Two Paths, One Program: Incorporating Prescriptive and Performance Approaches in a Multi-State New Construction Program

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ABSTRACT

Utilities have tried countless means and approaches to encourage higher energy efficiency standards for new homes rather than trying to retrofit them at some later date. Today, there are many new residential construction demand-side resource programs around the country aiming to cost-effectively capture what would otherwise be "lost opportunities."

PacifiCorp operates electric-only utilities in six different states, each with distinct requirements and needs from a resource perspective. This entails tailoring programs to ensure the most cost-effective approach possible. PacifiCorp's Utah Power program in Utah and the Pacific Power program in Washington follow two different paths, albeit under the same ENERGY STAR[®] New Homes Program umbrella. In Utah, the new construction program is designed as a "performance path" program using Home Energy Rating System (HERS) Raters to perform inspections and verification. Washington is designed to correspond with the existing four-state Northwest ENERGY STAR program operated by the Northwest Energy Efficiency Alliance. It uses a prescriptive "Builder Option Package" approach.

This paper discusses the process pursued in the design of the PacifiCorp New Homes program, as well as the challenges of creating, designing and operating an electric savings-only program for a multiple-state utility. It highlights anticipated energy savings, incremental costs, and the importance of developing creative marketing approaches in meeting the requirements of different program designs. It also offers a glimpse into the obstacles encountered and how they were overcome.

Introduction

Although multi-state utilities are not unusual, there are distinct challenges to running one turnkey single family and multi-family residential new construction program across state lines. In order to remain cost-effective and to reflect various market personalities, strategies must differ in each state. This paper will explore the process pursued in the creation and design of this program for an electric-only utility. It includes an overview state-specific program elements, anticipated energy savings, estimated incremental costs and challenges to success.

Background

PacifiCorp, doing business as Utah Power and Pacific Power, files and regularly updates an Integrated Resource Plan that details its needs from a supply side and demand side basis. As part of this process, the company issues Requests for Proposals (RFP) seeking demand side resources. This program was initiated in response to such an RFP.

The RFP for a residential new homes program covered three states: Utah, Washington and Idaho. We will describe only Utah and Washington programs in this paper because the tariff

in Idaho has not yet been filed. Utah's program launched early 2005, with Washington following a few months later. PacifiCorp had not sponsored any residential new construction programs in any of its service territories since the Super Good Cents days of the 80's and 90's. The market for an ENERGY STAR[®] new homes program was nascent and many contractors were not expecting to see a utility-sponsored residential new construction program.

The initial strategy developed was to promote long-lived measures and sustained air conditioning load reduction. Over the past few years there has been explosive growth in air conditioning use in the western United States (Shroeder, Zaragoza, Little, and Gilroy 2004). As a result, utilities and vendors providing efficiency programs are focusing more on air conditioning load today. Those measures likely to be underutilized in PacifiCorp's service territory, such as duct sealing and windows, were also a key element, and we avoided overlap with measures covered under existing PacifiCorp demand side management (DSM) programs.

Utah

The state of Utah had a very small contingent of EPA ENERGY STAR builders when the Company program began in 2005. Additionally, there was only one active Home Energy Rating System (HERS) provider in the state. HERS Raters are a key foundation block in the Utah Power program because they are the only entity that can certify new homes to be ENERGY STAR – a requirement for the performance path.

Washington

The state of Washington, through the Northwest Energy Efficiency Alliance, had an existing ENERGY STAR program in place, although it was only in its first year. Unlike Utah, the Northwest ENERGY STAR program uses a Builder Option Package (BOP), which is essentially a prescriptive path instead of a HERS-based performance path program. Since Washington uses the prescriptive BOP, the program design was fundamentally different from Utah. In short, one residential new construction program ended up with two distinct design components.

Initial Program Targets

The goal of this program is to certify 11,501 single-family homes and multi-family units over a five-year period, (Table 1) equating to approximately 10% of the new homes market¹. The savings associated with these residential units (Table 2) is 20,551 MWh.

¹ see <u>http://www.business.utah.edu/go/bebr/908</u> for information on building permits

Program Year	Utah	Washington	Idaho
1	362	40	10
2	1780	162	34
3	2,329	198	46
4	2,874	213	47
5	3,146	217	43
Totals	10,491	830	180

Table 1. Five-Year Unit Goals

Source: Ecos Consulting and Dave Baylon, Ecotope, Inc.

		ai bavings Goals (mi m	()
Program Year	Utah	Washington	Idaho
1	999	138	49
2	3,796	530	86
3	3,410	655	105
4	4,272	704	106
5	4,884	716	100
Totals	17,361	2,743	447

Table 2. Five-Year Savings Goals (MWh)

Source: Ecos Consulting and Dave Baylon, Ecotope, Inc.

Program Design Solutions

To accomplish the successful design and implementation of this program, a strong program team was assembled. In addition to PacifiCorp and Ecos Consulting, partners included ICF Consulting, Ecotope and Delta T. In the initial program design, several strategies were developed to capture the electric savings needed for a successful residential new construction program. These included:

- Requiring prescriptive measures to ensure electric savings²
- Instituting a strong account management team to recruit and service contractors
- Leveraging local market actors to ensure a sustainable delivery mechanism

The Challenges

This demand-side program had three primary obstacles. The first had to do with the immature ENERGY STAR infrastructure and brand awareness in the program service territories. There was not a vigorous ENERGY STAR new homes program in either state. A distinct lack of awareness of ENERGY STAR, particularly as it related to new homes, was found in both the Pacific Power and Utah Power service territories. While performing our original market research in 2003, only several of the dozens of builders we interviewed had any familiarity with ENERGY STAR new homes. Even code enforcement appeared to be lacking in many jurisdictions.

The incremental cost of the energy efficiency measures required to reach the Utah Power ENERGY STAR (and to a lesser extent the Pacific Power ENERGY STAR) new homes specification represented the second challenge to overcome. In Utah, builders gave us a total

² Prototypical homes for each state were modeled by Ecotope to develop savings estimates; space conditioning loads were originally targeted as the most cost-effective solution to the savings.

incremental cost of anywhere between \$900 and \$2500. Typical upgrade components in the program include SEER 13 air conditioner (from a SEER 10), low-e glass and duct sealing. Specific examples are addressed in the Incremental Costs section below.

In any program where builders and subcontractors are not familiar with certain methodologies, the resistance to change is tremendous. It was no different with the PacifiCorp program. One of the ways to avoid change or reduce risk is to increase the cost to cover the unknown, which the homeowner must absorb. Energy efficiency programs typically must overcome this high price discrepancy when launching new programs in order to be successful.

The third challenge deals with climate conditions in these respective states and the associated heating fuel preferences. In each state territory – especially Utah – gas heating is a major factor, so few electric heating savings can be achieved under the ENERGY STAR program. Add the relatively insignificant cooling loads associated with each state and the bottom line is there are not many kWh savings to be found in heating and cooling. However, because of continued growth in air conditioning use, we targeted the limited cooling load because it represented the bulk of the available savings.

Modest existing ENERGY STAR programs. As noted previously, all markets had an immature ENERGY STAR infrastructure and limited ENERGY STAR new homes brand recognition. Utah was the only state that some limited ENERGY STAR new homes activity. Even so, the number of new homes being built to ENERGY STAR standards represented only a tiny fraction of the entire new homes market, approximately one percent in 2004 (Petersen, 2004; Utah Construction Report, 2004). This activity existed in only two locations in the state. The first was St. George in southern Utah, which is primarily served by public utilities and therefore not eligible for the Utah Power program. The second location is in a development called Daybreak, located along the Wasatch Front, and it requires all homes to be certified as ENERGY STAR.³

Each of these ENERGY STAR communities is served by the one active existing HERS Rating Provider, with only one full time Rater. Utah Energy Conservation Coalition (UECC) is a non-profit organization offering rating services and training on a variety of topics, including home energy rating and energy codes. Although one existing Ratings Provider is satisfactory for the program year one goal, it is clear that additional Raters will be required to achieve unit and savings goals in future years.

The state of Washington falls under the umbrella of the Northwest ENERGY STAR Program. This program follows a prescriptive path and uses Performance Testing Contractors (PTCs) and Verifiers to carry out the inspections and testing needed to certify a home ENERGY STAR. This program had only been operating for a few months when the Washington Pacific Power ENERGY STAR New Homes Program launched. Although there were Verifiers and PTCs in several of the Washington markets, none were located in the Pacific Power rural eastern Washington service territory. The program either needed to recruit these resources from adjacent communities (none were particularly close) or recruit and train new PTCs and Verifiers. This prerequisite had to be met before any homes could be certified.

Incremental costs. Experience has shown that the amount of incremental cost in new programs tends to be higher in the beginning, but usually comes down over time. The unknown has significantly increased the cost of constructing an ENERGY STAR new home as contractors seek to cover their risk. The incremental costs identified by builders have been quoted to be as

³ The Wasatch Front is where the majority of the state's new homes are constructed.

high as \$2000, which is on par with other ENERGY STAR homes programs (Rashkin, 2004). In addition, the California statewide ENERGY STAR New Home Program evaluation report stated that 48% of builders reported they experienced at least one barrier to participation. The most common barrier cited was "funding uncertainty" (Brost & Gobris, 2004).

As a result, considerable builder incentives are offered in each state to partially offset the incremental costs of program measures. The incentives for each ENERGY STAR certified program home ranges from \$350 to \$1000. Incentives for "plus" measures are also available and will be discussed further below.

Climate conditions. In each climate, heating is the dominant influence and natural gas is the primary heating fuel. With little opportunity to gain demand-side kWh savings through heating, the majority of program savings will be achieved through cooling measures. The estimated savings for program year one was 1,802 kWh per home and 1,931 kWh per home in program year two. Table 3 illustrates the challenge presented to the program with its low number of cooling hours that contribute to a minimal cooling load. Table 4 illustrates the estimated first year kWh and therm savings per home for each state.

Table 5. Heating and Cooling Degree Days										
City, State	Heating Degree Days	Cooling Degree Days								
Salt Lake City, Utah	5,458	1,105								
Yakima, Washington	6,008	467								
Rexburg, Idaho	8,097	205								

Table 3	Heating a	nd Cooling	Degree Days
I abic o	i i i catiling a	ind Cooming	Degree Days

Source: Western Regional Climate Center (http://www.wrcc.dri.edu/index.html)

I able 4. Estimate	d kwh and Therm Savings Per	Home – Program Year I
State	Therm Savings	kWh Savings

State	Therm Savings	kwn Savings
Utah	294	1,802
Washington	166	3,424
Idaho	350	1,578

Modeling runs using SEEM⁴ building simulation software by Dave Baylon, Ecotope, Inc.

Performance Path in Utah

Under a performance path process, new homes can achieve an ENERGY STAR certification by utilizing energy saving measures that combine to reach a HERS score of 86 or better. The EPA is changing the performance path requirements from a HERS score to a HERS index as of the new ENERGY STAR specification in 2006.⁵ The measures may include any or all of those referenced in the following section and are modeled using authorized software to produce the score/index.

Energy saving measures. The main categories of measures modeled by HERS qualified software include building envelope upgrades, high performance windows, controlled air infiltration, high efficient heating and cooling systems, tight duct systems, and more efficient

⁴ The SEEM building simulation model is specifically designed for evaluating residential heating and cooling loads. It is a developmental model authored by Larry Palmiter of Ecotope, Inc. The model is an hourly finite element model with a simplified implementation of a Mean Radiant Temperature calculation in both the conditioned zones and the unconditioned zones.

⁵ <u>http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/Perf_Path_Final_122305.pdf</u>

water heating equipment. With available savings concentrated mostly in the HVAC equipment and delivery systems, the following measures are targeted under the program:

- High performance air conditioners (SEER 13 when minimum was SEER 10)
- Performance duct sealing
- Locating duct systems in conditioned space
- Testing and commissioning of air conditioners
- Evaporative cooling systems

Other non-HVAC system measures include:

- High performance windows with appropriate Solar Heat Gain Coefficients (SHGC)
- Envelope/insulation measures
- ENERGY STAR appliances, lighting and ceiling fans

In a performance-based program, trade-off measures can be used to increase efficiency in one part of the home and lessen the efficiency in another part. For instance, better windows may be used to offset a decrease in insulation. The software HERS Raters use to calculate home scores can be manipulated to let builders know where they can increase or decrease measure efficiency and still qualify for ENERGY STAR. This is also true in the Utah Power program to if minimum qualifying standards are maintained.

Incremental costs. To help address the incremental cost issue, we have been working with the low-e glass manufacturer and with low-e window distributors in Utah. With their input we have lowered the cost of low-e glass to builders by a small amount. However, this does represent some progress. Listed below are incremental cost quotes from HVAC suppliers/dealers retrieved from our builder interviews held during our market research period.

- Holmes Homes \$800 to go from a SEER 10 air conditioner to a SEER 13
- DR Horton \$700 to go from a SEER 10 air conditioner to a SEER 13 and \$500 to go to low-e glass
- Fieldstone Homes \$900 to upgrade to Utah Power ENERGY STAR
- Wright Homes \$600 to go from a SEER 10 air conditioner to a SEER 13
- Ivory Homes \$800 to go from a SEER 10 air conditioner to a SEER 13 and \$600 to go to low-e glass

Another added cost area is the third-party inspection required by the program and EPA ENERGY STAR to certify the homes. In most cases the cost of the HERS inspection is approximately the same amount of the builder incentive, so they end up canceling each other out – another market barrier.

Program infrastructure. At this point, the HERS Raters were in place, but builders and subcontractors who were adequately trained to construct an ENERGY STAR new home were in short supply. The program requirements necessitated a hands-on training, primarily for HVAC contractors. HVAC system measures comprised the bulk of the savings of the program, thus

training was concentrated on those HVAC contractors who worked primarily in the new construction market. To date over twenty HVAC contractor crews have been trained.

Energy savings. Savings targets were calculated by combining a performance path minimum standard and adding the prescriptive measures that would be required in order to reach beyond the minimum HERS score of 86. The five-year savings estimates for Utah were outlined previously in Table 2. Savings will come from the solutions outlined below and from the measures detailed in a later section. "Plus" measures, discussed in the next section were also introduced to add to the potential savings.

Solutions. We outlined a combination of strategies that together would achieve the desired energy resources. The first involved capturing some prescriptive requirements to guarantee minimum savings that the program needed to prove cost-effectiveness. Homes were still obligated to reach the 86 HERS score but were also required to meet the following supplementary benchmarks:

- Minimum window U-Value of .35
- Minimum air conditioning SEER rating of 13 (when the standard was SEER 10)
- Performance based duct sealing standard

The second strategy was to employ an account management arrangement that would ensure outstanding customer service to builders, contractors and HERS Raters. This implementation strategy would also provide the initial training and education needed to engage the stakeholders and enact change. A third strategy was to follow the sales presentation via account managers with a specific and field-based training program that would motivate participants to reach the minimum requirements to build to ENERGY STAR standards. Fourth, "plus" measures were added and included:

- Evaporative cooling systems
- ENERGY STAR qualified dishwashers and ceiling fans
- Lighting upgrade to ENERGY STAR fixtures (fifteen for single family and five for multi-family)

Our final strategy involved building relationships with local market actors to create the infrastructure necessary to ensure that the program functions smoothly and continues to deliver savings into the future. This strategy involves providing the local market actors with tools to help them promote energy efficiency measures to customers. Cooperative advertising dollars, energy efficiency measure data sheets and on-the-job training are a few of the program offerings.

Prescriptive Path in Washington

The Northwest ENERGY STAR program utilizes a prescriptive Builder Option Package to achieve ENERGY STAR certification.⁶ Under these guidelines, builders achieve certification by installing a prescriptive set of measures. In this case there are no trade-offs as there are in the

⁶ See <u>http://www.northwestenergystar.com/index.php?cID=119</u> for more information.

performance path. However, there are some Technical Compliance Options that function somewhat like trade-offs.

Coordination with Northwest ENERGY STAR. In following the guidelines of this existing Northwest ENERGY STAR program, it is necessary to coordinate our program and processes with this organization. This can lead to some unusual scenarios because the Northwest ENERGY STAR program is not required to file a tariff with the Washington Utilities and Transportation Commission. Since PacifiCorp is required to do so, program design for the upcoming year is determined in the fall of the preceding year, yet decisions for the Northwest ENERGY STAR program may not happen until much later – presenting a logistical challenge. Additionally, the Northwest ENERGY STAR program. Our program is electric only while the Northwest ENERGY STAR program can utilize both electric *and* gas savings.

Prescriptive measures. The Builder Option Package (BOP) has two sets of specifications depending upon the heating system builders install. BOP 1 is for natural gas fired furnaces and electric heat pumps. BOP 2 is for zonal electric, propane and oil furnaces. BOP 1, which is the most popular builder path, consists of the following common minimum requirements.

- Ceiling insulation R-38
- Wall insulation R-21
- Floors over conditioned space R-30
- Slab on grade floors R-10 perimeter
- Basement walls R-19
- Windows U-0.35
- Maximum glazing area of 21% of heated floor area
- Ducts R-8 (mastic sealing required; no cloth tape)
- <0.06 CFM per square foot of floor area or 75 CFM total at 50 Pa
- Gas furnaces 90%
- Heat pumps 8.0 HSPF (Pacific Power program requires a higher HSPF)
- Built in appliances must be ENERGY STAR
- Lighting sockets minimum of 50% must be ENERGY STAR

Incremental costs. Since several of the above measures are higher than local energy codes, including those in Pacific Power service territory, there are incremental costs associated with building to the Northwest ENERGY STAR standard. Although incremental costs quoted to us by builders are not quite as high as those quoted by Utah builders there can be a significant difference. There have not been enough Pacific Power ENERGY STAR homes constructed to be conclusive on this matter.

Similar to the Utah program, third party inspections and testing are also required in Washington. Verifiers and Performance Testing Contractors take the place of HERS Raters in this state, overseen by the Northwest Energy Efficiency Alliance. Initial costs for home certifications were quite expensive, ranging from \$525 to \$600. However, because no third-party inspectors were located in the Pacific Power service territory, travel time added to the cost. Fortunately, the program recently recruited an area Verifier and Performance Testing Contractor and costs have dropped to under \$500.

Program infrastructure. As noted above, the program recruited a local HVAC contractor to be trained to serve as a Performance Testing Contractor and a Verifier, and thus has eliminated the need to call in technicians from adjacent communities, sometimes as far as a two- or three-hour drive away. However, as the program grows additional contractors will need to be recruited.

Energy savings. Savings targets will be realized through the prescriptive measures required for the Northwest ENERGY STAR program. This is in much the same way we used "prescriptive plus" measures in the Utah Performance program.

Solutions. For the most part, electric energy savings in Washington align with the Northwest ENERGY STAR BOP. The account management strategy utilized in Utah is similar to Washington. It provides outstanding customer service to builders, contractors and PTC/Verifiers. The Account Manager also provides the initial training and education to facilitate the deployment of the knowledgeable participants. Field-based training is a part of the strategy to achieve participation, compliance and savings. It is critical that the program team develop relationships with local market actors to produce the market infrastructure outlined earlier in the Utah section. Again, the purpose is to make certain the program functions smoothly and can continue to deliver savings into the future. This strategy includes providing the local market actors with those same tools to help them promote energy efficiency measures to customers.

Creative Marketing Solutions

Marketing tactics have been used to increase builder and contractor participation and to promote the program to consumers. The original marketing strategy targeted encompassed the following procedures in a multi-faceted marketing campaign. While the program offered moderate incentives, the program's success hinged on its ability to effectively convince builders there is a viable long-term market for energy-efficient housing. Initial tactics included:

- Targeting relevant messages for all players and participants in the new home construction value chain: developers, builders, design consultants, real estate agents, lenders and homebuyers
- Forging strategic partnerships with relevant stakeholders to lend credibility to our program and leverage marketing expertise and resources
- Building upon the credibility of the ENERGY STAR, Utah Power and Pacific Power brands
- Utilizing a cooperative marketing campaign for builders and other program allies
- Creating customized marketing collateral for program participants

We have utilized all of the above tactics to one degree or another, the most successful to date being strategic partnership development and cooperative advertising. All market channels have been explored and will continue to undergo similar scrutiny to guarantee the most cost-effective way to market to stakeholders. Additionally, we held a focus group to determine what consumers look for in new homes. Where possible, we have coordinated with PacifiCorp to make use of existing utility market channels to reach customers.

Program Cost-Effectiveness

A third party consultant conducted the cost-benefit analyses for the purpose of filing the program details with each state utility commission. Quantec calculated cost-effectiveness using a Demand Impact and Cost Effective Model, and determined that the program for each state is cost-effective under all scenarios. Tables six and eight below show the company's Integrated Resource Plan (IRP) 10% Load Factor Decrement for each respective state. Tables seven and nine show Program Cost and Savings for each.

Table 6. PacifiCorp (Utah) IRP 10% Load Factor Decrement – Five-year Pr

All Measures	Overall	Re	esults	AC: IRP 10%		
	Costs		Benefits		Diff	Ratio
Total Resource Cost Test (TRC) + Conservation Add	\$ 6,834,522	\$	33,830,249	\$	26,995,727	4.950
Total Resource Cost Test (TRC) no Adder	\$ 6,834,522	\$	30,758,405	\$	23,923,883	4.500
Utility Cost Test (UCT)	\$ 8,209,326	\$	20,454,125	\$	12,244,799	2.492
Utah Rate Impact Measure (URIM)	\$ 8,258,528	\$	20,454,325	\$	12,195,797	2.477
Participant (PCT)	\$ (1,374,803)	\$	15,687,122	\$	17,061,925	n/a

Table 7. PacifiCorp	(Utah)) Program	Costs	and Savings	5
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													Total Utili		otal Utility	Annual			
Year	Adminis	stration	Evaluation	I	ncentives	Ins	Inspections		Inspections		Inspections		Inspections		Inspections		Inspections Cost		Savings
	Program	Utility								(kWh)									
1	\$ 1,069,333	\$ 60,000	\$ 100,000	\$	171,262	\$	5,000	\$	1,405,596	738,771									
2	\$ 1,137,246	\$ 30,000	\$ 100,000	\$	751,283	\$	7,500	\$	2,026,031	3,285,920									
3	\$ 1,022,569	\$ 30,000	\$ 100,000	\$	926,578	\$	10,000	\$	2,089,150	3,630,496									
4	\$ 1,013,526	\$ 30,000	\$ 100,000	\$	1,211,822	\$	10,000	\$	2,365,352	4,709,774									
5	\$ 1,057,145	\$ 45,000	\$ 100,000	\$	1,331,828	\$	10,000	\$	2,543,978	5,200,953									

Table 8. PacifiCorp (Washington) IRP 10% Load Factor Decrement – Five-year Program

All Measures	Overall	Re	sults	AC: IRP 10%			
	Costs		Benefits		Diff	Ratio	
Total Resource Cost Test (TRC) + Conservation Add	\$ 1,679,951	\$	3,092,883	\$	1,412,932	1.841	
Total Resource Cost Test (TRC) no Adder	\$ 1,679,951	\$	2,811,711	\$	1,131,760	1.674	
Utility Cost Test (UCT)	\$ 1,098,978	\$	1,447,235	\$	348,257	1.317	
Utah Rate Impact Measure (URIM)	\$ 2,379,811	\$	1,447,235	\$	(932,576)	0.608	
Participant (PCT)	\$ 580,974	\$	1,679,572	\$	1,098,598	2.891	

Year		Adminis	stra	tion	Ev	aluation	Iı	ncentives	Inspections		Inspections		Inspections		Inspections		Inspections		Inspections		Inspections		Total Utility Cost		Annual Savings
	P	rogram		Utility									(kWh)												
1	\$	171,257	\$	24,000	\$	20,000	\$	21,388	\$	1,000	\$	237,646	148,934												
2	\$	164,957	\$	12,000	\$	20,000	\$	84,261	\$	1,500	\$	282,720	519,716												
3	\$	157,190	\$	12,000	\$	20,000	\$	103,704	\$	2,000	\$	294,897	642,286												
4	\$	151,230	\$	12,000	\$	20,000	\$	111,612	\$	2,000	\$	296,846	689,847												
5	\$	150,161	\$	18,000	\$	20,000	\$	113,557	\$	2,000	\$	303,723	702,104												

Table 9. PacifiCorp (Washington) Program Costs and Savings

Lessons Learned and Conclusions

Although the program has been running a relatively short time, we can draw several preliminary conclusions.

Do Not Underestimate Resistance to Change

New markets take time to develop no matter how much resource you expend in trying to transform that market. The marketing plan identified credible paths to pursue, but the amount of time it takes to introduce and launch the various strategies was misjudged. It is essential to clearly understand the "resistance to change" in any given market. Quite simply, we underestimated this resistance in both Utah and Washington.

Multi-State Programs Present Program Management Resource Challenges

Although one utility company may operate in more than one state, launching a multi-state program really means you are launching one program per state. As a result, program management resources are divided, marketing resources are diluted to implement campaigns in different states, and budgets are strained in an attempt to satisfy all entities.

Leverage Local Resources

Partnerships with strategic market actors are extremely important. If recruited well, they can leverage your strained resources and will act as an extended sales force for your program. Even though only limited partners may receive incentives (in this case the builders), other associates can be successfully integrated into the program. This results in a more robust effort by all stakeholders. There are a number of external stakeholders our program found helpful.

Local and state homebuilders associations. Membership in local Homebuilder Associations (HBAs) is essential to the success of the program, and active participation is just as important. The program joined one local area HBA in the Washington service territory and four of the largest HBAs in the Utah service territory. Program personnel regularly participate in monthly meetings, and the program sponsors a number of HBA events, such as Tours of Homes and special builder meetings.

Planning and building departments. These organizations provide the building permit and planning data for local jurisdictions. Engaging the person who "owns" this data can provide important information about areas with significant building activity. They may also be able to provide names and contact information for large developments planned in the program territory.

Low-income and subsidized housing organizations. There are many organizations that provide housing for low-income families, including new homes and multi-family units. The program has connected with several of these organizations. In Washington, the Diocese of Yakima Housing Services builds both single family and multi-family housing for low-income migrant workers. The program participated in the promotion of a demonstration house developed by this organization and built by the Graduate Architecture students of the University of Washington. In Utah, several of the subsidized housing organizations are participants in the program. These include Six County Association of Governments, Five County Association of Governments, Bear River Association of Governments, Utah Housing Corporation, USDA Rural Development and the Rural Housing Development Corporation.

Members of each state's DSM Advisory Committee. This group of stakeholders was engaged early in the process to review and provide feedback on the program before it was filed as a tariff. Interaction with this group was primarily conducted by the utility.

Political entities on the local, state and regional level. In each of the geographical areas of the company service territories, there are utility employees that have contact and relationships with the local political bodies. Program personnel are getting involved in the political scene, such as development grand openings and other ENERGY STAR marketing events.

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