OLR RESEARCH REPORT

January 10, 2011 2011-R-0002

FINANCING ENERGY EFFICIENCY

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You asked for a summary of financing provisions incorporated in the Energy Efficiency Fund plan. This report also discusses three related loan programs, administered by the Connecticut Housing Investment Fund (CHIF), the Bank of America on behalf of the Department of Public Utility Control (DPUC), and the Connecticut Hospital Association Trust.

SUMMARY

The Energy Efficiency Fund (the fund) is primarily supported by a surcharge on electric bills. In recent years, this money has been supplemented with the proceeds of emission credits sold under the Regional Greenhouse Gas Initiative, federal grants under the American Reinvestment and Recovery Act, and other sources. Similarly, the conservation adjustment mechanism on natural gas bills is the primary funding source for gas conservation measures through the fund.

Historically, the fund primarily provided rebates to encourage energy efficiency measures. However, the fund has used a number of options to leverage its resources. The electric and gas companies currently offer efficiency financing programs to provide financing alternatives for the part of the customer's costs that are not covered by the rebates.

There are currently several financing programs for residential and commercial and industrial (C&I) customers. The electric and gas companies have developed a pilot low interest energy efficiency loan program for residential customers. The Small Business Energy

Advantage (SBEA) program provides interest-free loans for energy-saving measures for small C&I customers. The program is also open to municipalities with projects qualifying for the Energy Opportunities Program. The loans are repaid on the customer's electric bill. The electric and gas companies provide also incentives to pay part of the cost of installing energy-efficient equipment for C&I customers. The project costs not covered by the incentives can be financed through the Small C&I Energy Efficiency Loan program, which offers low-interest loans.

By law, the electric and gas companies must develop plans for the use of money in the fund. The plans are submitted to the Energy Efficiency Board and then to DPUC for its approval. The forecast for the 2010 fund budget and revenues shows United Illuminating (UI) will have a surplus of $2.2 million and Connecticut Light & Power (CL&P) will have a surplus of $33.3 million. In the 2011 plan, CL&P requested that $15.0 million of its share of the surplus be used to capitalize a residential loan program, as described below. UI proposed implementing the SBEA loan model for its residential customers. Under its proposal, UI would continue using the current loan servicer to originate the loans but would provide utility capital to fund the loans. UI would also offer on-bill repayment of these loans.

In docket 10-10-03, DPUC approved UI's proposal with modifications. It allowed CL&P to set aside the $15 million but stated that it needs to perform a more thorough examination of the program details prior to the funds being expended.

In addition to the programs that are financed under the plan, DPUC offers low-interest ratepayer-subsidized financing for energy efficiency and on-site generation projects costing more than $1 million. CHIF offers low interest efficiency loans to limited-income residential customers. Ratepayer funds are used to subsidize these loans.

CURRENT FINANCING PROGRAMS

Residential Customers

The electric and gas companies have developed a pilot low interest energy efficiency loan program for residential customers, pursuant to a DPUC order. The pilot program will end later this year. To participate in the program, customers must first have an audit conducted under the Home Energy Solutions (HES) program. The customer must then obtain an estimate from an approved contractor and apply for a loan. The loans are unsecured and the maximum term is 10 years. There is no prepayment penalty.

The loans can be used to finance comprehensive or single measure projects. A comprehensive project must include an eligible energy efficiency measure recommended by the audit, such as insulation upgrades or duct sealing. The project must also either (1) replace a heating, ventilation, or air conditioning (HVAC) system of any fuel type or (2) install a new or replacement qualifying central air conditioning system. The loan rate is currently 2.99% for loans of $2,500 to $6,999 and 0% for loans between $7,000 and $20,000.

Alternatively, a customer can take out a loan for a single measure. The interest rate is the same as for the comprehensive projects for certain measures, such as high efficiency insulation that meets HES requirements and Energy Star® water heating systems, including heat pump systems. The interest rate is 2.99% for the first $10,000 of a loan for an Energy Star® geothermal heat pump. The rate is 2.99% for all loans of $2,500 to $20,000 for the following measures: (1) new or replacement central air conditioning systems, (2) replacement air-to-air heat pumps, and (3) replacement boilers and furnaces. There are efficiency standards for each type of product and air conditioning systems, heat pumps, and propane furnaces must be Energy Star® rated. In addition, the customer can take out a loan at this rate for replacement windows that are Energy Star® rated, but only in conjunction with at least one other energy saving initiative and only if they are replacing single pane windows.

These unsecured loans are offered through AFC First Financial Corporation, i.e., they are not financed from the fund although ratepayer money is used to subsidize their interest rate. Initially, the capital for the program came from Fannie Mae, which charged a high interest rate (14.99%), resulting in a high cost to the fund to reduce the interest rate on the loans. As discussed below, the electric companies have proposed altering the financing of the program. Further information about the program is available at http://www.ctenergyloan.com/index.php.

In addition to the utility programs, CHIF offers subsidized loans through its Limited Income Financing Program. The loans are provided directly to limited-income customers. The initial capital for the program came from a bond authorization rather than the fund. The electric and gas companies provide an interest subsidy to CHIF on the outstanding loan balances. Owners of one- to four-unit buildings may borrow up to $25,000 and multi-family property owners may borrow up to $2,000 per unit to a maximum of $60,000 per building for up to 10 years for eligible improvements. These include a variety of efficiency measures, such as insulation, heat pumps, replacement heating systems, replacement windows, and solar energy systems. Further information about this program is available at www.chif.org.

Commercial and Industrial

Small Business Energy Advantage/Municipal Program. The Small Business Energy Advantage (SBEA) program provides energy-saving measures for small C&I customers. The program is available to customers with an average 12-month peak demand between 10 kilowatts (kW) and 200 kW. The program is also open to municipalities with projects qualifying for the Energy Opportunities Program. All participating customers must be in good credit standing with their electric or gas company.

Once the utility company determines that a customer is eligible, a SBEA contractor assesses the customer's facility at no cost. The company reviews the assessment and, if accepted, the contractor presents a proposal. The proposal includes all possible energy-efficiency measures, their costs, and estimated energy savings. The proposal can include HVAC, refrigeration, and lighting measures, among other things.

The proposal also includes program incentive and financing options. Eligible customers can receive rebates that cover part of the cost of the measures. They can finance the remaining costs with interest-free loans that can be repaid on the customer's electric bill. The loan amount can be from $500 to $100,000. The maximum term for loans is 36 months in CL&P's service territory and 48 months in UI's service territory. Loans are not available to customers or projects participating in certain other efficiency programs.

The fund pays the utility companies interest on the aggregate principal amount of loans outstanding at an annual rate equal to each company's weighted cost of capital. The interest rate for new loans is reviewed from time to time and adjusted as appropriate. The fund also finances a loan default reserve account to compensate for any defaulted and charged-off loans. The amount of this compensation is limited to the outstanding principal balance of the customer's loan.

The loan program enables the companies to offer larger incentives to qualifying customers than would be possible if the fund covered all of the costs of the efficiency measures. The program's default rates have remained low (less than 1%) notwithstanding the current economic environment.

The maximum cumulative amount outstanding between small C&I and municipal projects is $20 million over three years for CL&P projects and $7.5 million over three years for UI projects.

Low-Interest Loans for C&I Customers. With support from the fund, the electric and gas companies provide incentives to pay part of the cost of installing energy-efficient equipment for qualifying C&I customers. The project costs not covered by the incentives can be financed through the Small C&I Energy Efficiency Loan program, which offers low-interest loans.

The program is open to all C&I customers in business for at least three years with good credit standing. All efficiency projects undertaken by C&I customers qualify, except for new construction and major renovation projects and projects that participate in SBEA loan program described above. If an SBEA or municipal project only receives rebates under that program but does not obtain a loan, it can apply to participate in this low-interest loan program.

The low-interest loan must be used to upgrade or replace existing equipment with high-efficiency equipment. The loans are for $2,000 to $250,000, with subsidized low-interest financing offered on the first $100,000 of the loan. The balance can be financed at market rates. The maximum loan term is 60 months. In 2010, the subsidized loan rate for electric company customers was approximately 7%.

DPUC Loan Program. This program offers low-interest ratepayer-subsidized financing for energy efficiency and on-site generation projects costing more than $1 million. The program, administered by Bank of America, offers low interest loans for customer-side distributed resource projects of 50 kW or greater. Customer-side distributed resources include conservation projects that reduce system demand, as well as customer-owned generation. To qualify for this program, energy conservation projects must meet the following criteria:

1. the project must save electricity rather than gas or oil;

2. the project must be located in CL&P's or UI's service territory; and

3. if the project received any funding from the Energy Efficiency Fund or the Clean Energy Fund, this amount must be subtracted from the amount subsidized under this loan program.

The financing need after subtracting funding from other sources must be $1 million or greater. The interest rate on the loans is subsidized so it will be 1% below the customer's applicable rate or no more than the prime rate.

Hospital Program. This program offers loans from the Connecticut Hospital Association Trust for participating eligible health care facilities. In the 2011 plan, CL&P proposes to cover the program's administrative expenses in its financing budget to allow this program to continue to provide its revolving loan fund.

PLAN PROPOSALS AND DPUC DECISION

Proposals

In recent years, DPUC has sought to implement a residential loan program in which loans are repaid on the customer's bill for some time. In addition, PA 07-242 requires the electric companies to develop a program with residential on-bill repayment of financing for conservation measures as part of their energy efficiency programs offered under CGS § 16-245m. However, the companies have stated that they were reluctant to move forward, citing state and federal banking laws that make it difficult for them to directly offer a residential on-bill repayment structure. They stated that using a loan originator will mitigate these concerns.

In the 2011 plan, UI proposes extending the SBEA loan model to its residential customers. Under its proposal, UI would continue using AFC to originate the loans. But would use its own capital to fund the loans and would offer on-bill repayment. To implement this approach for residential customers, UI requested DPUC approval to:

1. allow UI to receive its average cost of capital (currently 6.38%) from the fund (or some equivalent recovery mechanism) for up to $5 million in company funds,

2. allow it to recover any expenses associated with defaulted loans from the fund or another mechanism,

3. approve the practice of applying any partial payments to the utility charges first and then to the residential loan so that electric service is only terminated for unpaid utility charges and not for defaulted loans, and

4. allow it to fund any incremental administrative costs through the fund.

CL&P also indicated that it is seeking alternative sources of capital for residential financing. In the 2011 plan, it proposed using $15 million of its share of the 2010 surplus as a source of capital. In 2012, the $15 million investment (net of any loss reserves used) would be returned to CL&P on behalf of the fund for other energy efficiency programs through:

1. selling loans in the secondary market or, if a secondary market does not develop, to Fannie Mae;

2. returning any funds not loaned to customers; and

3. customer loan repayments pursuant to loan terms.

CL&P notes that the loans must carry some interest since there is no demand from the secondary market to purchase zero percent interest loans.

Under the proposal, CL&P and Yankee Gas will continue to use their 2011 residential efficiency financing budgets to reduce interest rates for eligible residential energy efficiency measures. CL&P estimates that its proposal will reduce the difference between the interest rate charged to the fund and the interest rate charged to borrowers by 4% to 5%. CL&P states that it will (1) remove the $15 million expenditure from its 2010 performance management fee and (2) use their proposed 2011 budgets to subsidize interest rates to 0% to 2.99%.

Table 1 compares the cost of the current pilot program to alternative proposals for both companies. As the table notes, the current cost of capital includes the costs of loan origination and servicing. CL&P offers two options, one that has AFC service the loans and one where CL&P does this itself. UI proposes to service its loans itself.

Table 1: Cost of Current and Proposed Financing Programs

	Current Method	Proposed Method - AFC Loan Servicer	Proposed Method - CL&P Loan Servicer	UI Proposal
Source of Funding				
Fannie Mae	14.99%			
UI				6.38%
Energy Efficiency Fund		5.99%	5.99%	
Origination				
AFC	included above	2.00%	2.00%	2.00%
UI				
Energy Efficiency Fund				
Loan Servicing				
AFC	included above	2.00%		
UI				1.00%
CL&P			1.00%	
Total Cost	**14.99%**	**9.99%**	**8.99%**	**9.38%**
Total Savings		**5.00%**	**6.00%**	**5.61%**
Source of data: CL&P Late Filed Exhibit No. 26.				

CL&P states that its proposal would allow it to continue offering financing to residential customers who choose to invest in energy efficiency. It claimed that the proposal will:

1. produce more sustainable residential financing;

2. reduce the interest rate buy down amount paid by the fund (presently 40% of loan amount) by not relying on Fannie Mae for funding;

3. lower fund costs to allow more customers to receive energy efficiency financing;

4. reduce the budget carryover of unspent funds from 2010 to 2011;

5. enable the efficiency funding to circulate to support new customer loans through a program that will use expended funds to be repaid or otherwise made available for additional measures in 2012, when the budget is projected to be reduced by 35% under PA 10-179;

6. provide an on-bill repayment option, which is currently unavailable; and

7. eliminate the potential that interest rates for CL&P residential energy efficiency loans may increase.

CL&P also requested that DPUC approve the practice of applying any partial payments to the utility charges first and then to the residential loan. This will ensure that electric service is only terminated for unpaid utility charges and not for defaulted loans. CL&P requested that DPUC allow it to recover any incremental administrative costs (i.e., loan servicing on customers bills) from the fund and approve and authorize payment or reserve of the $15 million for this loan pool by December 28, 2010.

For projects that combine electric and fossil-fuel measures, the companies proposed a single financial agreement to avoid having to separately bill the gas portion of an efficiency project through the gas bill and the electric portion through the electric bill. They also stated they would incur additional costs to modify existing software because the current software does not support multiple financial agreements for the same project.

DPUC Decision

In its decision in docket 10-10-03, DPUC authorizes a total efficiency budget of $141.5 million for the electric companies for 2011. CL&P requested $15 million of the underspent funds from the prior year be used for a residential loan program. DPUC will allow this money to be set aside but stated that it needs to perform a more thorough examination of the program details before allowing the money to be expended. Therefore, it will reopen the docket to review the proposal and rule on it. DPUC will explore ways to reduce the cost of all loans in this reopened proceeding.

DPUC found that UI's proposal fulfills past DPUC directives regarding residential on-bill financing and is consistent with the requirements of PA 07-242. DPUC approved UI's proposal, which will go into effect June 1, 2011, with one change. To reduce costs and improve the cost-effectiveness of the residential loan program, DPUC will require an interest rate of 2.99% for all loans. UI must closely monitor this program and notify DPUC if the interest rate reduces program activity.

DPUC will require the following standards to implement this program:

1. UI's capital will fund the cost of any project in its service territory;

2. the customer will enter into a single financial agreement whether the home is heated by electricity, gas, or a combination of these fuels;

3. loan repayment for all projects will appear on the customer's electric bill and will be identified as CT Energy Efficiency Fund Loan;

4. gas companies will reimburse the fund for their share of each project's cost including the cost of the loan; and

5. the customer's gas bill will include a message during the term of the loan regarding energy savings and the loan repayment structure.

Any costs associated with gas projects, including costs of financing, loan losses, and an equitable share of administrative costs must be recovered from the gas companies.

DPUC stated that the program standards approved in the decision will lower the cost of funding residential loans. However, DPUC remains uncertain whether the financing program will be cost effective or provide a better option than increased rebates. Therefore, DPUC required UI and the fund to continue to examine methods to reduce the cost of the program.

Regarding continuation of the loan program beyond the pilot period, DPUC found that residential loans should continue but that the fund should no longer subsidize loans for oil heated homes. Further, the cost of gas measures should be funded through gas revenues. Therefore, it ordered the companies to modify the program effective June 1, 2011 to accommodate these requirements.

HYPERLINKS

Energy Opportunities Program
http://www.cl-p.com/Business/SaveEnergy/Services/EnergyOpportunities.aspx

Small Business Energy Advantage
http://www.cl-p.com/Business/SaveEnergy/Services/EnergyAdvantage.aspx

Energy Opportunities Program
http://www.cl-p.com/Business/SaveEnergy/Services/EnergyOpportunities.aspx

PA 10-179
http://cga.ct.gov/2010/ACT/PA/2010PA-00179-R00SB-00494-PA.htm

PA 07-242
http://cga.ct.gov/2007/ACT/PA/2007PA-00242-R00HB-07432-PA.htm

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