EnergyTrust of Oregon, Inc.

2005-2006 Final Action Plan

December 15, 2004

I. INTRODUCTION

> *"These improvements help us compete in a global market that is increasingly competitive. Energy Trust incentives are allowing us to invest in projects that we would not be able to do otherwise."* Brad Beavers, regional process control manager at Timber Products Company.

> *"I've been interested in the environment, and installing solar is something I've been thinking of doing for a long time. Thanks to Energy Trust, the prices finally got down to the point where it seemed like the right thing to do."* David Baasch, homeowner.

> *"Energy Trust's incentive, combined with annual energy savings, should allow our investment to pay for itself in about four years."* Jim Van Horn, assistant director of facility services at Rogue Valley Manor.

Two years ago, the people at the Energy Trust[1] set out to provide Oregonians with their first comprehensive and long-term programs to save both electricity and natural gas and to benefit from clean, renewable energy. The commitment made was to deliver high quality services to eligible consumers of every kind wherever they live and work throughout our state. Our goals are to secure 300 average megawatts of electric energy savings and 450 average megawatts of new renewable energy generation by 2012, enough energy to forestall the construction of two or more conventionally fueled power plants. We are well on our way to deliver on this promise.

As of September 30, 2004, as we enter the busiest part of the season for completing projects, current year program results include:

- 21,835 completed energy efficiency projects distributed throughout our service areas. This compares to 16,128 sites treated for the full year of 2003 and translates to a cumulative total of approximately 53,135 projects or sites since inception.
- Total energy savings of 10.5 aMW (92,212 megawatt hours) and 1,108,000 therms. This equates to 33% of our 2004 electric savings goal and 78% of our 2004 gas goals.

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[1] The Energy Trust is an independent nonprofit organization dedicated to providing cost effective energy efficiency services and renewable energy benefits to Oregonians. Our mission is to "*change how Oregonians produce and use energy by investing in efficient technologies and renewable resources that save dollars and protect the environment.*"

- Since inception, installed energy efficiency savings equal to 43 aMW, representing 14% of our 2012 goal of 300 aMW.
- Achieved savings at a cost of $1.8 million per average megawatt for all electric energy savings programs
- Achieved savings at a cost of $2.6 per therm across all gas efficiency programs.
- Achieved nearly 200 solar installations across Oregon and have nine other projects covering 4 different renewable energy resources. We have three successful programs and are close to launching a fourth.
- Installed enough capacity to produce 14.4 aMW of renewable energy per year, with another 0.34 aMW contractually committed. While this is less than half the goal of 36 aMW installed and committed by the end of 2004, with the recent extension of the PTC,[2] action on the utility large wind RFPs has accelerated and there is good reason to believe we will have at least 25 aMW of commitments by year's end. If so, 2004 goals may be exceeded.

Achievements in 2004 moved the Energy Trust from a start-up organization focused on initial pilot, transition and new programs to an organization with well designed, highly workable and diversified programs which served an increasing number of Oregonians throughout the year.

II. 2005-2006 Draft Final Action Plan Highlights and 2005 Proposed Final Budget Themes

During the next two years, the draft final Action Plan establishes a course to expand and enhance existing Energy Trust programs and build upon the momentum gained to date. In addition, the draft final Action Plan proposes new programs and also new strategies to be explored in anticipation of programs in future years. The following overview captures themes from the draft final Action Plan and corresponding 2005 proposed final budget:

- *Stability* - For the first time, the Energy Trust investments in efficiency and renewable energy are expected to match annual revenues (and even exceed them, drawing on surpluses from prior years). This indicates that ratepayers are increasingly aware and taking full advantage of the programs and services available. One indication of stable programs is the amount projected for incentive payments. The 2005 budget anticipates over $50 million in incentive payments.

- *Acquire savings* - The Action Plan assumes a range of anticipated savings. Below, we show the lower and upper bounds of likely results from our acquisition strategy. The approach emphasizes high efficiency gains in the industrial sector, increased opportunities for commercial businesses and continued quality opportunities for residential consumers. Anticipated efficiency savings for 2005 are as follows:

[2] The shortfall was primarily due to the lapse of the federal production tax credit (PTC) for wind, which slowed progress on utility RFPs and produced delay in cluster-scale (community) wind projects. A second cause of the shortfall is the application of PURPA rules for qualifying facilities in Oregon, which make it difficult to do mid-size projects.

	Conservative	Best Case
Electric[3]	32 aMW (280,000 MWH)	37 aMW (324,120 MWH)
	$1.6 million /aMW	$1.4 million /aMW
Gas	1.3 million therms	1.8 million therms
	$6.0/ therm	$4.5/ therm

- With the addition of the 32 aMW target the efficiency programs will be about 37% of the 300 aMW 2012 goal.[4]

- *Renewable energy generation* – Assuming the successful completion of the utility-scale wind RFPs, the 2005 goal is 26.6 aMW of installations and new commitments. This could range up to 38.2 aMW if all factors are favorable. More than 90% of the goal is dependent on the successful completion of utility-scale wind projects in 2005.

- *Program enhancements* - Building upon success to date, implementation experience and evaluation results, existing program offerings are being enhanced through the addition of new measures, attractive incentives, targeted marketing and more support of trade allies who we rely upon for program delivery.

- *New Programs* - A new Efficient Facility Operations program will be designed and initiated for existing commercial building owners and managers. Additional measures will be added to programs to better serve small commercial consumers. Greater opportunities for large-scale commercial solar installations will be pursued. To further round out the portfolio of renewable energy programs, biopower (formerly biomass) and community wind programs will be developed and promoted.

- *New Strategies* - The Energy Trust is interested in strategies that concentrate energy efficiency and renewable program investments in a particular neighborhood or community. Such efforts would afford potential benefits to the utility system grid, perhaps deferring capital investment in transmission and distribution, increasing reliability and relieving congestion. Results of a request for proposal on Community Energy approaches will be reviewed in anticipation of future program investment. The Energy Trust is also investigating the possibility of funding large Combined Heat and Power projects that offset fossil fuel generation. This efficiency opportunity could build upon biomass and demonstration CHP projects now under review. Options for pursuing this resource will be considered by the Board in early 2005.

- *Benchmarks* – Energy Trust success will be measured against newly adopted OPUC performance measures (benchmarks).

- *Financial certification* - Fulfill legal requirements and new financial certification requirements.

[3] An additional 1.37 aMW of savings is expected from self-directed funding of efficiency project by large energy users, an alternative to Energy Trust funding authorized by the same enabling legislation.
[4] The goal includes self-directed savings as a complement to Energy Trust activities. About 18.5 aMW of activity was self-directed in 2002 and 2003.

- *Operating environment and partnerships/leverage* – Achieving the Energy Trust's goals will require a common effort of government, energy utilities and others. In addition to its ongoing collaboration with the Oregon Public Utility Commission and Oregon Department of Energy, the Energy Trust will explore ways to support the Governor's Global Warming Task Force, the Northwest Power and Conservation Council's Fifth Pacific Northwest Electric Power and Conservation Plan, Bonneville Power Administration conservation, renewable resource and non-wires initiatives, and utility integrated resource plans and programs, as appropriate. In consultation with these parties, we will also explore whether Energy Trust funds should be supplemented by grants or other funds for energy conservation and renewable resource programs.

- *Operational improvements* – Energy Trust continues to implement operational efficiencies. Expanded data reporting capabilities will be added to the Fastrack system. The internal Process Improvement Team will maintain the annual work schedule, improve standardized forms and documentation, and schedule management training. The results of the management audit, currently underway, will guide other improvements. To maintain efficient work flow and improve capacity to serve new programs and program activities, one new position is recommended in the 2005 proposed final budget. Continued support is anticipated for the Energy Trust call center operation, which – along with the website -- functions as the "front door" for the majority of our program participants. The customer service manager will continue to emphasize customer service standards at the calltaker and program management contractor levels.

- *Balance between electric utility funders* -The 2005 proposed final budget projects energy efficiency expenditures in Pacific Power service territory that exceed revenues received. This results primarily from the popularity of the Production Efficiency program in the utility's service territory, where there is greater opportunity for industrial savings. Should this occur, in order to fulfill commitments to program participants and comply with law, the Energy Trust may decide to use a line of credit. Annual natural gas revenues received are projected to be spent within the calendar year.

- *Expending natural gas funds* -The 2005 proposed final budget anticipates spending at about the same rate that natural gas revenues are received. Carryover natural gas revenues from prior years result in a higher balance projected by year end. This balance reflects the lag time during which programs were being designed and ramped up and the parity between revenues and expenditures that is reached when programs mature. It is anticipated that natural gas revenues and expenditures will approach parity in 2006.

- *Renewable energy strategy* - Renewable energy programs remain dependent upon federal tax policies and the sometimes very short-term timeframes for response. Utility tariffs and policies also continue to play a role in achieving renewable energy targets.

III. 2005 Draft Final Action Plan Program Highlights

The plan for 2005 continues programs which began in 2003 and 2004, strengthens and/or modifies some of their offerings, and proposes several new programs and initiatives. Descriptions of each program and initiative can be found in the package. Highlights are noted here.

ENERGY EFFICIENCY PROGRAMS

A. Residential Programs

- ***Home Energy Savings,*** the weatherization program for existing homes, will continue offering a wide variety of measures for single family, multifamily (apartment buildings) and manufactured homes. For single family participants, augmented incentives for air sealing and duct testing will be provided, and the incentive in electric homes will increase. Multifamily window incentive values will increase in some situations. For manufactured homes, services will be expanded to include duct sealing, CFLs and heat pumps. Energy Trust's program management contract with Ecos Consulting will end July 31, 2005. The program will be put out to bid in spring and a new contract signed to permit a seamless transition. The proposed final budget for the Home Energy Savings program in 2005 is $13.1 million, and the annual savings target is 2.5 aMW and 714 thousand therms.

- ***Efficient Home Products*** strives to overcome market barriers to the purchase of energy efficiency through product incentives, consumer awareness and education, focusing on the Environmental Protection Agency's ENERGY STAR® label. In 2005 the program will offer a year-round incentive for ultra-high-efficiency clothes washers, expand the Lights for Learning school compact fluorescent light bulb fundraiser to more schools, provide four free CFLs to individuals who complete the online Nexus Home Energy Analyzer, and launch an initiative to recycle inefficient refrigerators. The proposed final budget for the Efficient Home Products program in 2005 is $2.6 million, and the annual savings target is 1.1 aMW and 21 thousand therms.

- ***Efficient New Homes*** provides the residential new home market with services and expanded incentives focusing on attracting builders and developers to meet ENERGY STAR efficiency standards. In 2005, the program will add incentives for CFLs and efficient dishwashers, expand training and incentives for heating/cooling installers, train realtors on ENERGY STAR benefits, conduct 4-6 low rise multifamily demonstrations, fund a pilot multifamily high-rise project, and begin offering incentives for manufactured homes. The proposed final budget for the Efficient New Homes program in 2005 is $4.3 million, and the annual savings target is 0.4 aMW and 163 thousand therms.

B. Commercial Programs

a. ***Building Efficiency*** serves existing commercial buildings with technical assistance and financial incentives for lighting, electric and gas heating and cooling, efficient electric motors and energy management controls. New initiatives for 2005 include free installation of a dishwasher pre-rinse sprayer valve, packaged refrigeration measures for convenience and grocery stores, and expanded incentives for rooftop heating/ventilation/air conditioning units and gas equipment. The proposed final budget for the Building Efficiency program in 2005 is $6.4 million, and the annual savings target is 2.8 aMW and 283 thousand therms.

b. ***New Building Efficiency*** provides technical assistance and financial incentives for high-efficiency design and equipment in commercial and industrial new construction and

major renovation projects. In 2005 the program will add a Leadership in Energy and Environmental Design (LEED) track. It will explore offering free design software to promote energy efficient design, daylighting and natural ventilation. The standard track incentive list will be expanded to include such items as reach-in coolers and refrigerators, commercial food service equipment, and expanded incentives for rooftop units. The program's high-performance and LEED tracks will be aligned with Oregon Business Energy Tax Credit applications to ensure the projects meet BETC requirements. The program will commit incentives to schools in coordination with the Oregon Department of Energy and will integrate Green Investment Fund projects into the program. The proposed final budget for the New Building Efficiency program in 2005 is $2.7million, and the annual savings target is 0.53 aMW and 55 thousand therms.

c. ***Efficient Facility Operations (formerly Building Operations and Commissioning),*** a new program set to roll out in early 2005, provides training, technical assistance, and incentives to help building operators and managers integrate energy efficiency into daily facility operations. The program will promote building performance services, building operator certification, compressed air technologies and building benchmarking. Specialized outreach to commercial buildings of different sizes will assure customer needs are addressed. A network of qualified trade allies will be engaged to deliver program services. The Northwest Energy Efficiency Alliance's building performance services pilot will be integrated into the program. The proposed final budget for the Building Operations and Commissioning program in 2005 is $0.82 million, and the annual savings target is 0.4 aMW and 62 thousand therms.

C. Industrial Programs

- ***Production Efficiency*** supports high-efficiency design and equipment for existing and new electric-powered industrial processes and facilities. Proven approaches will be continued in 2005, including the offer of technical analysis services, streamlined project approvals and, as needed to prompt participation, a 2 cent per annual kwh minimum incentive for cost-effective projects[5]. In 2005 the program will offer service to multiple large projects on one site. Starting mid-year a free irrigation nozzle exchange and pump efficiency incentives will be offered to irrigation customers. The proposed final budget for the Production Efficiency program in 2005 is $22.8 million, and the annual savings target is 19.5 aMW.

D. Other Energy Efficiency Programs

- ***Solar Water Heating*** offers assistance and incentives to residential and commercial water heating systems and pools. New approaches are planned for 2005 to stimulate participation in the commercial sector. Grants will be issued for commercial demonstration projects with strong education/outreach plans. Comarketing with Eugene Water and Electric Board will target NW Natural customers. Collaboration with the Building Efficiency and New Building Efficiency programs will encourage solar in new buildings. Grants to plumbing training centers will be used to increase the base of

[5] Subject to per-project caps and special incentives for self-directing energy users.

qualified installers. The proposed final budget for the Solar Water Heating program in 2005 is $680 thousand, and the annual savings target is .02 aMW and 18 thousand therms.

- ***LED Traffic Signal (Light-emitting Diode)*** program has supported communities in replacing incandescent green traffic lights with more efficient LED lamps. The program has placed 4187 lamps in signals around the state since its beginning in 2003. In 2005, consideration will be given to expanding the program to include red lamps, new traffic signals, new and existing yellow signals, pedestrian crossing signals and outdoor LED lighting for landscaping, signage and buildings. The proposed final budget for the Light-emitting Diode Retrofit program in 2005 is $260 thousand, and the annual savings target is 0.21 aMW.

- ***Northwest Energy Efficiency Alliance*** works through over 140 regional utilities and other organizations to develop and promote technologies, educational services, alliance building and other initiatives to build a market for energy efficiency. Energy Trust is the second largest funder of the Alliance, next to Bonneville Power Administration. An Energy Trust director sits on the Alliance board and helps leverage Alliance programs to enhance Energy Trust offerings. In 2005, Energy Trust will work with the Alliance to coordinate 30 program operations with related Alliance initiatives. Energy Trust will explore broadening the Alliance's mission or alternate regional coordination mechanisms as needed to support new opportunities outside the Alliance's mission. The proposed final budget for the Northwest Energy Efficiency Alliance in 2005 is $3.5 million, and the annual savings target is 3.2 aMW.

- ***Utility Transition*** programs were funded starting in 2002 as a way to meet demand and accumulate energy savings while Energy Trust developed its own programs. Contracts with the electric utilities supported specific utility programs. The transition programs largely completed in 2004, but a few long lead-time projects in PGE will continue through March 2005, at which time the transition agreements will sunset. The proposed final budget in 2005 for the utility transition program is $325 thousand, and the annual savings target is 1.2 aMW.

RENEWABLE ENERGY PROGRAMS

- ***Solar Electric*** provides incentives and promotions to expand participation, create more awareness, improve installation and equipment standards, provide quality assurance and strengthen the capacity of installer businesses. Program innovations in 2005 include adding new commercial and residential construction, offering an incentive for solar-ready homes, expanding the standard incentives to systems up to 25kW capacity in order to attract commercial installations, designing an incentive package for agricultural irrigation pumping, and support for solar radiation data collection and analysis of system performance. The proposed final budget in 2005 for the Solar Electric program is $3.0 million, and the annual production goal is 0.07 aMW.

- ***Open Solicitation*** is a grant-like program supporting new applications, technologies or business models that may provide guidance for new, technology-specific Energy Trust programs, while also securing energy resources at low cost. In 2005 the program will focus on outreach and lead generation, and help fund 4-6 new projects. It will look for

renewable energy projects with economic development benefits, support feasibility studies and assist applicants in refining proposals. Two detailed project case studies will be targeted to engineering and municipal decision makers. The proposed final budget in 2005 for the Open Solicitation program is $2.1 million, and the annual production goal is 0.20 aMW.

- ***Cluster/Community Wind*** is a new initiative for 2005 that continues and expands the Anemometer Loan Program to include installation of one or more projects. The program will launch an integrated program of incentives and services to leverage Oregon Department of Energy tax credits and loans, as well as federal incentives and benefits, to increase clustered wind development. Financial and business models will be developed to help rural Oregon communities and more landowners to sponsor wind projects, and an Oregon-specific guidebook will be published for interested communities and localities. One in-depth case study with a financial fact sheet will be produced. The proposed final budget for 2005 for the Cluster/Community Wind program is $2.8 million, and the annual production goal is 0.33 aMW.

- ***Biopower***, formally called Biomass, will support generation of power from biological waste products in order to deliver low-cost renewable energy to the grid while securing other non-energy benefits for project sponsors in all sectors. Through contracted market analysis and outreach, a small number of target segments will be identified and Oregon-specific information gathered on prices and resource potential. By mid 2005, expanded marketing will seek projects from targeted market segments, with a target of starting 1-2 projects by year's end. Implementation of the program requires the services of a new program coordinator. The proposed final budget for 2005 for the Biopower program is $2.8 million, and the annual production goal is 1.0 aMW.

- ***Utility Scale***, The utility-scale program will harness large amounts of wind, geothermal or biomass power by facilitating partnerships between utilities and developers and by providing incentives to cover above-market costs. In 2003, through an Energy Trust competitive selection, Pacific Power and Eurus Energy America Corporation partnered to build a 41 MW wind farm in Umatilla County. In 2004 we are partnering with Pacific Power and PGE in additional competitive selections of renewable resources. The proposed final budget for 2005 for the Utility Scale program is $14.7 million, and the annual production goal is 25 aMW.

IV. 2006 Draft Final Action Plan Preview

The action plan for 2006 will continue the full range of 2005 energy efficiency and renewable energy programs across all sectors and geographic areas. New contracts for Home Energy Savings, Building Efficiency and Production Efficiency programs will be in place, and may included programmatic changes that would take full effect in 2006. Depending on the outcome of planning studies in 2005, community marketing and program delivery may be initiated in one or more localities. Large combined heat and power projects may be offered Energy Trust support. The Biopower and Cluster/Community Wind programs may be expanded. Energy Trust staff and board are developing a process to involve the Oregon Department of Energy, utilities and others in identifying, studying and bringing forward new initiatives, one or more of which may be developed for implementation in 2006.

V. Outreach

Every year, Energy Trust invites public and stakeholder review and comment on the proposed budget and action plan. This year public meetings were scheduled in six communities. The action plan for 2005-2006 and proposed 2005 budget were reviewed at meetings of the Conservation Advisory Council and Renewable Energy Advisory Council. Communications with trade allies sought their comments. A comment link was provided on the Energy Trust website, and the availability of this will be noted in SYNERGY, the Energy Trust e-newsletter. Meetings were held with utilities, business organizations and other stakeholders.

Appendix 1

Energy Trust of Oregon, Inc.
Strategic Plan Goals
for 2002-2007

Goal 1: By 2012, deliver programs to help consumers save 300 average megawatts of electricity 20 million annual therms of natural gas by investing in measures with an average life of 14 or more years for electricity and 20 or more years for natural gas.

Goal 2: Provide 10% of Oregon's electric energy from renewable resources by 2012, (approximately 450 average megawatts for PacifiCorp and PGE).

Goal 3: Extend energy efficiency and on-site renewable energy programs and benefits to underserved consumers.

Goal 4: Contribute to the creation of a stable environment in which businesses that promote energy efficiency and renewable energy have the opportunity to succeed and thrive.

Goal 5: Encourage and support Oregonians to integrate energy efficiency and renewable resources into their daily lives.

Appendix 2

Excerpts of 2005 Performance Measures for the Energy Trust of Oregon as adopted by the Oregon Public Utilities Commission
October 5, 2004

Electric Efficiency Performance Targets: The Commission expects the Trust to obtain electricity efficiency savings of at least 20 MWa, computed on a three-year rolling average.

The Commission expects the Trust to obtain electricity efficiency savings at an average levelized life-cycle ETO cost of not more than two cents per kWh.

Natural Gas Efficiency Performance Targets: The Commission expects the Trust to obtain natural gas efficiency savings of at least 700,000 therms, computed on a three-year rolling average

The Commission expects the Trust to obtain natural gas efficiency savings at an average levelized life-cycle ETO cost of not more than 30 cents per therm.

Renewable Resource Development Targets: The Commission expects the Trust to deliver at least 15 MWa of new renewable resource development annually, computed on a three-year rolling average, from a variety of renewable resources.

Financial Integrity: The Commission expects the Trust to demonstrate its financial integrity by obtaining an unqualified financial audit opinion annually.

Program Delivery Efficiency: The Commission expects the Trust to demonstrate program delivery efficiency by keeping its administrative and program support costs[6] below 11 percent of annual revenues.

Customer Satisfaction: The Commission expects the Trust to demonstrate reasonable customer satisfaction rates by surveying its customers as part of its program evaluations. Preferably, the surveys will provide a scale showing the degree of satisfaction with Trust services and allow for open-ended responses. In addition, the Trust will report salient statistics regarding complaints it receives directly, or from utility customer services. Findings are to be reported to the Commission.

Benefit/Cost Ratios: The Commission expects the Trust to report the benefit/cost ratio for its larger conservation acquisition programs beginning with its second quarter 2005 report. The Trust staff, Commission staff, customer groups and other interested parties will meet to develop an agreed upon calculation of costs and

[6] For the purpose of these performance measures, program support costs are defined as all program costs except the following accounts: program management, program incentive, program payroll and related expenses, call center, and program outsource services.

benefits included in the ratio. An agreed upon definition should be established by mid-May 2005 for incorporation in the second quarter 2005 report.

Other Considerations: In addition to considering the results of the above-mentioned performance measures, the Commission will also consider the performance of other conservation and renewable resource programs and public comments when making its annual decision to renew its Grant Agreement with the Trust. The Commission will seek comment from the public on such issues as the following:

- Is the Trust achieving good results in its conservation and renewable resource programs?
- Does the Trust conduct its business in an open and transparent way?
- Is the Trust receptive to public input?
- Does the Trust monitor program performance and make program adjustments effectively?
- Are the benefits of the Trust's programs reasonably spread among customer classes and geographic areas?
- Are the Trust's programs appropriately coordinated with related local, state, and regional programs?
- Is the Trust complying with the guidelines set forth in the Grant Agreement?
- Are there any significant issues that warrant the issuance of a Notice of Concern?
- Should the Grant Agreement be renewed for another year?

Performance measures for 2006 ETO performance will be established no later than June 1, 2005.