demonstration Project

Project Briefing

November 8, 2005

Summary

Staff is working with Portland General Electric (PGE) and the Oregon Zoo to install a high-visibility solar PV system at the Oregon Zoo. The proposed project will be funded 50% by PGE and 50% by Energy Trust of Oregon, Inc. The capacity is expected to be approximately 50 kW and it is assumed that the project will begin construction in the fall of 2006. A two-stage Request for Proposal (RFP) process managed by PGE will be used to select the Contractor and the final design. This briefing is intended to inform the RAC that staff is pursuing this opportunity with PGE, and to solicit input on the general model of cooperation that is described below.

Background

The goal of the demonstration project is to create a highly visible signature PV installation that uses an Oregon landmark and a highly visible PGE customer, the Oregon Zoo, to highlight renewable energy. The installation will be in the 40- to 60-kW range.

The project will be publicly announced by PGE and the Oregon Zoo on Earth Day, April 22, 2006 and a kiosk will provide educational material about the project for zoo visitors. Additional educational value and publicity will be achieved through Energy Trust's input on a project outreach plan to be prepared jointly by Energy Trust, PGE and the Oregon Zoo.

Energy Trust will dedicate up to \$200,000 for this installation. PGE will dedicate \$200,000 plus additional funds that will be recovered through tax incentives. To support their share of the project, PGE intends to use revenues raised by PGE through sales of PGE's Clean Wind retail product, which currently reside in a dedicated resource development fund. Energy Trust funding for this project will be capped at the above-market cost of energy delivered into the PGE grid from this PV system, net of any available state or federal tax credits and other subsidies.

PGE will be the lead on the project and will enter into a contract with the Oregon Zoo and Metro that protects the interests of PGE and those of the Energy Trust. The Energy Trust will enter into a contract with PGE that defines our working relationship with PGE for this project.

The selection of the Contractor and system design will be through a two-stage RFP process. The first stage will lead to the selection of semi-finalist teams based on quality of responses according to pre-defined evaluation criteria. The second phase will be an invitation for the semi-finalists to further develop the design concepts established in the first phase and to

prepare a final proposal. Energy Trust staff will be on the RFP review team along with PGE and Oregon Zoo staff.

The PV system will be required to meet Energy Trust technical requirements for solar electric installations and the installation will be performed by either a (i) Solar Trade Ally contractor, or (ii) a licensed electrician that has completed a solar installation training course approved by Energy Trust

The criteria for project evaluation will include;

1. Visibility of the project for education purposes.
2. Engaging and visually pleasing design that blends with zoo architecture and landscaping.
3. Practicality/usability of the design to enhance the visitor experience. This could include covered seating or parking areas, education classrooms or walkways.
4. Use of existing structures to minimize impacts to future animal or exhibit areas planned for the zoo campus.
5. Minimal requirements for maintenance or cleaning due to limited zoo resources.

Committee and Public Review

Staff requested comments on this proposal from the RAC on November 16, 2006. The proposal will be presented to the Board for informational purposes on December 14, 2005. The final project with actual project costs will be presented to the RAC when they become available.