Pay-As-You-Save™ (PAYS®)

March 8, 2005

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PAYS® Products

Money-saving resource efficiency products purchased with no up-front payment and no customer debt obligation. The customer pays a tariffed charge on the utility bill as long as there are savings.

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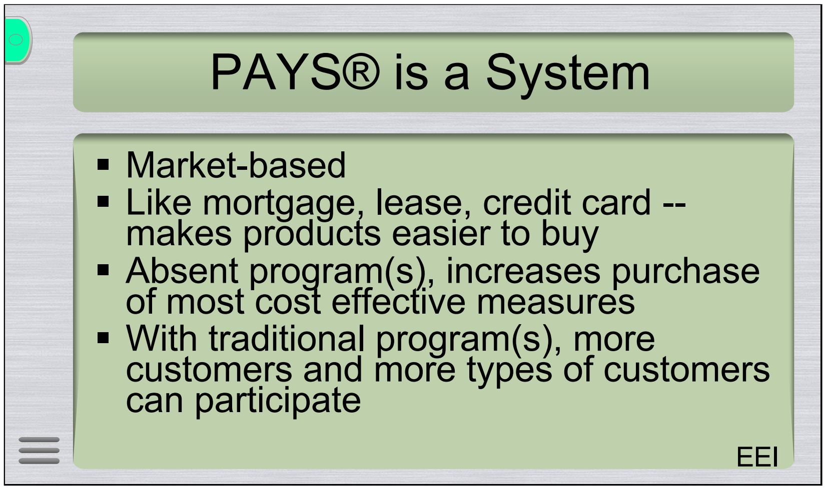
This is a simple definition of the products available through the PAYS® system that some people have found helpful.

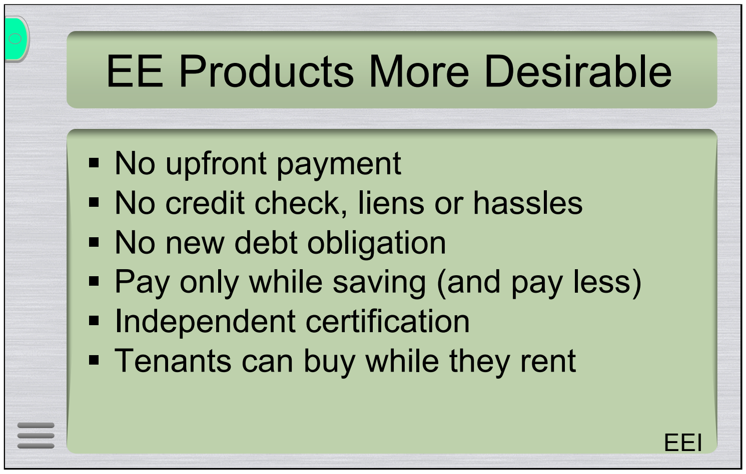


• PAYS® is not a program. It is a market-based system. Like other market-based systems ---mortgages, leases, credit cards --- PAYS® makes it easier for vendors to make sales and for consumers to make purchases by putting a system in place that removes market barriers. PAYS® makes it easier for energy efficiency suppliers to sell cost effective products to customers and easier for folks who want to save money, save the environment or be more comfortable buy the products and services that enable them to get these benefits.

• PAYS® can operate without a traditional program. Vendors will market cost effective measures that qualify as PAYS® products and customers will want to buy them.

• You can also use it to make existing or new energy efficiency programs work better; so that they reach more customers and more types of customers. Or you can make PAYS® products available without a program.

• All traditional energy efficiency programs involving a customer co-payment are better with PAYS®. No upfront payment is needed so capital is no barrier. Payments are linked to occupancy so there is no barrier to renters or people unsure how long they will remain at their premises. There is no new debt so there is no barrier for those individuals or businesses with debt issues. Since customers pay 100% of the costs, there is no free ridership issue. As testimony in NH indicates, less funding is required for rebates to effect customer action so rebates go further. In other words, PAYS® means more customers can and will participate in traditional programs.



It is important to note the customer benefits of buying a PAYS® product.

• PAYS®customers can buy efficiency measures without paying anything up front.

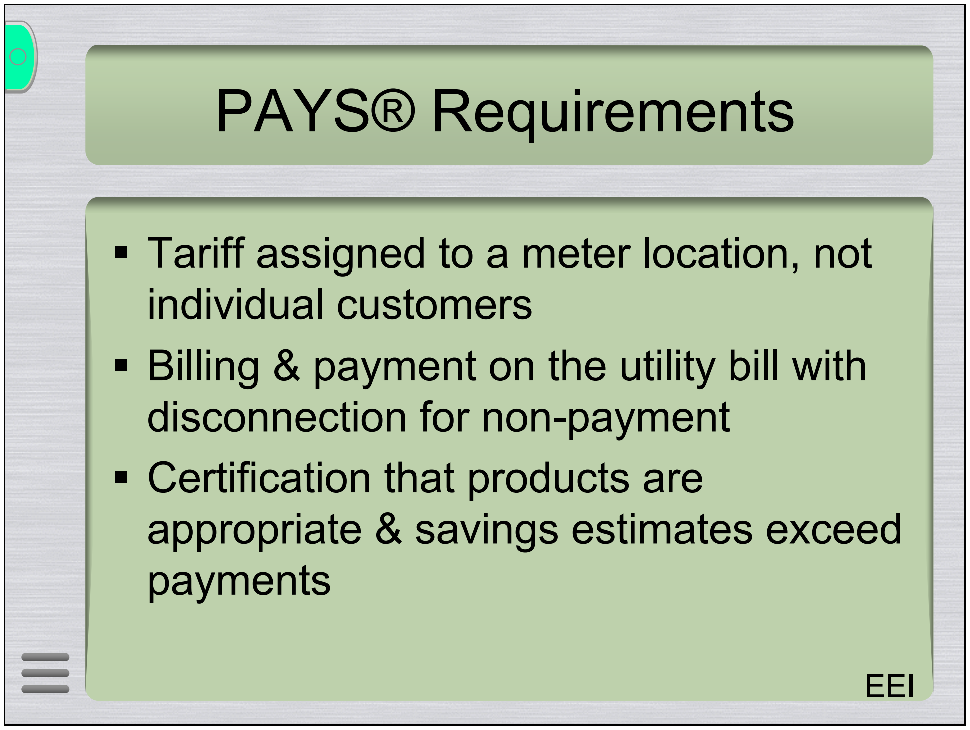
• PAYS® is not a consumer loan, so there is no credit check, liens are not needed -- all the hassles and issues of dealing with financing institutions are eliminated for the customer.

• Since the obligation is attached to the meter and the purchaser is only agreeing to pay a lower bill, the customers are not taking on new debt. This means that municipalities, public schools, or hospitals do not need voter or board approval to make this purchase; businesses and individuals don't use up borrowing capacity to purchase efficiency measures so this capacity remains available for other business or household priorities.

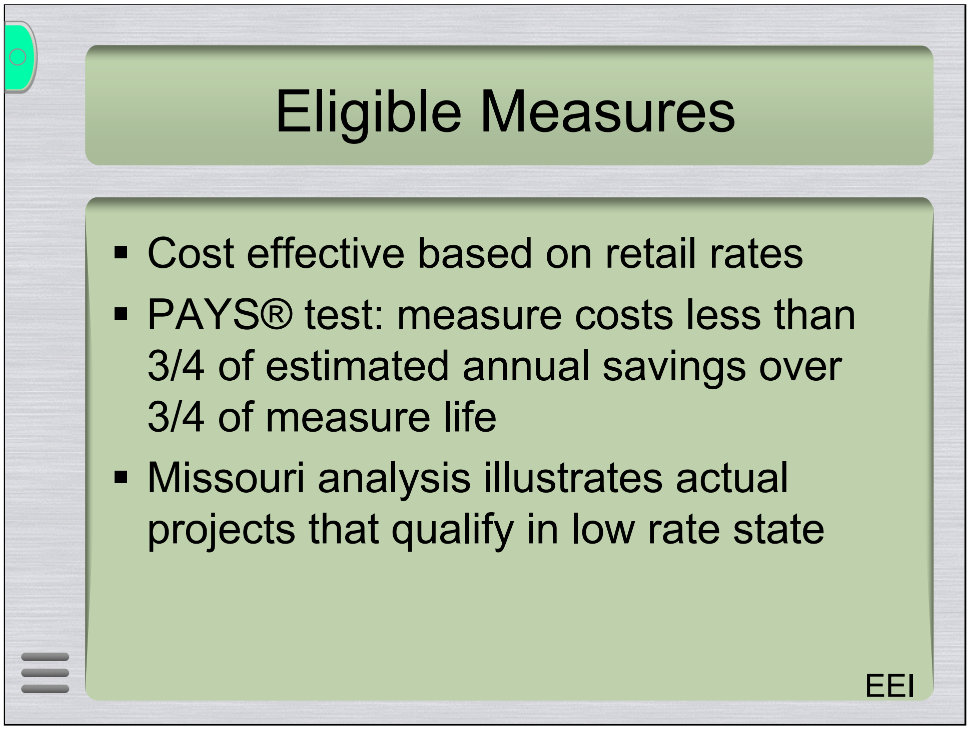
• We call the system Pay As You Save because customers pay only as long as they save. Their payments are offset by bill savings. Someone other than the vendor "sanctions" the purchase. Customers' payments are actually an agreement to pay a lower bill. And the obligation to pay ends when they relocate.

• Independent certification of measure savings creates more trust, especially when PAYS® is not part of a traditional program.

• And PAYS® solves a problem that no program has been able to solve -- split incentives. Tenants can purchase PAYS® products because they only have to pay while they are a tenant.



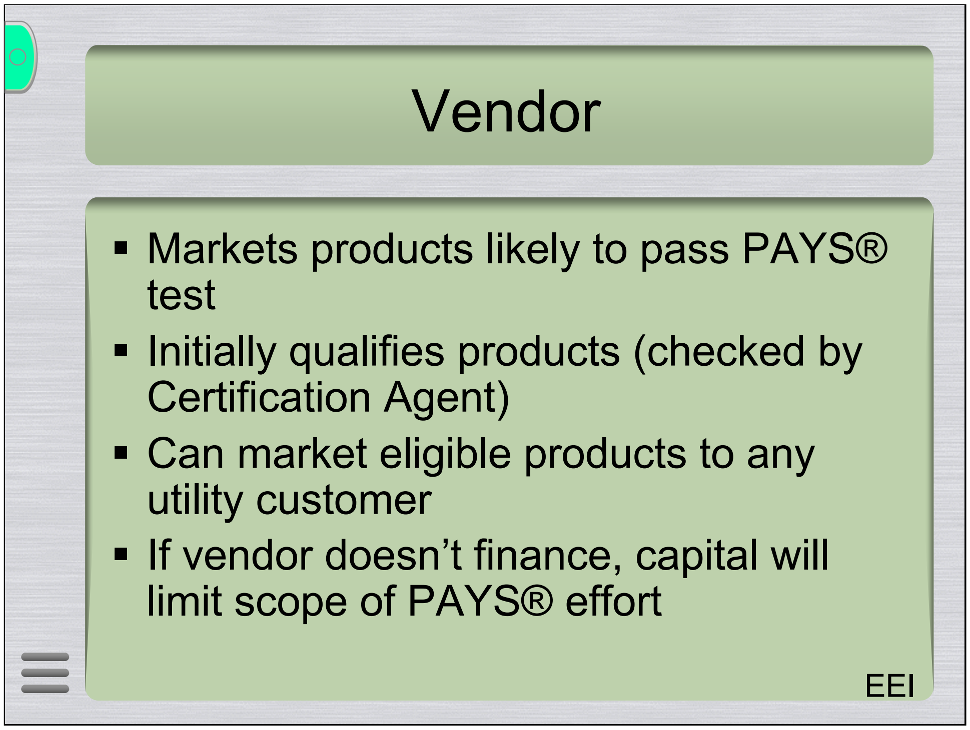
Although there are many elements to a successful PAYS® effort, any effort needs these three items to be PAYS®



• PAYS® cost effectiveness is based on retail rates -- the rates that customers pay.

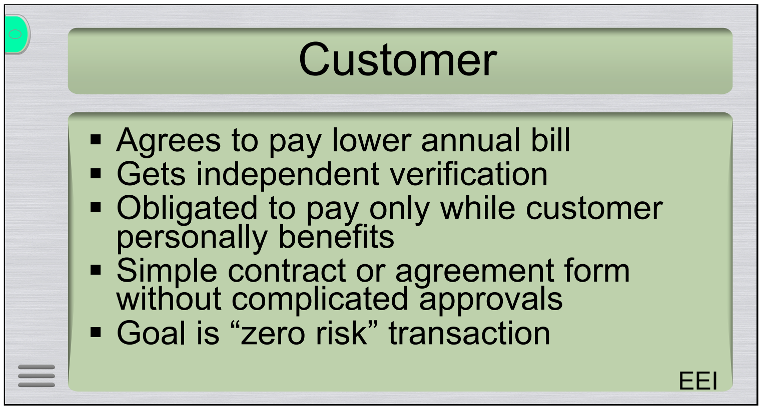
• For measures to be eligible as PAYS® products, must pass what we call the 3/4 - 3/4 rule.

•We want to take a moment to highlight data about what types of measures pass. Pages 12-24 in the Missouri analysis (available at www.paysamerica.org) and the accompanying appendices detail PAYS® products likely to qualify in Michigan (since their rates are lower). In our recent NH testimony, Appendix 1 has a spreadsheet listing each municipal project with cost and savings data.



• PAYS® is market based so vendors can market eligible products directly to customers. The vendor does a preliminary eligibility calculation using the PAYS® screening tool. The Certification Agent checks to make sure the measure is eligible.

• Vendors can finance the measures. If they do, there is no limit to the amount of projects any one customer or any number of customers can do. There are no budget restraints as with traditional programs. Otherwise, the availability of capital for measure installation will be what limits the level of PAYS® product sales.



• The purchasing customer agrees to pay monthly PAYS® charges which are lower than the independently verified, estimated savings. The obligation to pay the charges apply only while the a customer remains at the location where the measure was installed, and only if the measure keeps functioning.

• The contract in our lighting program was a simple form in which the customer’s agreement to pay followed a disclosure that if they have been using their lighting less than a specified number of hours per day, they would lose money. In otherwords, in this case the tariff only required self-certification.

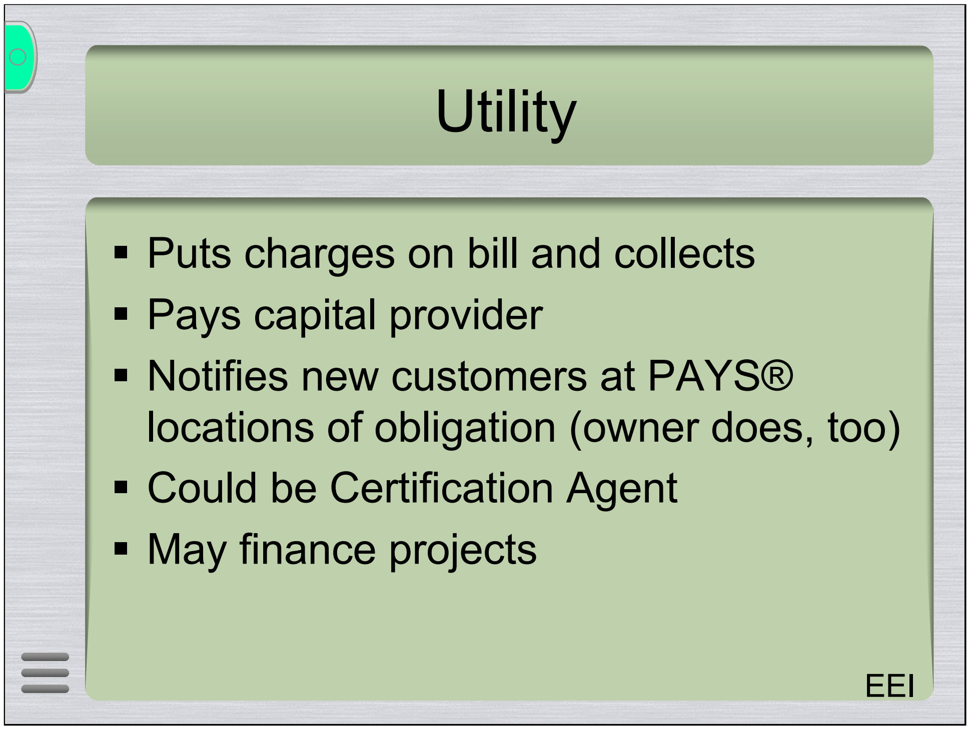
• The contract for municipalities and major measures was a longer form approved by the Commission, utility lawyers, and the Office of Public Counsel. But we made sure it was readable and that a simple signature could start the process. We have since learned that much of this may be able to be put into the tariff and removed from the contract.

• We also established an agency relationship between the certification agent, in NH the utilities, and the customer so that the certification agent had legal standing to operate on the client’s behalf without liability.

Obviously, there is no such thing as zero risk. We call it zero risk for the customer because:

1. someone other than customer or vendor checks the offer;
2. the customer can end the deal by leaving;
3. The customer doesn’t have to convince the next occupant to pay more for their home or business to recover their investment; and
4. if the measure stops working it is fixed or the customer stops paying.

• A well-designed PAYS® system makes the contracting process safe, easy, and as risk free as possible for the customer.

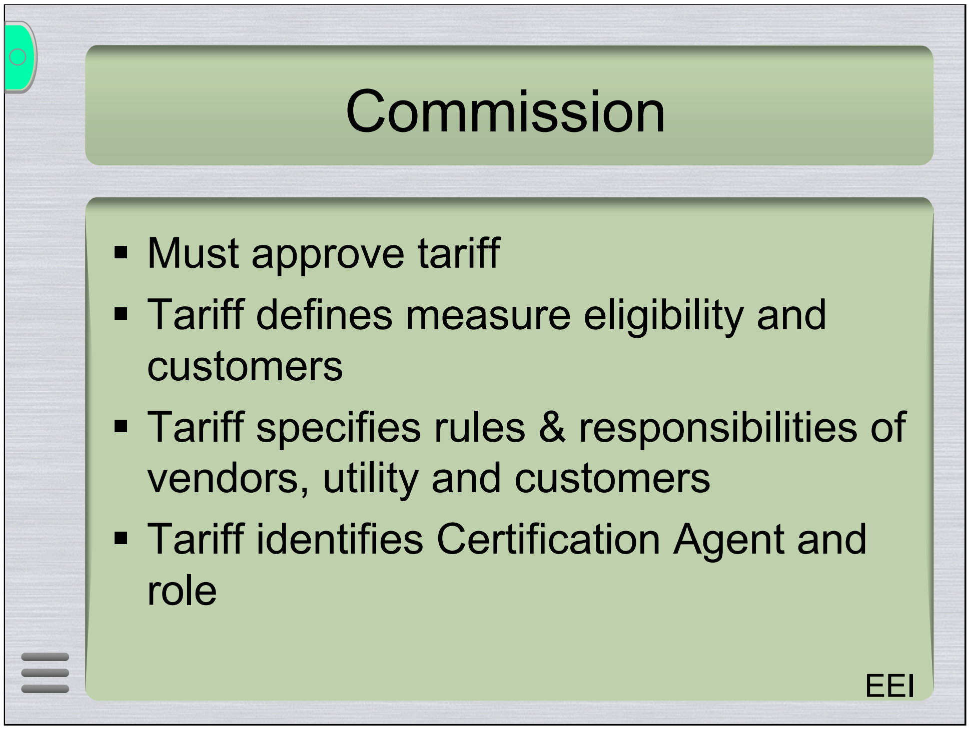


• The essential utility functions are to put PAYS® charges on the utility bill and collect them just as they do any other tariffed charges; to repay the capital providers; and to notify new customers at a PAYS® location of their tariff obligations.

• Charges must be on bill. Once on the bill, payments don't change during course of term. Term can be extended to cover financing costs associated with non-occupancy or, costs for repairs.

• Although we recommend an independent certification agent, a utility may serve this role, particularly if the utility has been operating an energy efficiency installation program and has the in-house expertise. Both NH utilities served this role.

• One NH utility financed projects using a revolving loan fund, the other financed it by borrowing funds as needed from their regular line of credit. We know of a vendor willing to finance lighting projects.



• PAYS® requires a regulatory tariff. To exist, it must be approved by the Commission.

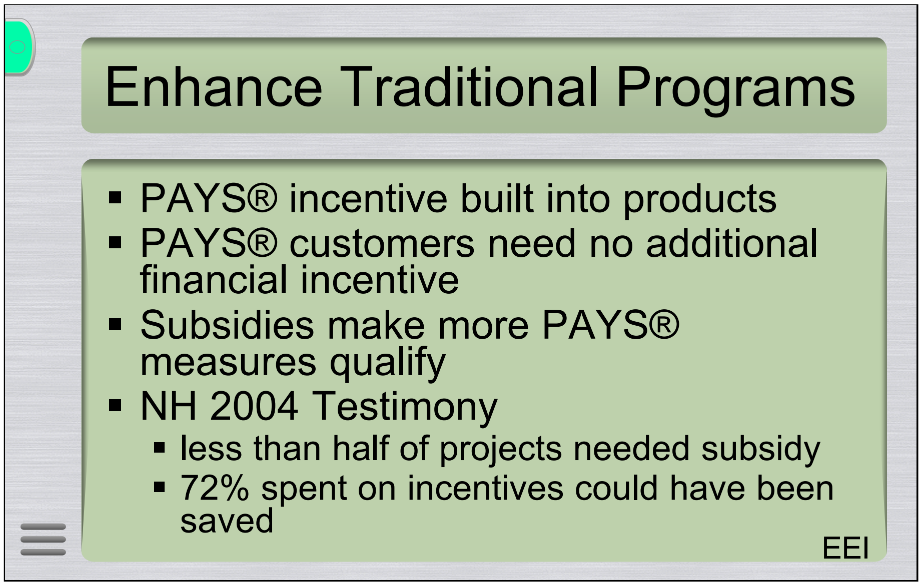
• The tariff can limit PAYS® to specific products or fuel savings (e.g., gas or electric) or be available for any project eligible that qualifies using the 3/4 - 3/4 rule.

• The tariff can be available to all customers or be targeted to specific classes or sub groups (e.g., municipalities or large non-profits).

• The tariff states what qualifications vendors must meet to be able to sell PAYS® products (NH: bonding or letter of credit, warranty, inspection penalty, etc.).

• It states what the utility will do (billing, notification of new customers, bad debt treatment).

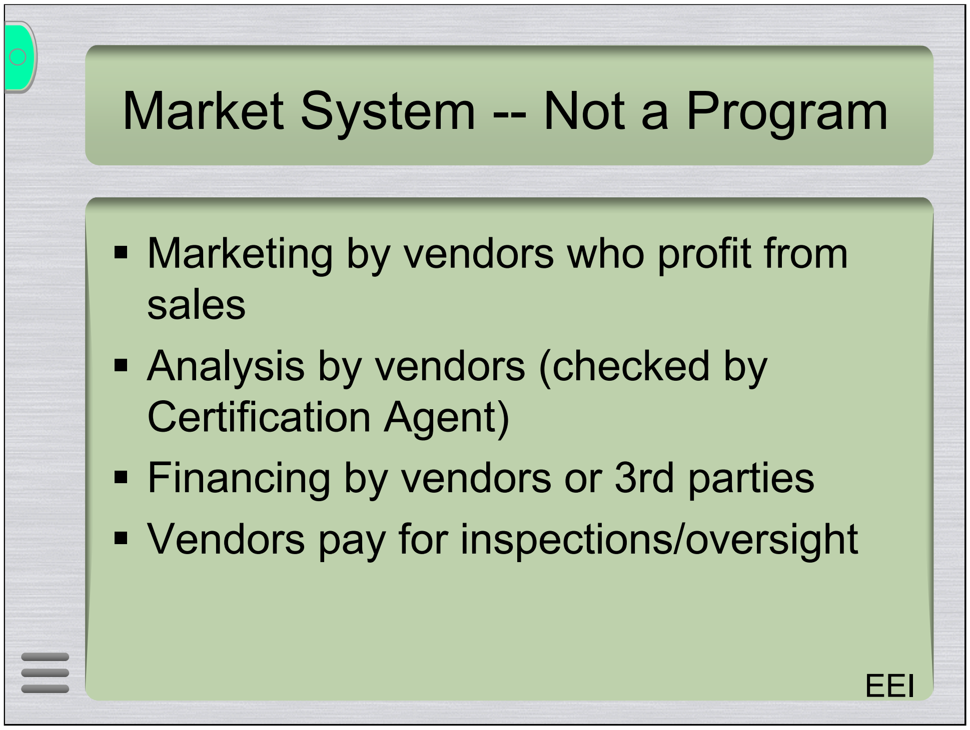
• It notes what customers must do (payment obligations, owner disclosures, customer damage to measures, etc.).



• When we developed PAYS® we were trying to create a market structure that would eliminate the barriers to buying cost effective products -- so that the only smart move for customers would be to buy energy efficiency products. If you read our papers, we gave a lot of thought to how build the incentive to buy these products into the products themselves --- retrofits, new construction and even distributed generation.

• Early on, advocates of traditional incentive programs worried that PAYS® might be used to eliminate their programs. Late last year, we submitted testimony, available on the PAYS America website, showing how PAYS® could be used to enhance traditional incentive programs so they could reach more customers (so rebates can go further) and reach more types of customers (renters, those without capital or with debt issues or with approval barriers).

• We see PAYS® as a necessary market enhancement that DTE should implement for its customers and Michigan (for all the economic and environmental benefits) that can be part of a comprehensive three legged program or a stand alone effort. The only difference is that as a stand alone effort, fewer measures will qualify.



While everyone here can probably agree that a comprehensive effort with rebates to qualify all measures that benefit the system and society, with on-the-bill financing to help those without capital, with consumer assurance and technical assistance to help customers make the right decisions and with PAYS® to deal with occupancy and debt issues will accomplish the most efficiency work possible; in some areas, the funds to pay for such programs are hard or impossible to come by.

PAYS® is designed to operate as a market-based system. It can work along side rebate programs or it can operate alone.

Read slide

We know of one vendor who will do all of the above except the marketing which could be handled by bill stuffers or public service announcements.

Potential DTE Benefits

- Extremely low cost ee effort
- Lock customers into 7 - 10 year contracts
- If capital provider, DTE gets guaranteed interest rate
- Favorable Commission treatment (bonus, sales guarantee, rate of return)

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What's Needed for PAYS®

- Collaborative agreement on design issues: certification, tariff, contracts, billing/IS changes, marketing, bad debt
- Selection of customer classes & measures
- Source of capital
- PSC approval

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Questions & Answers

- From your February meeting minutes
- Today's questions

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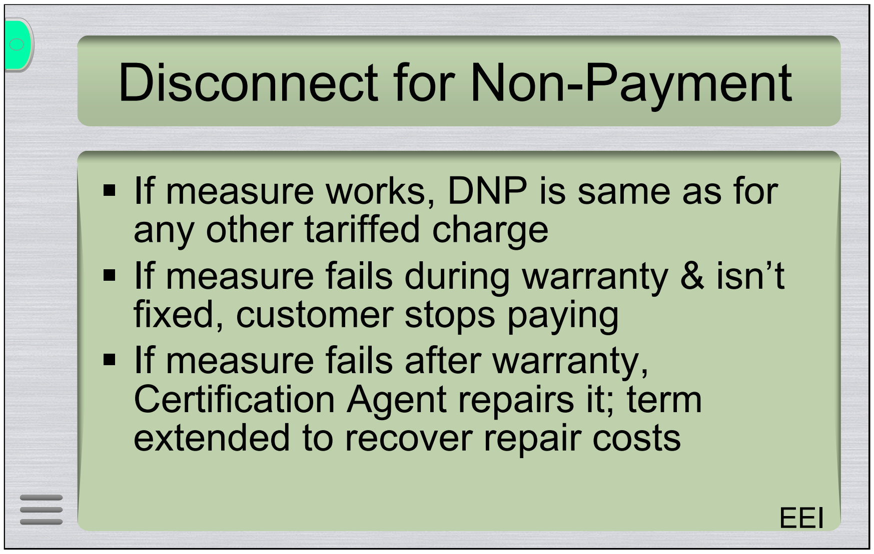
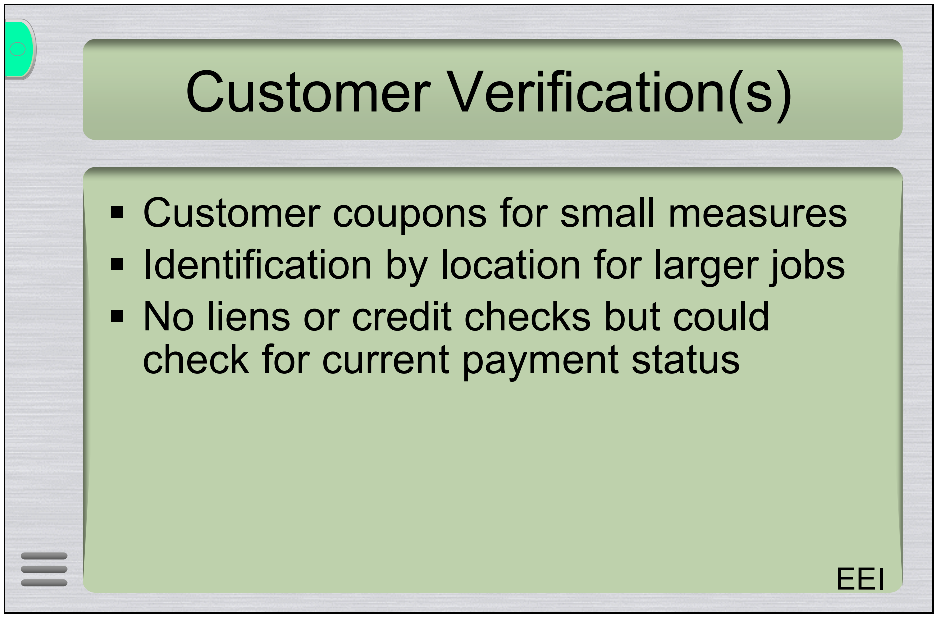


Assuming the equipment worked, disconnections for non-payment would be handled the same as it is for non-payment of any other Detroit Edison tariffed charge. We assume there would be warning notices, eventual disconnection for non-payment in accordance with Commission rules, bad debt turned over to a collection agency, and whatever was not recovered from non-paying customers would be recovered from all ratepayers. We should note that customer non-payment is traditionally lower for utilities (1 to 3 percent) than for banks. In the NH PAYS® Pilot, customer non-payment for PSNH was zero; for NHEC it was less than 0.08% of the amount spent on measures.

If a measure fails during the warranty period, the customer does not have to continue making payments if it is not fixed. If the vendor does not honor the warranty, bonding or an irrevocable letter of credit can be used to make the utility whole by either paying for a repair or covering the missed payments.

If a measure fails after the warranty period, the tariff should provide that if the measure can be repaired, the payment term, but not the amount of each payment, can be extended to recover any additional repair costs. Repairs would be handled by the Certification Agent.

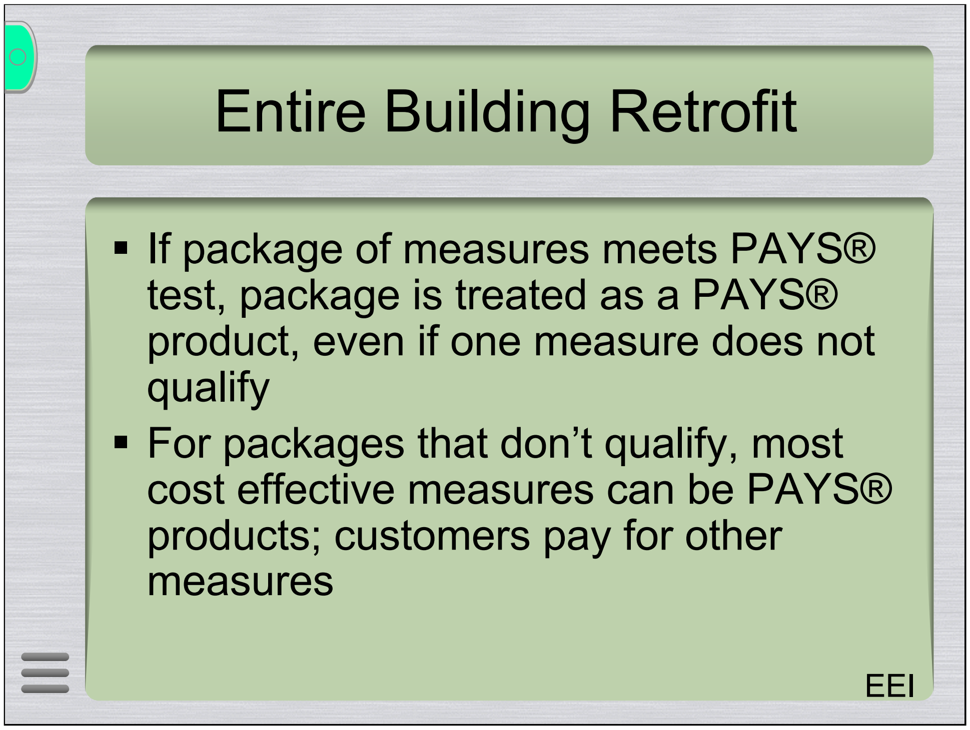


In NHEC's residential lighting program, the most market-based PAYS® effort, all services were provided by a vendor and not the utility. Coupons were sent to customers and were used to identify customers. If a customer forgot their coupon when they went to the store they could use an ID and a call to the utility to verify their account and get an account number.

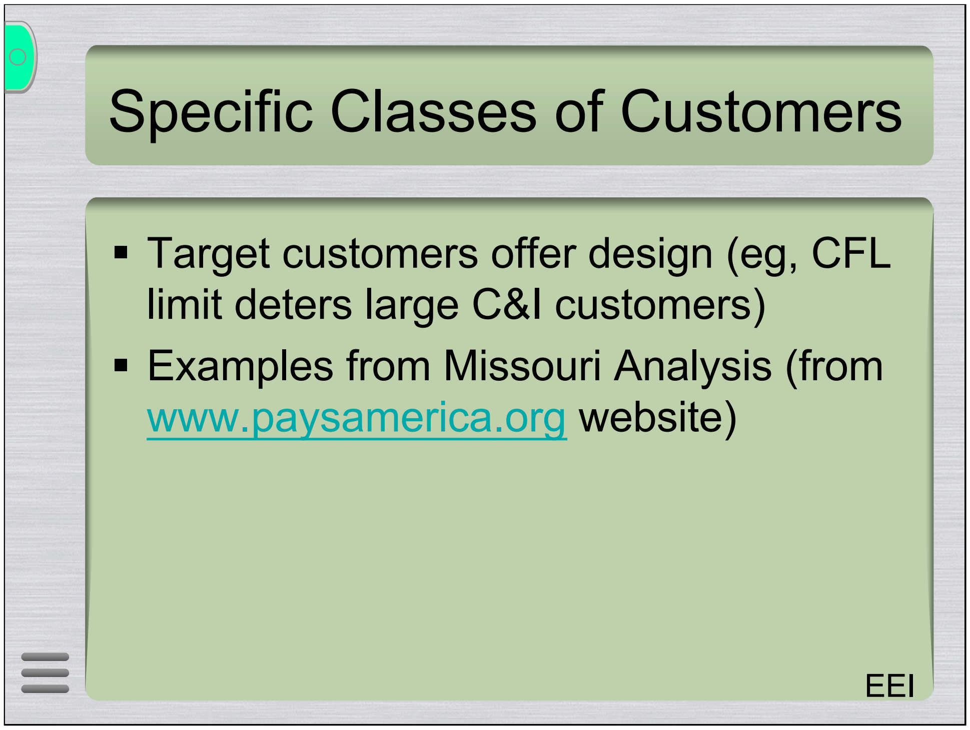
We have identified a vendor willing to do a CFL program by mail order. Similar coupons could be sent to customers which would double as order forms.

For permanent measures, the location where the measure is being installed identifies the customer.

PAYS® does not require liens or credit checks It would be possible to have the Certification Agent check account status as part of the approval process if required by the Commission or a utility as a criteria for eligibility for the PAYS® tariff.

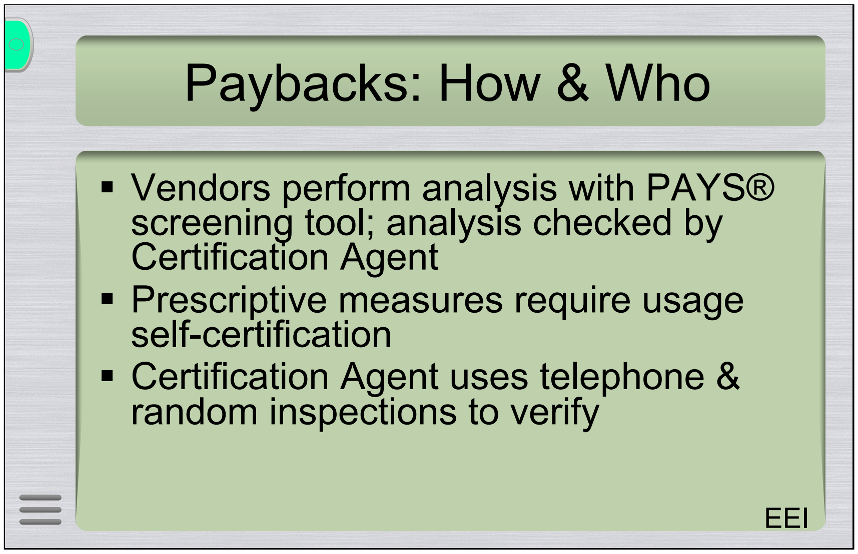


In New Hampshire, and as recommend by EEI, if a package of measures qualified under the 3/4 – 3/4 rule, the entire package of measures can be treated as a PAYS® product even if one measure did not qualify by itself. This included measures that produced savings for any resource type (e.g., gas, water or electricity). If the customer wants to do more than the package of measures that qualify, the customer has the option of doing the most cost effective measures as a PAYS® product using the tariff and paying for the other measures any way (s)he can.



The best example is the CFL program in NH for small commercial and residential customers and the municipal program. It was easy to identify the larger customer by bills and identity (name). A limit on the number of CFLs served to exclude larger commercial customers.

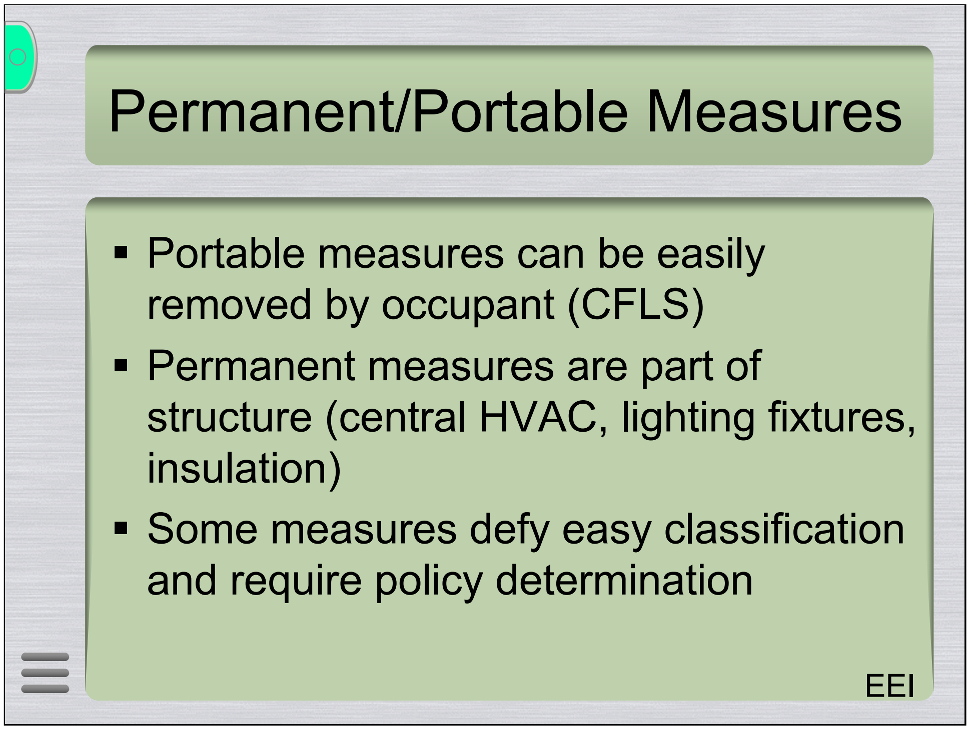
Projects identified in our study, “A Preliminary Analysis of the Cost Effectiveness of Potential PAYS® Products In Missouri”, prepared when we were employed by PAYS America evidence sample projects that qualify by customer class in a state with comparable or lower rates. It is available at www.paysamerica.org.



Vendors market PAYS® products (although in the pilots, except for NHEC's CFL option, utility staff marketed most projects). As part of their marketing, they are required to compute the simple payback (cost versus savings without inflation or adders based on current customer costs including financing) to see if their project qualifies. We have a tool vendors could use to assist in their measure screening.

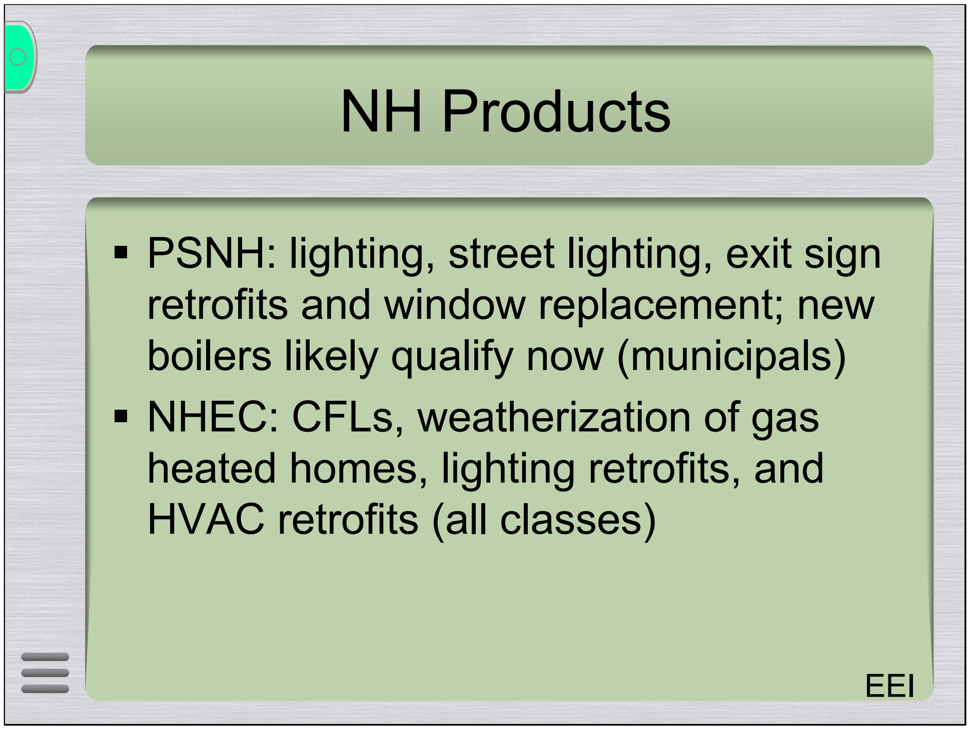
The certification agent checks the savings estimates. Sometimes, this would involve just a call to the customer to verify hours of usage or the type of equipment to be replaced. In new construction the call would be to check assumptions about usage and baseline equipment to be upgraded. In a custom project of sufficient cost, without significantly increasing the cost there should be sufficient funds to pay an engineering firm to review the savings estimates.

An exception might be prescriptive measures for which, like CFLs, the savings can be quantified in advance based on minimum customer usage. In New Hampshire, customers self-certified their savings by signing an agreement stipulating they were replacing at least 45 watts of lighting used at least for 3 hours each day. Other prescriptive measures, for example lighting replacements might lend themselves to self-certification.



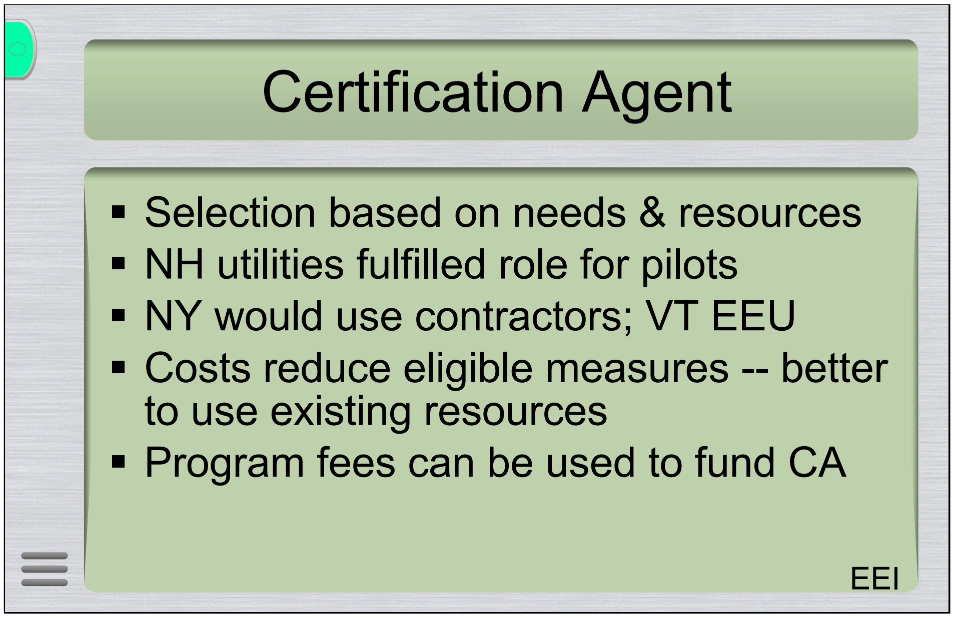
Permanent measures are measures that remain with the premises. Some distinctions are easy. CFLs are obviously not permanent measures. Lighting fixtures are. Central air conditioners are permanent measures. Window air conditioners are not.

However, some measures do not fit into easy classification and a collaborative or the Commission would have to make a decision about their status. For example, in New Hampshire, refrigerators would be portable measures because folks take them with them when they relocate. However, in New York City, by law, most refrigerators must remain in apartments.



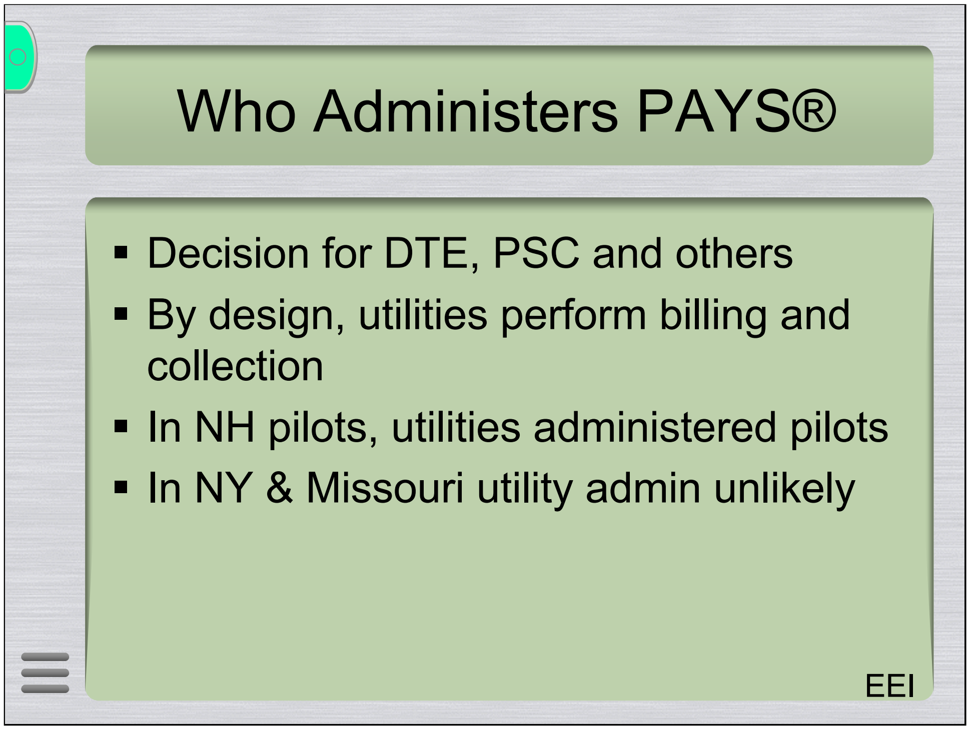
Any measure that produced documented savings (regardless of fuel saved) qualified under the tariff approved by the New Hampshire Commission. One measure, a ventilating system for a health club qualified because the elimination of costly annual repairs was almost as significant as the estimated annual energy savings. Measures installed by PSNH included lighting, street lighting, exit sign retrofits and window replacement. A boiler replacement just missed qualifying but may qualify this year due to increased fuel costs.

At NHEC, measures included CFLs, weatherization of gas heated homes (even though NHEC only sells electricity to its members), lighting retrofits, and HVAC upgrades.

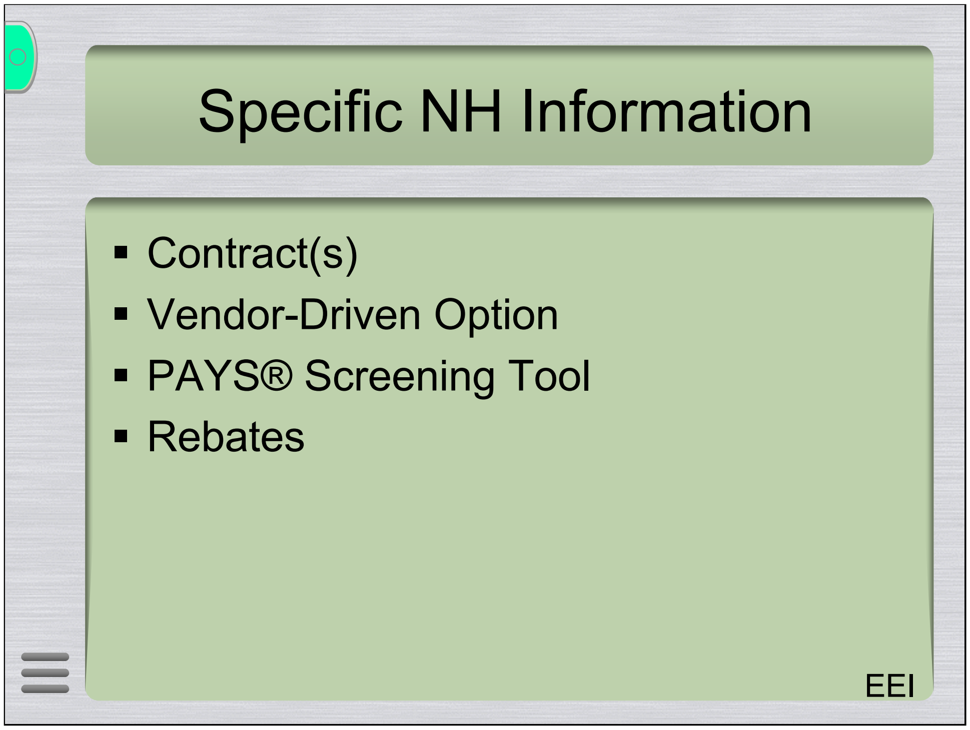


This decision is based on needs and resources. In the New Hampshire pilots, the two utilities served this role. They used customer service staff already in place. In conversations with NYSERDA in New York state, we envision it would be contracted to engineering firms as are most NYSERDA programs. In Vermont, we discussed with regulators how the independent Energy Efficiency Utility could be the certification agent. In Missouri, we held discussions with the Industrial Assessment Center at the University of Missouri – Rolla about their fulfilling this role.

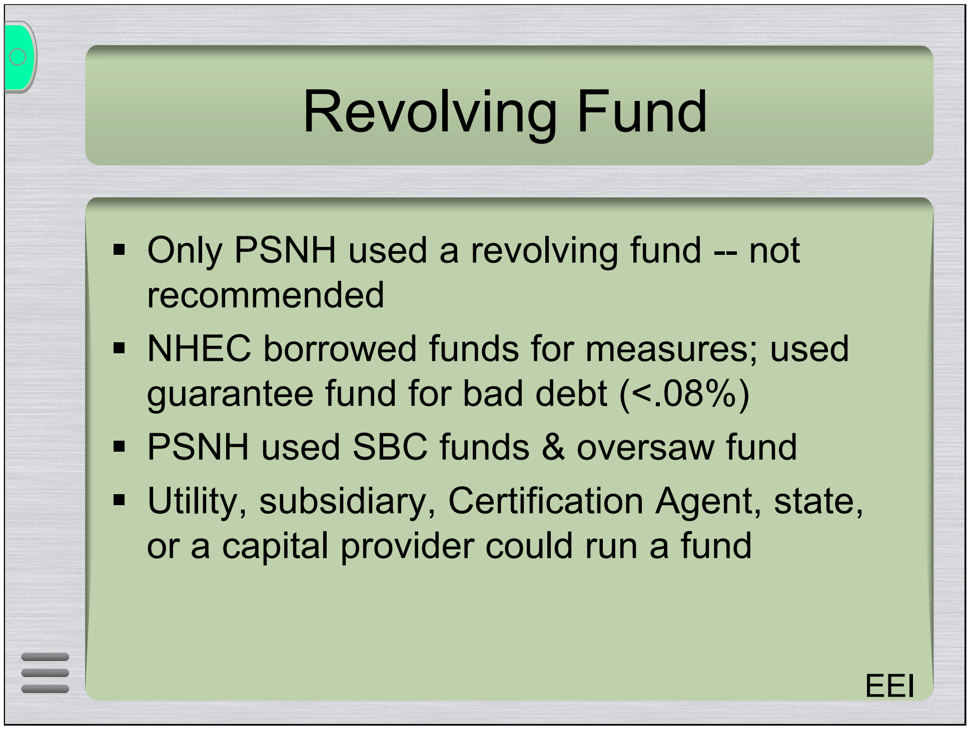
Clearly, if an organization needs no funding to perform this function (e.g., because it is already staffed), the reduced costs for the service will make more measures qualify. However, a small fee can be added to each project to pay for a reasonable level of consumer assurance (e.g., selected random calls for a vendor driven CFL program, random inspections for residential or small commercial retrofit or new construction projects, and mandatory inspections of large industrial projects). Inspection fees are discussed and included in the projects discussed in our Missouri study.



This is a choice Detroit Edison, the Commission and others would have to make. When creating PAYS® we envisioned that utilities would only perform billing and collection functions. However, the two utilities in New Hampshire provided oversight for the pilots. It is unlikely utilities will operate programs discussed in Missouri or New York.



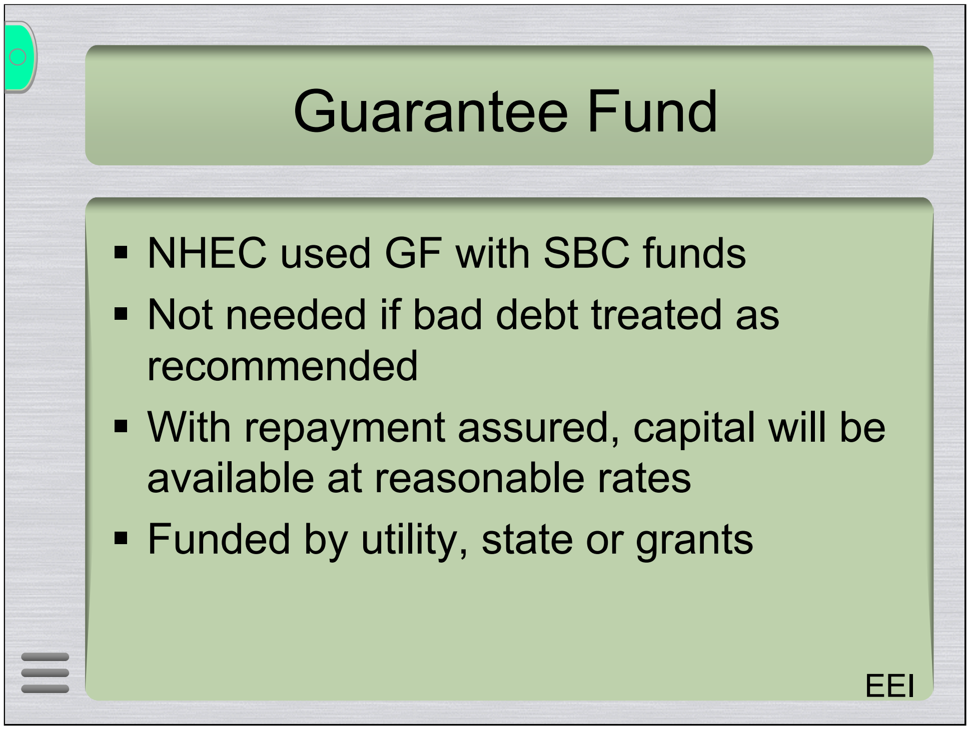
Present information from GDS Associates, Inc. evaluation (available at paysamerica.org website, April 12, 2001 PSNH & NHEC filing and NHPIRG Testimony in 2004 NH Docket DE 04-052.



The only place where a revolving loan fund has been used for PAYS® is at PSNH. We do not recommend its use because it limits activity to the amount in the fund which defeats the market driven design of PAYS®.

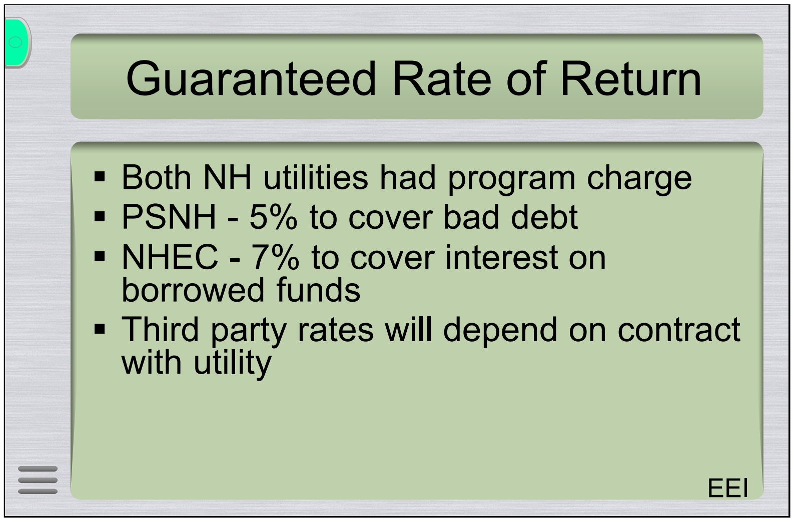
NHEC borrowed funds to pay for the up front cost for measures and set up a guarantee fund to cover potential bad debt, which never materialized. They leveraged 10 times the amount of activity for their funds while PSNH got less than one tenth the value of its SBC funds.

In PSNH's pilot, PSNH set up the fund using system benefits funds and oversaw the fund, but made a very small amount of money available to capitalize this fund. A properly capitalized fund could be managed by the utility, one of its subsidiaries, the certification agent, the state, or a capital provider (which would build its administrative costs into its financing charges).



NHEC used this approach and used system benefit funds to create the guarantee fund. We don’t think a guarantee fund is needed because bad debt will be so low that the cost to set it up outweighs it utility.

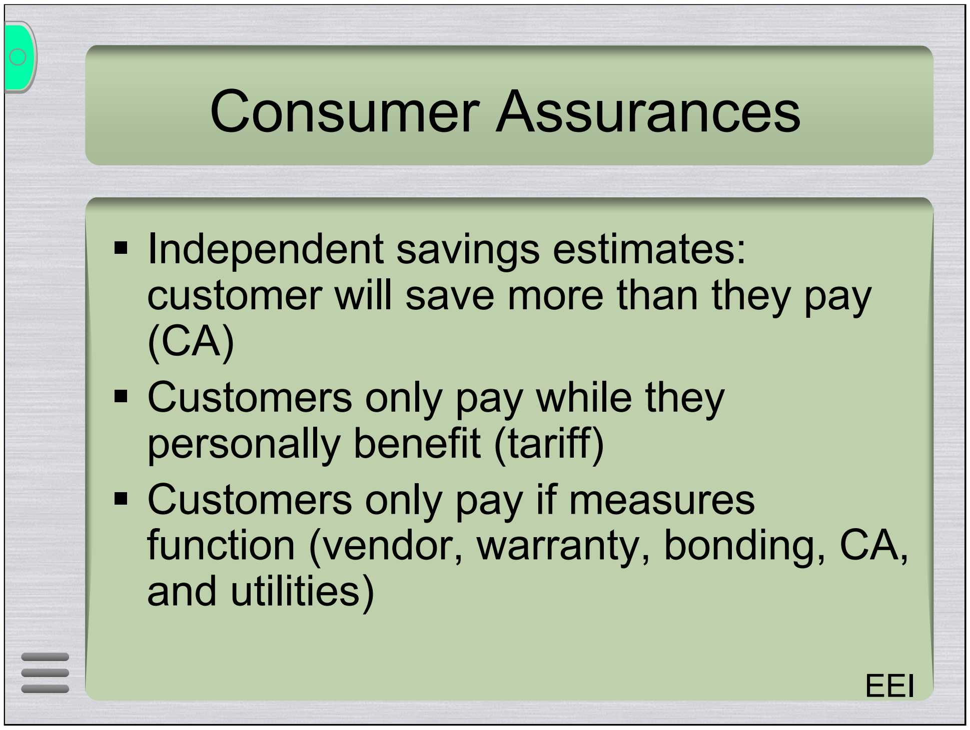
If bad debt is treated as we recommend, a guarantee fund it not needed. Any capital provider should be willing to make capital available at reasonable rates without the need of a guarantee fund because repayment is assured. If Michigan policy makers choose the guarantee fund approach, it would need to be funded by the utility, the state, or grants.



Since PSNH used SBC funds to fund its revolving loan fund, it did not need to recover financing charges to make the fund whole. Prior to the pilot, there was some concern about bad debt. The parties to the Settlement that created PAYS® agreed to a program charge of 5% which would cover any bad debt. To date, there is zero bad debt and no one really thinks there will be any.

NHEC either borrowed the funds to pay the upfront cost for measures or used operating funds. They borrow from the CFC, an organization set up to lend money to Coop utilities. A 7% program charge was agreed as a figure that would both cover any possible interest charges (at the time they were borrowing mid term at about 5% and any bad debt. Again, bad debt at NHEC was 8 hundreths of one percent of the money used to pay the upfront cost for measures.

We think independent capital providers or utility subsidiaries will provide relatively low cost capita, similar to state bond rates of less than 5% for 7 - 10 year terms if the utility treats all non-payments as traditional bad debt. In effect, the capital provider will be guaranteed repayment as part of a Commission approved contract which is a lot more secure than most other forms of investment.

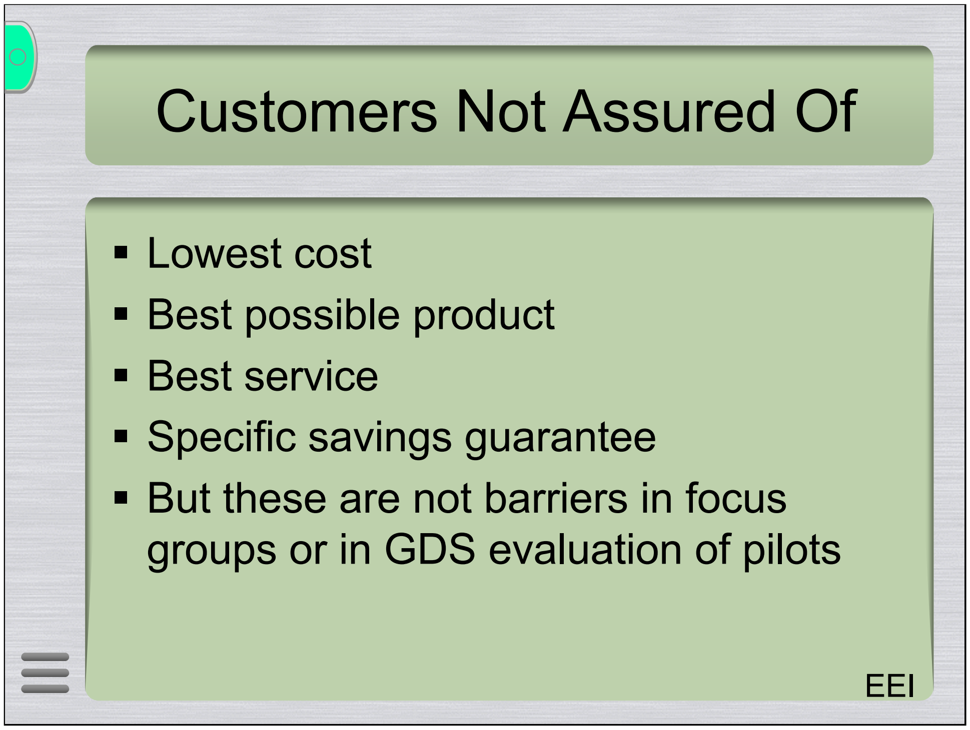


Customers were assured that:

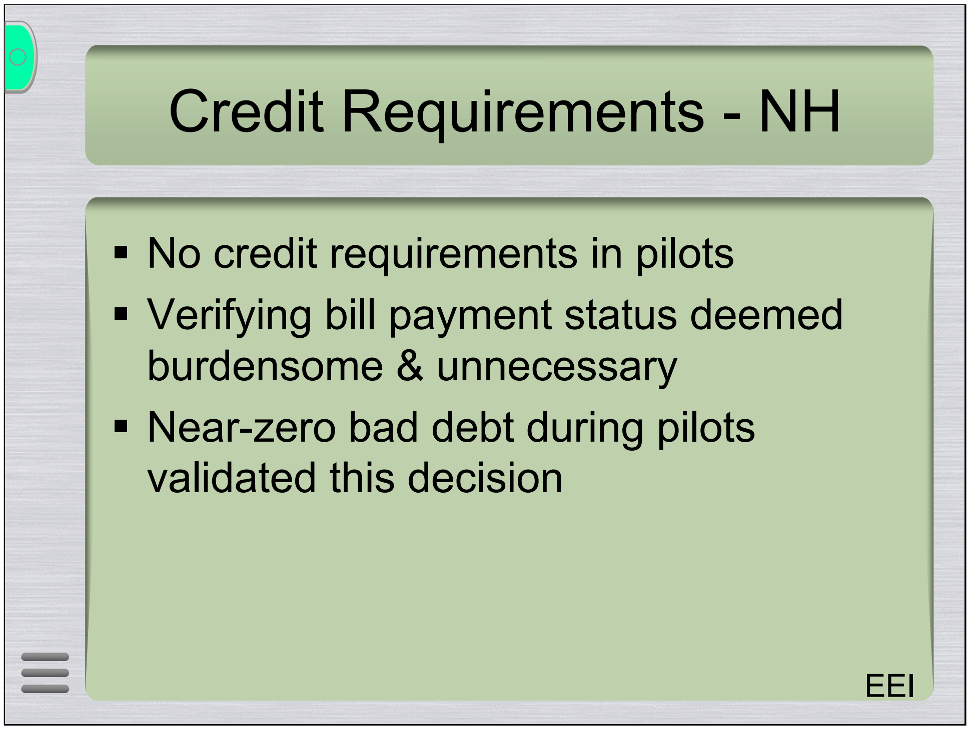
• Independent savings estimates verified the customer will save more than they pay for the duration of payments (by the certification agent or by design and self certification).

• They only had to pay while they personally benefited (tariff).

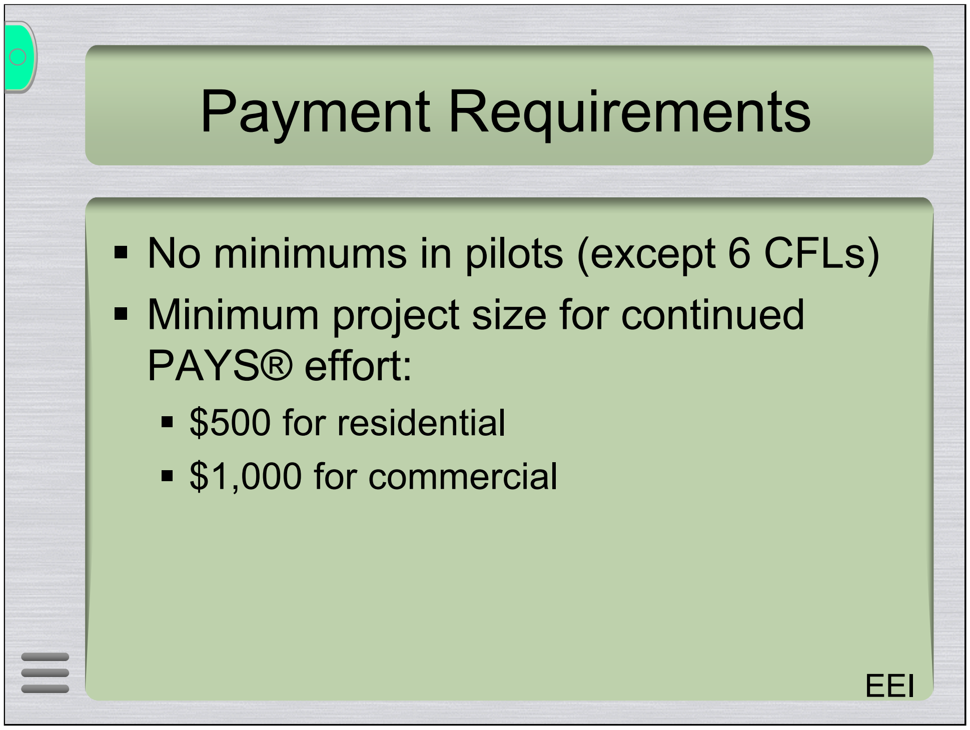
• They only had to pay if the measure continued to function unless they damaged it (vendor responsible for warranty claims backed by bonding or irrevocable letters of credit, certification agent responsible for repairs after warranties when feasible, and although it never occurred, in theory, the utilities would have had higher bad debt if measures failed and the vendor, the bonding and repairs were insufficient to keep the item functioning or to pay the remaining costs.).



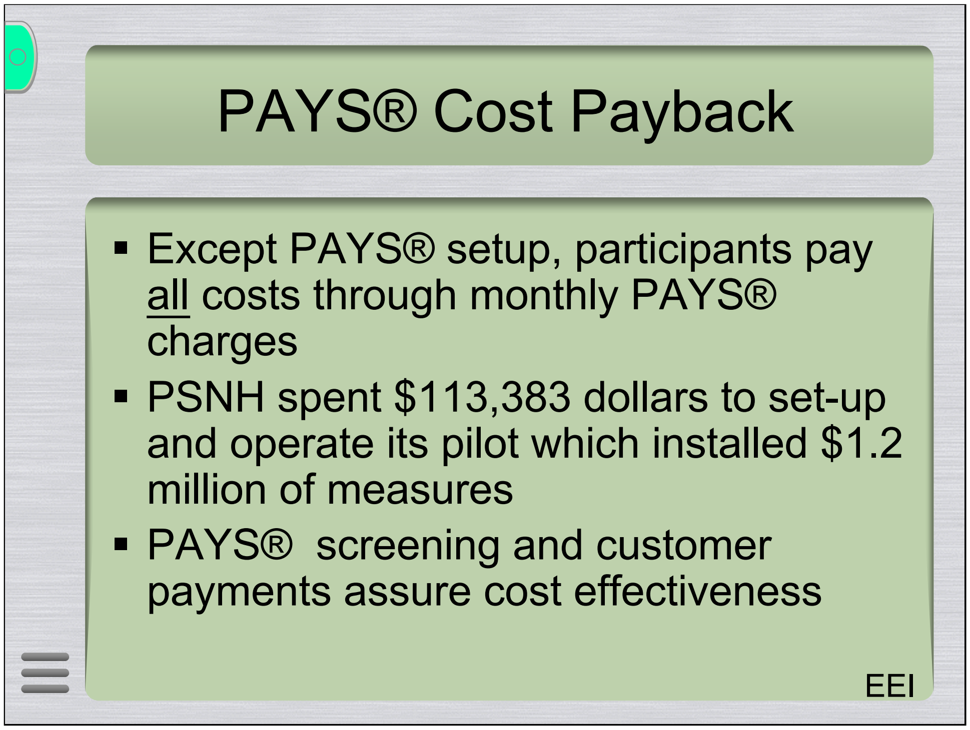
Customers were not assured of the lowest cost, best possible product, best service or guaranteed any amount of savings. However, this was never identified as a barrier in focus groups nor during the evaluation of the pilots. Since only three quarters of savings over three quarters of the typical life of the measure was considered there was a considerable safety margin. Customers also believed energy costs would increase, further increasing their savings.



There were no credit requirements. All customers were eligible to participate. In development of the pilot we discussed calls to customer service staff to verify that customers were current with their bills but this was determined to be burdensome to the staff and, with the threat of disconnection for non-payment, unnecessary. And, the near-zero bad debt during the two years of the pilots serving all classes of customers validated this decision.



In the pilot, the minimum project was 6 CFLs. In the continued PAYS® efforts, there will be a minimum project size of $500 for residential and $1,000 for commercial projects.



Once the system is in place, all costs for measures are repaid through monthly PAYS® charges. We don't have the latest up-to-date information for New Hampshire. You would have to get it from the utilities or the NH Commission. But according to the quarterly reports that we have filed for activity through 2003, NHEC spent about $35,000 dollars to operate its pilot which installed more than $138,000 dollars worth of cost effective measures. PSNH spent about $113 thousand dollars to set up its pilot to install $1.2 million dollars of cost effective measures. Cost effectiveness is assured because only cost effective measures based on retail rates without externalities qualify as PAYS® products and the utility does not pay anything for them. Since customers pay for 100% of program costs, there are no costs associated with free ridership.

The Certification Agent is responsible for assuring that the measure(s) being installed meets the cost-effectiveness test and is appropriate for installation at the location. This can be done using a combination of follow-up phone calls to the customer and random site visits. Vendors pay for the cost of failed inspections. Customers are not assured they are getting the lowest price, the best possible measure, or the most savings. In the end, the marketplace will determine which measures are marketed and purchased.

Other Questions?

EEI