

DOCKETED

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October 28, 2016

Dr. Holmes Hummel
Clean Energy Works
P.O. Box 73386
Washington, DC 20001

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 16-OIR-02
1516 Ninth Street
Sacramento, CA 95814

RE: Comments on the Draft Recommendations for the SB 350 Study on Barriers of Low-Income and Disadvantaged Communities to Renewable Energy and Energy Efficiency

Clean Energy Works appreciates the opportunity to offer comment on the Draft Recommendations for the California Energy Commission's Draft Report on A Study of Barriers and Solutions to Energy Efficiency, Renewables, and Contracting Opportunities Among Low-Income Customers and Disadvantaged Communities.

Clean Energy Works is a champion for accelerating investment in energy efficiency and renewable energy using inclusive financing. In the prior rounds of comments, Clean Energy Works explained inclusive financing as tariffed on-bill investment programs offered by utilities to all customers, regardless of income, credit score, or renter status. More than a dozen utilities in multiple states have demonstrated success with tariffed on-bill investment programs based on the Pay As You Save[®] (PAYS[®]) system created by the Energy Efficiency Institute.¹ We provided an overview of the concept, an update on key field results reported this year, and a summary of programs in other states that are based on PAYS.

¹ Pay As You Save and PAYS are terms that describe a type of tariffed on-bill investment program developed by the Energy Efficiency Institute, Inc. (EEI). EEI filed for trademark protection to ensure that the terms would not be used by others to market different programs or program designs that would create confusion in the sector. EEI has not charged royalties for use of the trademark, but rather has sought to ensure that parties using the phrase are referring to programs that ensure the key conditions of the Pay As You Save system.

Comment on Draft Recommendation 2(a):

Based on that background and on the body of material on the record for this proceeding, Clean Energy Works raises for attention Draft Recommendation 2(a):

- a. The CPUC should develop an on-bill financing pilot program for low-income and disadvantaged communities using a pay-for-performance model. The Energy Commission should encourage and assist in the adoption of a pay-for-performance model among POU's and rural electric cooperatives.

In the U.S., there are two main types of on-bill financing programs:

- 1. On-bill loan programs:** The customer takes out a loan from the utility or a third party and makes debt payments on the utility bill.

Consumer protections designed to prevent subprime lending activity often result in the disqualification of low-income households as prospective participants in these programs. In particular, renters are categorically excluded from debt-based on-bill financing programs, and the majority of low-income households are renters.

- 2. Tariffed on-bill programs:** The utility makes an investment and recovers its cost on the utility bill with a charge that is tied to the meter, and that charge is less than the estimated savings.

Investments in efficiency upgrades through these programs are dependent on the cost effectiveness of the upgrades, and not on the collateral, income, or credit history of the customer. For that reason, tariffed on-bill programs are open to all customers regardless of income, credit score, or renter status. Tariffed on-bill programs do not require a participant to take on a debt obligation.

The draft recommendation 2(a) refers to "pay for performance." Pay-for-performance is a method for quantifying savings for the purposes of supporting utility procurement of energy efficiency as a resource, not a model for on-bill financing. Pay As You Save and pay-for-performance are distinctly different concepts, and they are also complementary. The pay-for-performance method of utility procurement of energy efficiency resources can be applied to the savings achieved through any type of on-bill financing program.

Draft recommendation 2(a) should be revised to convey accurately a course of action that both the CPUC and CEC could take to ensure that Californians have access to inclusive financing for distributed energy solutions. Here is the recommended revision:

"The CPUC should develop a pilot tariffed on-bill program for investments in energy efficiency that would be open to utility customers regardless of income, credit score, or renter status. The Energy Commission should encourage and assist in the implementation of a tariffed on-bill program among POU's and rural electric cooperatives."

Additional reference material for tariffed on-bill program performance

For reference on the record, we are also providing a briefing deck presented by a utility CEO at the annual conference of the Southeast Energy Efficiency Alliance held this week. The analysis of the market response shows the effect of switching from an on-bill loan program to a tariffed on-bill program. The full report is available at www.OECC.com.

This latest installment from the field is another indication of the potential impact of inclusive financing in California.

Thank you again for conducting an active stakeholder engagement process in support of the development of the Barriers Study. We appreciate the opportunity to offer feedback on the Draft Recommendations in addition to the prior draft of the report.



HELP PAYS[®]:

A tariffed on-bill investment program
based on Pay As You Save[®] (PAYS[®])

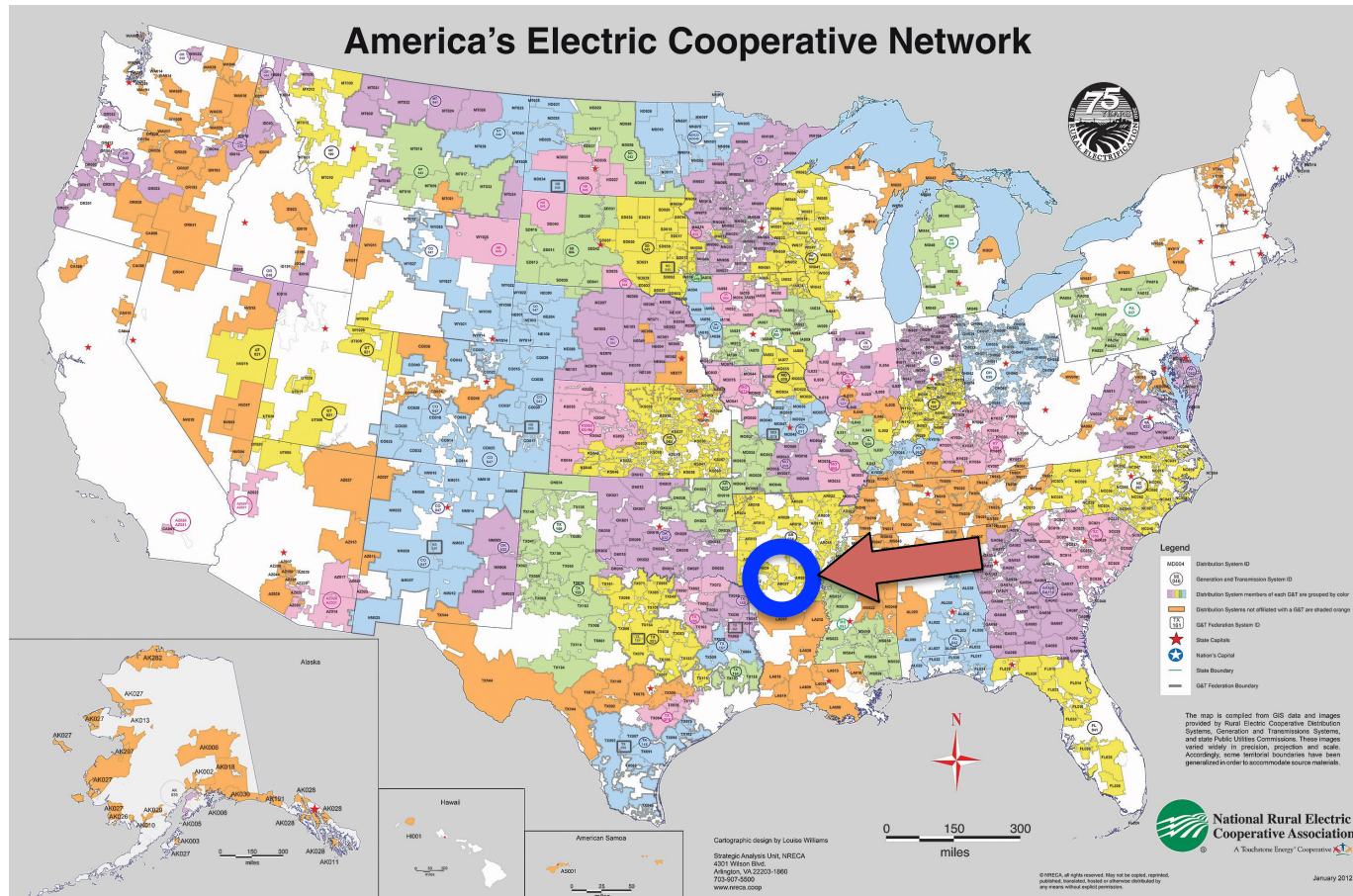
Mark Cayce

President & CEO of Ouachita Electric

Prepared for *Momentum*: 2016 Conference of the Southeast Energy Efficiency Alliance & the Alliance for Energy Service Professionals

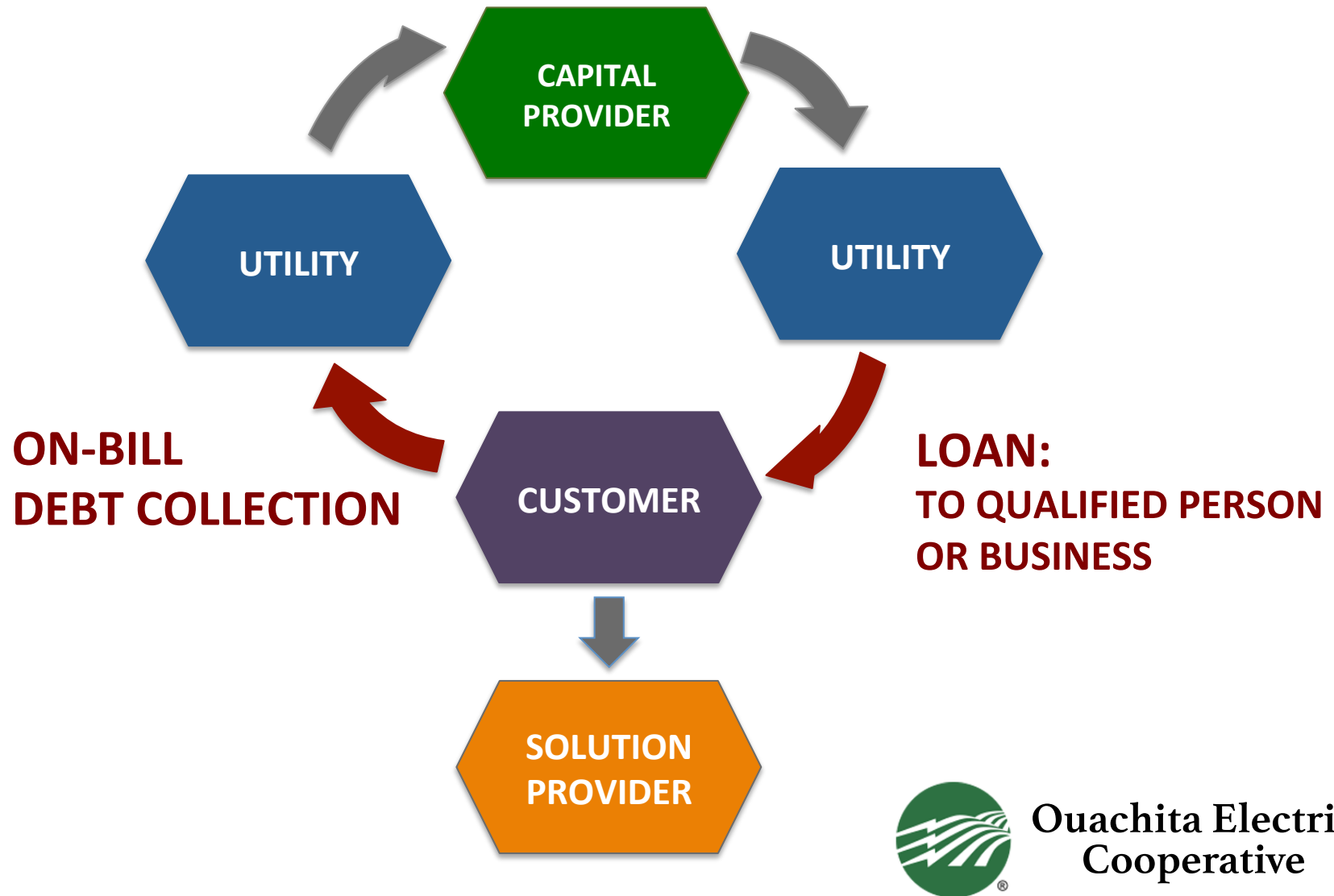
Ouachita Electric Cooperative

Our service area is in the economically distressed Delta Regional Authority area.



We serve Calhoun County, the only rural contender among the semi-finalists for the Georgetown University Energy Prize for communities and energy efficiency.

We initially offered an on-bill loan program called Home Energy Lending Program (HELP)



**Ouachita Electric
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We switched our on-bill **loan** program (HELP) to a **tariffed** on-bill program (HELP PAYS[®]). Why?

1. **Renters were left out.** Only property owners were eligible.
2. **Loans posed more risks**, so we could not finance bigger projects (including HVAC), leaving bigger savings untended.

To **reach more people** and **achieve higher savings**, our Board voted to offer an opt-in tariff using Pay As You Save[®].



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Our State Utility Commission Unanimously Approved an Opt-in Tariff for Investments in Energy Efficiency Upgrades

PAY AS YOU SAVE® ON-BILL PROGRAM MODEL TARIFF

- 1 **Eligibility:** Eligible on an optional and voluntary basis to any cooperative member who takes service under any rate schedule for energy efficiency improvements (upgrades) where the cooperative provides electric service to the structure. It shall not be a requirement that the structure be all-electric.
- 2 **Participation:** To participate in the Program, a member must: 1) request from the cooperative an analysis of cost effective upgrades, 2) agree to the terms of the cost effectiveness analysis fee as described in Section 2.2, and 3) review the Purchase Agreement that defines member benefits and obligations, and implement any project that does not require an upfront payment from the member as described in Section 3.3.
- 3 **Energy Efficiency Plans:** The cooperative will have its Program Operator or approved energy efficiency contractor perform a cost effectiveness analysis and prepare an Energy Efficiency Plan (Plan), identifying recommended upgrades to improve energy efficiency and lower power costs.
 - 3.1 **Incentive Payment:** The cooperative may make an incentive payment for program participation that is less than or equal to the value of the upgrades to the cooperative.
 - 3.2 **Net Savings:** Recommended upgrades shall be limited to those where the annual Program Service Charges (Service Charges), including program fees and the cooperative's cost for capital are no greater than 80% of the estimated annual benefit from reduction to members' annual utility charges based on current rates in electricity and/or gas costs.
 - 3.3 **Copay Option:** In order to qualify a project for the Program that is not cost effective, Members may agree to pay the portion of a project's cost that prevents it from qualifying for the program as an upfront payment to the contractor. The cooperative will assume no responsibility for such upfront payments to the contractor.
 - 3.4 **Cost Effectiveness Analysis Fee:** If the cost of the cost effectiveness analysis exceeds the value to the cooperative of upgrades accepted by members for installation, the cooperative will recover from participants the portion of the cost for the analysis that is greater than the value of the upgrades to the cooperative. The utility will not recover costs for the analysis if the Energy Efficiency Plan concludes that proposed upgrades are cost effective only with a copay. The cooperative will recover all of its costs for the analysis at a location from a member who declines to install upgrades identified in an Energy Efficiency Plan that does not require a copay.
 - 3.5 **Existing Buildings:** Projects that address upgrades to existing buildings deemed unlikely to be habitable or to serve their intended purpose for duration of service charges will not be approved unless other funding can effect necessary repairs.
- 4 **Approved Contractor:** Should the member determine to proceed with implementing the Plan, the cooperative shall determine the appropriate monthly Program Charge as described below. The member shall sign the Agreement and select a contractor from the cooperative's list of approved contractors.
- 5 **Quality Assurance:** When the energy efficiency upgrades are completed, the contractor shall be paid by the cooperative, following on-site or telephone inspection and approval of the installation by the cooperative or its Program Operator.

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- 6 **Program Services Charge:** The cooperative will recover the costs for its investments including any fees as allowed in this tariff through monthly Service Charges assigned to the meter at the location where upgrades are installed and paid by members occupying that location until all cooperative costs have been recovered. Service Charges will also be set for a duration not to exceed 80% of estimated life of the upgrades or the length of a full parts and labor warranty, whichever is less and in no case longer than twelve years. The Service Charges and duration of payments will be included in the Purchase Agreement.
- 6.1 **Cost Recovery:** No sooner than 45 days after approval by the cooperative or its Program Operator, the member shall be billed the monthly Program Charge as determined by the cooperative. The cooperative will bill and collect Service Charges until cost recovery is complete except in cases discussed in Section 7.
- 6.2 **Termination of Program Charge:** Once the cooperative's costs for Upgrades at a location have been recovered, the monthly Program Charge shall no longer be billed, except as described in Section 7.
- 6.3 **Extension of Program Charge:** As described in Section 6 or for any other reason, if the monthly Service Charge is reduced or suspended, once repairs have been successfully effected or service reconnected, the number of total monthly payments shall be extended until the Service Charges collected equal the cooperative's cost for installation as described in Section 5. The duration of Service Charges will also be extended if there are missed payments and the current occupant is still benefiting from the upgrades in order for the cooperative to recover its costs to install upgrades at a location.
- 6.4 **Tied to the Meter:** Until cost recovery for upgrades at a location is complete or the upgrades fail as described in Section 7, the terms of this tariff shall be binding on the metered structure and any future member who shall receive service at that location.
- 6.5 **Disconnection for Non-Payment:** Without regard to any other Commission or cooperative rules or policies, the Service Charges shall be considered as an essential part of the customer's bill for electric service, and the cooperative may disconnect the metered structure for non-payment of Service Charges under the same provisions as for any other electric service.
- 7 **Repairs:** Should, at any future time during the billing of Service Charges, the cooperative determine that the installed upgrades are no longer functioning as intended and that the occupant, or building owner if different, did not damage or fail to maintain the upgrades in place, the cooperative shall reduce or suspend the Program Service Charges until such time as the cooperative and/or its contractor can repair the upgrade. If the upgrade cannot be repaired or replaced cost effectively, the cooperative will waive remaining charges.

If the cooperative determines the occupant, or building owner if different, did damage or fail to maintain the upgrades in place, it will seek to recover all costs associated with the installation, including any fees, incentives paid to lower project costs, and legal fees.

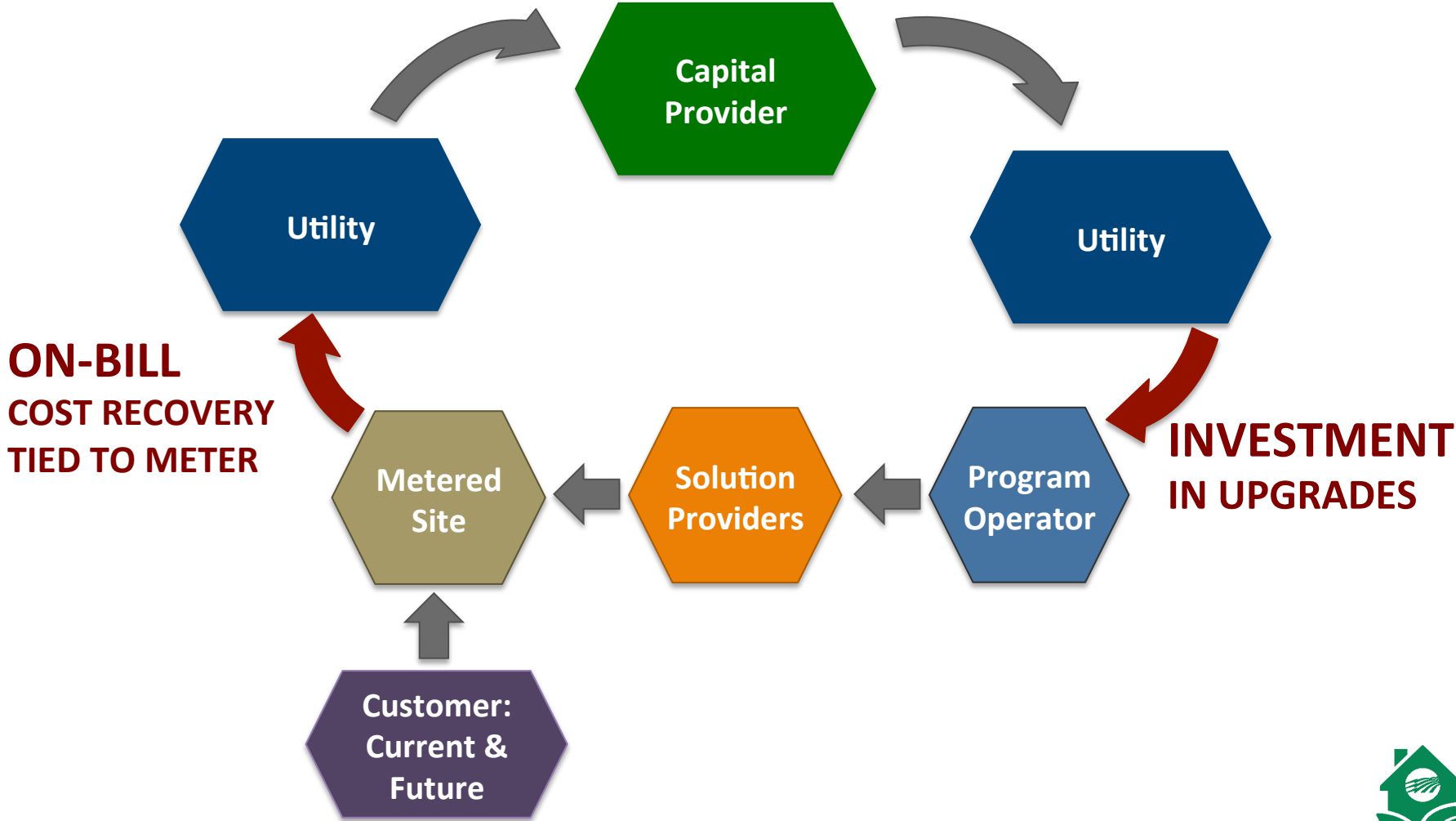
The Service Charges will continue until cost recovery is complete.

Pay As You Save® and PAYS® are trademarks of Energy Efficiency Institute, Inc.



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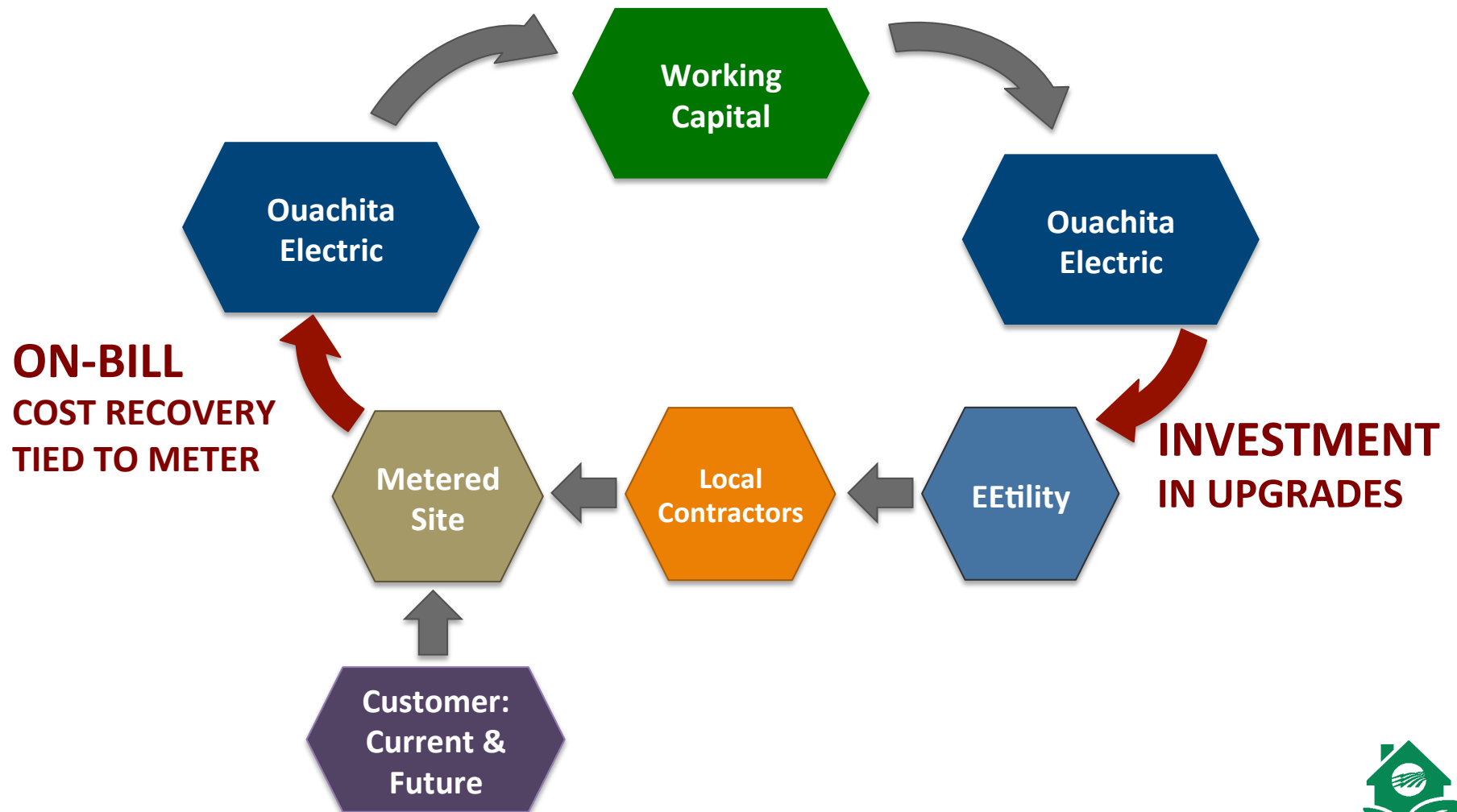
Tariffed on-bill programs for efficiency upgrades based on the PAYS[®] system



HELP PAYS[®] is based on the Pay As You Save[®] and PAYS[®] system created by the Energy Efficiency Institute, Inc.



HELP PAYS®: A tariffed on-bill program for efficiency



HELP PAYS® is based on the Pay As You Save® and PAYS® system created by the Energy Efficiency Institute, Inc.



Launching HELP PAYS®

- **Program Design:** Licensed from Energy Efficiency Institute, Inc.; and we used procedures similar to our prior loan program, HELP
- **Program Operator:** EEtility, the first benefit corporation (B Corp) in Arkansas, had also served as the operator for HELP
- **Marketing:** Announcement in the monthly newsletter, and a page on our website with a 10-minute introductory video
- **Intake:** Among the responses, we used a short questionnaire over the phone to identify 149 sites that could be good prospects.



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On-site assessments must meet a high bar

Utility covers the cost of assessing investment opportunities using:

1. Bill history
2. On-site measurements
3. Engineering modeling

The standard Participant Cost Test* for cost effectiveness is modified to ensure immediate net savings and reduced risk:

1. Cost recovery charge capped at 80% of estimated savings
2. Cost recovery period capped at 80% of useful life of the upgrades
3. Current rates applied without assuming rate escalation

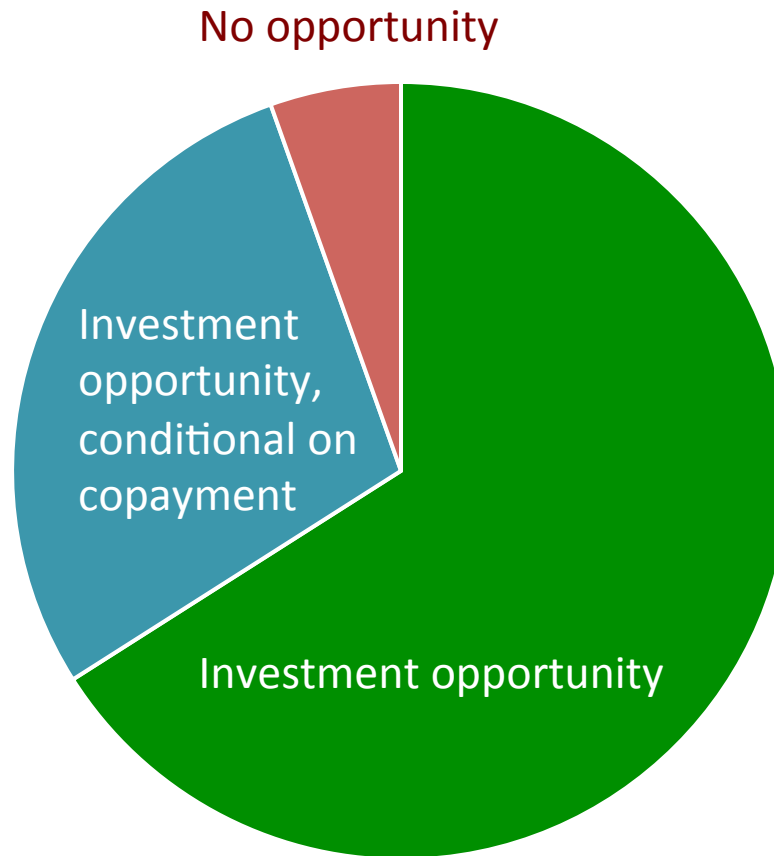


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* See California Standard Practice Manual, 2002.



Most of the 149 sites assessed had investment opportunities that met the HELP PAYS[®] criteria for cost effectiveness



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More than 95% of the HELP PAYS® offers to invest in upgrades were accepted



100% of renters in multi-family housing accepted the offer, supported by their landlords.

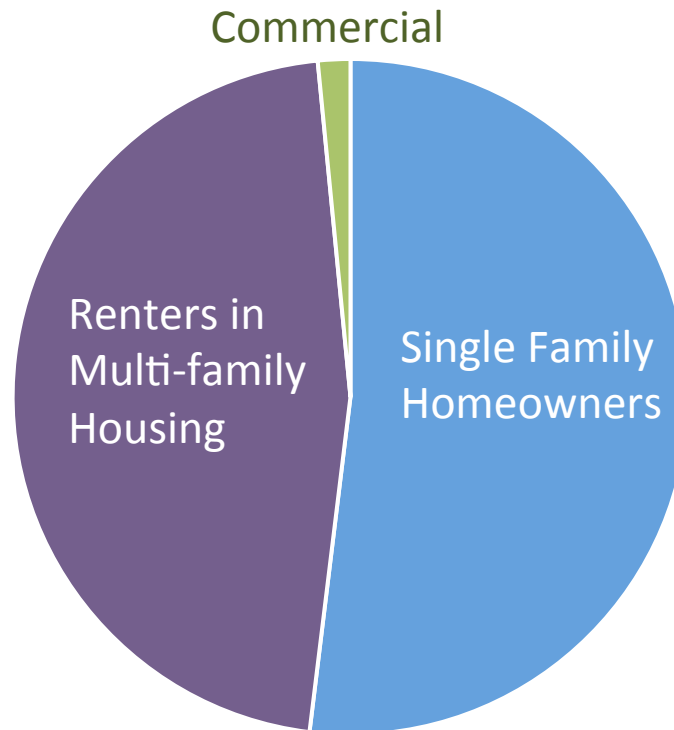


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Renters accounted for nearly half of participants

Number of Investments by Type of Project Site



90% of the customers in our service area are residential.

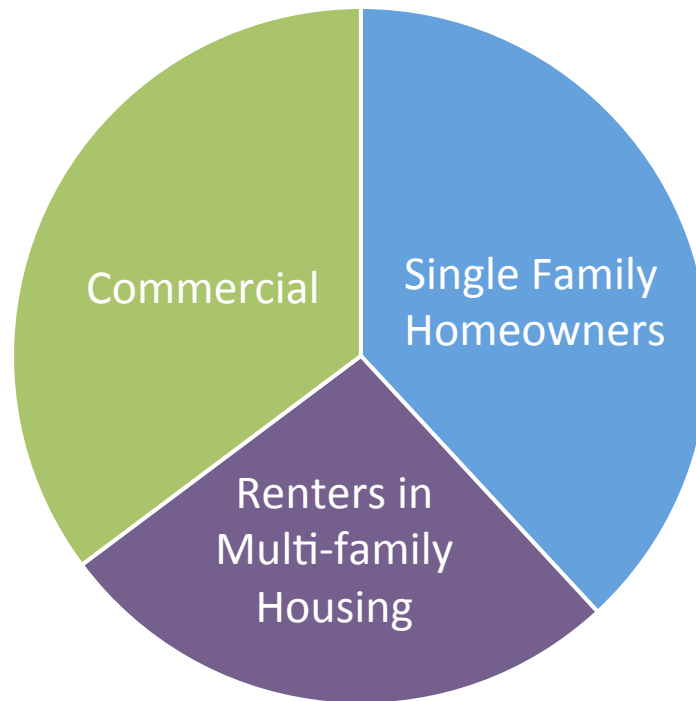


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Total investments in first 4 months exceeded \$1.5 million

Distribution of Investment Funds by Type of Project Site



A college and a municipal building accounted for 1/3 of the investment.

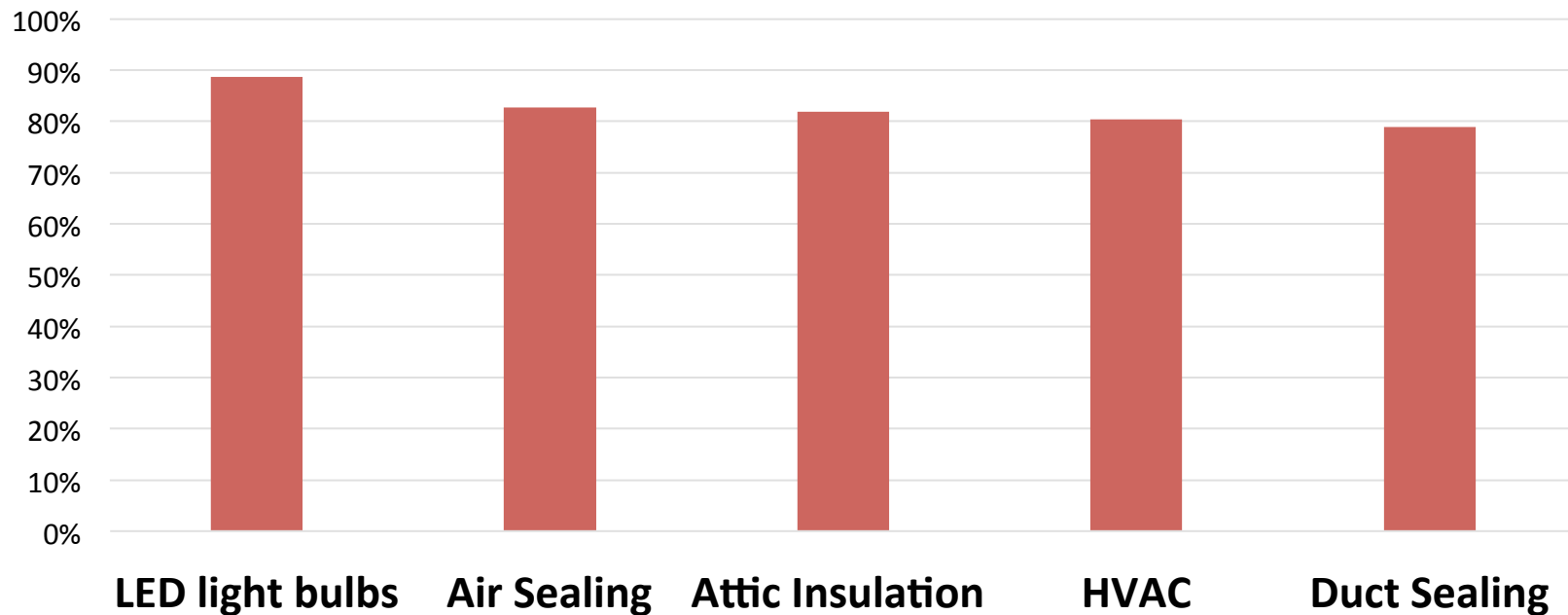


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Most projects include a combination of cost-effective, long-lived building upgrades

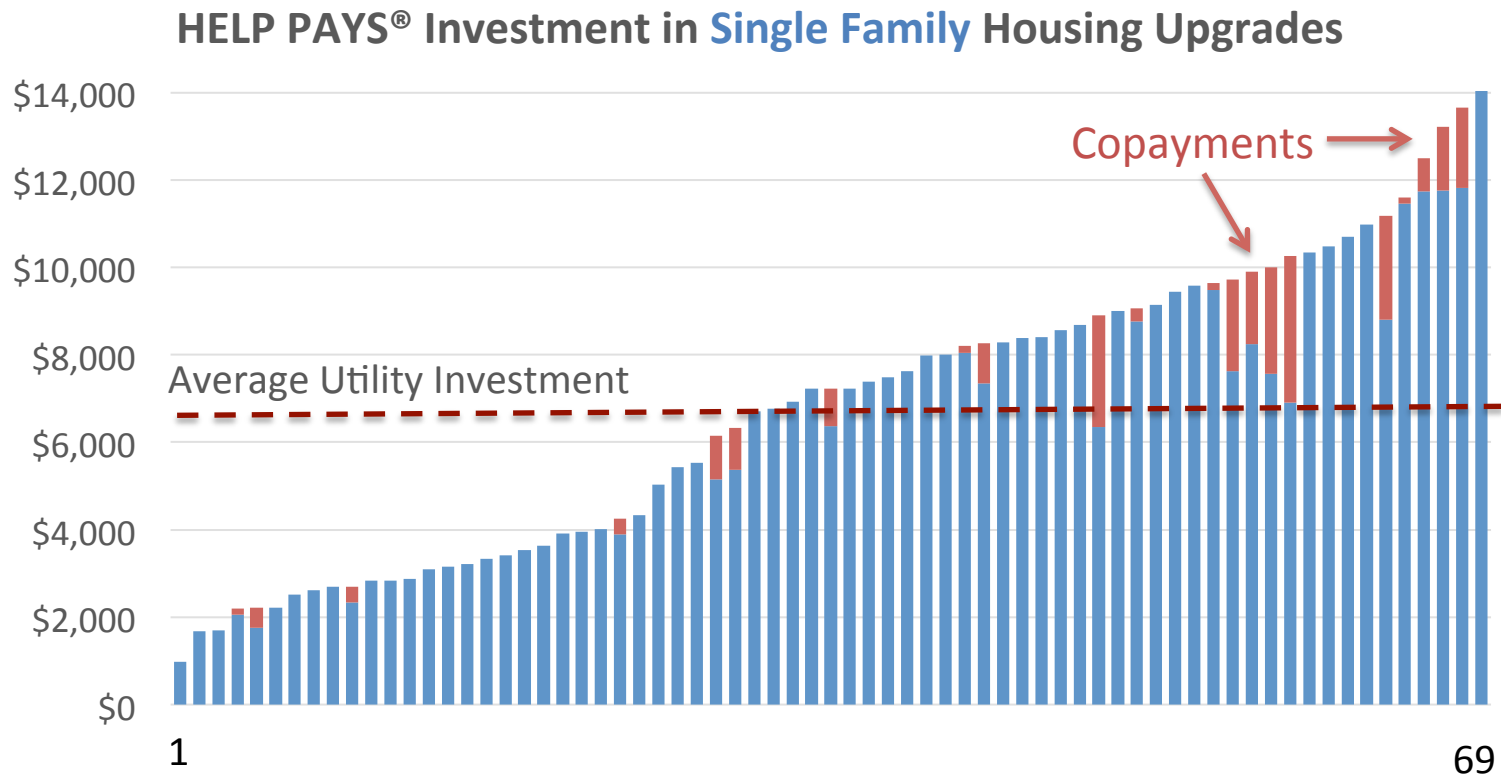
Frequency of Main Types of Upgrades



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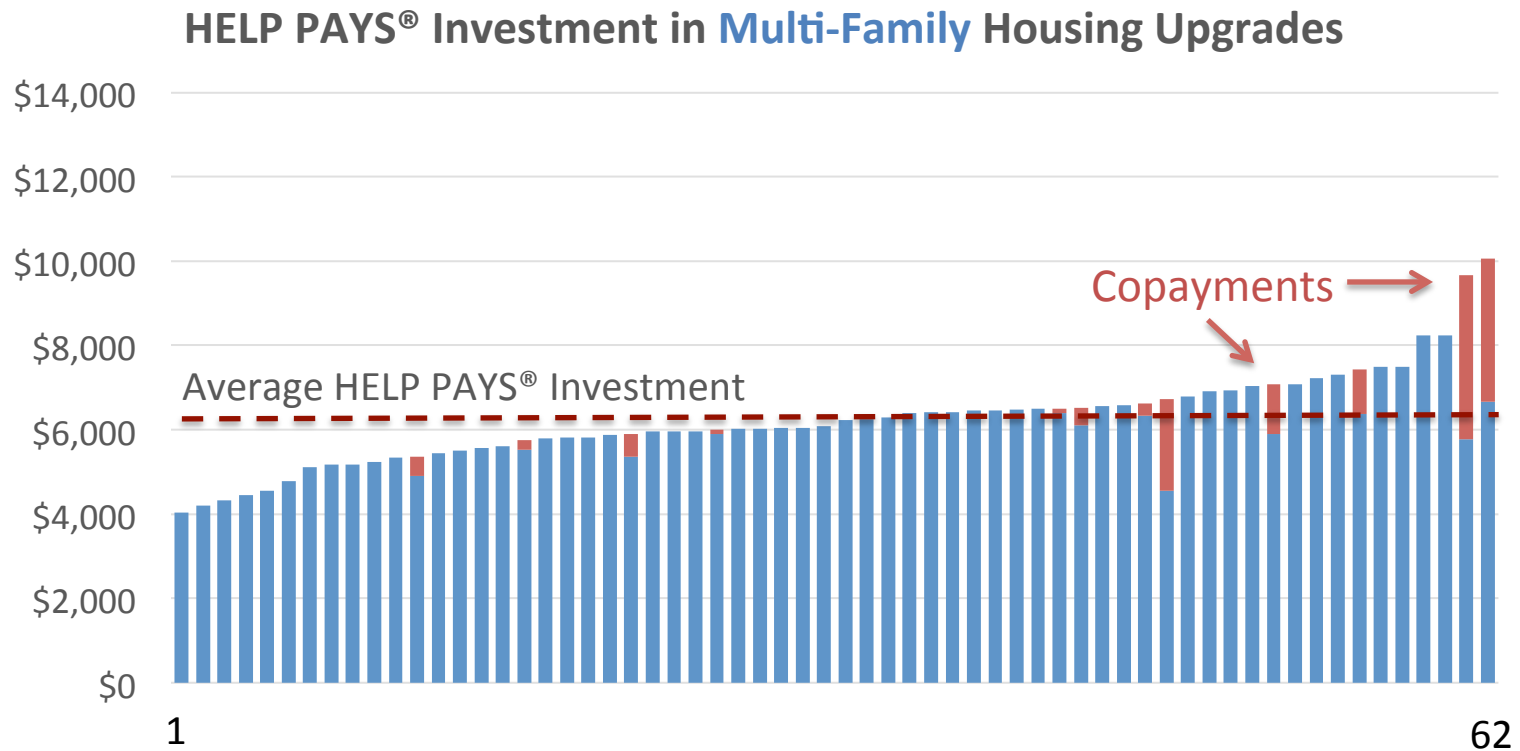
Varied field conditions yielded wide range of project costs



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Multi-family housing had less variation, yet similar average project size of ~\$6,000



Landlords paid 100% of the copayments, which totaled 4% of the upgrades.



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Average Project Profile

Estimated energy savings:

Includes both electricity and gas / propane

Single family housing: average above 30%

Multi-family housing: average above 35%

Net savings to participant:

20% of estimated savings

Average cost recovery payment:

Single family: \$56/month

Multi-family: \$52/month



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Market Performance of HELP vs HELP PAYS®

Comparing the first 4 months of HELP PAYS® with same 4 months of prior year:

1. **Increased Participation:** The number of participants tripled. As a result, our most active contractor is hiring locally to expand their capacity.
2. **Renters:** Previously disqualified under HELP; account for nearly half the participants in the first 4 months of HELP PAYS®.
3. **Larger investments:** The average investment more than doubled after the switch to the HELP PAYS® tariffed on-bill program.
4. **Pace of investment:** Investment surged by more than a factor of 10.
5. **Demand savings:** Average of nearly 2kW of on-peak demand savings, which is worth thousands of dollars to the utility over the life of the upgrades.



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Looking ahead:

- Full report on this preliminary data analysis is posted on www.oecc.com.
- Some aspects of our program will require a full year of data to begin evaluating, and we will continue to make adjustments.
- We seek opportunities to share our experience and to gain insight from other utilities with similar programs.
- Support from the Southeast Energy Efficiency Alliance has been valuable, and we will contribute to SEEA's future programming on inclusive financing for energy efficiency.



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HELP PAYS[®]:

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“WAH-shee-tah”

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