

APPENDIX B

Review of Selected Utility and State ENERGY STAR® Programs

TABLE OF CONTENTS

	Page
A. Introduction	1
B. Programs	
1. Austin Energy (Texas)	1
2. Conectiv Power Delivery (New Jersey)	2
3. Eugene Water and Electric Board (Oregon)	2
4. New England Region.....	3
5. New York State Energy Research & Development Authority..	5
6. Northwest Energy Efficiency Alliance.....	3
7. Pacific Gas and Electric (California).....	9
8. Public Service Electric and Gas (New Jersey).....	9
9. Wisconsin Energy Conservation Corporation.....	10
C. Conclusions	12

A. Introduction

The DOE reports that 90-plus utility and state partners will reach 47 percent of U.S. households and in program year 2000.¹ Expenditures by partners will exceed \$150 million for ENERGY STAR® regional programs.² In some cases utilities have developed and implemented these programs. In other jurisdictions state agencies or non-profit corporations have responsibility for program administration. Utilities in have become partners in several states. Staff believes that this approach may have applications in Maryland.

B. Programs

1. Austin Energy

Austin Energy is a community-owned utility serving Austin, Texas. Austin Energy provides information and education to customers about ENERGY STAR® Appliances such as refrigerators, clothes washers, dishwashers and window air conditioners. The information describes what makes an appliance efficient and provides estimates of the energy savings associated with high-efficiency appliances and what factors customers should consider when purchasing an appliance. Austin Energy also offers rebates of between \$25 and \$50 for ENERGY STAR® window air conditioners. The City of Austin offers rebates of \$100 on certain ENERGY STAR® models. Additionally, Austin Energy offers rebates for program-specified HVAC equipment and water heaters. These programs did not specify ENERGY STAR® equipment. Austin Energy also provides a comprehensive weatherization program and a list of registered contractors meet insurance requirement, received training on the technical specifications and procedures to participate in the Home Energy Loan Program and Whole House Rebate Program, and provide a minimum one year warranty on all materials, parts and workmanship.

¹ Exhibit 4 provides a full list of partners.

² Find Citation

2. *Conectiv Power Delivery*

Conectiv Power Delivery offers financial incentives to customers who install high-efficiency heat pumps and central air conditioners in existing homes. Newly constructed homes not participating in Conectiv Power Delivery's ENERGY STAR® Homes program (a new construction program) may also be eligible for incentives. Contractors are required to submit load calculations to ensure equipment is properly sized in order for customers to receive incentives. Incentives are paid for those installations that meet all program requirements.

Conectiv Power Delivery also offers financial incentives to those that build or purchase newly constructed ENERGY STAR® Homes. This program offers a free energy analysis of the house design and two inspections to ensure that all energy-saving criteria have been met.

3. *Eugene Water and Electric Board*

The Eugene Water and Electric Board (EWEB) offers rebates to encourage customers to purchase high-efficiency appliances. The Rebates are paid to customers who purchase ENERGY STAR® dishwashers, refrigerators, room air conditioners and water heaters. The rebate schedule is shown in Table B-1.

Table B-1 Eugene Water and Electric Board Energy Saving Home Appliance Rebate Program 2000 Rebate Schedule	
Appliance Type	Rebate
Dishwasher	\$30
Refrigerators	\$60
Clothes Washer	\$75
Electric Water Heater	\$50
Room Air Conditioner	\$40

In addition to the appliance program, EWEB website provides website and telephone numbers of related programs ENERGY STAR® website and the Oregon Office of Energy, which provides information about tax, credits for energy efficiency homes.

4. *New England Region*

NEEP reports that over 20 electric and gas utilities in the Massachusetts, Connecticut, New Hampshire, Vermont and Rhode Island participate have been promoting ENERGY STAR® products since 1998. The products promoted include appliances (clothes washers, refrigerators, dishwashers, room air conditioners), lighting and new home construction. This program has used a number of different media to promote these products including advertising, in-store merchandising, public relations, direct mail and the Internet.³

5. *New York State Energy Research and Development Authority*

New York State Energy Research and Development Authority (NYSERDA) sponsors ENERGY STAR® programs in New York and will expand its activities to promote other programs. Current programs focus on information and education for appliances. Future plans include activities to support ENERGY STAR® Homes (new homes) and an ENERGY STAR® Home Performance Program (existing homes). These programs will make it easier for consumers to learn about and implement energy saving activities in their homes.

The NYSERDA reports working with the [Building Performance Contractors Association](#) to increase the number of trained and qualified contractors to provide home performance services (weatherization). A home performance services professional will undertake a number of activities to identify and remedy problems affecting a home, which include the following:

- blower doors
- energy analysis software
- pressurization equipment
- combustion test equipment

³ The information in this section is based on a presentation made on Northeast Regional Energy Marketing 2000 (September 27, 2000).

- infrared cameras
- indoor air quality test equipment
- manometers

The NYSERDA also reports working with contractors and remodelers in the New York to help you integrate ENERGY STAR® labeled appliances, lighting products, windows, and other equipment into home improvement projects.

The NYSERDA reports working with the New York State Builders Association to increase the number of ENERGY STAR® builders and homes across the State. A number of lending institutions offer ENERGY STAR® mortgages to purchasers of ENERGY STAR® homes. These lenders recognize the value of reduced operating costs associated with energy efficient homes and have incorporated various incentives into their ENERGY STAR® mortgage products. Features of an ENERGY STAR® mortgage can include: a debt to income ratio stretch of 2%; discounts on closing costs; discounts on or payment of home energy rating costs; interest rate reductions; and waiving of other fees.

The **New York Energy Smart** Loan Fund provides interest rate reductions on loans for energy efficiency projects and renewable technologies. A network of participating New York State lenders provides low-cost loans. The lender's interest rate is "bought down" by 450 basis points. Eligible Improvements:

- Prequalified measures that are proven cost-effective investments to reduce energy, such as ENERGY STAR® appliances, windows, and lighting products; high efficiency water heaters; heat pumps; high efficiency heating systems; ENERGY STAR® central air conditioning systems; programmable thermostats; insulation and duct sealing; on-grid photovoltaics; and others.
- Custom measures with a payback in energy use reductions of ten years or less.
- Renewable energy technologies that use the sun, wind, water, or ground to generate heat or power.

Electric customers of one of the following utilities: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, or Orange and Rockland Utilities, Inc.

6. Northwest Energy Efficiency Alliance

The Northwest Energy Efficiency Alliance seeks to bring about significant and lasting changes in markets for energy-efficient technologies and practices, to improve the region's efficient use of energy and reduce costs to consumers and the electric system. The Alliance also hopes to leverage and provide for non-energy benefits. Collaboration both inside and outside the region is a vital element of the Alliance, whose partners look to market transformation ventures as a means to save considerable energy at potentially low long-term costs. Eventually, the thinking goes, transformed markets will no longer need financial incentives.

Utilities in the four-state region invested \$65.5 million in market transformation projects between 1997 and 1999. The utilities have also committed to spend up to \$100 million for market transformation endeavors from 2000 through 2004. To date, the Alliance board has approved funding for the following market transformation projects:

a. ENERGY STAR® High-Efficiency Residential Windows

This program intends to boost consumer demand and market share for high efficiency windows, doors, skylights and other fenestration products (U-factor of 0.35 or less and with a Solar Heat Gain Coefficient of 0.30 or higher) in new residential construction. The venture works with the new single-family, multi-family and manufactured housing markets. The project will also work to increase the adoption of even higher efficiency window products (U=0.30) in remodeled homes.

In conjunction with industry and the U.S. Department of Energy's ENERGY STAR® initiatives, the project will launch a comprehensive awareness campaign including activities such as promotional initiatives (advertising and product branding), sales training for manufacturers and technical assistance for builders. This venture expects a high market penetration (around 65%) of high-efficiency fenestration products by the year 2001. Alliance funding approved by

the board amounts to \$1.6 million over two years. Additional support is anticipated from the industry members of the Northwest Fenestration Efficiency Collaborative. The collaborative also serve as the project steering committee.

b. ENERGY STAR® Residential Lighting Fixtures

This venture offers incentives to manufacturers and/or wholesale distributors of energy-efficient lighting fixtures, as a means to address the key market obstacles of limited availability, high retail costs and spotty awareness. The program links selected retailers and wholesalers with manufacturers of energy-efficient fixtures; it also includes a consumer marketing and advertising campaign about the benefits of this technology.

The ENERGY STAR® Residential Lighting Fixtures program offers incentives to manufacturers of energy-efficient, hardwired lighting fixtures and compact fluorescent torchieres to encourage the distribution and sale of these products. The program also includes a consumer awareness campaign to emphasize the benefits of efficient fixtures and support the revision of building code for residential construction to include standards for energy-efficient fixtures in bathrooms.

All products included in the program must meet ENERGY STAR® specifications and use compact fluorescent lamps. National and regional retail markets were targeted to educate customers about energy-efficient lighting and enable them to make an informed decision when purchasing lighting fixtures. The Alliance board of directors in June 97 approved \$2.4 million for the 30-month program, which is operated by Portland Energy Conservation, Inc.

c. ENERGY STAR® Resource-Efficient Clothes Washers

This project promotes resource-efficient clothes washers - and their substantial energy, water and detergent savings. It is aimed at increasing the market share of resource-efficient washers through aggressive marketing and support for higher federal efficiency standards for clothes washers. Since it began, the program has increased the market share for resource efficient clothes washers from around 2 percent in May 1997 to 15 percent today.

Initially, the ENERGY STAR® Resource-Efficient Clothes Washers program offered consumer and retailer incentives to encourage the increase of sales for the machines. As the market share for the products grew, it was no longer necessary to offer such incentives on a regional basis to encourage sales. Instead, a number of electric, water, and wastewater utilities in the Pacific Northwest offer incentives locally as part of their local energy and water efficiency programs.

Today the program consists of intensive marketing and promotional efforts as well as retailer training to raise awareness about the resource-savings and non-energy benefits of the machines. Two promotions are planned for this fall including the ENERGY STAR® Grimiest Soccer Team photo contest and soccer clinics and the ENERGY STAR® Clean Up Sweepstakes. In addition to its promotional activities, the program has worked with the Alliance's National Standards project in a campaign to influence federal efforts to develop and adopt standards that require higher levels of efficiency in clothes washers.

In 1997, the Alliance Board approved an overall budget of \$9 million for the duration of this program through 1999. An additional \$1.675 million was allocated for the program to continue promotional efforts through 2000. In 2000, the washer program also expanded to a platform of ENERGY STAR® home appliances including dishwashers, refrigerators and room air conditioners.

d. LightWise (Compact Fluorescent Lighting)

The ENERGY STAR® Compact Fluorescent Lighting program seeks to expand the regional market for residential compact fluorescent lighting and lower the cost of the energy-efficient bulbs. This venture expands on the LightSaver program sponsored in 1996 by several Northwest utilities. In late 1996, the Alliance board approved funding of \$698,000 through June of 1997. And in June 1997, the board approved a 2-1/2-year extension, through 1999, for nearly \$2.5 million. Recently the program was extended for an additional six months, while market research and a proposed program redesign are conducted.

The program is working to achieve the following goals:

- products available to consumers throughout the region in at least 75% of stores
- cost reductions resulting from economies of scale, together with increased competition result in average retail prices of \$10 or less
- A significant demand for the products as a result of high consumer awareness and acceptance of qualified CFBs.

The Northwest Alliance reports that there are indications that our efforts have contributed to lower retail prices for high-quality energy-saving compact fluorescent bulbs, average prices for CFBs has dropped from \$14-\$28 in 1997 to \$8-12 in 1999. Availability has also increased throughout the region. Manufacturers participating in the program increased from 3 in 1998 to 6 in 1999 and the number of qualifying products increased from 13 in 1998 to more than 60 in 1999.

e. Performance Tested Comfort SystemsSM

This project seeks to establish testing and retrofitting of poorly functioning heating, ventilation, and cooling (HVAC) systems in homes as a viable and profitable business around the Northwest. It will also certify homes found to be in compliance with specifications. The venture aims to create sustained demand for efficient HVAC systems in new homes.

Four primary market barriers have been identified that need to be overcome for the project to be successful. They include:

- Contractors and residents alike are generally unaware of the impacts of leaky duct work on comfort, health, safety and space-conditioning energy consumption;
- Contractors don't realize how their design and installation practices affect air leakage in duct systems;
- Contractors have neither the skills nor the information to successfully market improvements in duct efficiency, both in new construction and retrofits; and
- There is no credible means to identify and verify the benefits of efficient HVAC systems.

To achieve these goals, Oregon Office of Energy and its subcontractors--Washington State University Cooperative Extension Energy Program, Oregon State University Energy Extension Program, and the Idaho Department of Water Resources Energy Division--have developed a five-pronged approach. They will:

- refine estimates of the costs and benefits of reducing duct leaks;
- test and refine protocols and standards for utilities and contractors;
- develop and test a marketing plan;
- establish a trained group of contractors and trade allies; and
- establish a self-supporting training and certification program for contractors.

The Alliance board approved funding of \$600,000 for this project over two years. An additional year was added along with \$442,000 for a total project budget of \$1,042,000 through December 2000. The Electric Power Research Institute is expected to provide an additional \$80,000.

7. *Pacific Gas and Electric*

Pacific Gas and Electric Company (PG&E) is a wholly owned subsidiary of PG&E

Corporation. The company provides electric service to about 4.5 million customers (households and businesses) and natural gas to about 3.6 million customers. PG&E's service area spans 70,000 square miles, including all or portions of 48 of California's 58 counties, with a population of more than 13 million people. PG&E has provided customer energy efficiency programs since 1978.

The DOE reports that PG&E has been an active ENERGY STAR® partner since September 1997, recruiting retailers in their service territory to label and promote ENERGY STAR® qualifying products. In addition, PG&E promotes the benefits of energy efficiency and the ENERGY STAR® logo to customers in its service territory through regular bill inserts and ENERGY STAR® advertisements on payment envelopes. The company has also trained its telephone hotline staff to be able to answer questions about the ENERGY STAR® program and associated consumer rebate programs. PG&E is one of four California investor owned utilities (IOUs) that contributes funds to the California Residential Lighting and Appliances Program. This Program has been running since mid-1999 and will continue through December 2001.

8. *Public Service Electric and Gas*

Public Service Electric and Gas offers the "Energy Efficient Home 5 Star Program (EEH 5 Star)" to customers who build new homes that qualify for ENERGY STAR® Five Star certification. Participants may qualify for up to \$500 back at closing.

PSE&G's Residential Rebate Program offers rebates to customer who install program-specified high efficiency Central Air Conditioner, Electric Heat Pump, Gas Furnace or Boiler. An optional, supplemental rebate for ENERGY STAR® rated Programmable Thermostats is also offered for the purchase of any ENERGY STAR® rated programmable thermostat, when a high efficiency central air conditioner, electric heat pump, gas furnace or boiler is also purchased and installed.

9. *Wisconsin Energy Conservation Corporation*

Wisconsin Energy Conservation Corporation (WECC) was established as a private, nonprofit corporation in 1980. WECC Wisconsin Energy Conservation Corporation (WECC) delivers energy efficiency programs to electric and natural gas customers in Wisconsin. Sponsors of WECC's programs include the following 31 Wisconsin utilities:

- Menasha Utilities
- Alliant Utilities
- Muscoda Light & Water
- Wisconsin Electric Power Company
- New Holstein Utilities
- Boscobel Utilities
- New Richmond Utilities
- Cedarburg Light & Water
- Oconomowoc Utilities
- Columbus Water & Light
- River Falls Municipal Utilities
- Eagle River Light & Water
- Shawano Municipal Utilities
- Florence Utilities
- Slinger Utilities
- Hartford Electric
- Sturgeon Bay Utilities
- Hustisford Utilities
- Sun Prairie Water & Light
- Jefferson Water & Electric
- Superior Water, Light and Power
- Kaukauna Electric
- Waterloo Water & Light
- Lake Mills Light & Water
- Waunakee Utilities
- Lodi Utilities
- Waupun Utilities
- Manitowoc Public Utilities
- Whitehall Electric Utility
- Marshfield Electric & Water Department
- Wisconsin Rapids Water Works & Lighting Commission

Government partners include the Department of Administration-Wisconsin Energy Bureau and several county governments. WECC's activities represent a multi-utility market

transformation effort that includes several ENERGY STAR® promotional components. WECC has been an ENERGY STAR® partner since August 1998.

In terms of ENERGY STAR® ®, WECC provides information on appliances such as clothes washers, dehumidifiers, room air conditioners, refrigerators and lighting. WECC provides rebates (mail-in coupons) for ENERGY STAR® lighting fixtures (up to \$15), bulb (up to \$5), torchieres (up to \$20), and, clothes washers (\$50). Additionally, WECC provides information to customers about manufacturer promotions and participating retailers.

Wisconsin ENERGY STAR® Homes builds on the national ENERGY STAR® program by adding building standards that are more specific to Wisconsin's weather, while emphasizing comfort, combustion safety, and durability. The Wisconsin ENERGY STAR® Homes program has Home Performance Raters who work closely with builders. Raters are from the only state-recognized home energy rating service. To certify a Wisconsin ENERGY STAR® Home, a Rater coordinates at least three site visits with your builder during the construction of your home, and completes performance tests to ensure the home works as designed: comfortable, safe, durable, and energy efficient. After the final visit, if the rating score is 86 or higher, the Rater will certify the home as a Wisconsin ENERGY STAR® Home. WECC provides a newsletter, information on lenders and builders who participate in the program. There is no reference to incentives.

C. Conclusions

The review of utility and state ENERGY STAR® demonstrates that efforts to promote ENERGY STAR® programs and products exist in several regions and states. The programs are supported by investor-owned, cooperatives and municipal electric and gas utilities. The supporting utilities appear to be of various sizes. It further appears that a statewide or regional approach to ENERGY STAR® programs is critical to involving a broad range of utility sizes and structures.

After a review of these programs, it is apparent that many of these programs do not rely on rebates or other forms of direct incentives. The Wisconsin ENERGY STAR® Home, for example, provides the inspections at no cost. These efforts include promotion of ENERGY STAR® appliances, HVAC, new home construction, and lighting. A new of different strategies have been adopted to promote these programs including point of sale incentives (coupons), rebates, technical assistance, free inspections, contractor certification and trade ally training. Rebates appear to be offered frequently for clothes washers and window air conditioners, and to a lesser extent for refrigerators and dishwashers. Additionally, point of sale coupons and rebates are widely used for specified high-efficiency lighting fixtures and compact florescent bulbs. The Northwest Energy Efficiency Alliance relies on information and education for most of its lighting programs.

This initial review of ENERGY STAR® programs, while admittedly not all inclusive, provides a basis to confirm that education and information programs are widely used to promote ENERGY STAR® products around the country. This suggests that the approach proposed by Staff to focus on education and information efforts is an approach that is currently used by many states and regions. Further, this review, demonstrates that many features of the programs offered by the Southern Maryland Electric Cooperative represent current practices in promoting new homes and HVAC equipment and should be incorporated into ENERGY STAR® programs in Maryland, where appropriate. Finally, it appears that a statewide or regional approach is critical to allowing utilities of all shapes and sizes (and their customers) to have ENERGY STAR® programs.