

OVERVIEW OF RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

CONNECTICUT

Connecticut's Energy Efficiency Fund has developed a number of residential energy efficiency programs that offer incentives to customers across the state. The Fund is supported by all Connecticut Light & Power (CL&P) and United Illuminating (UI) customers through a \$0.003/kWh charge on their electric bill, and by customers of Connecticut Natural Gas, the Southern Connecticut Gas Company and the Yankee Gas Services Company through a conservation charge included in their rates.

CL&P and UI administer and implement the residential energy efficiency programs in accordance with a comprehensive plan approved by the Connecticut Department of Public Utility Control (DPUC). The utilities develop their plans with advice and assistance from the state's Energy Conservation Management Board (ECMB). Additional sources of funding for the Energy Efficiency Fund in 2009 included the Regional Greenhouse Gas Initiative (RGGI), the Forward Capacity Market (FCM), Class III Renewable Credits and the American Recovery and Reinvestment Act (ARRA).

The Energy Efficiency Fund's Home Energy Solutions (HES) program is one of the most popular state-run programs, serving approximately 29,000 customers in 2010, with an annual savings of 403,366,841 kWh. The HES program provides weatherization assistance to customers of the participating gas and electric utilities. For a \$75 fee, a contractor authorized by the local utility can provide customers with envelope assessments (blower door and duct tests), on-the-spot improvements and information on rebates for appliances, HVAC systems and insulation. In addition to the HES weatherization services, households may qualify for insulation and energy efficiency appliance upgrades. A number of financing options are available; in general the homeowner assumes the loan and the contractor is paid directly for energy efficiency upgrades. Up to 100% of the costs are covered and there is no closing cost on the loan.

The Residential Home Energy Savings Program, which is subsidized in part by a State of Connecticut grant, provides a comprehensive in-home energy assessment to customers of various utilities, such as Norwich Public Utilities, Groton Utilities and Bozrah Light & Power. This program entails a home visit by a certified contractor (Groton and Bozrah L&P) or an NPU technician (Norwich Public Utilities) who will conduct a blower door test to identify and eliminate air leaks in the home, replace customers' incandescent light bulbs with new CFL bulbs, install low-flow shower heads and sink aerators to lower water consumption, and generally conduct an inspection of energy usage, at no cost to the customer.

MASSACHUSETTS

Massachusetts' energy efficiency fund is authorized to support energy efficiency programs, including demand-side management (DSM) programs and low-income energy programs. It is funded by several sources: a non-bypassable surcharge of \$0.0025/kWh imposed on customers of all investor-owned electric utilities in Massachusetts; amounts generated under the Forward Capacity Market program administered by ISO-NE; cap-and-trade pollution-control programs, including the Regional Greenhouse Gas Initiative (RGGI) and the NOx Allowance Trading Program; and other sources approved by the Massachusetts Department of Energy Resources (DOER), the Energy Efficiency Advisory Council and the Department of Public Utilities (DPU). Efficiency programs are administered by electric utilities and municipal aggregators, with approval by a state-appointed Energy Efficiency Advisory Council. DOER is responsible for program oversight and evaluation.

MassSAVE is an initiative sponsored by Massachusetts' gas and electric utilities and energy efficiency service providers, including Columbia Gas of Massachusetts, the Berkshire Gas Company, Cape Light Compact, National Grid, the New England Gas Company, NSTAR, Until and the Western Massachusetts Electric Company. The sponsors of MassSAVE work closely with DOER to provide a wide range of services, incentives, trainings, and information promoting energy efficiency that help residents and businesses manage energy use and related costs. The MassSAVE initiative offers incentives through a number of utility rebate programs (for customers of sponsor utilities) and local rebate programs, such as those run by Cape Light Compact. The main programs include Gas Networks, COOL SMART, Energy Bucks, Energy Star Homes, Energy Star Major Renovations Program and the Heat Loan Program.

Columbia Gas, in addition to participating in the MassSAVE Gas Network Program, also runs a program called Partners in Energy. The program pays residential customers 75% of the cost of recommended weatherization measures, up to \$2,000. Columbia Gas will perform a free energy assessment and provide its customers with a report listing energy-saving measures that qualify for incentives. If requested, the Partners in Energy program can also provide their customers with a pre-approved independent installation contractor.

The Massachusetts Municipal Wholesale Electric Company (MMWEC) provides the Home Energy Loss Prevention Services (HELPS) Program to approximately 20 municipal utilities in Massachusetts, including Chicopee Light and Wakefield Municipal Gas & Light. HELPS offers a home energy audit, appliance and lighting rebates and other incentives for the implementation of measures recommended in an audit. Participating utilities customize the suite of rebates provided to their customers in order to help those customers implement measures recommended in the energy audit.

Renew Boston is a local rebate program that offers energy efficiency incentives to income-eligible residents in the city of Boston. The program is funded by an American Recovery and Reinvestment Act (ARRA) Energy Efficiency Conservation Block Grant (EECBG). After an initial eligibility verification process, Renew Boston will conduct an on-site energy assessment for free. Pending the results of the assessment, a Renew Boston representative will recommend and make improvements in insulation, air sealing and lighting, among other efficiency upgrades. Up to \$2,600 in improvements may be made at no cost to the resident. Only improvements made through the Renew Boston program by Renew Boston representatives (and official, authorized partners) are eligible.

Concord Municipal Light Plant (CMLP) offers incentives through its Electric Heat Weatherization Program. This program allows customers to have up to 40% of their weatherization costs covered by a rebate. A residential energy audit must have recently been performed on the house (2 years prior, or less) in order to be eligible. Measures include ceiling, floor and wall insulation, duct/pipe insulation, HVAC duct sealing and general air sealing. The maximum rebate amount is \$1,000. Rebates will be made available after a post-installation inspection and buyers' receipts or paid invoices are sent to CMLP.

NEW JERSEY

New Jersey's "societal benefits charge" (SBC) is collected as a non-bypassable charge imposed on all customers of New Jersey's seven investor-owned electric public utilities and gas public utilities. The New Jersey Board of Public Utilities (NJBPU) determines the amount that will be collected. In September 2008 the NJBPU approved a 2009-2012 budget of \$1.213 billion, with approximately 80% (\$950 million) of the budget devoted to energy efficiency programs.

The SBC funds New Jersey's Clean Energy Program (NJCEP), a statewide initiative administered by the NJBPU. The NJCEP provides technical assistance, financial assistance, information and education for all classes of ratepayers. NJCEP energy-efficiency programs and renewable-energy programs were initially managed and implemented by New Jersey's seven investor-owned electric public utilities and gas public utilities, but in 2007 management was turned over to third-party program managers Honeywell Utility Solutions and TRC Energy Solutions.

The NJBPU will continue to act as the administrator of the NJCEP, while contracted program managers will be responsible for managing and implementing the programs. The New Jersey Office of Clean Energy (OCE) and market managers submit annual program plans for approval by the NJBPU. For energy-efficiency projects, the NJCEP has provided funding for new construction, building retrofits, HVAC systems, Energy Star products (including air conditioners, appliances and lighting), combined heat and power (CHP), energy audits and energy-efficiency projects for low-income residents.

The NJBPU offers a Home Performance with Energy Star Program, which provides incentives that lower the ultimate cost to consumers for the installation of energy efficiency measures identified in a comprehensive home assessment. Customers can receive up to \$10,000 in loans and rebates up to 50%. In order to receive incentives from this program, eligible work must be performed by a BPI-certified contractor who is a registered Trade Ally of the NJCEP. This program is now available to residents throughout New Jersey, including customers of the state's municipal electric utilities and those that use oil or propane as a heating fuel. The expansion was made possible by the use of ARRA funds as a supplement to normal program funding through the New Jersey SBC. The program budget for 2011 is \$38.4 million.

The state of New Jersey also offers the New Jersey Comfort Partners program - a free of charge, direct installation energy efficiency assistance program available to most New Jersey households with significant energy usage and an income at or below 225% of the federal poverty guidelines. The measures offered are case-specific and will depend on the outcome of a comprehensive energy analysis of the household. A number of major utilities participate in the program, including PSE&G, Jersey Central Power & Light, Atlantic City Electric, Elizabethtown Gas, NJ Natural Gas (NJNG) and South Jersey Gas.

In addition, many of the larger utilities have their own energy efficiency programs, some of which overlap/supplement the statewide programs. The two largest programs are PSE&G's Residential Whole House Efficiency Program and NJNG's SAVEGREEN Program. The PSE&G Residential Whole House Efficiency Program provides income eligible homeowners or tenants with an in-home energy audit, air leakage testing, and duct sealing. PSE&G will also perform home health and safety testing and up to eight hours of air-sealing, caulking, and weather-stripping. For PSE&G recommended efficiency upgrades (such as insulation, HVAC, or other measures) the utility will pay all of the cost up front. The homeowner or landlord is expected to repay 20% - 50% of that cost depending on their income, interest free, through their energy bill over a period of 60 months or in one lump sum. NJNG's SAVEGREEN Project provides additional rebates that supplement the statewide WARMAdvantage Program – a space-heater and water heater rebate program. Existing NJNG customers who qualify for the WARMAdvantage incentive and have a home energy audit performed can receive an additional \$900 rebate from the utility if they install a natural gas furnace or boiler that meets the efficiency requirements.

NEW YORK

New York's A.B 40004A authorizes counties, towns, cities and villages (collectively referred to as "municipal corporations") to offer sustainable energy loan programs. Loans may be used to pay for

energy audits; cost-effective, permanent energy efficiency improvements (i.e., appliances are generally not eligible); renewable energy feasibility studies; and the installation of renewable energy systems. The authorizing legislation does not limit the authority of local governments to provide loans to different sectors (e.g., residential, commercial, etc.). Any such limitations would be determined at the local level for a specific local program. In order to qualify for a loan, energy audits or renewable energy feasibility studies must be performed by a contractor certified according to standards set by NYSERDA or by the local government under standards at least as stringent as those developed by NYSERDA. Loans may not be issued for energy efficiency improvements that have not been determined to be appropriate by an energy audit or for renewable energy systems that have not undergone a feasibility study.

New York's A.B. 8862 authorizes towns to create residential home energy efficiency programs funded by periodic charges or fees for the services rendered. The effect of this policy, although not precisely a loan, is similar to a loan. In towns that offer such a program, the town would be permitted to enter into contracts for home energy audits and energy efficiency improvements on behalf of participating residents. Participating residents benefit by having improvements made upon their property by the town at no up-front cost to themselves and are permitted to repay the town for the improvements through a periodic fee or charge. The charges associated with the service constitute a lien upon the property on which the improvements took place.

New York's system benefits charge (SBC), established in 1996 by the New York Public Service Commission (PSC), supports energy efficiency, education and outreach, research and development, and low-income energy assistance. To support the SBC program, the state's six investor-owned electric or natural gas utilities - Central Hudson Gas & Electric Corporation, Consolidated Edison Company, National Grid, New York State Electric & Gas Corporation, Orange and Rockland Utilities and Rochester Gas and Electric Corporation - collect funds from customers through a surcharge on customers' bills. Each year from 2006-2011, these utilities must collect and remit a sum equal to 1.42% of their 2004 revenue to NYSERDA.

The SBC program is administered by NYSERDA and funds a number of their programs aimed at improving energy efficiency. NYSERDA's programs are available statewide, but only customers that pay the SBC are eligible for assistance through NYSERDA's SBC-funded programs. Customers of the Long Island Power Authority (LIPA), the New York Power Authority (NYPA), municipal utilities, and electric cooperatives do not qualify for incentives funded by the SBC. The NYPA provides energy conservation programs for schools, hospitals and government buildings and LIPA provides a Home Performance with Energy Star (HPwES) program to its customers.

Most New Yorkers can take advantage of energy efficiency incentives offered through NYSERDA's Home Performance with Energy Star (HPwES) program. This program is funded primarily by the SBC but also receives funds from the Energy Efficiency Portfolio Standard (EEPS) and the Regional Greenhouse Gas

Initiative (RGGI). The program is available to all New York residents who are customers of the state's six investor-owned utilities that collect SBC funds. To the extent that the customer is eligible for other energy efficiency incentive programs (e.g., from their utility), NYSERDA will coordinate with the respective program administrators to minimize confusion.

The HPwES program uses a network of independent home improvement contractors, accredited by the Building Performance Institute (BPI). Each participating contractor is trained to identify energy efficiency improvements and to test homes using a 'whole-house' approach. Qualified customers may receive a free or reduced cost comprehensive home assessment/audit, energy efficiency rebates and low-cost financing through NYSERDA's HPwES program.

Through the Green Jobs-Green New York (GJGNY) program, NYSERDA partners with Energy Finance Solutions (EFS) to offer an unsecured loan for the installation of eligible energy efficiency measures in owner-occupied 1-4 family homes. EFS administers the loans, but GJGNY program subsidizes the interest rates. Participants in the GJGNY Financing program remain eligible for other incentives offered by utilities or by NYSERDA, including the NYSERDA HPwES Financing Incentive and the NYSERDA Assisted Home Performance Grants Program.

NYSERDA also has a Residential Loan Fund that provides Energy Smart Loans - reduced-interest rate loans to finance energy efficiency renovations and new construction. In order to qualify for the program, the customer must participate in NYSERDA's HPwES program. To participate in NYSERDA's HPwES program, a comprehensive home assessment must be performed by an approved BPI-certified contractor, which may cost a small fee. In many cases the customer will be eligible for a reduced or no-cost home assessment based in part on their income level.

The Long Island Power Authority (LIPA) also offers an HPwES program to its residential customers. LIPA's HPwES program has the same structure, eligibility requirements and procedures as NYSERDA's HPwES program. LIPA also offers two main energy efficiency rebate programs: the Cool Homes program (for AC systems and heat pumps) and the Geothermal Energy Wise program (for geothermal heat pumps).

The town of Babylon offers the Long Island Green Homes Program - a self-financing residential retrofit program. The program is only available to Babylon residents. The program is a "benefit assessment" program, which allows the town to make a specific improvement that serves a public purpose on a parcel of property and assess the cost of the benefit against the property. The program focuses on insulation upgrades, new boilers or furnaces, new hot water heaters and air sealing/duct work. Customers can pay for the improvements upfront or can choose to have Long Island Green Homes foot the entire upfront cost of the improvements and pay for the improvements over time using the money they save on their energy bills. The payment obligation is attached to the property itself rather than to the owner, so it remains with the home upon any changes in ownership. It is important to note that

while the cost of the improvements is considered to be assessed against the property, this does not mean that the assessed value of the property used to compute property taxes is increased.

To participate in the program, residents must provide certain information about their home and historic energy use and then schedule a Home Performance Evaluation to be conducted by a town-licensed, BPI-accredited energy auditor. If the homeowner elects to make some of the improvements identified on the evaluation, the cost of the evaluation (\$250) is deducted from the overall cost of the improvements. Based upon the results of the Home Performance Evaluation, the contractor will enter into a contract directly with the Town and will make the recommended energy-efficiency improvements chosen by the homeowner. The program pays the contractor for the cost of the improvements and arranges a monthly payment plan for the homeowners to repay these costs through a separate contract. The homeowner's payment schedule is generally intended to result in annual payments that are less than the homeowner's annual energy cost savings.

OREGON

The Oregon state legislature has authorized the creation of "local improvement districts" where cities and counties provide financing for the installation of renewable-energy systems and energy-efficiency improvements to residential, commercial, industrial or other qualifying real property. Local governments may issue revenue bonds to finance the loan programs or can borrow money from the Oregon Department of Energy under the Energy Efficiency and Sustainable Technologies Loan Program for small-scale local energy projects. The loans may be secured with a lien on the property, although liens are not senior. Some potential options for loan repayment are via a special assessment on local government taxes, utility bills, or another approved method of loan repayment.

Oregon's Department of Energy administers the Oregon Small-Scale Energy Loan Program (SELP), which provides financing for small-scale, local energy projects. The program offers low-interest loans for projects that improve energy efficiency and/or enhance the production/use of renewable energy. Loans are available to individuals, businesses, schools, cities, counties, special districts, state and federal agencies, public corporations, cooperatives, tribes and non-profits. Though there is no legal maximum loan, the size of loans generally ranges from \$20,000 to \$20 million. Terms vary, but are generally set to match the term of the bonds that funded the loans. Loan terms may not exceed project life.

Oregon's Department of Energy also administers the State Home Oil Weatherization (SHOW) Program, which serves Oregon households that heat with oil, propane, kerosene, butane, or wood. SHOW-eligible homeowners can conduct their own energy audit and apply for cash rebates for installed weatherization and heating measures. Eligible SHOW homeowners can receive a maximum rebate of \$500. Customers must have a blower-door test conducted by a certified contractor to be eligible for rebates. Energy conserving measures may be installed by a certified contractor or the homeowner. The equipment

installer must fill out the “Energy Audit Checklist” and “Energy Rebate” form available on the program website.

Oregon's 1999 electric-utility restructuring legislation requires Pacific Power and Portland General Electric (PGE) to collect a 3% public-purpose charge from their customers for a Public Benefits Fund to support renewable energy and energy efficiency projects through January 1, 2026. The Oregon Public Utility Commission (OPUC) authorized the Energy Trust of Oregon, an independent non-profit organization, to administer these programs beginning in 2002. Of the funds collected by the electric utilities, 56.7% must be allocated towards energy efficiency programs. In addition to its work under the 1999 energy restructuring law, the Energy Trust administers gas conservation programs for residential and commercial customers of Northwest Natural, the Cascade Natural Gas Corporation and Pacific Power.

The Energy Trust of Oregon offers a variety of incentives and services through their Home Energy Solutions initiative, including a Home Performance with Energy Star program and various rebate programs. The first step to participate in any of these programs is to contact Energy Trust and schedule a free Home Energy Review with an Energy Trust home energy advisor. The energy advisor will perform a one-hour walkthrough of the home. The advisor will analyze the home's energy use, recommend energy-saving measures, install up to four free compact fluorescent bulbs, and advise the homeowner on how to take advantage of Oregon's Residential Energy Tax Credit.

Lane Electric Cooperative offers a Weatherization Grant Program to their residential customers. Grants cover up to 25% of the energy efficiency measure –related costs, up to \$1,000. Eligible measures include building and duct insulation, HVAC duct sealing, door and window replacements and general air sealing. Lane Electric also offers a low income grant for weatherization measures up to \$1,500. Property owners of rentals must make a 50% contribution to any project. Before receiving funding for any of the programs, members must first request an energy analysis for the dwelling. Once the energy analysis is performed, forms and bid sheets will be mailed to the applicant. These forms must be completed and returned to the Lane Electric Cooperative office. Upon inspection and approval of the installation, payment will be made to the contractor using the approved cash grant.

Lane Electric also provides 0% loans to residents for the installation of efficient heat pumps and weatherization measures through the Home Energy Loan Program. Participating single or multi-family residences with permanently installed electric heat are eligible to apply for loans up to \$9,000 through either Pacific Cascade Federal Credit Union or First Tech Credit Union. The banks charge an interest rate on their loans, but Lane Electric buys the interest rate down to 0%. In order to qualify for the loan, members must first request an energy analysis for the dwelling from Lane Electric. From the energy analysis, the auditor will then provide the customer with a list of eligible measures. The customer must choose which measures they would like to take, and then solicit contractor bids and submit a loan

application to First Tech Credit Union or Pacific Cascade Federal Credit Union. Lane Electric also offers customers a number of energy efficiency rebate incentives.

The Springfield Utility Board (SUB) offers a joint loan and rebate program for heat pumps and weatherization measures. In addition to heat pump incentives, a rebate totaling 50% of the cost of insulation measures is available to residential customers in manufactured, site-built, or multi-family complexes for ceiling, floor and wall insulation. A rebate of 100% of the insulation measure is available to limited income customers. 0% loans are available to qualified customers for the purchase of qualifying energy-efficient heat pumps, insulation upgrades, and energy efficient windows. Interested customers should get bids from qualifying contractors, and submit them, along with the loan application form and an administration fee of \$80 to the utility. Once work has been completed, someone from the utility will inspect the work done. The SUB also offers a free energy audit for homeowners. An SUB staff member experienced in conservation measures will inspect and make energy efficiency recommendations.

In addition to the programs described above, a number of similarly-structured energy efficiency programs exist among the following providers: Ashland Electric Utility, Avista Utilities and Salem Electric (loan and rebate); Emerald People's Utility District (EPUD), Columbia River PUD and Tillamook County PUD (loan and rebate); Central Electric Cooperative, Douglas Electric Cooperative and Midstate Electric Cooperative (rebates); and Forest Grove Light & Power, Idaho Power and Monmouth Power & Light (rebates).

PENNSYLVANIA

The state of Pennsylvania has four renewable and sustainable-energy funding programs. The programs were created through individual settlements with the state's five major distribution utilities: Metropolitan Edison Company (Met-Ed), Pennsylvania Electric Company (Penelec), PECO Energy (PECO), PP&L (PPL), and Allegheny Power/West Penn Power Company (WPP). Each utility has established an oversight board and designated a fund administrator. Met-Ed, Penelec and Penn Power are now part of FirstEnergy Corp, a diversified energy company headquartered in Ohio.

The Keystone HELP Program is a state loan program designed to help homeowners improve energy efficiency with special financing for high-efficiency heating, air conditioning, insulation, windows, doors, geothermal and "whole house" improvements. Principally supported by the Pennsylvania Department of Environmental Protection, the Pennsylvania Treasury Department and the Pennsylvania Housing Finance Agency, the HELP Program is administered by AFC First Financial Corporation, a Pennsylvania

energy efficiency lender. Pennsylvania homeowners who own and make qualifying improvements to their one- or two-unit primary residence located in the state and whose combined annual household income does not exceed \$150,000 are eligible to apply for loans under this program. Eligible applicants may receive only one loan during each fiscal year, but they may apply for additional loans in future years.

All installed equipment and material must be new and work must be performed by a qualifying contractor. A list of qualifying contractors is available on the program's website. The HELP Program's Whole House Improvement Loans are available for qualifying improvements determined by a comprehensive "whole house" energy audit conducted by a qualifying auditor. Loans range from \$5,000 to \$35,000. The rate range is 3.875% - 6.375% (fixed) and term options are 10, 15 or 20 years. Eligible applicants will receive \$325 towards the cost of the energy audit from Keystone HELP upon completion of the post-construction audit.

Keystone's EnergyWorks Program is a special offshoot of Keystone HELP which offers special, lower interest rates to income-eligible homeowners in Bucks, Chester, Delaware, Montgomery, and Philadelphia counties. It is administered by AFC First Financial Corporation, a Pennsylvania energy efficiency lender. The EnergyWorks Program is principally supported by the Pennsylvania Department of Environmental Protection, the Pennsylvania Treasury Department and the Pennsylvania Housing Finance Agency. Additional support comes from a grant from the US Department of Energy's Better Buildings Program. There are two categories of loans available through the EnergyWorks Program: a Gold Level loan (for whole-house energy improvements) and a Silver Level loan (for targeted energy efficiency measures). Residents who qualify for EnergyWorks loans may also qualify of other loan offerings through the general, Statewide Keystone HELP Energy Efficiency Loan Program.

FirstEnergy Corp.'s Pennsylvania Electric Company (Penelec), Metropolitan Edison Company, and Pennsylvania Power Company administer a number of residential energy efficiency programs to comply with Pennsylvania Act 129. These programs include the Whole House Program (rebates on "whole home" measures), the Residential HVAC Program (rebates on qualifying central air conditioners, air source heat pumps, and geothermal heat pumps), the Appliance Turn-In Program (rebates for turning in inefficient appliances) and the Appliance Rebate Program (rebates on Energy Star appliances). FirstEnergy's Whole House Program is based on a "whole home" approach and offers rebates up to \$1,200. Customers may qualify for as much as \$300 in rebates for participating in a two-part comprehensive home energy audit and up to \$900 in rebates for installing energy-saving improvements such as air sealing, duct sealing, insulation, duct insulation and windows and doors.

Through the Whole House Program, First Energy offers customers three ways to evaluate their home energy usage: the Walk-Through Energy Audit Program (\$50); the Whole House Energy Audit Program (BPI-certified contractor, fees vary by contractor); and an Online Home Energy Analyzer tool (available on the FirstEnergy website, free). FirstEnergy has contracted with Honeywell to administer the Whole House Program. The program's website and its content are maintained by Honeywell.

PPL Electric Utilities' Home Assessment Program offers incentives for contracting a home energy audit. Two energy assessment options are provided at reduced prices: a Home Energy Survey (walk-through evaluation, \$50 fee) and a Home Energy Audit (comprehensive diagnostic audit by BPI-certified analyst, \$150-\$250 reimbursement). For both assessment options, trained energy surveyors or analysts will install several free energy-saving measures (such as CFLs, smart power strips, faucet aerators and water heater pipe insulation) and provide the customer with additional recommendations to make their home more energy efficient. By implementing the energy efficiency measures recommended by either of the two home energy assessments, homeowners can qualify for additional E-power rebates, as well as the weatherization and duct sealing rebates and bonus rebates. For each additional recommended measure that is installed, the customer receives an additional \$50 rebate up to a maximum of \$150 if all four recommendations are installed.

In addition to the programs described above, some Pennsylvania utilities (e.g., Allegheny Power and Duquesne Light Company) offer rebates to customers for purchasing and installing energy-efficient equipment. Many of these programs do not have any requirements as to how the measures are installed. Most of the programs do not require a home energy evaluation to be conducted prior to receiving rebates, although program websites generally provide customers access to a free web-based energy calculator/tool that provides customized home efficiency and conservation recommendations.

TEXAS

The Austin Home Performance with Energy Star program, one of the earliest and most successful of such programs in the U.S., uses a contractor-driven model in which the contractor conducts the audit. The program provides rebates or low-interest loans through a local credit union, and matching rebates may also be provided by Texas Gas. Through the Better Buildings program, Austin has been able to offer enhanced incentives, including an interest-free loan product, which has substantially increased public interest in the program. The program has a rigorous QA regime; in the past, all jobs were inspected, but the program has grown to the point that this is no longer practical. Program officials emphasize the importance of working with contractors.

The Oncor Home Performance program is one of several related residential energy efficiency programs offered by Oncor. The audits are carried out by Service Providers, who may bid on the retrofit work. Oncor makes a number of rebates available in support of the program. Oncor also offers a Residential Energy Audit program ("Take a Load Off Texas"), which employs Texas HERO-certified auditors, who may but are not required to bid on the scope of work.

The Standard Offer Programs conform to a model in which a Project Sponsor (contractor, ESCO, non-profit or other entity) contracts directly with the utility to achieve energy savings in residential buildings. Savings can be calculated through a deemed, "limited M&V," or measured approach, but for residential projects the deemed approach is strongly recommended. Deemed savings are based on the delta between existing Federal standards and the equipment / measure installed, rather than between the previously existing and the new / replacement equipment. The contract is made between the Project Sponsor and the Utility; the utilities do not provide funds or rebates to the homeowner.

The utility rebate programs provide free audits conducted by staff auditors who use blower doors and in some cases thermal imaging and/or duct blaster tests. Installation is by program-approved third party contractors. Rebates are typically for attic/ceiling and in some cases wall/floor insulation, high-efficiency air conditioners, solar screens and energy efficient windows, solar water heaters, radiant barriers and similar measures that meet program standards.

CPS Energy, the Alamo Area Council of Governments, and other San Antonio area organizations are launching a Better-Buildings-funded energy efficiency program that will target residential commercial, industrial and government buildings. The program is apparently still in development (follow-up important).

WASHINGTON

Seattle City Light recently launched a program to provide subsidized audits (cost to the consumer is \$95) conducted by BPI-certified auditors, who may or may not bid on the retrofit job. Subsidies have not been provided at present. However, the City of Seattle and a broad partnership of local groups, including Seattle City Light, received a Better Buildings grant to implement a program that targets residential, commercial, industrial and municipal buildings. The details of the program are still being worked out, as per the program's website.

The City of Bainbridge Island and many other groups have received a Better Buildings award to implement a residential and commercial energy efficiency program. The residential program has two tiers: a clipboard audit and an in depth audit with full diagnostic techniques as per Home Performance with ENERGY STAR standards. The program offers a range of rebates.

Washington has a large number of utilities, many of them relatively small and customer owned. A number of them, including Clark Public Utilities, Cowlitz County PUD, and Greys Harbor PUD, provide free audits (or low-cost) conducted by utility employees. They typically provide rebates for

weatherization measures, as well as other ECMs such as duct sealing and/or installation of heat pumps. Many also provide low-interest loans. The work is done by utility-approved contractors.

NorthWest Natural provides a Home Performance with ENERGY STAR program administered by the Oregon Energy Trust. A program-approved contractor selected by the homeowner conducts the audit. A wide range of measure-by-measure incentives is available, and financing is also available through a partner financial institution.

WISCONSIN

Wisconsin's Focus on Energy, a nonprofit organization, provides a Home Performance with ENERGY STAR program in partnership with more than 100 Wisconsin utilities. The audit process is driven by third party consultants, who test in and test. The audit is not subsidized and customers are encouraged to shop around. The program provides generous subsidies for specific measures, and subsidized financing is available. This Home Performance with ENERGY STAR program is one of the oldest and most successful in the U.S.

Two other utilities, both Touchstone Co-ops, run their own Home Performance with ENERGY STAR programs. Barron Electric's program offers audits conducted by Barron staff/contractors; the cost is "valued" at \$300 but offered to customers for \$150. The program provides subsidies and a low-interest loan option (up to \$5,000 at a rate of 3% for up to five years). Riverland Energy Cooperative's program requires a third-party audit by a state-certified auditor, and provides a \$150 rebate against the cost of the audit (which their materials suggest typically costs \$350). The audit includes both blower door and infrared camera. Riverland offers a number of measure-specific rebates, as well as a \$250 incentive specifically for homeowners who implement the audit recommendations.