



Affordable Energy Efficiency Programs: How to design programs to get the most customer participation

*Joint session for the Staff Subcommittees on
Consumers and the Public Interest,
Energy Resources and the Environment,
and Rate Design*

Sunday, February 9, 2020 – NARUC Winter Policy Summit Meeting

Affordable Energy Efficiency Programs: How to design programs to get the most customer participation

Moderator:

Tom Stanton, Principal Researcher, Energy and Environment,
National Regulatory Research Institute,

Presenters:

**Meg Power, PhD, Senior Advisor,
Community Action Partnership**

**Joseph Magee, Energy Policy Manager,
Pennsylvania PUC**

**Wally Nixon, Commissioners' Legal Advisor,
Arkansas PSC**



***Affordable Energy Efficiency Programs:
How to design programs to get the most customer participation***

Energy efficiency programs are designed to help lower a customer's energy bills. But often low-income customers, who could benefit the most from energy efficiency programs, can't afford to participate due to the high upfront costs of EE measures or are unable to access financing, or both. This is often true even if rebates or other financial incentives are offered. This panel will discuss what Commissions and utilities are doing to bridge the energy efficiency program financing gap. It will also dive into possible rate structures, partnerships with Community Action Agencies and other nonprofit-entities, and utility programs offering on-bill financing (OBF) or tariff-based financing (TBF) (e.g., Pay-As-You-Save (PAYS®)). The session also highlights results of Pennsylvania's recent energy affordability study and universal service program review to better demonstrate how to design and implement effective energy assistance programs and reviews Arkansas's Consistent Weatherization Approach (CWA), which is providing EE services, without an out-of-pocket payment, to thousands of customers each year, many of whom are low-income.



Delinquencies and Disconnections



- Four part series, each Webinar 90 minutes.
- Moderator for all four Webinars: Hon. Commissioner Marion Gold, Ph.D., Rhode Island Public Utilities Commission
- Webinar 1: Delinquencies and Disconnections: Where are We Now? (5/8/19)
- Webinar 2: Delinquencies and Disconnections: Case Studies from the States (6/10/19)
- Webinar 3: Disconnections and Delinquencies (8/22/19)
- Webinar 4: Disconnections and Delinquencies: Lessons Learned and Next Steps (10/16/19)
- All four Webinars are accessible via the YouTube channel “NRRI Media,” at <https://www.youtube.com/channel/UCWQ78OXQr7PQddU5iMK4wyA>

High level summary of Webinars

Quoting/Paraphrasing a review of Webinars 1 through 3 by Moderator, Hon. Marion Gold, Ph.D., Rhode Island Public Utilities Commission, from <https://www.youtube.com/watch?v=6g0-Lhpbb6E>, time stamp 2:30 to 6:00.

- “Our goal for the series was to have focused recommendations on best practices for the regulatory community, with respect to consistent data collection, and reporting models that we can better use to serve customers who struggle to pay utility bills. ... We’ve had a robust and wide-ranging conversation... .”
- A second goal for the series was to inform everyone, so that together NARUC and NASUCA could work to craft a resolution or resolutions, promoting best practices in data collection, data sharing, and program design to help reduce delinquencies and disconnections.
 - ❑ The joint NARUC/NASUCA Resolution was passed at the November 2019 Annual Meetings of both organizations. Reportedly, this is the first time ever that the same resolution was passed by both organizations.

High level summary of Webinars (Continued)

- Webinar 1: “We learned that terminations are increasing and arrearages are growing, across the country, despite many great energy assistance programs. We discussed the value of collecting better data to monitor the problem, and we reviewed the challenges that we face to make sure the data provide information that we can use to improve affordability, reduce terminations, and lower uncollectibles.”
- Webinars 2 and 3: “We shared a lot of examples from regulatory commissions regarding how various states are collecting standardized data from the utilities, and then we zoomed in on some success stories as examples of best practices in a lot of different areas.”

High level summary of Webinars (Continued)

- For Webinar 4, we asked some of the speakers from the previous webinars to provide their top recommendations for four major topics:
 - ❶ **Standardizing language and definitions**, “... a crucial first step in the data collection effort”
 - ❷ **Data collection practices**, types of data and practices for making sure that the data are valid, reliable, used appropriately, and effectively
 - ❸ Programs to address **evolving customer preferences and needs**, challenges and opportunities as our utilities are modernized
 - ❹ Recommendations associated with **reducing utility delinquencies and disconnections**
- At the end of Webinar 4, Charlene Ketchum, Policy Advisor and Legal Counsel to Missouri PSC Commissioner, Hon. Maida Coleman, Chair of the NARUC Committee on Consumers and the Public Interest, and David Springe, Executive Director of NASUCA, discussed developing, vetting, and submitting a joint resolution on data collection and reporting.

The NARUC / NASUCA Joint Resolution

- *Resolution on Best Practices in Data Collection and Reporting for Utility Services Delinquencies in Payments and Disconnections of Service*, <https://pubs.naruc.org/pub/5B694F5B-D52A-A964-2EF3-8C734C18FC89> and <https://www.nasuca.org/nwp/wp-content/uploads/2018/11/2019-07-NASUCA-Data-Collection-Resolution-Joint-with-NARUC-Final.pdf>
- The resolution includes support for best practices for reducing delinquencies and terminations, along with data collection guidelines.
- The *Resolution* encourages all interested parties to:
[I]dentify and share best practices that demonstrate promise to reduce delinquencies and disconnections, with the explicit goal of increasing customers capabilities to pay utility bills over time including best practices that identify and highlight access to helpful programs and services, including bill affordability programs such as discount rates or percentage of income payment plans, energy efficiency programs and services, weatherization, consumer education, expanding existing shutoff protections, custom payment plans that reflect the ability of the customer to successfully complete the payment plan, and flexible bill due dates.

Next Steps Intro and Mini Case Studies

- Case studies are being collected for six major categories:
 - ➊ Data collection and data sharing about delinquencies and disconnections;
 - ➋ Segmenting customers, and program innovations applicable to specific customer groups;
 - ➌ Decision-making systems for designing and implementing successful programs;
 - ➍ Innovations in utility rates and tariffs and bill payment options;
 - ➎ Innovations in energy efficiency programming; and,
 - ➏ Innovations in utility customer service and customer assistance programs.
- NRRI continues to welcome ideas for additional case studies at any time, and will add more case study reports as they become available. Please suggest case studies from any and all types of public utilities, too (electric, natural gas or other heating fuels, telecommunications and broadband, water, and wastewater).

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Transforming Our Approaches to Energy Insecurity as We Transform Utility Service

Meg Power, PhD.

National Community Action Foundation

INCLUDING EVERYONE IN TOMORROW'S ENERGY MARKETS

- Great programs
 - Smart, evidence-based consumer protection
- AND
- Capitalizing the transformation of goods and services for those without capital
 - “Beneficial” electrification = massive shift in the public infrastructure and personal physical goods [your “stuff”]
 - “Beneficial electrification” AKA a “greener” world is a new tomorrow, not a bigger today.



The advocates'

2010 FAIR CLIMATE CHANGE POLICY [EXCERPT]

THE DESIGN of any climate change mitigation policy that raises the cost of energy and other essential consumer goods must be fair to all Americans.

FAIR Climate change policies must:

- Ensure that all consumers can afford the quantities of residential and transportation energy that meet their basic needs;
- Ensure that no households experience economic insecurity as a consequence of climate change policies;

https://www.nclc.org/images/pdf/special_projects/climate_change/principles_energy_water.pdf

AN INCLUSIVE SYSTEM? MAYBE TOMORROW...

- DISCONNECTIONS RISING, EPISODIC
- FAMILIES MOST AFFECTED ARE THOSE NOT ELIGIBLE FOR LIHEAP
(“WORKING CLASS” ? “LOWER QUINTILE” ?)
- PROGRAMS’ SCALE DOESN’T MATCH THE CHALLENGE

TOMORROW:

*WILL ‘TOTAL’ ELECTRICITY DEPENDENCE MEAN EPISODICALLY
LIVING WITHOUT ~~POWER~~ COMMUNICATIONS, TRANSPORTATION,
INTERNET, LIGHTS, HEAT, COOLING FOR 40 MILLION+ CUSTOMERS?*



Customers

Policies THAT LIFT

BURDEN REDUCTION

- PIPP – BURDEN IS THE ESSENTIAL FOCUS – [BUT NOT ENERGY ALONE..]
- ARREARAGE MANAGEMENT AND INCENTIVES
- BROADER PACKAGE OF EFFICIENCY MEASURES – SOCIETAL AND CO2 BENEFITS INCLUDED

REWARDING EFFICIENCY

- No FIXED CHARGES OR MINIMUM BILLS
- CHEAP OR FREE CAPITAL
- Non-energy BENEFITS [Health! Safety! Comfort!]

Related: D-R ONLY WORKS IF YOU UNDERSTAND THESE CUSTOMERS' DEGREE OF FLEXIBILITY – [and there may be no fit]

UNDERSTAND CUSTOMERS' DILEMMA USING

- DATA:
 - PA REPORT, CA REGULAR ANALYSIS
 - Program Evaluation [PAYS]
 - DEMOGRAPHIC/POVERTY DATA ANALYSTS
 - BIGger Picture –National, not Service Territory not ISO
- SIMULATION AND TRAINING
- Partners

Your Programs need community partners to:

The Goal is Braided Funding Streams for a Larger Program with Greater Impact



- Get the need right IN THE design
 - Intervenor funding
 - Impact studies – including household well-being impacts
- Income and other personal info and screening- avoid DUPLICATING!
- UNDERSTANDING PROGRAM DELIVERY/MANAGEMENT
- Recruiting/getting through the door for efficiency: \$1000 vs \$0?
- Braiding
 - Efficiency, safety, housing repair, health upgrades [BIG EMPHASIS - emerging]

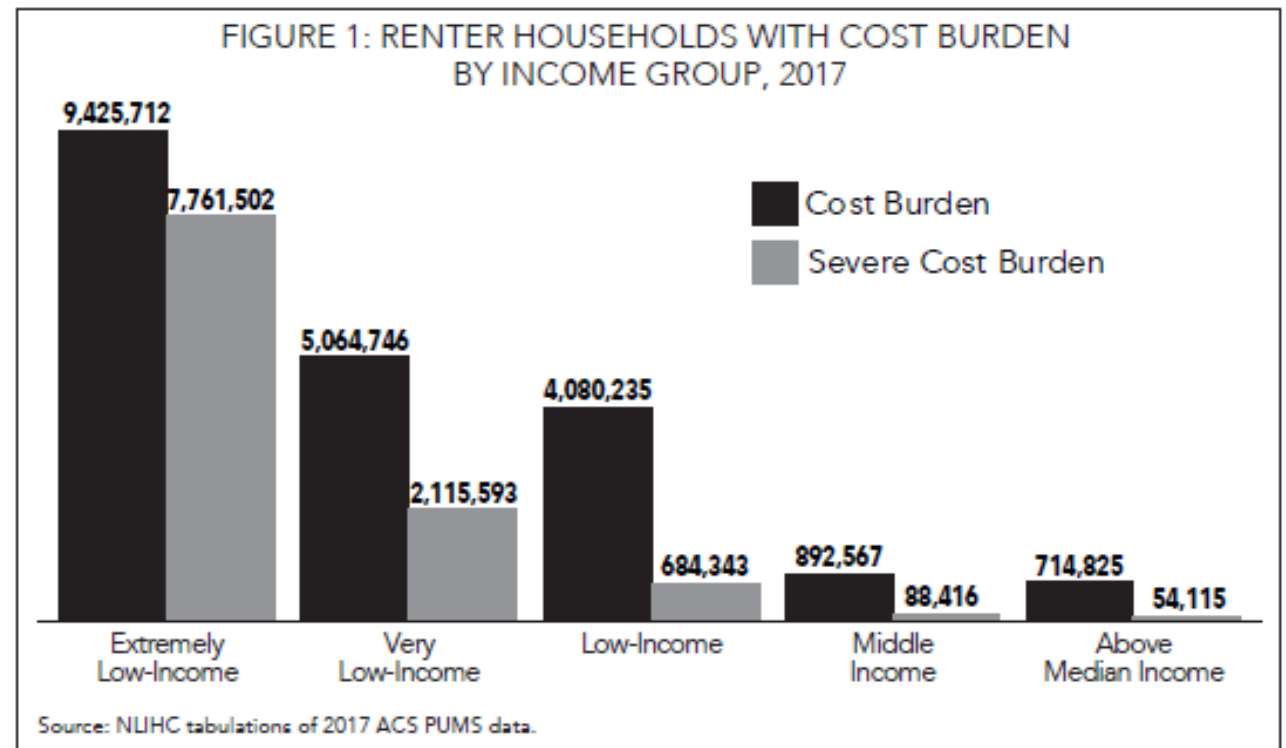


TOMORROW?

The scale of the
connectivity and fairness
problem
for the industry and
for each family

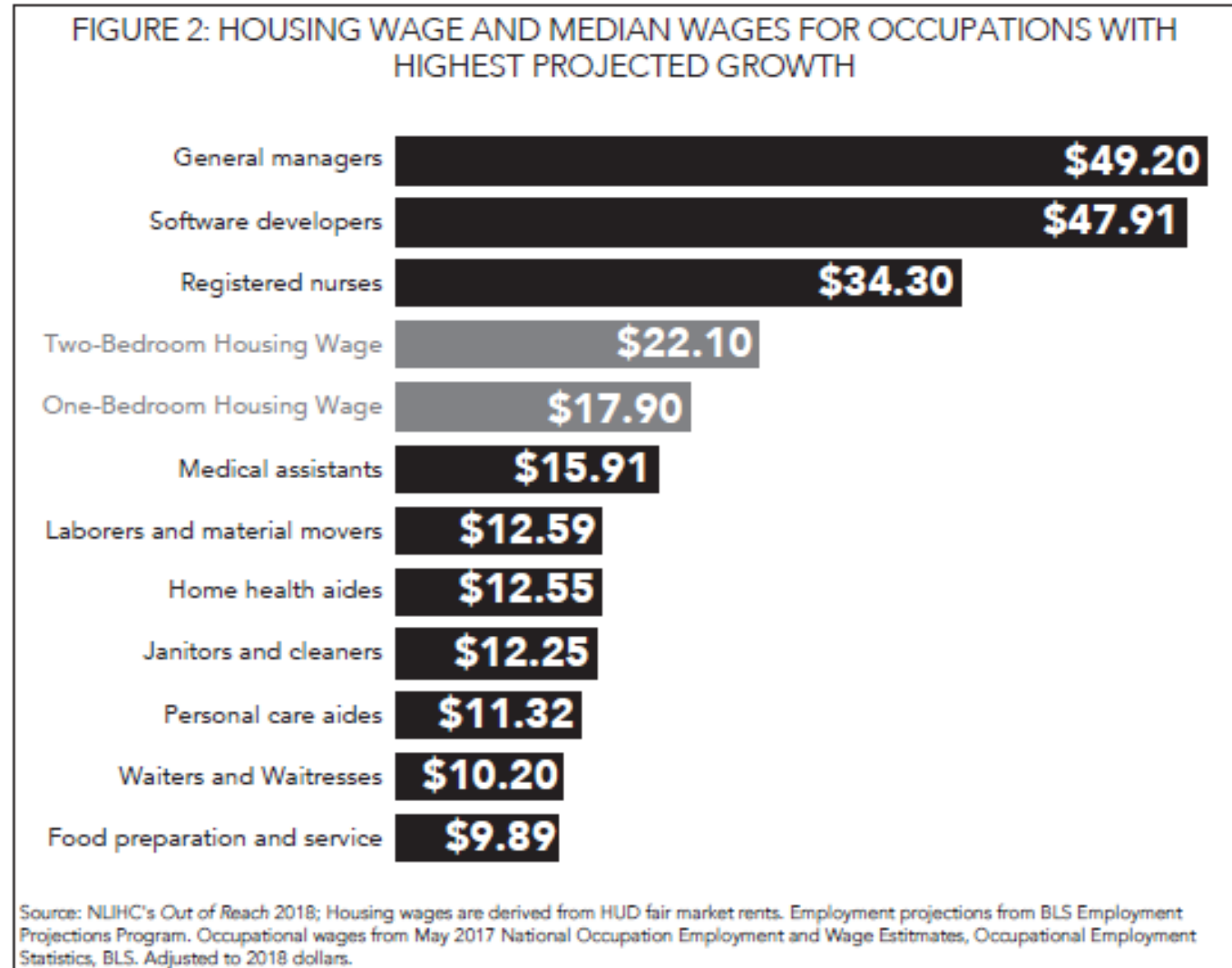
You NEED Partners for engagement with 2020 poverty – not 1980 energy poverty

- Energy burden reduction is housing burden reduction
BUT
- Housing burden is an unsolved, worsening national crisis



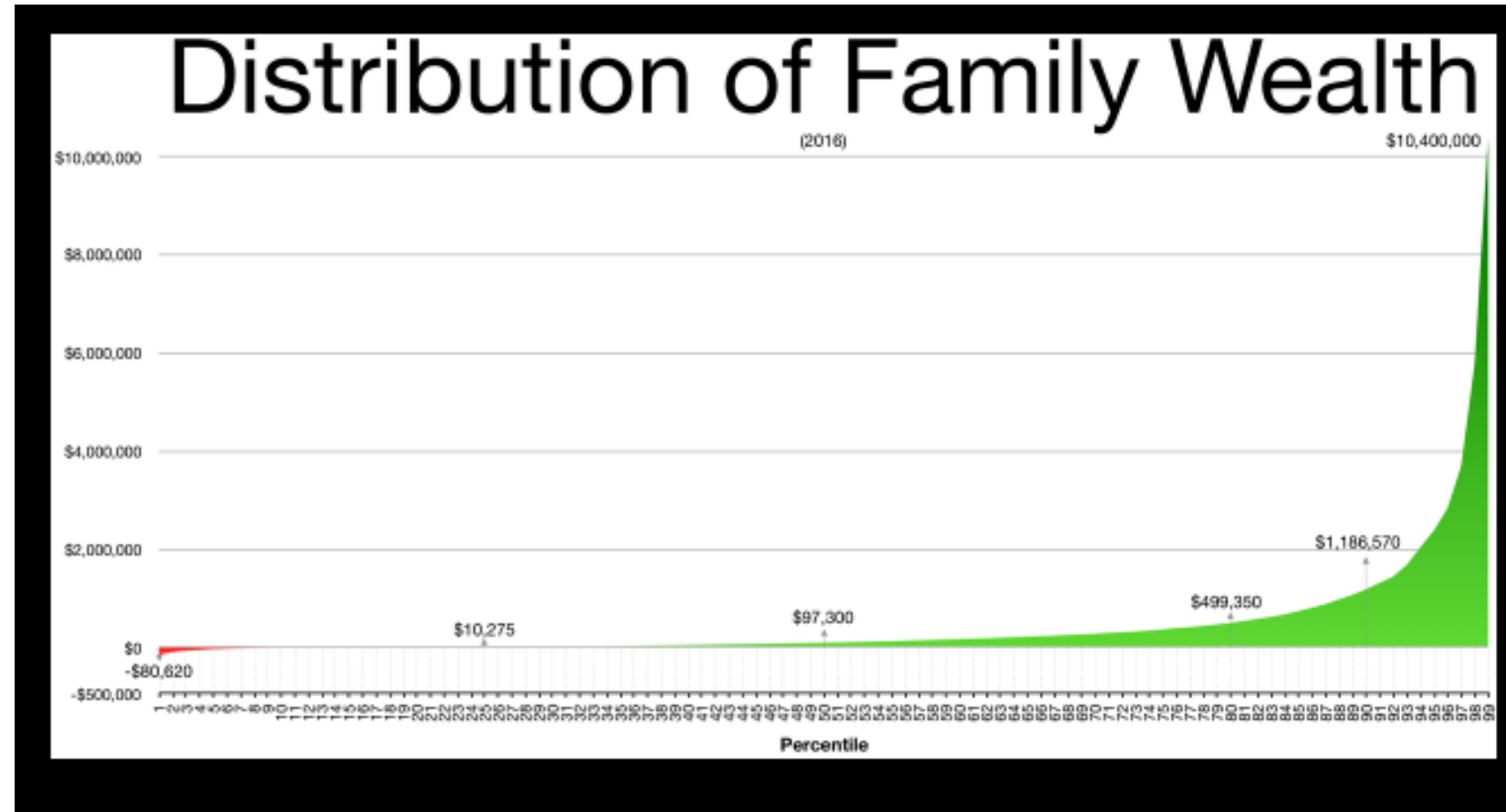
UTILITIES AND REGULATORS KTK:

The Wages by Job v Rents [cheapest 40% of units]



Where is the capital for new plug-ins ? Better buildings? Renewable tech? Community resilience?

- LDC Ratepayers??
- Not your LMI customers!



What Could an Alliance of Families' Advocates, Utilities and Regulators Achieve?

- Change the Conversation and Assumptions?
- Cost out the true investment to achieve inclusion?
- Move the financial burden to a combo of
DEEP Pockets- the wholesale market entities –
PLUS a progressive tax base- State and federal investment?
- Reinvigorate the dream of Universal Service?



gg63026166 www.gograph.com

What if the policy and regulations for energy matched public policy addressing income insecurity and exclusion ?

- Electricity will soon be EVERYTHING
- Policies will directly affect every key market that connects people to each other, to commerce, to spaces
- The electric market “silo” is already just a museum piece
- Engagement with incomes and prosperity policy – and funding it fairly [mostly NOT through rates!] – is essential.

PS: One big building block : The federal Weatherization Program



- \$900 million to \$1 billion annually
- and Growing [20% appropriations increase for 2020]
- High tech standards and worker qualifications
- Access to the “Hard-to-Reach”
- Lives in organizations with a complex web of
- Safety Net and development programs

Forward Together?



CAP's Weatherization Leveraged Partnerships Project

Free T & TA to -



- Grow the impact of your EE and bill payment services for households
- Start up leveraging or/ and deal with challenges in existing programs
- We have
 - Resources to share
 - Connections with experienced peers
 - Trainings and webinars like this one!
- CALL/Email! 202- 265-7546

MegPower@opportunitystudies.org

- Visit Our Energy Page at CAP
- <https://communityactionpartnership.com/energy-partnerships/>



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Pennsylvania's Energy Affordability Study and Universal Service Evaluation

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Background

| 1999–2019: Pennsylvania’s Max Energy Burden Levels for CAPs | | | |
|---|------------|--------------|---------------|
| | 0-50% FPIG | 51-100% FPIG | 101-150% FPIG |
| Gas heating | 5%-8% | 7%-10% | 9%-10% |
| Electric non-heat | 2%-5% | 4%-6% | 6%-7% |
| Electric heating | 7%-13% | 11%-16% | 15%-17% |

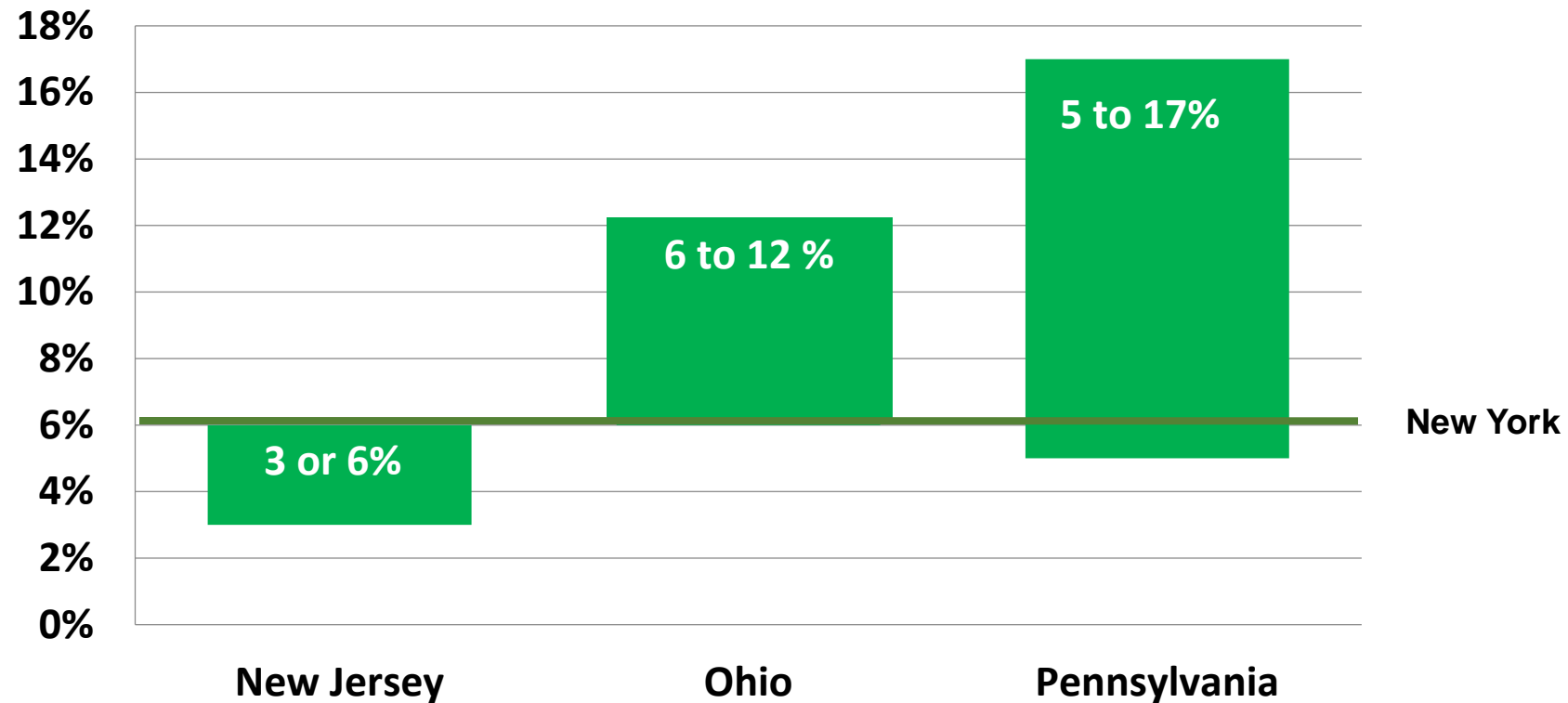
CAP = Customer Assistance Program
FPIG = Federal Poverty Income Guidelines

Background

New York - Percentage of income plan = **6%** of annual income

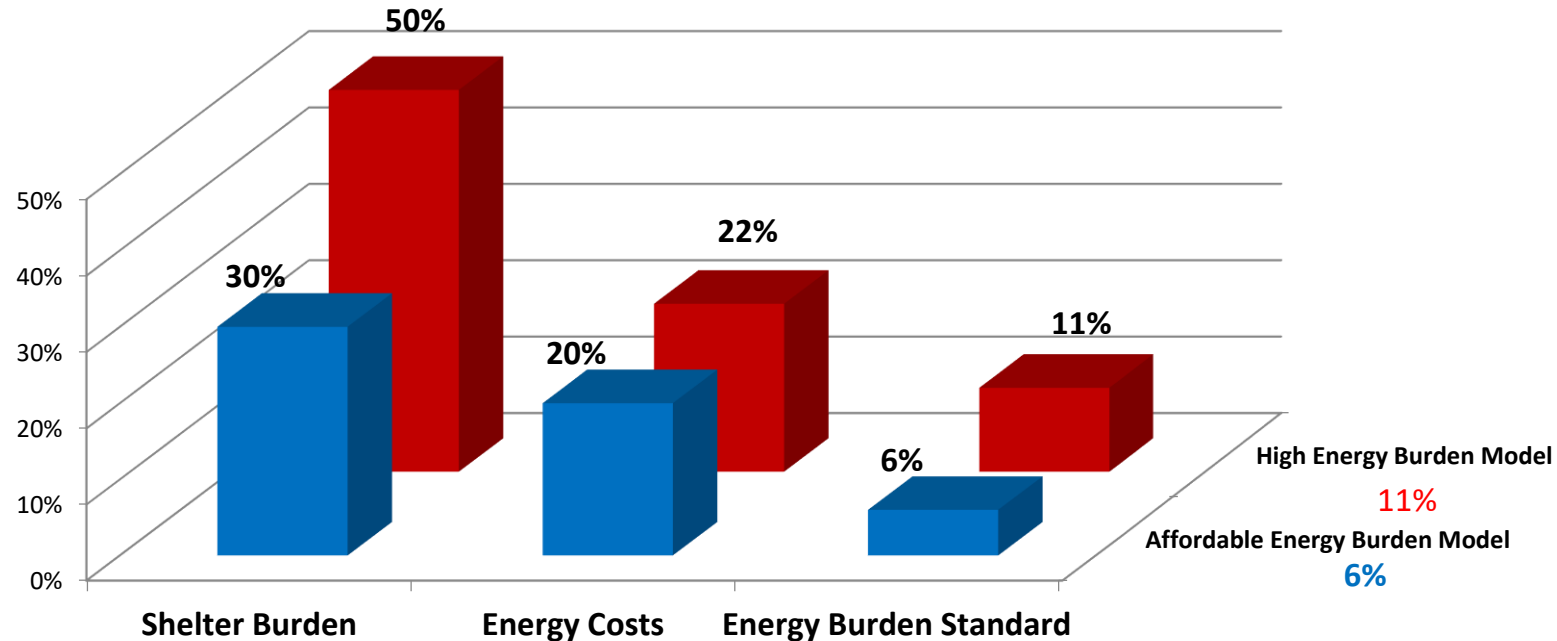
NJ - Fixed Credit/Percentage of income plan = **3% or 6%** of annual income.

Ohio - Percentage of income payment plan = **6% to 12%** of customer's monthly household income.



Background

- Fisher, Sheehan & Colton: **Affordable Energy Burden Model**: 30% Shelter X 20% Energy Bill = **6% of Income**
- APPRISE: **High Energy Burden Model**: 50% Shelter X 22% Energy Bill = **11% of Income**



Energy Affordability Study: Energy Burdens

CAP customers still pay a significantly higher percent of income for electric and gas service than the average residential account.

The energy burden level for the average PA residential household (non-CAP) is 4%:

- 2% for gas heating;
- 2% for electric non-heat; and
- 4% for electric heat.

The energy burden level for the average CAP households are:

- 7-8% for gas heating;
- 5-6% for electric non-heat; and
- 8-10% for electric heat.

Customers in the 0 to 50% Poverty level, regardless of heating or non-heating status and energy type, often had energy burdens exceeding the PA CAP Policy Statement guidelines.

Energy Affordability Study: Impact of LIHEAP

The study found that LIHEAP had a measurable impact on energy burdens for CAP customers, especially those at the lowest income tier.

CAP households at 0-50% Poverty Level

- 5-6% decrease for gas heating
- 6-8% decrease for electric non-heating
- 7-9% decrease for electric heating

CAP households at 51-100% Poverty Level

- 2-3% decrease

CAP households at 101-150% Poverty Level

- 1-2% decrease

Even after LIHEAP, customers in the 0 to 50% Poverty level often had energy burdens exceeding the PA CAP Policy Statement guidelines.

Energy Affordability Study: Other Observations

- Utilities are not tracking or reporting data consistently.
- Utilities that required low-income customers to be “payment troubled” (*e.g.*, had a payment arrangement in the past 12 months) to qualify for CAPs had higher average debt than CAPs that did not have this restriction.
- Payment behavior of CAP customers did not appear to have been strongly or definitively correlated to household income.

The data did not provide a clear indication of what might constitute an “affordable” energy burden level for CAP customers.

Changes to PA CAP Policy Statement

1. New Maximum CAP Energy burden levels

| Utility Service Type | 0-50% poverty | 51-100% poverty | 101-150% poverty |
|----------------------|---------------|-----------------|------------------|
| Electric Non-Heat | 2% | 4% | 4% |
| Gas Heat | 4% | 6% | 6% |
| Electric Heat | 6% | 10% | 10% |

2. Minimum CAP payment requirements and CAP Credit Limits shall be established in individual utility universal service plan proceedings
3. Adopts Chapter 14 definition of “household income” – adult income only

Changes to PA CAP Policy Statement (cont.)

4. Allowing customers to maintain CAP status when transferring service
5. Use income for past 30 days or 12 months to determine eligibility
6. CAP customers need no longer provide SSNs or be “payment troubled”
7. No penalties for LIHEAP non-participation
8. No late payment charges for CAP customers
9. Grant debt forgiveness for monthly and “catch-up” CAP payments
10. Offer CAP applications online
11. Use standardized zero-income form
12. Extended income recertification timeframes (except zero income customers)
13. Initiate collection activity after two CAP payments in arrears – no program removal for non-payment
14. No automatic exemption of ratepayer classes (*e.g.*, industrial, commercial) for cost-recovery
15. Develop Consumer Education and Outreach Plans

Relevant Documents

Energy Affordability Study

<http://www.puc.pa.gov/pcdocs/1602386.pdf>

Review of Universal Service and Energy Conservation Programs

<http://www.puc.pa.gov/pcdocs/1559325.pdf>

11/5/19 Order - 2019 Amendments to the CAP Policy Statement

<http://www.puc.pa.gov/pcdocs/1643025.docx>

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LEAPFROGGING ON-BILL FINANCING (OBF) WITH TARIFF-BASED FINANCING (TBF) OF ENERGY EFFICIENCY BEHIND THE METER

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February 9, 2020
At the NARUC Winter Summit
Washington, D.C.

On-Bill Financing (OBF), involves a Utility offering:

- ◎ a loan to a customer, with all elements that typically implies:
 - property ownership (no renters need apply)
 - dealing with a lender (bank, credit union, or the utility itself)
 - a credit check (debt-to-income ratio – **no low-income customers need apply**)
 - incurring debt (a loan or note)
 - a lien (if the borrower is a property owner)
 - possible disconnection for failure to make loan payment
 - possible collection activity for nonpayment
 - possible foreclosure for failure to retire loan
 - possible impairment of property sale if loan not paid,
 - a need for loan loss reserve
 - the property owner's obligation to pay the loan charges if the EE upgrades fail during the term of the loan, even if there are no energy savings.

IOUs frequently object to OBF, citing no interest in being “banks” or collection agencies. (Everygy Missouri has recently signaled its opposition to being a financial institution that holds loans or liens on equipment on the customer’s side of the meter.) If an IOU includes OBF as an EE program measure paid for by all customers through an EE cost recovery rider, then all customers finance the loan and any associated losses, increasing costs and reducing cost effectiveness of the utility’s EE portfolio via the ratepayer funding pool. The customer must engage and pay contractors for work and enforce warranties in event of repair or replacement need.

What is meant by TBF?

- ◎ The term *Tariff-Based Financing* featured in these slides is synonymous with *On-Bill Tariff*, the term elected by the Department of Energy in its Issue Brief on the topic. Both terms refer similarly to the concept called *Tariffed On-Bill* by the Southeast Energy Efficiency Alliance in its materials on best practices.
- ◎ TBF also comports with *Tariff-Based Recovery*, which the California Public Utilities Commission last week coined with the release of its draft Transportation Electrification Framework
- ◎ The objective for using TBF is to send a signal that “on-bill” and “financing” both produce consistent allergic reactions due to the prior association of those terms with “loans” (See Slide 2).
- ◎ No matter what the abbreviated jargon may be, all these terms have the same meaning when unpacked: **Tariffed terms of service for site-specific investment and cost recovery.**

Elements of Tariff-Based Financing (TBF)

- As pioneered in 1999 by the Energy Efficiency Institute, Inc. (a Vermont sub-S corporation), the **Pay-As-You-Save® (PAYS®) model TBF** involves:
- **No loan to customer** and **no means testing** for eligibility (so most of those elements on the previous slide go away).
- **LMI customers occupying homes needing EE upgrades are eligible just like non-LMI customers. PAYS is available to renters with the landlord's consent.**
- The opt-in tariff provides that **the utility** (IOU, co-op, or muni):
 - **Accesses any source of very low-cost market rate capital: 2-4%** (e.g., RUS, CFC, or utility's own balance sheet capital)
 - **Invests in and owns cost-effective EE measures (averaging \$4,500 - \$8,000) on the customer side of the meter. This is a key factor.**
 - **Either directly, or through an experienced third-party Program Operator:**
 - **conducts an energy audit/assessment of the home**
 - **deals with contractor selection**
 - **engages and pays installers for all cost-effective EE improvements (LEDs, HVAC replacement, attic insulation, duct and air sealing)**
 - **arranges for repairs or replacement of non-performing measures, and enforces warranties. .**

:

Elements of TBF cont'd

-The utility:
- owns and warrants performance of measures and exercises leverage to obtain extended warranties; enforces quality assurance
- finances measures for up to 10-12 years (when measure costs are recovered, ownership transfers to property owner)
- places the costs as a monthly fixed charge onto the customer's bill, as offset by the kWh and bill savings (at least 20% of estimated energy and bill savings go to customer, thus reducing the bill in most instances). (Customers have option to do additional measures with an upfront co-pay).

Examples of Successful TBF Implementation abound and Experienced Program Operators are available to help utilities stand up programs

- PAYS® programs began in New Hampshire in 2002 with a municipal utility and a cooperative and have been implemented in HI, AR, CA, KS, KY, NC, and TN by electric cooperatives, municipal utilities, and IOUs.
- Program Operators help design, set up, and manage TBF programs for utilities and deliver services to customers. These include EEtility (an Arkansas Benefit Corporation), MACED (a Kentucky non-profit), and utilities themselves.
- A large (\$10-15 M) one-year PAYS® Pilot targeting low-income and multifamily populations was recently approved by the MO PSC for Evergy Missouri, but the IOU has the prerogative not to proceed with it. File No. EO-2019-0132, issued 12/11/2019, effective 1/1/2020. Evergy has the option to use a third-party Program Operator.

Arkansas's Ouachita Electric Cooperative Corporation's TBF Program – HELP-PAYS®

- Ouachita had a previous **OBF** Home Energy Loan Program (HELP) with low participation (46 member loans in 2015)
- **HELP-PAYS®** did not depend on government subsidies to run its program, but its cost effectiveness was enhanced when it won a competition for a USDA/REAP subsidy.
- Average HELP loan for single family home was \$2,533
- OECC average household median income of ~\$29K vs. Arkansas's \$42K, National \$52K
- 8500 meters, 6916 Residential
- Housing stock 50-75 years old, very energy inefficient
- Average energy usage of residential customer in 2016: 2,015 kWh per month (non-weather normalized)
- **Most projects include a combination of cost-effective long-lived building upgrades: LED lamps, air sealing, attic insulation, HVAC, duct sealing – in a hot, humid climate**

Ouachita's HELP-PAYS® Features

- Co-op members, regardless of income, including renters in good bill payment status are eligible to participate, with permission of landlord. This is why TBF is called “all inclusive” financing.
- No out-of-pocket cost to participating member (owner or renter) unless co-pay options are selected for additional EE upgrades or rooftop solar. This benefits LMI customers
- Landlord has little incentive to say no, since her property gets improved and her tenant's bills go down, making it easier to pay rent
- No credit score or check needed since no loan to customer
- No lien on property since no loan
- Little risk of disconnection and collection activity (only for failure to pay utility bills when vacating or selling property – the same as with non-TBF customers). Successor tenant/owner picks up future payments under tariff and experiences the same improved premises and lower bills. Owner may place notice of PAYS obligation on property record if permitted by state law.

More on Ouachita's HELP-PAYS®

- No risk of foreclosure or impairment of property sale for failure to pay loan and diminished need for loss reserve (since there is no loan)
- No subsidies by other customers, no ratepayer funding pools – every customer pays own way via the tariff-based charge for measures that lower the bill.
- Property owners are obliged under the PAYS® program to notify successor owners and tenants of the tarified charges riding with the meter (and almost invariably the associated lower bills than otherwise would be the case, owing to reduced energy usage).
- No disconnections have been reported with more than 5,000 projects and \$40 million invested over the past 19 years of PAYS® program activity

See 10-minute video on Ouachita's HELP-PAYS program at:
<https://www.youtube.com/watch?v=FnNpZPk6o8g&feature=youtu.be>

Ouachita HELP PAYS® Results

- After getting approval for its TBF tariff from the Arkansas Public Service Commission in 2016, Ouachita Electric Cooperative Corp. in south Arkansas implemented HELP PAYS®. See Order No. 2 in Docket No. 15-106-U: http://www.apscservices.info/pdf/15/15-106-TF_6_1.pdf
- Ouachita favors TBF because it produces reductions in energy usage and peak load and thereby reduces costs paid to its wholesale (G&T) power supplier and thereby lowers costs for all of its members, while improving affordability, comfort & livability for participants. All members benefit, but participants benefit more.
- Given the age and low efficiency of many rural cooperative members' homes in Ouachita's service territory and the very low-income status of many members, EE measures deliver a big bang for the buck for houses that on average are using over 2,000 kWh per month (vs. an average residential customer of Arkansas IOUs being 1,000 kWh per month).
- Estimated average monthly energy bill savings at Ouachita: \$68 minus average monthly program service charge via tariff of \$54, leaving average monthly net savings of \$14 = average estimated 15% lower bill for every house participating, according to Mark Cayce, Gen. Mgr. of Ouachita.

More Results of Ouachita's HELP PAYS ® Program

- Results are reported by EUtility, a Little Rock-based Benefit Corporation implementing PAYS® for OECC and across the U.S.
- Explosive growth (3X more than total loan portfolio of former HELP OBF program), with **\$2.8 million in EE investments in first 3 years** under HELP PAYS®. See OptiMiser evaluation report dated 3/1/2019.
- **Average HELP PAYS® investment for single family home: \$4,639. Avg. tariff payment period: 12 years.**
- **100% of multi-family housing units in OECC service area participated, with landlord approval and participation** (including upgrades, optional co-pays)
- 88 participants were multi-family (avg. \$5,746 inv.) and single family **renters**
- 173 HVAC units installed in 2017 (including highly efficient mini-split replacements of window unit air conditioners)
- Evaluations show drop in peak demand averaging nearly 2 kW per participant (~ **\$250-\$300 in annual avoided demand costs per customer = reduced payments by OECC to its wholesale supplier**)
- **Est'd 22% reduction in avg. participant's kWh usage (non-weather normalized) from 2016 to 2017 (2015 kWh/mo. reduced to 1,559 kWh/mo.)**

More Ouachita Results:

- Out of 6916 OECC members , 5% market penetration of customer base as of 1/1/2020 (90% adoption rate by those who seek to participate).
- Supporting 20+ good paying jobs for EE contractors and installers in first year of HELP-PAYS
- Increasing availability of high-efficiency products and equipment, not previously found in the low-income region
- Attracting attention of Arkansas business community. Headlines:
 - *Arkansas Times*, September 1, 2017: “Free Energy: In Camden, an Innovative Program is Helping Electric customers Get Expensive, Energy-Efficiency Upgrades, Without Feeling the Pinch on Their Bill”
 - *Arkansas Business* magazine (two articles in same issue), September 11, 2017:
 - “No Catch: Lower Electric bills Pay for High-Efficiency Retrofits” and
 - “PAYS: Too Good, But True – Editor’s Note”
- HELP-PAYS is also available to Commercial customers.

Ouachita Fun Fact for Regulators

- In October 2019, Ouachita applied to the Arkansas PSC, **seeking a 4.5% rate reduction**, owing to both its EE program and its Solar initiatives having contributed to reducing its wholesale power costs by driving down peak demand.
- Its General Manager attributes just over half of the total decrease to the co-op's EE and Solar accounts. This reduction has occurred even though the co-op has added several new MW of new load over the past 5 years.
- This application is now pending – but what are the odds it'll not be looked upon with favor?

“Lagniappe” – a little something extra on Arkansas and EE Affordability

- ◉ Discrete low-income carve-outs were prohibited in Arkansas by a state Supreme Court decision in 2001 finding that the PSC could not engage in “social ratemaking”
- ◉ A new law, Act 1102 of 2017 authorized the Commission to require utilities to implement financial assistance programs for customers 65 or older or who meet income eligibility qualification for LIHEAP. The Commission’s Act 1102 Working Group is developing such programs.
- ◉ Meanwhile, in 2016 the Commission’s EE Parties Working Collaboratively (PWC) developed the CWA to provide residential weatherization services to eligible customers (not means tested, under the old law).
- ◉ Arkansas’s Consistent Weatherization Approach (CWA) is thus an LMI EE Affordability Initiative being implemented by the state’s IOUs.
- ◉ The CWA is designed to reach “severely energy inefficient homes”
- ◉ The CWA is an outgrowth of the APSC’s EE Programs implemented under the Energy Conservation Endorsement Act of 1977 (Ark. Code Ann. § 23-3-401 et seq.)

Arkansas's CWA and its Results to date

- Under the CWA, the electric and gas IOUs (not co-ops) were directed to implement programs offering basic weatherization services.
- Critical components of the Core Program are:
 - Direct installation of low-cost energy savings measures
 - Installation of a set of weatherization measures , including insulation and air sealing; and
 - Management of the contractors that deliver the home assessments and installation
 - Average program costs are <\$2,000 per home, with no out-of-pocket cost to the customer, regardless of income
- The program passes the Total Resource Cost Test
- Since 2017, the CWA has completed nearly 30,000 audits and has completed more than 53,000 projects, most of these by Entergy Arkansas, LLC, which took the lead on implementation.
- The CWA reaches a significant portion of residential customers who would be eligible under the new Act 1102 requirements (i.e., ranging from 13-131% for LIHEAP-eligible customers and 8-40% of the elderly (65 or older). **Additional data on LMI participation is being collected.**

Affordable Energy Efficiency Programs: How to design programs to get the most customer participation

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