
Call Slides and Discussion Summary

October 31, 2013
Agenda

- Call Logistics and Introductions
- Featured Participants
  - Jeff Pitkin, NYSERDA
  - Greg Leventis and Peter Thompson, Lawrence Berkeley National Labs
- Discussion:
  - What kind of consumer demand are programs seeing?
  - How has the performance of on-bill financing compared with other financing programs?
  - What lessons have programs learned?
- Future Call Topics Poll
Call Participants

- Austin Energy
- California Center for Sustainable Energy (San Diego, CA)
- Clinton Foundation
- Craft3 (Portland OR)
- Efficiency Maine
- Energy Fit Nevada
- Greater Cincinnati Energy Alliance
- Institute for Market Transformation
- Michigan Saves
- NYSERDA
- Richmond Region Energy Alliance (RREA)
- Southeast Energy Efficiency Alliance (SEEA)
- Wisconsin Energy Conservation Corporation
NY On-Bill Recovery Program Status
DOE Better Buildings Peer Exchange
10/31/2013

Jeff Pitkin, Treasurer
New York State Energy Research and Development Authority
On-Bill Recovery Financing Program

• Legislation enacted Aug 2011; program launched Jan 2012
• Statewide program – 7 utilities
• Energy efficiency improvements for residential (owned) and small businesses (<= 100 employees) and not-for-profits
  • Governor signed legislation adding renewable technologies
• Transferability
  • Unless satisfied prior to sale (allows purchaser to require seller to payoff)
  • Seller must provide written notice to prospective buyer; responsible for arrears up to transfer
  • Program Declaration filed in clerk’s office – not a lien; ensures notice to prospective purchaser
  • Title company performs property ownership search
• Installment charge is tariff charge
  • Consumer safeguards - termination of service; deferred payment arrangements
  • Installment charge subordinated to utility collection of service charges
  • Establishes process for off-bill billing if customer account is terminated without transfer
• Bill neutrality
  • Installment charges can’t exceed 1/12th of estimated energy cost savings from all energy sources (allows oil/propane), including anticipated price escalations over loan term
• Fees paid to utilities to offset system changes & administration
## Residential OBR Terms

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>On-Bill Recovery Loan (Launched 1/30/2012)</th>
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<tbody>
<tr>
<td><strong>Borrower eligibility</strong></td>
<td>Owner and named on utility account</td>
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<tr>
<td><strong>Loan Amt</strong></td>
<td>Up to $13,000; $25,000 if payback period is 15 years or less</td>
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<tr>
<td><strong>Loan Term</strong></td>
<td>5, 10, or 15 years; Term may not exceed expected useful life of measures</td>
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<tr>
<td><strong>Interest Rate</strong></td>
<td>3.49% (2.99% prior to Jan 2013)</td>
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<tr>
<td><strong>Cost Effectiveness Required</strong></td>
<td>Loan installment charge may not exceed 1/12th of estimated annual energy cost savings</td>
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10/31/2012
Loan Underwriting Approach

Tier 1 loans
- Traditional FNMA standards
  - FICO 640+
  - Debt:Income (DTI) < 50%
  - No bankruptcies 7 yrs
  - No outstanding judgments/collections > $2,500
- Aggregated and financed through capital markets

Tier 2 loans
- Originated using alternate loan underwriting criteria
  - Current on mortgage for last 12 months
  - Current on utility bill for at least 2 consecutive months in each of last 2 years
  - Max 70% DTI (100% if customer is eligible for Assisted 50%/$5,000 subsidy)
  - No bankruptcies 5 yrs
  - No outstanding judgments/collections > $2,500
- Held in revolving loan fund until performance allows securitization

Third Party loan origination and servicing:
- Loan Originator: Energy Finance Solutions
- Master Loan Servicer: Concord Servicing Corporation

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Lessons Learned

• Subordination problematic for secondary markets financing
• Deferred payment arrangements result in lengthening repayment term – result in early chargeoffs
• Challenges with obtaining utility bill payment history for timely loan decisioning for Tier 2
• Property ownership verification results in slower approval process
• Current cost effectiveness rules slow down approval
• Lack of easy-to-use and reliable modeling tools creates bottlenecks
• Speed of loan and project approval critical
$24.3 M Bonds Issued

- Closed August 2013
- Secured by 3,263 Tier 1 residential EE loans ($29.2M)
  - Includes 879 OBR loans ($9.2 million)
- 126% Coverage ratio; 110% minimum required
- NYS Environmental Facilities Corp Guarantee
  - State Revolving Fund (Clean Water) program
  - Demonstrated nexus clean energy – clean water programs
  - US EPA concurrence received Mar 2013
  - Resulted in AAA rating based on EFC SRF rating
  - Funded reserve $8.5M (DOE Better Buildings grant) to protect EFC/SRF Guarantee; reduced pro-rata with bond principal payments
- Also used State QECB volume cap – Federal interest subsidy
- Taxable interest rate 3.2%; net rate after QECB < .5%
- Replicable national model
Upcoming LBNL On-Bill Report

- Case Studies:
  - NYSERDA
  - United Illuminating, Small Business Energy Advantage program (CT)
  - National Grid’ (NY, RI and MA)
  - TVA, Energy Right Solutions (TN, KY, GA, MS, AL and NC)
  - PG&E, Energy Efficiency Loan Retrofit program (CA)
  - ECSC, Help My House (SC)
  - CEWO, on-bill loan programs (OR)
  - The Green Deal (United Kingdom)
  - PowerSmart loan programs (Manitoba, Canada)
  - Midwest Energy, How$mart loan program (KS)
  - Illinois Energy Efficiency Loan program (IL)
  - Georgia Environmental Finance Authority's EECBG-funded programs (GA)

- Final report will be available end of 2013 at [www.lbnl.gov](http://www.lbnl.gov)
The newness and structure of on-bill programs can create some challenges for private financing. Challenges for NYSERDA included:

- **Limited track record.** Heard from financial institutions “you built an interesting mousetrap, but it’s too new.” Rating agencies prefer to see data for a portfolio that has gone through one cycle (e.g., 10-12 years). NYSERDA had difficulty getting information about comparable asset classes (e.g., time share loans) to show financial institutions.

- **Subordination.** If customers couldn’t pay their full bills, utility charges got paid first, which created risk of non-payment of loans.

- **Deferred payment arrangements.** Customers could arrange with the utility to defer full payment of utility bills, which then delayed repayment of loans.

- **Transferability.** For NYSERDA, loans transferred from selling homeowners to buyers. In practice, this hasn’t created any problems with delinquency. Often, the loan is paid off at closing.

NYSERDA found a solution by partnering with the State Revolving Loan fund for water projects to issue bonds for capitalizing a state loan fund rather than seeking financing in private markets.
Discussion: Lessons Learned

- Maine had an on-bill financing program for heat pumps.
  - Found that many homeowners preferred to pay out of pocket.
  - Concluded that financing programs do not necessarily transform markets on their own but they helped customers understand that energy efficiency improvements were investments in the home’s value.

- On-bill financing programs in WA and OR have issued 3,000 loans. The loans are secured by a deed of trust and none have transferred to new owners when homes have sold.
  - Transfers of loans in New York may be more common because loans are not placed as a lien but as a “declaration instrument” that places an obligation on the utility account that is transferred unless paid off before sale.

- It is more common to find commercial on-bill programs than residential.
  - Commercial properties may have fewer issues with bill non-payment, deferrals, disconnection, etc.

- Where on-bill programs need to screen projects for cost-effectiveness, software tools can help.
  - In NY, cost-effectiveness calculation includes fees (and the loan amount includes cost recovery of fees).
To date, there have not been many secondary market sales of energy efficiency loans.

Fixed transaction costs (e.g., rating fees, legal and structural costs) are often considerable for any traditional asset-backed securities market, so financial institutions need high loan volumes to create an adequate return.
Future Call Topics and Poll

- Upcoming Call:
  - Program Support through Socially Responsible Investing (Dec. 12)

- Which of the following previously suggested topics are of interest for future Financing calls?
  - Effective Loan Program Design and Integration - 54%
  - Project Performance Relative to Loan Performance - 31%
  - Commercial PACE - 8%
  - Options for Unsecured Debt - 8%
  - Other - 0%

Please chat in other suggested call topics or email them to peerexchange@rossstrategic.com