Commercial Customer Reaction to Reduced Incentives

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ABSTRACT

As deregulation approached, Eugene Water & Electric Board (EWEB) chose to systematically ramp down commercial retrofit incentives in 1995 to determine the impact that various incentive levels have on program participation and energy-saving measure implementation. After three years of testing, EWEB found that actual customer reaction is not as negative as previous surveys or data projected. When loans are combined with reduced incentives, significant demand-side resources can still be acquired with the benefit of a lower unit cost. The demonstrated program design allows viable resource acquisition programs to continue, even as utility conservation budgets are squeezed in a competitive environment.

This paper reviews the program design and analyzes customer response to various incentive levels across two dimensions: utility contribution (share of measure cost) and customer net payback. Results are presented for the entire group of participants and for different sized customers. Based on the results, the authors recommend a middle way: start incentives at a level that will allow adequate participation, and later adjust incentives upwards when market response falls.

Introduction

Past studies into the impact of utility demand-side management (DSM) incentive levels concluded that incentives should either be very high (to increase participation and reduce marketing costs) or be eliminated in favor of information-only programs. As a result, many early DSM programs were designed with relatively high incentive levels. These programs were cost-effective to society at large, based on the long-term planning horizon of vertically integrated utilities. With electric utility competition, DSM programs will have to be made as cost effective as possible if they are to continue. Recently, many utilities have chosen to abandon incentives (providing information-only programs); to establish public purpose programs (tied to a very limited percentage of electric revenues); or to eliminate utility DSM programs entirely (since "the market will provide").

This paper shows how one set of commercial customers behaved when offered varying utility incentive levels combined with utility-financed low-interest loans. The data are the result of a three-year field study in the service territory of Eugene Water & Electric Board (EWEB), a moderate sized public utility.

Background

In 1994 EWEB was faced with the end of regional support from the Bonneville Power Administration (BPA) for their commercial DSM program. Under the regional program incentives were set relatively high, averaging 55% of Energy Conservation Measure (ECM) cost and capped at 70%. With the end of regional support also came the end of regional control, so it was appropriate to review EWEB's commercial DSM program design and effectiveness.

A literature review found widely varying conclusions regarding optimal utility incentive levels. Mast and Ignelzi (1994) concluded that "incentives' . . . role may be less important and quite different than [was] formerly thought." In contrast, Tolkin and Ford (1994) came to the conclusion that incentive levels are very important in commercial DSM programs. Warner (1994) agreed, looking at total program cost, including management, incentives, and marketing. He produced a theoretical model that shows a relatively constant total cost for incentive levels ranging from 50% to 80% of measure cost. Below a 30% incentive level he expected it would be necessary to significantly increase marketing costs, resulting in increased overall program costs.

Commercial Program Review with Decision Analysis

Hart (1995) used decision analysis[1] to analyze the program and aid in redesign. Figure 1 shows the influencing variables considered most likely to significantly impact program success in terms of customer participation, conservation achieved, and total resource cost. Each influencing variable is briefly described below.

- **Incentive Level Impact.** This is the impact on customer response of the offered utility incentive level.
- **Economic Impact.** The influence of general economic conditions on participation.
- **Advertising Impact.** The influence on participation that can be achieved through a local advertising campaign.

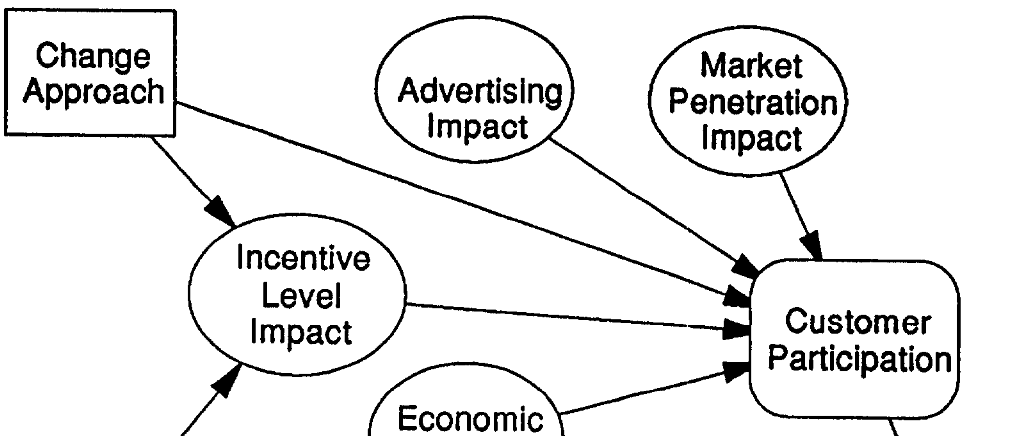

Figure 1. Decision Analysis Influence Diagram

[1] In a decision analysis, key variables are not given a single value, but instead are analyzed over a range of values reflecting uncertainty about their true value. A decision analysis does not yield a single answer, but a range of results with associated probabilities and an *expected value*. The advantage of a decision analysis method over a deterministic analysis is that it reveals the range of outcomes that might result from a program decision. Decision analysis also highlights which of the influencing variables have the biggest impact on program success.

- **Market Penetration Impact.** The impact of the percentage savings already acquired from the market as compared with the technical potential of savings.
- **Loan Default Rate.** The percentage of loans expected to be uncollectable each year. This variable affects program cost, rather than customer participation.

Sets of values and probabilities for these influencing variables were analyzed with DPL decision analysis software to find probable value ranges for savings acquired, total program cost, and levelized cost per kWh saved. Preliminary analysis reduced the alternatives under consideration to just two:

- Continuing the original program with incentives capped at 70% and averaging about 55% utility contribution toward ECM cost, or
- Adding low-interest loans, adding a comprehensiveness bonus incentive, and ramping down incentives over two years so the incentive drops from 55% to 25% of ECM cost.

The analysis predicted that both levelized resource cost and total resource acquired were most sensitive to incentive level impact, followed by advertising impact, market penetration impact, economic impact and loan default rate, in that order. In fact, the incentive level impact had more than 2.5 times the influence of any other variable. Table 1 shows the expected value results for the two program alternatives, and the percentage reduction from the original program for each measure.

Table 1. Expected Values for Key Measures of Program Success

Result (5 year projection)	**Original Program**	**Ramp-down Program**	**Reduction**
Energy Savings (MWh)	65,000	43,600	30%
Program Cost ($000)	$17,984	$9,994	45%
Levelized Cost (mills/kWh)	26.53	22.44	15%

Scope

Due to the contradictory results from prior studies and the strong influence that incentive level impact was expected to have on program results, EWEB decided to conduct a field study to better determine the actual impact of utility incentive levels on customer participation. *Incentive level* is a general term that can be viewed from a number of perspectives. To reduce confusion and allow study results to be used for various purposes, we analyzed incentive level in terms of the following variables:

- **Levelized cost** is expressed in lifetime mills per kWh saved[2]. The levelized cost represents what the utility is willing to pay for energy savings (*e.g.*, 20.5 mills per kWh) and can be compared with the cost of replacement generation in an integrated resource plan.
- **Project Payback** is the customer's net simple payback in years. It is the customer's *net cost* after incentives and tax credits divided by the *annual electric cost savings* (*e.g.*, 2.1 years).
- **Utility Contribution** means the percentage rebate or incentive that the utility pays when a customer installs an ECM (*e.g.*, rebate 50% of measure cost). Customers often view the utility contribution as a discount on their ECM cost.

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[2] Levelized cost accounts for the initial ECM cost, cost of capital, inflation, nominal and real discount rates, and the total estimated energy savings over the expected life of the ECM. The method used is developed by BPA effective June, 1993. Although discount and inflation rates have changed somewhat since then, the use of 1993 factors will allow easy comparison with other studies made at that time.

From the utility's perspective the levelized cost is most important in deciding whether or not to offer the program, but from the customer's perspective the important factors influencing their decision (whether or not to complete the energy project) are the utility contribution and the project payback. Both utility contribution and payback are analyzed to learn how customer completion of commercial retrofit projects varies in response to changes in these values. The focus of the study was whether or not customers chose to install the ECM installation after receiving an energy analysis[3]. This decision is analyzed to calculate the probability of project completion. Both utility contribution and project payback were analyzed to see if either is significant in determining the probability of project completion. Results were then used to predict total resource cost at various utility contribution levels.

Levelized cost is not analyzed as a driver of customer change, but is calculated after-the-fact based on installed measure costs and participation. The scope of the analysis was limited to retrofit projects, since new construction or market transformation programs have different goals. Although loan availability was considered an important part of program design (30% of participants took out loans) the study does not analyze the impact of loan availability on participation decisions. Finally, the study does not analyze the impact that marketing methods may have on customer participation.

Field Study Design

To test the impact of incentive levels on customer project completion the average utility contribution was quietly ramped down from 55% of project cost to about 25%. Each step when the incentive rate was reduced is called a *program cycle*. Each program cycle lasted approximately one calendar quarter. An important element of the study design is that incentive changes were made gradually: 5% quarterly reductions rather than a single abrupt 30% drop. Like the boiled frog who does not notice gradual temperature changes (Senge, 1994), customers should be less impacted by gradual changes. The exact method of incentive calculation was not advertised. Each customer who received an analysis was given an incentive *offer* that expired within 60 days. Starting in Cycle 2, low-interest (6%) loans were available to all customers (on approved credit) and a bonus incentive was applied to comprehensive[4] projects. The program elements that change for each cycle are described below with numerical values shown in Table 2.

- The base incentive is a function[5] of project electric savings, ECM life, and the rate EWEB pays for energy savings. The rate EWEB pays for energy savings is reduced in following cycles by a cycle adjustment factor (**Adj Fctr** in Table 2).
- A **Cap** was put on the base utility incentive contribution that changed over time, first rising and then declining. The incentive cap was calculated as a percentage of total project cost. The base incentive was also capped so the customer payback was at least one year.
- **Projects:** the number of project offers in each cycle included in the study data. About 10% of the incentive offers were still outstanding and were removed from the data set.
- **% Complete:** the percentage of incentive offers that resulted in customers choosing to complete projects.

[3] Customers received either a free energy analysis by the utility or a rebate towards a consultant analysis.
[4] To encourage maximum savings in each building and avoid "cream-skimming," a comprehensiveness bonus (about $0.05 per annual kWh saved) was applied when all practical cost-effective ECMs were included in a project. The bonus was in addition to the base incentive and was not subject to cost or payback caps.
[5] The site-based incentive calculation method was initially from BPA's Energy Smart Design program.

- **MWh Offered:** the total MWh of savings potential based on all offers made in the cycle.
- **% Saved:** the percentage of potential electric savings (from all offers) that was actually acquired by customers completing projects.

Table 2. Program Specifications and Results by Cycle

Cycle	Start Date	Adj Fctr	Cap	Projects	% Complete	MWh Offered	% Saved
1	1/1/95	100.0%	70%	18	94%	597	97%
2	3/6/95	87.5%	100%	33	88%	3,019	91%
3	6/5/95	79.2%	100%	81	83%	6,653	92%
4	10/1/95	70.8%	80%	35	80%	3,646	82%
5	1/1/96	62.5%	80%	44	64%	2,171	49%
6	4/1/96	54.2%	80%	34	68%	2,471	49%
7	7/1/96	45.8%	80%	55	53%	3,028	34%
8	10/1/96	37.5%	80%	34	71%	1,747	75%
9	1/1/97	37.5%	65%	60	62%	12,184	47%
End	11/1/97	Total/Average:		431	71%	35,516	64%

Data Analysis and Results

As can be seen in Table 2, the results for each cycle do not provide a steady completion trend. Due to limitations in cycle data set size and variation of individual project data, preliminary analysis by cycle was not enlightening. The incentive calculation method includes factors for levelized cost, payback, and utility contribution, so incentives calculated in each cycle produce a wide range of individual project results for the variables of interest. Analyzing the data by project proved more illuminating.

The levelized incentive cost for all 431 projects is plotted in Figure 2 by offer date. While the cost of any individual project varied widely due to project specific measures, the overall trend was downward. In fact, the average levelized incentive cost was cut by more than half during the study.[6] Also shown in Figure 2 are the curve fits for those projects customers accepted or completed (**YES trend**) and those projects they rejected or declined (**NO trend**). It is notable that the YES trend is almost identical to the NO trend. This indicates that levelized incentive cost is not the factor influencing the customers' decision to participate.

As discussed in the Decision Analysis section, project payback and utility contribution are expected to have the greatest influence on customer project completion decisions. Two analytical methods were used to plot payback and utility contribution: *clustered data averages* and *regression analysis*. The correlation coefficient of payback and utility contribution is 80%, so they were analyzed separately[7]. The data are further analyzed by stratifying customers into sales tiers based on electric purchases. Probabilities for project completion at various utility contribution levels are used to allocate administrative and marketing costs and predict total resource cost on a unit basis.

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[6] Administrative and marketing costs were relatively constant throughout the study period and are included later in the section on Resource Cost.

[7] The independent variables *payback* and *utility contribution* are not included in the same model because they are highly inversely related. When utility contribution goes up, project payback typically gets shorter.

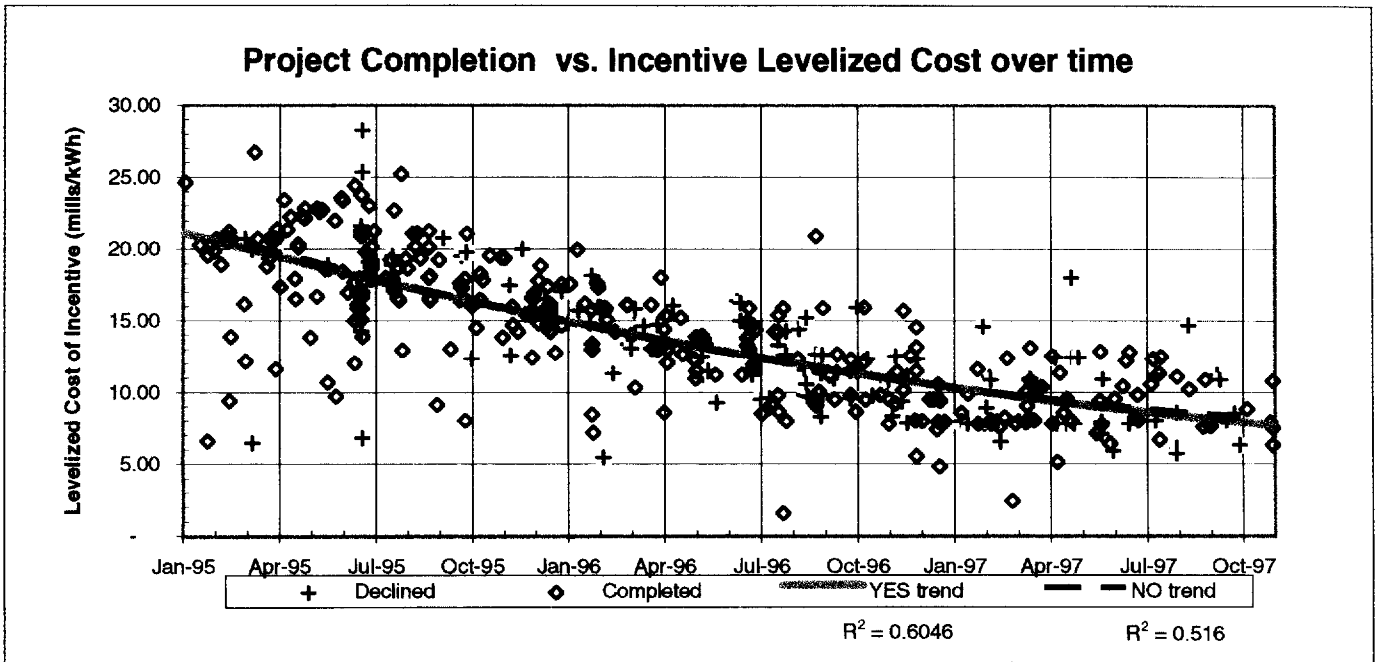

Figure 2. Levelized Cost vs. Project Completion Over Time

Customer Response to Payback

Although customers were presented with other life-cycle cost measures, simple payback[8] is used most by customers. Net payback is based on the net customer cost (*ECM cost* less *utility incentive* less *tax credits*[9]) divided by the *annual electric cost savings*. One approach used to analyze the impact of payback on customer project completion was to cluster program data by payback range and calculate the percentage of completed projects for each cluster. A preliminary evaluation of results weighted by savings was performed, but this approach gave too much bias to large projects. The final analysis evaluated project completion on a per project basis, without adjustment for project savings or partial[10] implementation. Completion rates for different payback range clusters are shown in Figure 3, plotted by average cluster payback on the x-axis vs. cluster percentage completion on the y-axis. A second-order polynomial provided the best curve fit to the data.

Another approach used a logit[11] model to perform a regression analysis of individual project completion as a function of the project payback. Results of this regression indicated that payback is statistically significant in predicting customer decisions about project installation. The regression equation is plotted in Figure 4.

[8] Payback serves as a proxy for other economic indicators and is free of customer-specific variables such as discount rates.
[9] Oregon taxpayers receive a 35% state income tax credit over five years (annually: 10%, 10%, 5%, 5%, 5%).
[10] Overall, 53% of customers installed all recommended measures, 11% installed more than recommended, 7% installed less than recommended, and 29% installed no measures (declined). To account for partial completion, the payback and utility contribution for completed projects is based on the completed cost and savings, not the offer for all measures.
[11] The Logit model allows representation of customer behavior to either accept or reject a project, and this decision is represented with a 1 if the customer accepts the project, or 0 if they do not accept the project. The logit model develops probabilities that a customer will accept a project based on the payback period and payback period squared.

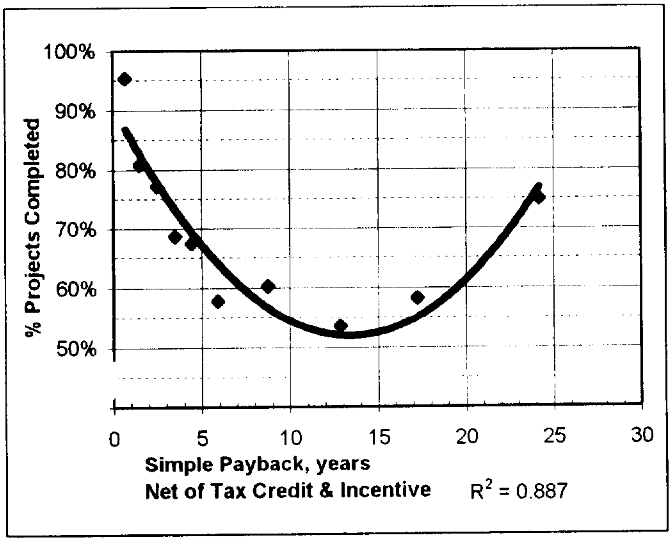

Figure 3. Net Payback vs. Project Completion

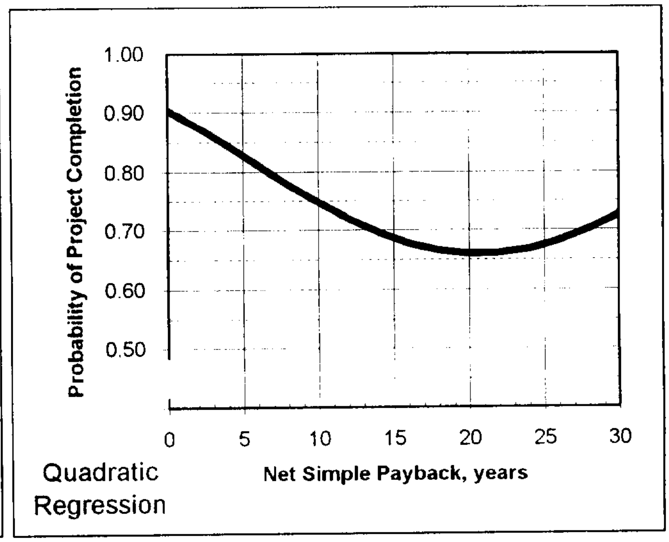

Figure 4. Payback Regression Analysis

The Payback Bounce Effect

As expected, project completion rates drop as the simple payback increases; however, in Figure 3 the rate of decrease slows abruptly after about a 6 year payback, and actually increases beyond a low point between 10 and 15 years. A similar effect is seen in Figure 4 and later analysis of payback.

One explanation for this counter-intuitive curve is that customers are probably not installing projects with longer paybacks solely for electric savings. For instance, some projects have fossil fuel or maintenance savings that aren't included in our calculation, so these paybacks are higher than what the customer really sees. It is also reasonable to assume that there are more free riders in projects with longer paybacks.

Not all of the longer paybacks are necessarily free riders. Most of the largest projects were done by a few large public institutions, which may have longer planning horizons than commercial businesses. Since only 9% of the projects have paybacks longer than 15 years, it is possible that these data points may just be outliers.

Customer Response to Utility Contribution

Another variable that may drive customer decisions is the percentage of the total project cost contributed by the utility through an incentive. In analyzing program options, utility contribution is more useful than payback. We expect that a larger utility contribution will result in more completed projects. The percentage of projects completed in each utility contribution cluster is shown in Figure 5. Project completion rates drop as utility contribution is reduced; however, the rate of decrease slows at around a 50% utility contribution. This indicates that once customers have committed to the effort of having an analysis performed, at least half will install some measures when loans are available and utility contribution is more than 20%. Results of a linear regression analysis with the logit model indicated that utility contribution is significant in predicting customer decisions about project installation. The regression equation is plotted in Figure 6.

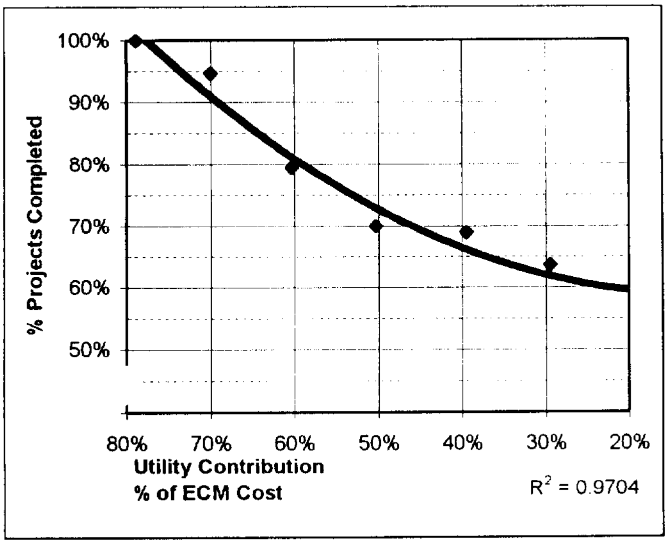

Figure 5. Utility Contribution vs. Completion

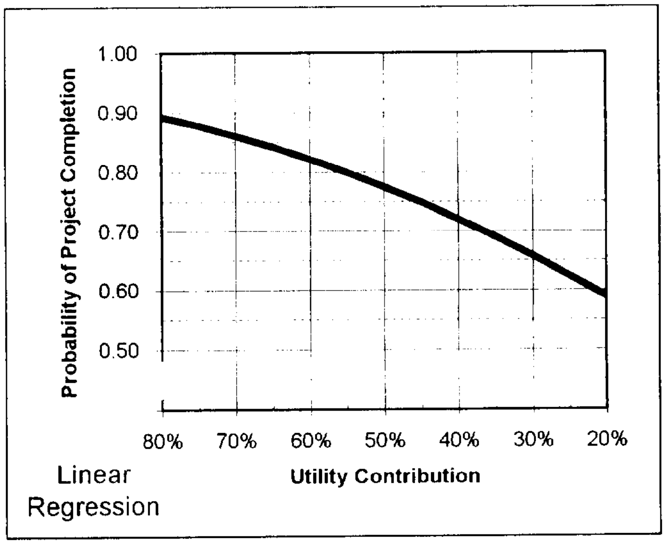

Figure 6. Utility Contribution Regression Analysis

Other Influencing Variables

The study focuses on customer behavior related to project payback and utility contribution, but other variables influencing customer project decisions must be considered. The expected impact of each influencing variable is discussed below.

- **Economic Climate.** During the study period, the national and local economic climates were fairly constant, so impact on customer project decisions did not vary.
- **Tax Law Changes.** There were variations in the taxability of commercial energy incentives during the study period. Most customers were not aware of the tax consequences and the impact was offset by the effect of a state tax credit, depreciation, and interest deduction for those who were aware of tax consequences.
- **Marketing Efforts.** Marketing was low profile and constant during the study.
- **Market Penetration.** As a program progresses, completed projects reduce the available savings. The remaining customers are expected to be less likely to implement projects. The savings achieved went from 20% of the assumed technical potential at the start of the study period to 32% three years later. Although it is impossible to separate the impact of market penetration from reduced utility contribution, the full range of paybacks and a wide range of utility contributions occur throughout the study period. Consequently, the effect of market penetration is fairly evenly distributed across the full range of the analyzed variables.
- **Customer Types.** There are many other variations between individual customers such as building owners vs. tenants, type of business, expertise with managing retrofit construction projects, and how important the project may be to the customer. These variables were not tracked or analyzed separately, with the exception of customer size (see next section). The variation in and mix of customer types in Eugene, Oregon is probably equivalent to other moderate size cities. While the probabilities produced in this study cannot be used to predict individual customer response, they should be useful in predicting overall response for a similar program operated in a similar market penetration range.

Customer Response by Sales Tier

The probability of project completion is further analyzed by stratifying customers into five tiers based on annual electric sales. We anticipate that larger customers may respond differently to the length of the payback period and utility contribution than smaller customers. The customer sales tiers, approximate corresponding annual energy use, and approximate peak electric load are listed in Table 3, along with the number of private (tax-paying), public, and total customer projects by sales tier in the sample set.

Table 3. Customer Electric Sales Tiers

Sales Tier	Customer Annual Electric Energy Purchases (kWh)	Peak kW	Projects by Customer Type Private	Public	Total
A	greater than 5,000,000 kWh/yr	>2000	4	58	62
B	1,000,000 to 4,999,999 kWh/yr	<2000	64	2	66
C	200,000 to 999,999 kWh/yr	<230	71	11	82
D	40,000 to 199,999 kWh/yr	<150	154	18	172
E	less than 40,000 kWh/yr	<25	46	3	49
Total			339	92	431

Response of customers in each sales tier to payback is analyzed using similar methods to the analysis of the entire data set. Results for the average cluster analysis of payback are listed in Table 4 along with the number of projects in each tier at each payback range.

Table 4. Payback Results by Customer Sales Tier

Payback Range*	Projects Completed A	B	C	D	E	Project Distribution by Sales Tier A	B	C	D	E	Total	%
0-2	73%	81%	92%	86%	100%	11	26	24	37	11	109	25%
2-4	69%	71%	64%	76%	100%	13	17	22	46	12	110	26%
4-6	75%	44%	61%	53%	50%	8	9	18	30	6	71	16%
6-10	75%	40%	56%	50%	78%	8	5	9	30	9	61	14%
10-15	82%	50%	25%	56%	80%	11	2	4	18	5	40	9%
15-30	100%	60%	50%	67%	60%	6	5	2	9	5	27	6%
>30	100%	100%	67%	50%	0%	5	2	3	2	1	13	3%
Wtd Avg	79%	68%	68%	67%	82%							
Total						62	66	82	172	49	431	
Percentage of projects offered by customer sales tier						14%	15%	19%	40%	11%		
Percentage of customers by sales tier in population						1%	3%	11%	33%	52%		

* Payback in years is based on net customer cost adjusted for incentives and tax credits.

To analyze project completion as a function of project payback a regression using a logit model was also performed on the five tiers, and the resulting regression equations except for Tiers A & E[12] are shown in Figure 7. The dark line for **All** projects is identical to the line shown in Figure 4, except the graph is truncated at 20 years. Tiers B, C, and D reach their minimum probability of project completion at years 10, 12, and 15, respectively. These minimums occur at much shorter paybacks than the minimum probability at year 20 for all customers. The regression curves show more payback sensitivity for Tiers B, C, and D than for all customers. Tier B customers are the most sensitive to payback, followed by Tier C, then Tier D.

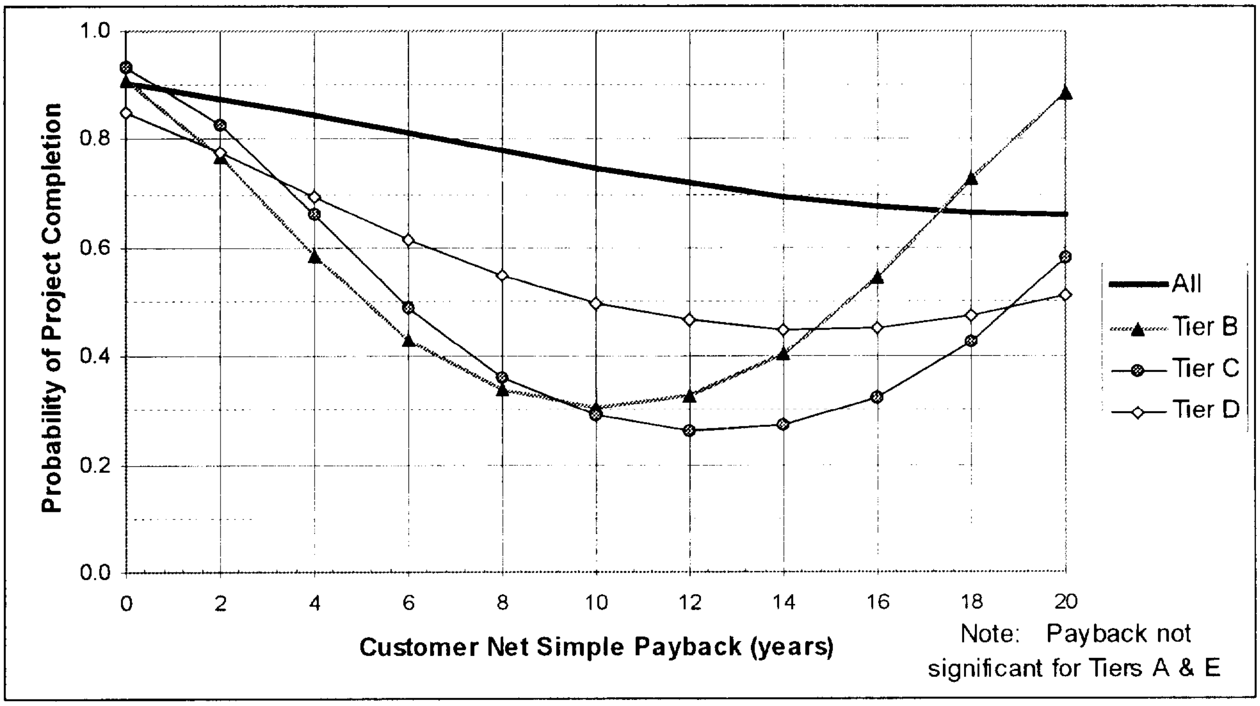

Figure 7. Regression Analysis of Response to Payback by Sales Tier

Again, we believe that projects with paybacks beyond the minimum completion probability are more likely to be free riders as discussed in the Payback Bounce Effect section. To get a clearer picture of rational customer economic decisions, the utility contribution regression analysis was performed on data subsets with an upper bound at the payback associated with the point of minimum project completion shown in Figure 7.

[12] Results for Tiers A and E are not included in Figure 7 or subsequent tier analysis because the regression results indicated that neither payback nor utility contribution were statistically significant as an explainer of project completion. We believe that this finding can be attributed to the type of customer in Tier A, and to insufficient data in Tier E. In the data set for Tier A, 58 of the 62 projects were completed by a few public institutions. It is likely that these public customers have longer payback horizons than private customers and are subject to budget availability and other political issues besides economics in their project decisions. Regression analysis on the public sector customers versus private sector customers as a predictor of project completion was not significant; however, in customer Tier A the sample data of observations in the private sector may be too small to make this finding meaningful.

Utility contribution was also analyzed for individual customer sales tiers using a logit model. The resulting regression equations are plotted in Figure 8. The dark line for **All** projects is similar to the line shown in Figure 6, except that only projects with paybacks less than the 20-year minimum are included. Below 50% utility contribution, Tier B had a much more rapid decline in project completion than the medium and smaller customers in Tiers C and D, which respond similarly to each other.

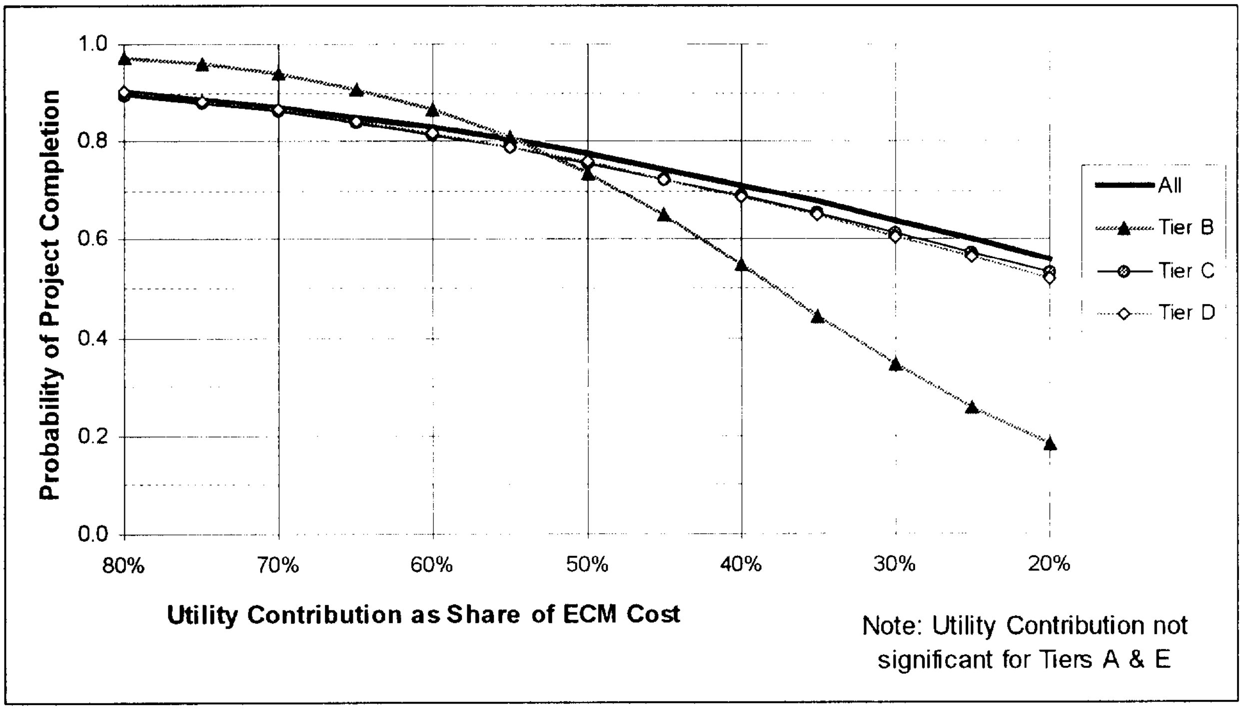

Figure 8. Regression Analysis of Response to Utility Contribution by Sales Tier

Resource Cost

The probabilities shown in Figure 8 are used to develop an estimation of total resource cost at discrete utility contribution levels. Administrative costs over the study period include: utility staff labor for marketing, analysis, and administration; stipends for consultant analysis; and loan administration. Overall study period costs are shown in Table 5, per kWh saved (levelized for a 14 year average measure life) and per peak kW reduction. For both the analysis (offer) phase and completion phase of a project, these unit costs are split into per-project costs, direct per-savings costs, and indirect per-savings costs. Average measure costs are also shown. Since the greatest administrative cost occurs during the offer phase, as the completion rate goes down the administrative cost <u>increases</u>. The administrative costs are combined with incentives to arrive at total resource cost. Results are allocated to three categories as shown in Figures 9 and 10 and listed below.

- **Marketing** cost consists of the direct per-project and per-MWh costs listed above that includes marketing, analysis, study stipends, customer contacts, and other work related directly to the project analysis and customer education.
- **Incentive** cost is the direct incentive paid to the customer or their contractor.
- **Management** cost includes inspections, payment processing, program enhancement, analysis review, loan administration, auditing, and quality control.

Table 5. Unit Cost Basis from Actual Program Costs

Administrative Costs during Study Period (including loans and consultant studies)	**Direct Cost Project Basis**	**Direct Cost Savings Basis**	**Indirect Cost Savings Basis**
Levelized Cost: 5.52 mills/kWh	1.49	3.30	0.73
Peak kW Cost: $212/ kW	$68	$114	$ 29
*Administrative Unit Cost Allocations: (apply to *offers / **completed projects)*	**Direct Cost / Project**	**Direct Cost / MWh Saved**	**Indirect Cost / MWh Saved**
Project Market/Analysis/Study stipends*	$ 650	$ 17.55	
Program Development/ Analysis Review*			$ 2.35
Inspection/Payment Processing**	$ 250	$ 7.32	
Loans/Auditing/Quality Control**			$ 4.05
Completed Project Total Unit Costs	$ 900	$ 24.87	$ 6.40
Measure (ECM) Cost by Customer Tier	**All**	**Tier B**	**Tier C & D**
Levelized Measure Cost, mills/kWh	30.3	27.0	28.9
Average Measure Cost: $/Peak kW	$ 1,400	$ 1,525	$ 1,270

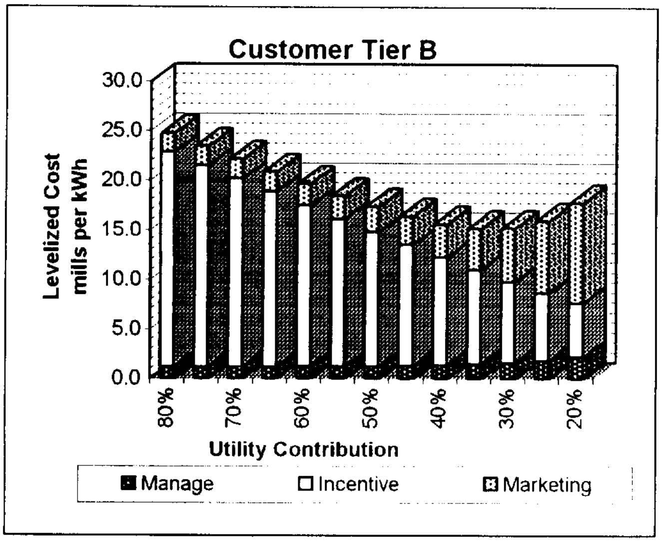

Figure 9. Resource Cost for Sales Tier B

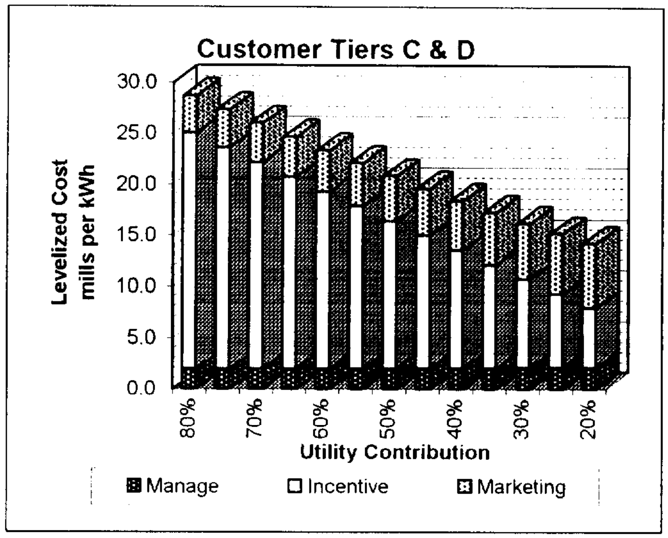

Figure 10. Resource Cost for Sales Tiers C and D

The analysis shown in Figure 8 demonstrated that customer Tier B and the combination of Tiers C and D behave differently, so they are grouped separately for cost analysis. Figure 9 shows a minimum resource cost for Tier B around 35% utility contribution. Figure 10 shows total resource costs for the combination of Tiers C and D. A 20% utility contribution is considered the minimum level to get enough customer attention for an analysis to be performed. Note the sharp increase in resource cost for Tier B below a 30% utility contribution. Fewer project completions for these larger customers may seriously reduce overall program performance in terms of acquired savings and total program resource cost.

Resulting Program Re-design

Based on this analysis, the higher than expected completion rates supported continuing the Cycle 9 level (which averaged about a 30% utility contribution) after the end of the study period, rather than ramping incentives back up to a 40% utility contribution as planned. Another driver in the reduced contribution level was that a stipulated budget amount for "public purpose" has replaced the integrated resource plan strategy of the past. The results of this study gave DSM managers confidence that a viable program could be operated with lower incentive levels.

Conclusions

With low-interest loans available, adequate project completion rates can be attained with moderately low (25% to 35%) utility contributions. This is based on a study of customer response to a site-based incentive program in a retrofit market with penetration between 20% and 32% of technical potential. Conclusions can be summarized as follows:

- Incentives do not need to be as high as prior studies have indicated for a viable DSM program to acquire significant conservation resource.
- Utility contributions in the range of 25% to 35% of project cost results in minimum total resource costs when administrative and marketing costs are considered.
- Different sized customers respond differently to project payback and utility contribution. For customers purchasing between 40,000 and 5,000,000 kWh annually, tiered regression results are statistically significant.

Based on the conclusions, the authors recommend a middle way: start at a level that will allow adequate participation, and later adjust incentives upwards when market response falls.

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