



Program Sustainability Peer Exchange Call:
*Transitioning to a Utility Funded Program
Environment: What Do I Need To Know?*

Call Slides and Discussion Summary

January 17, 2013

- Welcome and Polls
- Transitioning to a Utility Funded Program
Environment: Arizona Public Service HPwES Program
 - Gavin Hastings, Arizona Public Service
- Q&A and Discussion
 - What lessons have programs learned about working effectively with utilities and transitioning to new roles and responsibilities?
 - What are key remaining challenges for collaboration between programs and utilities?

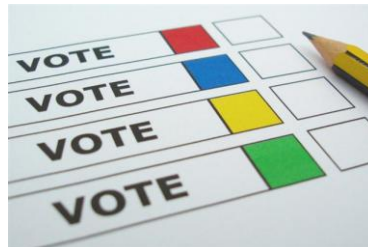
Participating Programs

- Boulder County, CO
- Cincinnati, OH
- Connecticut
- Fayette County, PA
- Las Vegas, NV
- University Park, Maryland
- Maryland
- Michigan
- Missouri
- Nebraska
- New Hampshire
- Nevada
- Oregon
- Seattle, Washington

Poll:

Which of the following best describes how you expect to work with utilities in the future?

- Collaboration with utility program (e.g., marketing, etc): 50%
- Providing program services for a utility: 38%
- Not planning to work with a utility: 6%
- Other: 6%
- Merger of BBNP program with utility: 0%



Utility Funded Programming: What Do You Need to Know?

Gavin Hastings

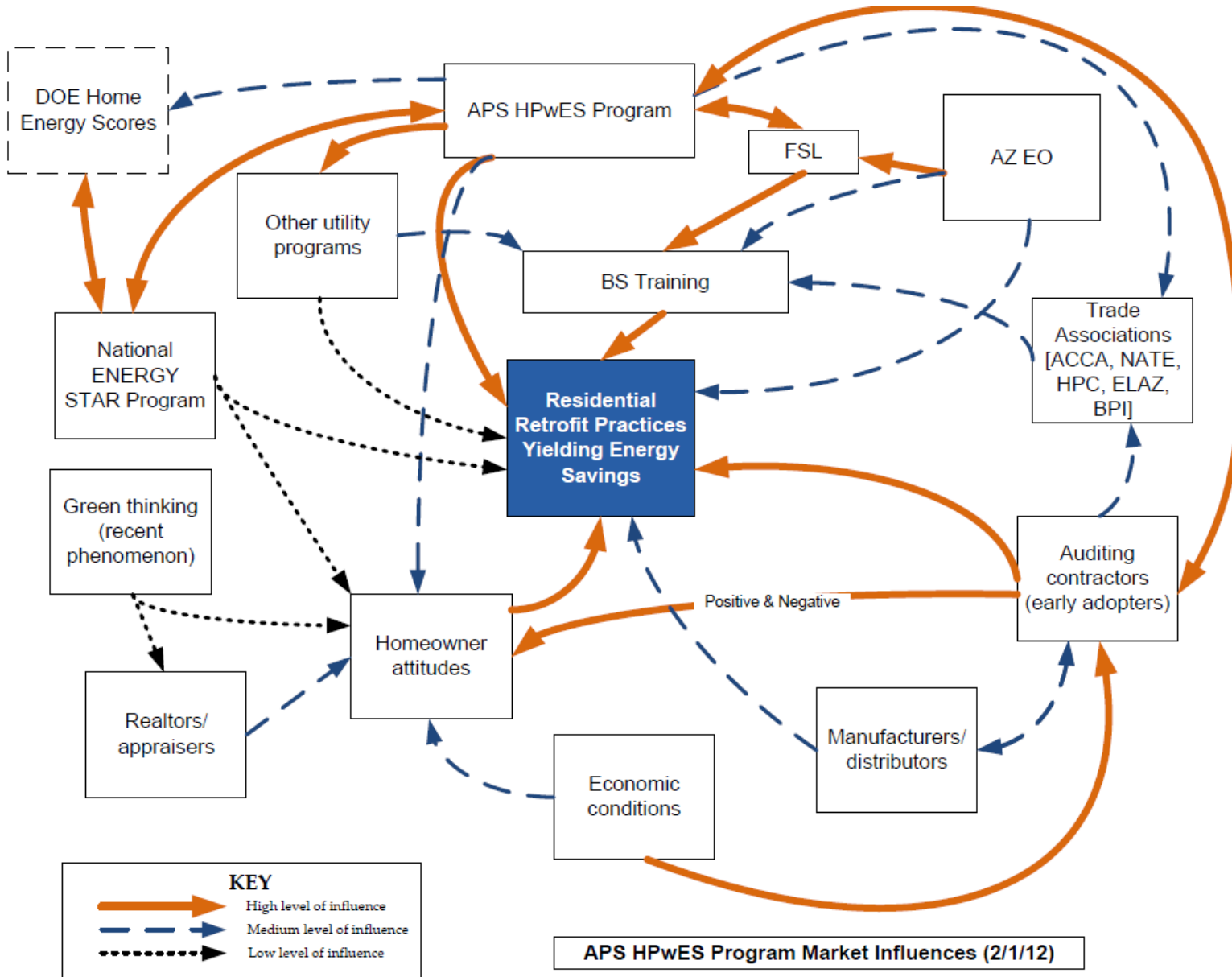
Account Executive, Arizona Public Service

Better Building Neighborhood Program

Peer Exchange Call: Jan. 2013



Roadmap Please!



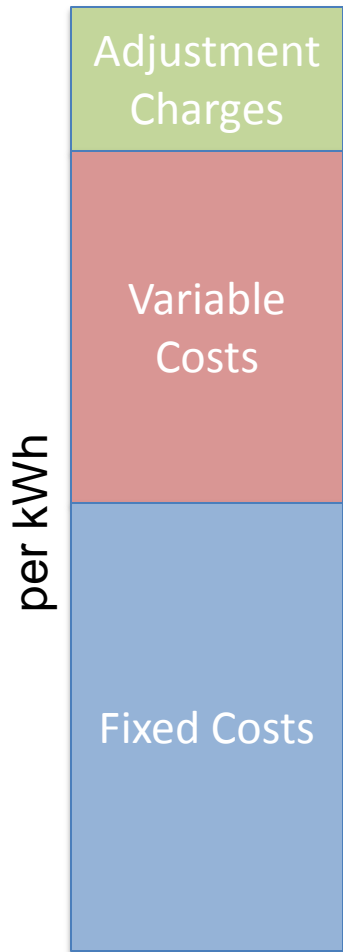
Overview

- Critical Areas of Focus
 - Funding (Regulatory/Rates/Process)
 - Data, Data, Data
 - Collaborative Relationships
 - AZ Case Study
- Questions and Discussion

Utility Funding 101

- How does a utility fund energy efficiency?
- Does your program meet local utility cost effectiveness tests?
- What is the timing and steps to get funding approved?

Utility Funding Needs



- Program Cost Recovery:
 - System benefits charge
 - Rate-basing
- Lost Revenue Recovery:
 - Performance Incentives
 - Lost Fixed Cost Recovery
 - Decoupling
- Usually determined during rate case settlement

Cost Effectiveness Tests

- Test Vary by Jurisdiction (both in type and Implementation)
 - **TRC**, SCT, PACT, PCT, RIM
 - Measure vs. Portfolio
- You must procure technical experts with local knowledge
 - Person: former commission staff or utility employee
 - Local/Regional Advocacy Groups or interveners
 - **Measure and Evaluation Contractors (Ex. Cadmus, Navigant, or whoever your utility uses)**

Cost Effectiveness 101: TRC/SCT

$$\text{TRC} = \frac{\text{Benefits (Avoided Cost* x Measure Life)}}{\text{Costs (Program Admin + Customer Incremental Cost)}}$$

* Cost Avoided by the **utility** by not needing to generate or distribute a unit of energy.

Cost Effectiveness 202: TRC/SCT

Demand, Capacity, Discount Rate, Externalities (CO₂, SO_x, Water, etc), Measure Life, Fuel Escalation Rate, Net to Gross Ratio, NEBs, Etc.

$$\text{TRC} = \frac{\text{Benefits (Avoided Cost* x Measure Life)}}{\text{Costs (Program Admin + Customer Incremental Cost)}}$$

Customer Incremental, Program Admin (measure, program, portfolio), M&V, performance incentives

Cost Effectiveness Places to Start

- Read:
 - “Best Practices in Energy Efficiency Program Screening” Wolfe, et al. 2012 <http://www.aceee.org/research-report/u122>
 - “A National Survey of State Policies and Practices for the Evaluation of Ratepayer-Funded Energy Efficiency Programs,” Kushler, Nowak, and Witte, 2012. http://www.nhpci.org/images/NHPC_Synapse-EE-Screening_final.pdf
- Ask your utility or local PUC
- Reach out to major local and regional EE advocacy groups and interveners
- **Procure a measure and evaluation contractor**

Regulatory Cycle Time/Process

- Implementation Plans filed annually or every two years (usually at the same time every year)
- Approach Utility, 6 months prior to filing
- Design and Calcs, 3 months prior to filing
- Once filed, Regulatory approval, 3-9 months.
- Implementation, 1-3 months
- Total Time: usually 1 to 3 Years

Data, Data, Data

- Legal:
 - Customer Ownership
 - Confidentiality
 - Data Security
 - Release forms
- Structural:
 - Data Collection Standards
 - Data Collection System

Data Action Items

- Collaboration
 - Use-case development
 - Acquisition strategies
- Large Scale Adoption of Data Standards
 - HPXML
 - BPI Data Collection Standard
 - DOE Data Taxonomy
- Paperless legal releases
- Explore Green Button More
- Build better software architecture

Sustainability through Collaboration

- Market Consistency
 - Contractor Requirements
 - Program and Incentive Design
 - Customer education
- Cost Share and improved cost effectiveness
 - Infrastructure Development
 - Training and Contractor Recruitment
 - Marketing
 - R and D
- Must transcend local markets!

Arizona Example

- Funders
 - Utilities: APS, SRP, SWG, Unisource
 - State Energy Office
 - Grantees
- Local Non-Profit (Foundation for Senior Living)
 - Training (Super-Lab)
 - Contractor Management and QA
 - Must transcend local markets!
- Southwest Home Performance Collaborative

Arizona Results

MARKET EFFECTS	2012 RESULTS*		TOTAL PROGRAM 2012 YEAR	AZ Home Performance Program to Date (2010-2012)
	APS	SRP		
Audits	4,992	3,157	8,149	20186
Completed Jobs	1,762	1,039	2,801	7534
Conversion Rates (Avg)	35.30%	32.91%	34.10%	37.61%
kWh Savings Annual	6,652,915	3,947,228	10,600,143	27,445,494
kWh Savings Lifetime	111,211,100	39,001,880	150,212,980	375,797,577
Pounds of GHG Reduced Annual	5,981,727	5,802,425	11,784,152	29,935,402

* actual data is for January - October 2012, provided by APS and SRP

Discussion



- What lessons have programs learned about working effectively with utilities and transitioning to new roles and responsibilities?
- What are key remaining challenges for collaboration between programs and utilities?

What lessons have programs learned about working effectively with utilities?

- Utilities can be one of the most substantial funding resources available in the marketplace
 - Better understanding of how utility funding works can support those trying to establish relationships with utilities or further enhance how programs deliver services and/or interact with utility partners
- Need to understand the point of view of the utility, which is primarily focused on balancing load, revenues, conservation, and protection of rate payers
 - Unless a utility can build program costs into its rate design, it is difficult for it to get involved in demand side management, rebates, etc.
 - In addition to program cost recovery, utilities need a mechanism to recover lost revenues (e.g. avoided operations costs that do not necessarily yield a benefit)
- Begin talking to utilities well in advance - regulatory processes are long and utilities do not change rates quickly

- Key components of sustainable collaboration
 - Market consistency: Utilities work internally and with other utilities to ensure their programs are consistent (e.g., similar contractor requirements, program requirements, customer education, customer experience, etc.)
 - Leverage other partners; sharing costs of training, marketing, R&D, etc. can improve overall program cost effectiveness
 - Ultimately energy efficiency efforts must transcend local markets and involve collaboration regionally and nationally
- Arizona example:
 - Aligned technical standards and program delivery, and leveraged partners
 - Allowed for low operating costs, maintained cost effectiveness, and produced significant program outcomes
- Roles for Programs
 - Develop partnerships that help utilities deliver to underserved communities and retain cost effectiveness (e.g. leverage weatherization networks)
 - Facilitate program development (especially valuable for smaller utilities)

What are key remaining challenges for collaboration between programs and utilities?

- The Total Resource Cost (TRC) test is one of the most common cost effectiveness tests
 - TRC is used by about 70% of jurisdictions across the country
 - Total customer cost is the incremental additional cost of the labor and materials for a particular measure over the base case of BAU or doing nothing
 - Rebates are treated as a pass-through in the test and not included in the benefits calculation
 - Important note: avoided costs are calculated for the utility, not the customer.
- Tests need to be done at the local level
 - Demand, capacity, discount rate, etc. vary widely by jurisdictions
 - Accurate information is important for demonstrating a program's cost effectiveness
- BBNP has developed a cost-effectiveness spreadsheet to assist programs
 - Currently piloting the tool with three programs; results to be reported soon
- Whole house programs involve lots of costs and can be difficult to screen for cost-effectiveness
 - Start with interim steps to build utility comfort (e.g. rebates for duct sealing or insulation)

What are key remaining challenges for collaboration between programs and utilities?

- Availability and use of data is a key challenge industry-wide
 - Utility usage data is owned by the customer and confidential; programs need release forms to procure data
 - Data security concerns: If a utility data set is compromised, the utility has to notify all its customers, which is a significant cost risk
- Need to manage process to mitigate risk for utility and give market the ability to use data in meaningful way
 - Paperless legal releases can streamline the ability to get customer permission (e.g. work with local utility to use docu-sign)
 - White House Green Button initiative to standardize customer data files has potential, but need to build software and control costs
- Collaboration is important to align on regional and national basis how programs and utilities use data
 - Large-scale adoption of data standards is coming (HPXML)
 - The Northeast Energy Efficiency Partnerships (NEEP) has launched its regional data standards/database for energy efficiency programs

What are key remaining challenges for collaboration between programs and utilities?



- Attribution – who gets credit for impacts?
 - In Arizona, utility established the relationship and contributed the majority of the funding, so took credit for the majority of the impact
- Different approach to energy efficiency investments
 - Eventually, people will not pay for not using energy
 - Focus on the greatest system and rate impacts - find ways to work with the utility to allocate energy efficiency investments to meet more complex utility needs and “hot spots” (areas in a utility service territory that are more exposed from resource distribution perspective than others)

Future Program Sustainability Call Topics



Program Sustainability calls will be on Thursdays from 12:30-2:00 PM on the dates below

- Program Sustainability Mastermind Session (February 14)
- Administering Non-profit Energy Efficiency Programs (March 14)
- Unique Fee-For-Service Revenues (April 11)
- Lender-based Revenues and Cost Savings (date TBD)

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