

Program Action Plans

October 8, 2004

Purpose

The purpose of this brief is to solicit input from the Renewable Energy Advisory Council (RAC) on proposed actions for each program for 2005. On the following summary sheets, each program is summarized, with goals and key actions for 2005.

Background

Each year Energy Trust staff solicits input on program goals and priorities for the following year. Staff is drafting preliminary budgets based on the goals and actions outlined on the following pages. The budget estimates corresponding to these outlines will be presented at the RAC meeting on October 13, 2005.

Summary of Proposed Revisions

Staff is proposing to launch two new programs and several new solar initiatives in 2005. In addition, staff will institute the revised Open Solicitation Program described elsewhere.

To follow are summary sheets for each program for 2005. These list goals, key actions and new initiatives. Staff seek comment on the list of actions and expected efforts.

Next steps

- Seek RAC input and review of the attached goals and plans.
- Seek other stakeholder input through a broader Trust outreach effort.
- Present revised plans and budgets to the board on November 3, 2004.
- Re-draft the preliminary actions plans and budgets for RAC re-review on November 17, 2005.
- Draft final budget for review in early December for board approval December 15, 2004.

1. Program: Biopower
2. Goal for 2005:
In its inaugural year, the Biopower Program will seek through market analysis and stakeholder outreach to establish a small number of segments to target, and, within each of those segments, to establish price points by means of an RFP. <ul style="list-style-type: none"> • Launch new program in July • Secure 1 - 2 projects, up to 2 MW in total
3. Design (market transformation, resource acquisition, demonstration, combination):
<ul style="list-style-type: none"> • At present, this is a market identification and development program. Through the program, however, ETO will gain experience with technologies potentially able to fill the bulk-power role currently played by wind.
4. 2004 Accomplishments:
<ul style="list-style-type: none"> • Through the Opens Solicitation Program initiated studies of two biomass-CHP projects and one landfill gas project. • During the first part of 2005 continue to use the Open Solicitation Program as the route to fund biopower projects.
5. Key activities in 2005:
Program Maintenance N/A
Expansions, new initiatives <ul style="list-style-type: none"> • Based on stakeholder outreach and the market analysis described below, design and initial program that identifies 1 – 2 biopower segments for focus and a path to expand these. • Release Request for Proposals in late summer 2005. • Identify 2 projects for funding commitments.
Studies, resource analysis <ul style="list-style-type: none"> • We will field market analysis in late 2004 or early 2005 to explore 4 – 5 biopower segments, seeking Oregon-specific information on prices and resource potential. These detailed technical and financial analyses will set the stage for stakeholder input and program design.
Marketing <ul style="list-style-type: none"> • Launch expanded marketing to targeted audiences, including selected biopower segments, Focus on outreach and lead generation
Industry, applicant support <ul style="list-style-type: none"> • Limited funds available for feasibility studies, and assisting selected applicants in developing proposal
Expected acquisition costs (levelized) <ul style="list-style-type: none"> • \$0.0.01 to \$0.018/kWh

1. Program: Open Solicitation
2. Goal for 2005: Launch re-designed program in January Follow committed projects (Albany Hydro and City of Portland Wind) to completion Secure 4 – 6 new projects and 1 MW of commitments and installations
3. Design (market transformation, resource acquisition, demonstration, combination): OSP will represent a portfolio of market defining demonstrations. Each qualifying project should exhibit several of the following characteristics: define a new market opportunity; provide data to validate a new application, technology or business models; demonstrate renewable energy technology to the general public or to key professional audiences; use renewable energy in an application not otherwise covered in other ETO programs; and, offer a potentially cost-effective renewable resource.
4. 2004 Accomplishments: <ul style="list-style-type: none"> • Installation of Apeasay Orchard net metered wind project • Second successive "largest PV installation in NW," at Pepsi Cola of Klamath Falls • Stirling engine at City of Corvallis wastewater treatment facility • Working relationships with the municipal waste-water treatment sector • Initiated studies of two biomass-CHP projects and one landfill gas project • Worked with an irrigation district to help them get ready to apply • Met with county and state agricultural officials to offer support for biomass development • Evaluated two community wind proposals, placed on hold while the PTC lapsed • Evaluated and rejected 2 other projects
5. Key activities in 2005: Program Maintenance <ul style="list-style-type: none"> • Program will continue to ensure that eligible good ideas do not "fall through the cracks."
Expansions, new initiatives <ul style="list-style-type: none"> • Launch the revised materials and process designed in late 2004. • Explore potential for large PV as distribution deferral strategy • Limit PV to projects that do not qualify for <25-kW standard offer in Solar Electric Program. • Funds available for renewable energy projects with economic development characteristics
Studies, resource analysis <ul style="list-style-type: none"> • None foreseen • Second year process evaluation • In-depth project, process evaluations (up to 4) • Two in-depth case studies targeted to engineering and municipal decision makers
Marketing <ul style="list-style-type: none"> • Launch expanded marketing to targeted audiences, including selected biopower segments, net-metered wind sector, municipalities • Focus on outreach and lead generation • Develop brochure, offer more web information and disseminate case studies
Industry, applicant support <ul style="list-style-type: none"> • Funds available for feasibility studies, and assisting selected applicants in developing proposals
Expected Acquisition costs <ul style="list-style-type: none"> • \$0.01 to \$0.08/kWh

1. Program:

Solar Electric

2. Goal for 2005:

New: 158 systems, 597 kW, \$1.7M in incentives (35% PGE, 65% PAC; approx. 70-75% residential)
Carryover: 37 systems, approx. 110 kW, \$370K

3. Design (market transformation, resource acquisition, demonstration, combination):

Market Transformation:

Expand participation, create more awareness, improve standards, provide quality assurance, ensure strong installer base, support training, provide incentives, directly market for the industry and assist consumers.

4. 2004 Accomplishments:

2004 expected commitments and completed installations: 525 kW

- 7 demonstration project grants made, 1st system online Sept. '04
- 7 training center grants made, homeowner eligibility offer made to trained electricians
- ASES conference: wrote and presented paper on PV program design, presented Energy Trust PV program in forum discussion, conducted tour of homes and training center, presented to women's PV workshop
- Number of trade allies doubled, conducted 2 program training sessions, 53 contractors attended
- Marketing: new brochure, new booth exhibit, 2 case studies, 11 press releases, 6 solar seminars
- Sponsored Green & Solar Home Tour
- Implemented program changes resulting from 6 mo program review with trade allies
- First program evaluation is underway

5. Key activities in 2005:

Program Maintenance

- Incentive to remain stable at the current level
- Hold quarterly program training sessions for new trade allies
- Update forms and documents on prescribed schedule
- Streamline inspection process
- Recruit trade allies in northeast Oregon
- Respond to opportunities or problems identified in evaluation
- Outsource or hire staff for processing of project applications
- Continue solar seminar and the other forms of marketing done in 2004
- Periodically revise equipment and installation standards
- Assist customers through call center, web and direct responses
- Support resource assessments through U of O
- Continue the solar schools program through BEF

Expansions, new initiatives

- Accommodate new construction (both commercial and residential) into the program design, and market to the new construction industry (designers and builders)
- Offer larger commercial PV incentives through the standard program: prescriptive incentive for net-metered < 25 kW. Projects larger than the net metered limit will continue to be handled through the Open Solicitation Program (also the route for PV projects requesting higher than standard incentive based on high demonstration value, e.g. building integrated PV.)
- Design a PV incentive package for agricultural irrigation pumping

- Offer incentives to construct solar-ready homes
- Support PGE in development of special projects
- Re-look at developing subsidized loans for PV systems
- Add some support staff to speed responses and handle the installer support efforts

Studies, resource analysis

- Analyze and publish UOSRML monitoring data
- Use meter readings after 1st year of operation to true up production estimates and compare performance of systems.
- Conduct energy impact evaluation of solar
- Conduct an evaluation of the second year of the program

Marketing

- Keep Energy Trust marketing at elevated level, and encourage co-marketing with trade allies
- Support and leverage the outreach efforts of the demonstration grant recipients
- Continue support for solar in schools in PGE territory

Industry, applicant support

- Sponsor OSEIA to hold 2005 NEC code update training course
- Review business practices of solar contractors, identify opportunities to support businesses and implement these in coordination with OSEIA
- Offer marketing seminars for solar installers
- Facilitate creation of net metering information sheet for customer

Other

- Work with New Building Efficiency and Efficient New Homes programs to streamline inclusion of solar in new construction projects.
- Participate in cross-program referral incentives

Expected acquisition costs (levelized)

- \$0.217/kWh (average of residential and commercial)

Solar Water Heating

Goal for 2005:

New: 98 systems, 18k therms, 118 MWh, \$150k in incentives (50% NWN, 25% PAC, 25% PGE)
Carryover: 19 systems, \$17k

Design (market transformation, resource acquisition, demonstration, combination):

Follow similar path of the PV program in responding to a slow start. Create demonstration opportunities, and focus market transformation efforts on building confidence in the solar industry. 2005 goal is to more than double the number of systems committed in 2004.

2004 Accomplishments:

2004 expected commitments and installations: 40 systems (17% of goal)

- Conducted 1 program training session, 16 contractors attended
- Marketing: new brochure, new booth exhibit, 2 SWH press releases, 6 solar seminars
- Sponsored Green & Solar Home Tour
- Commissioned solar thermal market assessment

Key activities in 2005:

Program Maintenance

- Raise gas incentive as allowed by increase in gas avoided cost
- Explore higher incentives justified by energy replacement strategy
- Perform program review with trade allies, and implement desirable program changes
- Hold quarterly program training sessions for new trade allies
- Update forms and documents on prescribed schedule

Expansions, new initiative

- Mimic PV new construction efforts

Studies, resource analysis

- Collect, analyze and publish performance data for Pence Place and Columbia Villa
- Create regional sun charts for SWH

Marketing

- Issue grants for commercial demonstration projects (\$100k)
- Target marketing toward commercial hot water audience
- Publish SWH case studies
- Co-market with EWEB to reach gas customers

Industry, applicant support

- Issue equipment grants to training centers
- Offer homeowner eligibility to trained licensed plumbers
- Sponsor publication of a SWH consumer's guide

Other

- Work with New Building Efficiency and Efficient New Homes programs to streamline inclusion of solar in new construction projects.
- Participate in cross-program referral incentives

1. Program: Utility Scale Projects
2. Goal for 2005:
<ul style="list-style-type: none"> • Complete commitments from 2004 for up to two projects • Foster installation of at least 75 MW of new capacity
3. Design (market transformation, resource acquisition, demonstration, combination):
<ul style="list-style-type: none"> • Low-cost, resource acquisition moving the market to parity with avoided costs. • Support of utility Integrated Resource Plan (IRP) acquisition goals
4. 2004 Accomplishments:
<ul style="list-style-type: none"> • 41 MW Combine Hills • Participation in two utility RFPs, helping to deliver utility IRP goals • Evaluation of more than two dozen larger scale projects • Selection of short list and negotiation of final project support
5. Key activities in 2005:
<p>Program Maintenance</p> <ul style="list-style-type: none"> • Final contracting and contract monitoring. • Financial reviews for escrow requirements • Project monitoring, commissioning • Performance tracking, reporting • Green tag reporting in coordination with proposed western regional generation information systems (WREGIS). • Work with utilities on any updates to their IRP action plans
<p>Expansions, new initiatives</p> <p>None</p>
<p>Studies, resource analysis</p> <ul style="list-style-type: none"> • Process evaluation • Case study
<p>Marketing</p> <p>Press releases and ribbon cuttings</p>
<p>Industry, applicant support</p> <p>None</p>
<p>Expected acquisition cost (levelized)</p> <p>\$0.002 to \$0.003/kWh</p>

1. Program: Wind Program
2. Goal for 2005:
<ul style="list-style-type: none"> • Complete commitments from 2004 for up to two projects • Foster installation of at least 1.5 MW of new capacity • Complete the full loan of 10 anemometers • Expand the anemometer loan program to 50' towers • Launch an ongoing program to install smaller clusters of large turbines (Community Wind)
3. Design (market transformation, resource acquisition, demonstration, combination):
<ul style="list-style-type: none"> • Market transformation, bringing cluster development to Oregon. • Expansion of the opportunities for wind, shortening lead times and positioning wind to play a more rapidly responsive role to utility resource needs • Resource confirmation through anemometer loans and support for OSU's wind monitoring lab
4. 2004 Accomplishments:
<ul style="list-style-type: none"> • Evaluation of two community-wind projects in Oregon • Completion of analyses of market barriers, experiences elsewhere, lessons learned and financial modeling • Support form RAC and board to design a program for launch in 2005 • Installed 7 anemometers
5. Key activities in 2005:
Program Maintenance
N/A
Expansions, new initiatives
<ul style="list-style-type: none"> • To foster the development of cluster wind, launch an integrated program of incentives and services, which leverage state (BETC, SELP) and federal incentives and benefits • Partner with OOE and OR Agr Department to assist landowners in gaining federal co-funding of projects and studies
Studies, resource analysis
<ul style="list-style-type: none"> • Revised financial modeling to refine scoping analyses • Define standard offer and/or use and RFP to help define the general subsidy required
Marketing
<ul style="list-style-type: none"> • Partner with Oregon OWIG, Oregon farm groups and other state agencies to co-promote the program • Press release and ribbon cutting for first community wind project • Case study/financial fact sheet
Industry, applicant support
<ul style="list-style-type: none"> • Develop Oregon-specific guidebook to local and community-based wind development • Anemometer Loans • Co-funding of industry support through OOE
Expected acquisition cost (levelized)
<ul style="list-style-type: none"> • \$0.0115/kWh

