

ENERGY AND TECHNOLOGY COMMITTEE

SENATE BILL NO. 591: AAC LOW-INTEREST LOANS TO STATE RESIDENTS FOR  
ENERGY EFFICIENT HOME IMPROVEMENTS

MARCH 7, 2008

TESTIMONY OF THE  
DEPARTMENT OF PUBLIC UTILITY CONTROL

While the content of Raised Bill 591 does not require action on behalf of the Department of Public Utility Control, the Department would like to submit the following comments on financing with respect to energy efficiency programs.

**Low Interest Loans**

The first cost of energy efficient equipment remains a *significant barrier* to the purchase and installation of this equipment for the residential class. Therefore, to encourage greater penetration of energy efficient products and clean sources of energy, the Department recommends that low cost/no cost financing be made available to residential customers, regardless of their current economic situation.

Zero interest financing allows the reduced energy costs that result from the installation of a project to be used to repay the loan, creating a *pay-as-you-save* (please note that pay-as-you-save is a trademark) scenario. Ideally, if the payment stream can be set up to equal the savings, the decision to invest in these technologies becomes a “no brainer.”

The Energy Conservation Loan Program is sponsored by the CT Department of Economic and Community Development (DECD) and is administered by the Connecticut Housing Investment Fund (CHIF). The loan program provides financial assistance in the form of below market interest rates to eligible building owners for residential energy efficiency improvements. The sliding-scale interest rates (**which depends on income qualifications**) are subsidized through the Connecticut Energy Efficiency Fund (CEEF). Loans are available for single family home owners as well as the owners of multifamily buildings.

While the CHIF offers lower interest loans, attractive financing is only available to low income customers, those who are least likely to pursue the installation of costly energy efficiency equipment. The Department believes that the availability of *low cost/no cost financing* would greatly expand the installation of energy efficiency equipment. Therefore, we support a revision

to the income guidelines used by CHIF thereby expanding the availability of low cost/no cost financing to a greater segment of Connecticut consumers.

The following is an example of how this would apply for a photovoltaic (PV) system. Since these systems operate during summer peak periods, improved financing for PV systems would help address Connecticut's peak demand. Other technologies that should qualify for zero percent financing include geothermal, solar thermal, high efficiency air conditioning and heat pumps.

Example: At present, the Connecticut Clean Energy Fund offers a significant rebate for PV systems. Despite the rebate (up to 50% or a maximum of \$25,000 for residential installations), the remaining first-cost of a PV system presents a financial challenge for most customers.

For instance, a typical residential PV system, say 4 kW (4,000 watts), costs about \$40,000. The total cost could be reduced to \$20,000 by the rebate from the Connecticut Clean Energy Fund (assuming a rebate of 1/2 the cost, or \$20,000). The cost of the project would be further reduced through any available federal tax credits. Assuming a tax credit of \$2,000, the total reduction would equal \$22,000, leaving the customer with a cost of \$18,000. The following tables compare the monthly payments for an \$18,000, loan based on annual interest rates of 7% and 0%.

Table 1 shows the payments that would be required based on estimated energy savings of about \$76/month:

- Under a 10-year loan and traditional financing, the net payment a customer would make is about \$133/month. Interest payments over the life of the loan would total about \$7,000.
- Under zero percent financing the net payment would be less than \$75/month.

Table 2 show the customer payment stream if the term of the loan is extended to 15 years. A no interest loan would cost the customer about \$24 per month.

Table 1 – 10-Year Loan

Interest Rate	7%	0%
Monthly Payment	\$209.00	\$150.00
Energy Savings	<u>\$75.92</u>	<u>\$75.92</u>
Net Monthly Payment	\$133.08	\$74.08

Table 2 – 15-Year Loan

Interest Rate	7%	0%
Monthly Payment	\$161.79	\$100.00
Energy Savings	<u>\$75.92</u>	<u>\$75.92</u>
Net Monthly Payment	\$85.87	\$24.08

In conclusion, the Department cannot dismiss the fact that recent legislative requirements have attributed to near-term upward pressure on electric rates. While the Department recognizes that these efforts are cost-effective, and can provide long-term benefits, the continued implementation of similar new programs will continue to increase current rates.

Therefore, the Department recommends that in lieu of additional grants, rebates and other direct incentive payment strategies, the legislature should consider setting aside funds to offer low interest/no interest financing programs for the installation of "big ticket" energy efficiency technologies such as photovoltaic (solar electric), geothermal, solar thermal, high efficiency air conditioning and heat pumps.

The DPUC strongly believes that the creation of an Energy Efficiency Loan Fund that provides very low or zero percent financing to low, middle and upper middle income consumers would create tremendous demand for these technologies to lower energy costs and affect peak demand.

