

Star of Energy Efficiency Awards - "Galaxy" Star of Energy Efficiency Award Category
Public Service Electric and Gas Company, Newark, NJ 07101

Public Service Electric and Gas Company (PSE&G) has for more than 25 years provided energy efficiency programming to its customers. PSE&G developed a number of leading edge energy efficiency programs in the late 1990's designed to transform markets, stimulate the construction of ENERGY STAR new construction and provide for comprehensive retrofits of low income customer dwelling units. These became the model for the state wide programs. In 2007, the management of most of these programs was transferred to the New Jersey Board of Public Utilities (BPU). Despite this change, PSE&G remains committed to helping its customers save energy. The Company took on a comprehensive review of opportunities to reduce carbon emissions and support the State's Energy Master Plan goal of reducing energy consumption by 20% by 2020. As a result, a number of initiatives were announced in 2007, focusing on PSE&G's own operations as well as programs offered to customers. To improve its energy efficiency, PSE&G has announced its intention to replace 1300 corporate fleet vehicles with fuel-efficient hybrids and to install new electrical wires and state-of-the art transformers that are expected to reduce carbon emissions by almost 60,000 tons by the year 2020. This nomination focuses on two recent examples of energy efficiency programming offered to customers that complement the BPU's statewide programs.

The first program is the Worry Free Domestic Hot Water Replacement Program where PSE&G provides a competitive service that replaces domestic water heating systems in residences in its service territory. An estimated 110,000 water heaters need to be replaced each year. The energy efficiency challenge of this "emergency breakdown" market is that higher efficiency equipment is rarely installed. However, in the PSE&G program fully 60% or 7,800 units a year are replaced with units having an EF of .62 or greater. Working with manufacturer AO Smith, PSE&G provided specifications for its own energy efficient unit and offers the unit for the breakdown service. PSE&G representatives take the time to inform customers about their option to choose an energy efficient model, and the benefits of doing so. A portion of the customer cost is defrayed by the NJ Clean Energy Program that offers a \$50 rebate per installation. PSE&G has installed over 50,000 energy-efficient water heaters since the introduction of the Worry Free Program. Lifetime energy savings of these units amounts to 4.8 million therms.

The second effort is the recently completed myPower Pricing Pilot Program which tested customers' reaction to the opportunity to conserve and shift load in response to variable Time-Of-Use and Critical Peak Price rates. It also tested in-home technology and multiple two-way communications systems that transferred energy pricing and interval consumption data to and from the customer's meter. It was the subject of an extensive evaluation. Program results showed that participants consistently lowered their energy use in response to price signals across two summers. Technology-enabled (smart thermostat) customers produced greater reductions in energy use in response to the TOU rates and the CPP events (peak demand reduction of 1.33 kW vs. between 0.32 to 0.43 kW for customers without technology enabling). The majority of participants achieved bill savings: 87% of technology-enabled and 68% of those without technology saved. Overall, customers were satisfied with myPower, they see benefits to the environment, and would recommend the program to others.