



December 8, 2005

VIA ELECTRONIC MAIL

Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City UT 84114

Attention: Julie P. Orchard
Commission Secretary

**Re: Docket No. 03-2035-02
Optional Experimental Residential Time-of-Day Tariff Analysis Report**

Pursuant to the Cost of Service, Rate Spread and Rate Design stipulation in Docket No. 03-2035-02, PacifiCorp hereby submits for filing, the Optional Experimental Residential Time-of-Day Tariff Analysis Report. A signed original letter, report and eight copies will be provided via overnight delivery.

An electronic copy of this filing has been provided to the attention of lmathie@utah.gov.

Sincerely,

A handwritten signature in black ink that reads "Dave Taylor/p.a.". The signature is written in a cursive, flowing style.

Dave Taylor
Manager, Regulation

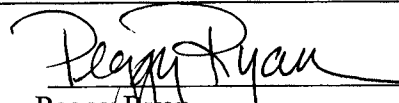
cc: Service List

CERTIFICATE OF SERVICE

I hereby certify that on this 8th day of December 2005, I caused to be served, pursuant to the Cost of Service, Rate Spread and Rate Design stipulation in Docket No. 03-2035-02, via overnight delivery and or email(if address available), a true and correct copy of the Optional Experimental Residential Time-of-Day Tariff Analysis Report.

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Optional Experimental Residential Time-of-Day Tariff Analysis

November 30, 2005

Prepared for the Utah Public Service Commission

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I. Executive Summary

In April 2004, the Utah Public Service Commission approved a new optional, experimental, residential Time-of-Day tariff, Schedule 2, for Utah Power. This program replaced the existing residential Time-of-Day tariff. The new program was designed to attract more customers by reducing the on-peak hours, reducing the price differential between on and off peak kWh, and limiting the period of time-based prices to a season that ran between May and September. The purpose of the new Time-of-Day program was to further explore time-of-use pricing, and to strengthen the incentives for residential customers to help reduce summer peak load in Utah.

The new tariff had greater customer interest than the old tariff which when discontinued had only 15 customers. At the start of June 2004, after the first promotion of the Time-of-Day program, 236 customers were participating. By October 2005, there were 325 participants.

In 2004, the average participant saved \$1.02 compared to an average savings of \$0.89 for 2005. There were 256 unique customers who participated in 2004 and 346 who participated in 2005. 85% of 2004 participants continued to participate in 2005.

Customer research of non-participating residential customers found that both aided and unaided awareness of the program was 21%. The research also found that of the non-participants who were surveyed, 86% felt that it is important for Utah Power to offer such a program. Of participants who were surveyed, 94% felt that signing up for the Time-of-Day program was easy to do. 72% of participants surveyed think that the program has saved them money. For both participants and non-participants, saving money was rated the most important reason to enroll. Also for both groups, bill inserts were considered to be an effective way of communicating the program.

The total estimated cost of the Time-of-Day program since its inception until September 2005, was \$109,778. With 325 customers participating at the end of September 2005, the estimated cost per active participant was therefore \$338.

We recommend that Utah Power continue to promote the program through cost effective/high impact means such as utility bill inserts. Utah Power should also enhance the information that is presented to customers about the program on its website and on other promotional materials, including some statistics that reflect the experience of program participants.

II. Introduction

Since 1988, Utah Power has offered an optional Time-of-Day rate (Schedule 2) for its residential customers. This rate did not have a high level of participation. When the old Schedule 2 tariff expired in April 2004, only 15 customers were participating.

In the 2003 Utah General Rate Case (Docket No. 03-2035-02), Utah Power proposed a new optional experimental residential Time-of-Day rate (Schedule 2) that would replace the old rate. The new Time-of-Day rate included several changes designed to attract more participants. Below is a table which highlights the differences;

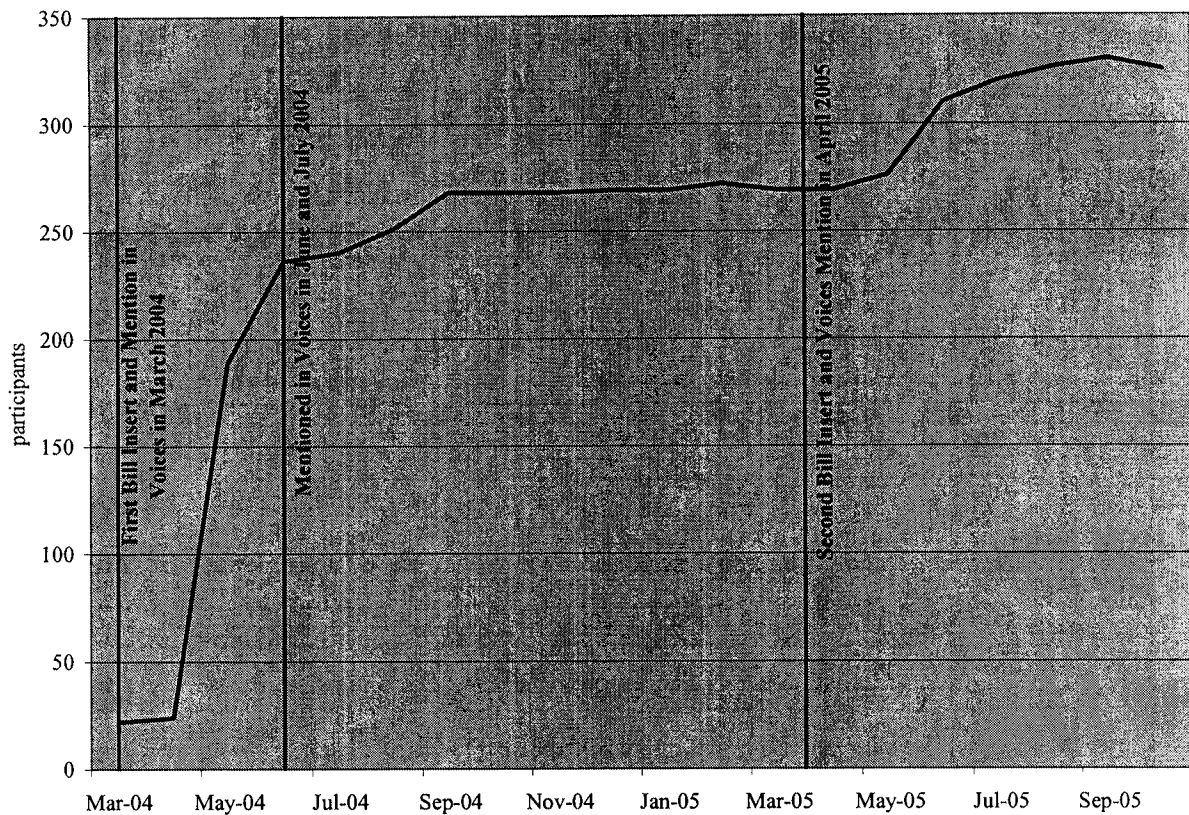
Table 1 – Differences between the Old and the New Residential Time-of-Day Tariff

Old Residential Time-of-Day Tariff:	New Residential Time-of-Day Tariff:
Stand alone tariff for residential customers	Tariff rider applied to residential Schedule 1 or 3 in order to accommodate the new inverted rate block structure.
Fixed prices for on-peak and off-peak periods; <i>on- vs. off-peak differential (9.43¢) is high relative to new tariff</i>	Energy Charge addition or credit applied to base tariff for on-peak and off-peak usage, respectively; <i>on- vs. off-peak price differential (5.77¢) is less than on prior Schedule 2 tariff</i>
On-peak hours are 8a-10p/M-F, excluding holidays	On-peak hours are 1p-8p/M-F, excluding holidays
Time-based pricing is year-round	Time-based pricing applies only during the season from the start of May through the close of September
Off-peak usage must be substantial to save vs. standard tariff	Average customer can save money vs. standard tariff at same usage level if <24% of total monthly usage occurs during on-peak hours

The intent of the Time-of-Day optional pilot was to further explore time-of-use pricing, and to offer programs for residential customers to help reduce summer peak load in Utah. The Utah Public Service Commission approved an enrollment cap of 1,000 participants when the tariff was initiated. In the stipulation in the 2003 general rate case, it was agreed that once 750 customers had enrolled, Utah Power would discuss customer interest with the Division of Public Utilities, the Committee of Consumer Services and other interested parties to determine whether to relax the enrollment limitation. If necessary, it was agreed that Utah Power would voluntarily and expeditiously file with the Commission to raise the participation cap. Utah Power also committed to review the program's results with the interested parties after September 2005.

In March 2004, Utah Power introduced the Time-of-Day rate on its web site as well as in a special bill insert that was sent to all 600,000+ Utah residential customers. The Time-of-Day rate was also highlighted in the March *Voices* customer newsletter. Since then, information regarding the Time-of-Day rate has been made continuously available on Utah Power's website. By the start of June 2004, after the initial promotion of the new experimental rate, 236 customers had enrolled in Schedule 2.

Chart 1 – Time-of-Day Participation History



The Time-of-Day program also was highlighted in the June, 2004 press release kicking off the Utah PowerForward summer electricity peak demand limiting program. Time-of-Day also was mentioned in the Governor's 2004 PowerForward kickoff media event. In July and August 2004, the Time-of-Day program was again highlighted in the *Voices* customer newsletter.

A letter and refrigerator magnet with Time-of-Day program effectiveness tips were sent to participants in April 2005. In April 2005, another Time-of-Day specific bill insert was sent to all 600,000+ residential customers and the program again was highlighted in *Voices*. Following the promotion at the beginning of May 2005, 276 customers were participating in the program. At the end of September 2005, 325 customers were participating.

The purpose of this report is to evaluate the Utah Time-of-Day program following the first two seasons of operation and to provide interested parties with conclusions and recommendations as was agreed in the stipulation. The remainder of this report includes Quantitative Pricing Analysis, Customer Research Analysis provided by independent research firm Dan Jones and Associates, a Summary of the Program Costs and System Benefits, as well as Conclusions and Recommendations.

III. Data and Methodology

The data used to produce this report was already available and came from the following sources:

- Information regarding customers including participation history, on and off peak as well as total kWh usage during different periods, and price of participants' usage was obtained from Utah Power's legacy billing system.
- Customer survey research for both Participants and Non-Participants was conducted by Dan Jones & Associates, an independent market research firm based in Salt Lake City. The questionnaire was developed by Dan Jones & Associates with direction from Utah Power. Dan Jones & Associates randomly selected each household within the sample universe from a list of names and telephone numbers provided by Utah Power.
- Program costs, except meter installation cost and net credit cost, were collected from Utah Power's accounting and financial database. All of the costs associated with communications and marketing, and administrative support were recorded and tracked separately.
- Meter installation cost was created from an estimate of the cost for a residential time-of-use meter plus an estimate of the cost of a meter technician to travel to the site and install and program a residential time-of-use meter.

IV. Quantitative Pricing Analysis

i. Customer Participation

In 2005, 346 unique customers participated in the Utah Time-of-Day Program. Participation increased by 90 customers, or about 35% from 2004, as shown in Table 2.

Table 2 – Customer Participation

	Unique Customers	Total Bills
2005	346	1,650
2004	256	1,314

A requirement of the Time-of-Day program is that enrollees remain on the Schedule 2 Time-of-Day rate for one year after enrolling. This requirement is intended to help ensure customers have time to integrate the Time-of-Day rate into their household operations and to minimize premature enrollment churn in light of program initiation costs.

Of the 256 customers who participated in the program in 2004, 218 also participated in 2005. This represents an 85% retention rate. Of the 38 customers who participated in 2004 but did not participate in 2005, 22 customers simply reverted to Schedule 1. This represents 9% of the 2004 participants. The remaining 17 customers did not take service under the same account.

Of the 346 customers who participated in the program in 2005, 128 or 37% were new to the program. Among customers participating in the program for the first time during 2005, 78% were existing customers who received service on Schedule 1 during the summer of 2004. The remaining 22% were new accounts that started receiving service after the summer of 2004.

ii. Program Cost of Customer Credit

A net credit of \$1,476 was given to program participants in 2005, up \$139 or about 10% from 2004. Table 3 shows the total amount of charges and credits, and the net credit given for each of the program years.

Table 3 – Total Credits and Charges, 2004 and 2005

	Net Credit Amount	On-Peak Charge	Off-Peak Credit
2005	\$1,476	\$9,037	\$10,513
2004	\$1,337	\$6,504	\$7,841

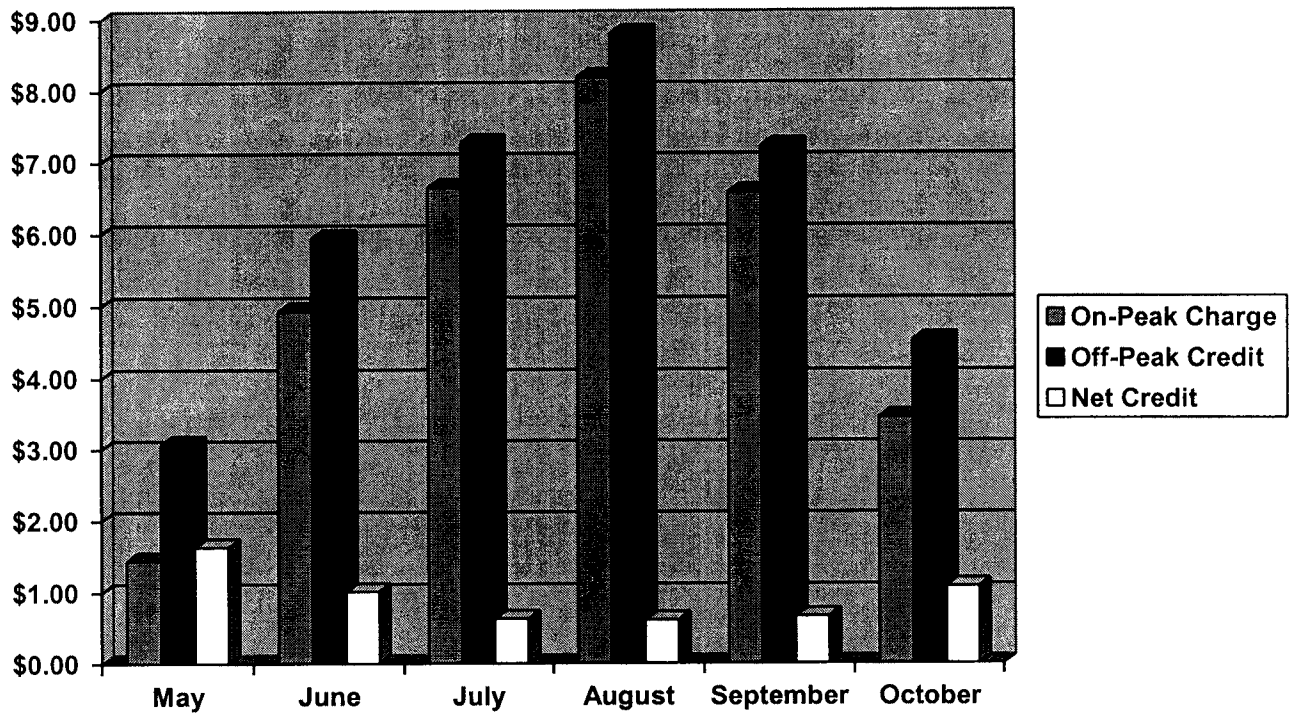
The average monthly net credit was 89¢ in 2005, down from \$1.02 in 2004. The average credit varied from month to month, as shown in Table 4 and Chart 2. In months where participants' usage tended to be higher, the average net credit was lower

Table 4 – Monthly Net Credit by Month, May – October 2005

Month	Average Net Credit	Average Off-Peak Credit	Average On-Peak Charge
May	\$1.63	\$3.07	\$1.44
June	\$1.01	\$5.94	\$4.93
July	\$0.63	\$7.27	\$6.64
August	\$0.61	\$8.80	\$8.19
September	\$0.66	\$7.22	\$6.57
October	\$1.08	\$4.52	\$3.44

Notes: Months reflect when the bill was issued, not when the usage took place. Bills with 0 kWh or 0 Summer kWh were excluded.

Chart 2 – Average Monthly Credit and Charge

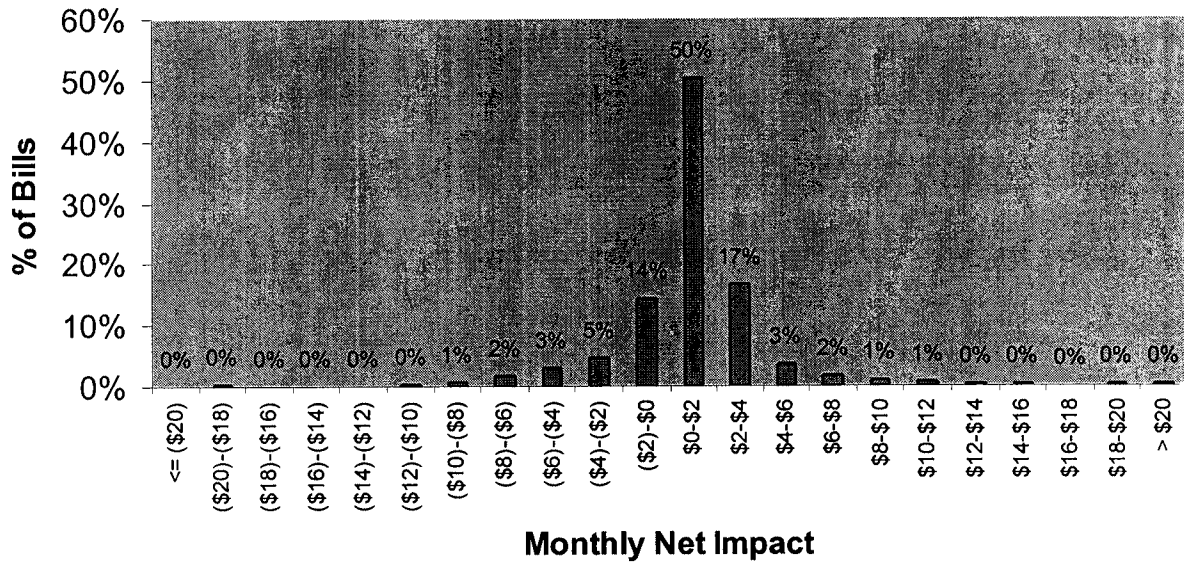


The monthly net impact to customers' bills ranged from a \$36.74 credit to a \$42.25 charge, with the median being a credit of 94¢, as shown in Table 5. The 95th and 5th percentile amounts show that while there were some extreme credits and charges, 90% of bills fell between a credit of \$5.47 and a charge of \$4.89. Only 2.6% of bills received a credit or charge greater than \$10. 74% of monthly bills received a net credit, while 26% of bills received a net charge. As shown in Chart 2, 50% of bills had a net credit between \$0 and \$2. 81% of bills had a net impact between a charge of \$2 and a credit of \$4.

Table 5 – Monthly Net Impact to Customer Bill, May – October 2005

	Percentile	Monthly Net Impact
Maximum	100%	\$36.74
	95%	\$5.47
	75%	\$1.98
Median	50%	\$0.94
	25%	(\$0.03)
	5%	(\$4.89)
Minimum	0%	(\$42.25)

Chart 3 – Frequency Distribution of Monthly Net Impact to Customer Bill, May – October 2005



iii. Monthly Net Impact by Customer Size

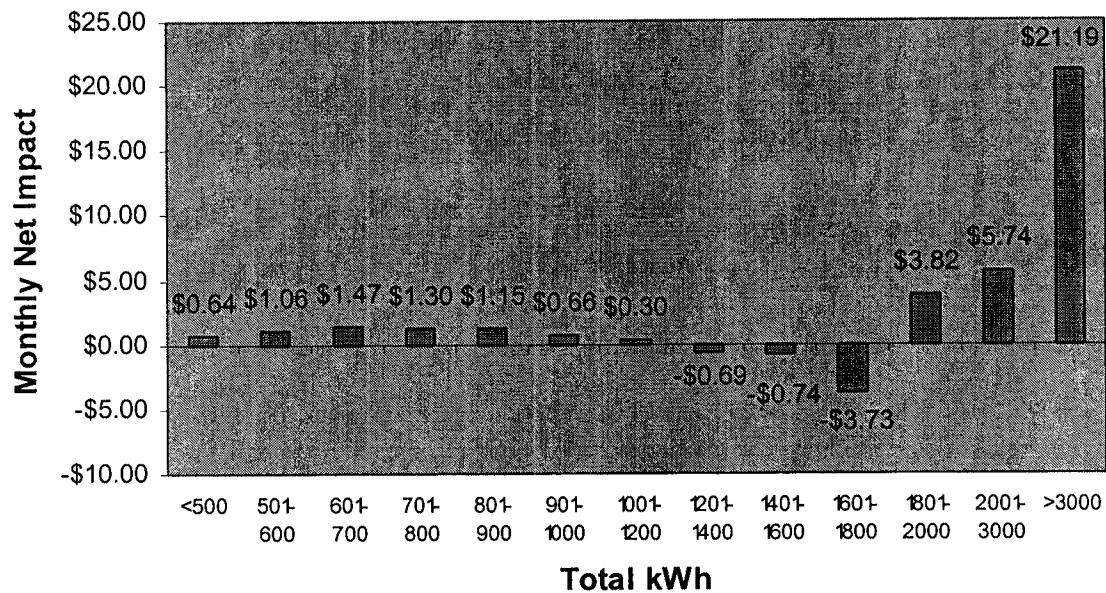
Table 6 shows the distribution of bills and average net impact amount by level of kWh usage. 90% of bills had monthly average usage of less than 1,200 kWh. The average net impact for this group was a credit of 85¢. Bills with usage between 1,201 and 1,800 kWh, had an average net charge of \$1.32 per month. Bills with usage over 1,800 kWh per month, had an average net credit of \$7.47 per month.

Chart 3 shows the average monthly impact at different kWh usage levels. This chart illustrates that the small users had a net credit of around \$1 per month on average, the medium sized customers had an average net monthly charge, and the large users had the largest average monthly credit.

Table 6 – Average Monthly Net Impact by Energy Use, 2005

kWh	% of Bills	Average kWh	Average Net Impact
<1,200	90%	464	\$0.85
1,201-1,800	7%	1,377	(\$1.32)
>1,800	3%	2,316	\$7.47
Total	100%	580	\$0.89

Chart 4 – Average Monthly Net Impact by Energy Use, May – October 2005



iv. Energy Usage

As participation grew about 35% from 2004 to 2005, total energy use by program participants increased by 248,497 kWh or 35% from 2004 to 2005. This is illustrated in Table 7. kWh usage per bill increased 7.6% from 2004 to 2005. On-Peak usage increased 39%, and Off-Peak usage increased 34%. It should be noted that the data has not been weather-normalized.

Table 7 – Total On and Off-Peak kWh, 2004 and 2005

	On-Peak kWh	Off-Peak kWh	Total kWh	Total Bills	kWh per Bill
2005	206,501	750,163	956,664	1,650	580
2004	148,646	559,521	708,167	1,314	539

Among the 218 customers that participated in both 2004 and 2005, average usage and average bill amount increased, while the average credit decreased from 2004 to 2005, as shown in Table 8.

Table 8 – Average Usage and Bill Amounts Among Repeat Participants, 2004 and 2005

	Average kWh	Average Bill	Average Savings
2005	636	\$47.69	\$0.86
2004	582	\$41.49	\$0.97

Interestingly, the customers who participated in the program in 2004 but not 2005 received a higher-than-average credit while in the program. After leaving the program,

these customers' bills and kWh usage increased in the summer months of 2005, as shown in Table 9.

Table 9 – Average Usage and Bill Amounts Among 2004-Only Participants, 2004 and 2005 (during May- October)

	Average kWh	Average Bill	Average Savings
2005	1,171	\$92.47	N/A
2004	974	\$71.47	\$2.03

The customers who participated in 2005 but not 2004 can be split into two groups, those who were existing customers in 2004 and those who were new customers in 2005. Table 10 details the kWh usage, average bill amount, and average savings among these groups. Also shown is the usage and average bill in 2004 for customers who did not participate in the program until 2005. Usage did not vary much from 2004 to 2005 among these new program participants.

Table 10 – Average Usage and Bill Amounts Among 2005-Only Participants, 2004 and 2005

	Average kWh	Average Bill	Average Savings
2005 Only Total	643	\$48.31	\$0.92
2005 New	605	\$46.07	\$0.26
2005 Existing	652	\$48.82	\$1.07
2004	646	\$47.41	N/A

V. Customer Research Analysis

In order to evaluate the effectiveness of the Time-of-Day program, Utah Power employed Dan Jones & Associates of Salt Lake City to conduct and compile a survey of 100 participants of the program, and also of 300 residential customers who were not participating in the program. A discussion of both reports as well as a discussion of the recommendations made by Dan Jones and Associates are included below.

i. Non-Participants

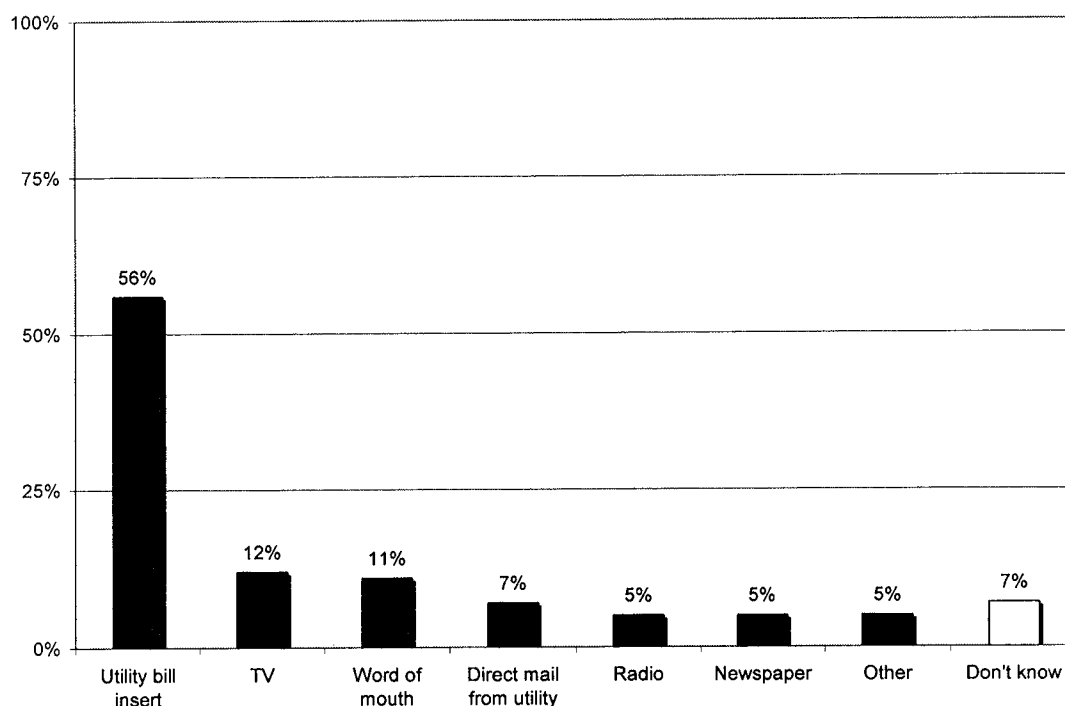
Awareness of the Time-of-Day Program is Moderate

Nearly one-half of respondents (48%) report that they have heard of energy programs offered by Utah Power in which prices vary based on when electricity is consumed. A similar percentage of people (49%) declare that they have not heard of such programs from Utah Power.

The research examined unaided and aided recall by the specific name of the program, i.e.: Time-of-Day. Among all respondents, 2% stated the correct name of the program on an unaided basis. When interviewers read the name of the program to those who didn't mention it unaided, we found that a total of 21% were aware of the name on an unaided and aided basis. Consequently, the vast majority of those interviewed (79%) report that they do not know the specific name of the program.

Respondents who are aware of the Time-of-Day program state that they heard about it from a utility bill insert (56%), TV (12%), word of mouth (11%), direct mail from the utility (7%), radio (5%), or newspaper (5%).

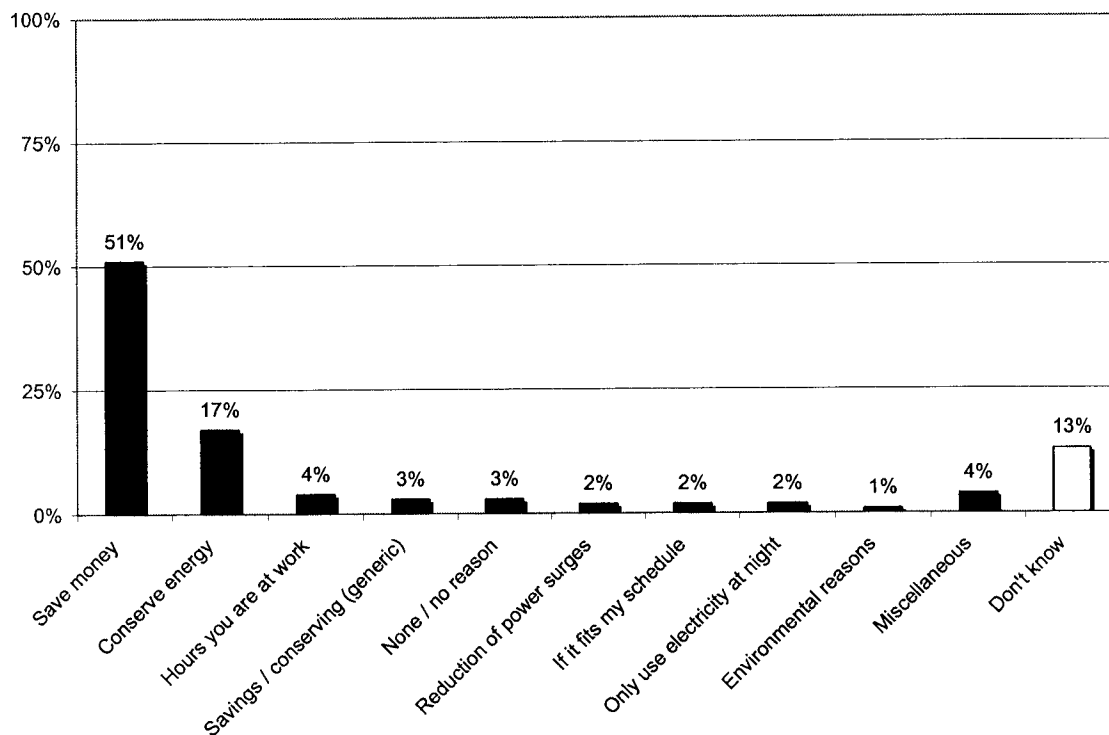
Chart 5 – How Non-Participants Heard about the Program



Saving Money is a Big Motivator to Enroll

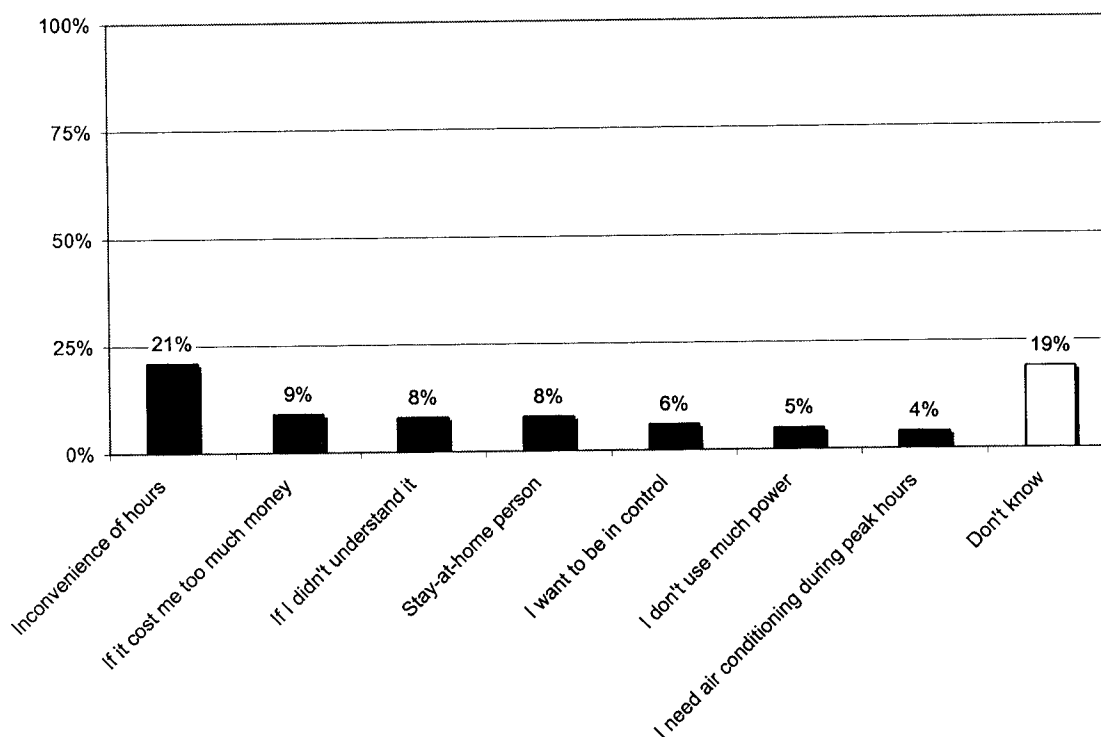
After hearing a brief description of the Time-of-Day program, non-participants were asked what they think would be the most important reason to participate in the program. One-half of respondents (51%) say that saving money is the most important reason to participate in the Time-of-Day program, while fewer people mention conserving energy (17%).

Chart 6 – The Most Important Reason to Participate in the Program (Non-Participants)



When presented with six reasons why people might participate in the Time-of-Day program and asked to rate the importance of each reason on a 0-10/not at all important to very important scale, non-participants reveal that the most compelling reasons for them are saving money on their electric bill (8.8), helping Utah Power keep electricity prices reasonable (8.3), and reducing power outages in their area (8.1), with all three receiving mean scores above 8.0. Comparatively less important reasons why people might participate in the Time-of-Day program are conserving electricity to protect the environment (7.7), conserving electricity for future generations (7.6), and having more control over their electricity usage (7.2), with all three receiving mean scores above 7.0 on the same 0-10 scale of importance.

Chart 7 – The Most Important Reason Why People Might not Participate (Non-Participants)



When asked for reasons why people might not participate in the Time-of-Day program, respondents tend to mention the hours might be inconvenient (21%), the program might cost too much money (9%), they might not understand the program (8%), and some people stay at home all day (8%). One in five people (19%) admit that they don't know why people might not participate in the Time-of-Day program.

Program Interest

One-half of non-participants (53%) affirm that they are very likely or somewhat likely to participate in the Time-of-Day program, with responses leaning toward *somewhat likely*. On the other hand, two out of five respondents (39%) confirm that they are somewhat unlikely or very unlikely to participate in the Time-of-Day program. Dan Jones and Associates cautioned that it is important to note that surveys are designed to measure opinion and not to predict behavior. In survey research, respondents often overestimate their actual intention to enroll in programs and some will give a socially desirable response. Therefore, it's unlikely that Utah Power will see a big jump in the number of enrollees as the data might suggest.

Respondents tend to say that they would participate in the program because of the money they would save (23%), they are not home much during the day (10%), and it is a good program (10%). Others say that they would not participate in the program because they would have to know more about it first (19%) and they use electricity during peak hours (7%).

It is Important for Utah Power to Offer the Time-of-Day Program

A high percentage of survey respondents (86%) declare that they think it is very important or somewhat important for Utah Power to offer the Time-of-Day program. On the other hand, only 9% of interviewees think that it is not very important or not at all important for Utah Power to offer the Time-of-Day program to customers.

Among those who think that it is important for Utah Power to offer the Time-of-Day program to customers, respondents tend to say it is important because of the need to encourage conservation (26%), it saves money (15%), and it gives people choices (15%). For those who think it is not important for Utah Power to offer the Time-of-Day program, respondents say that people will use electricity when they need to (21%) and that the program is inconvenient (7%).

TV Ads and Bill Inserts are Effective Methods of Communication

When presented with six methods of communication and asked to rate the effectiveness of each one at informing them about the Time-of-Day program, respondents tend to say that TV ads (3.6), an insert in their electricity bill (3.5), and radio ads (3.1) are the most effective methods of communication, indicated by mean scores above 3.0 on a 1-5/not at all effective to very effective scale. Comparatively less effective methods of communication are press releases (2.8), newspaper ads (2.8), and lastly, Utah Power's web site (2.3), given the mean scores between 2.0 and 3.0.

A plurality of respondents (33%) suggest that Utah Power provide more information and increase advertising to encourage them to sign up for the Time-of-Day program. Others say that they would be inclined to sign up for the program if offered incentives and discounts (14%) or if they were shown how it would save money (11%). One in four people (23%) acknowledge that they don't know what Utah Power could do to encourage them to sign up for the Time-of-Day program.

ii. Participants

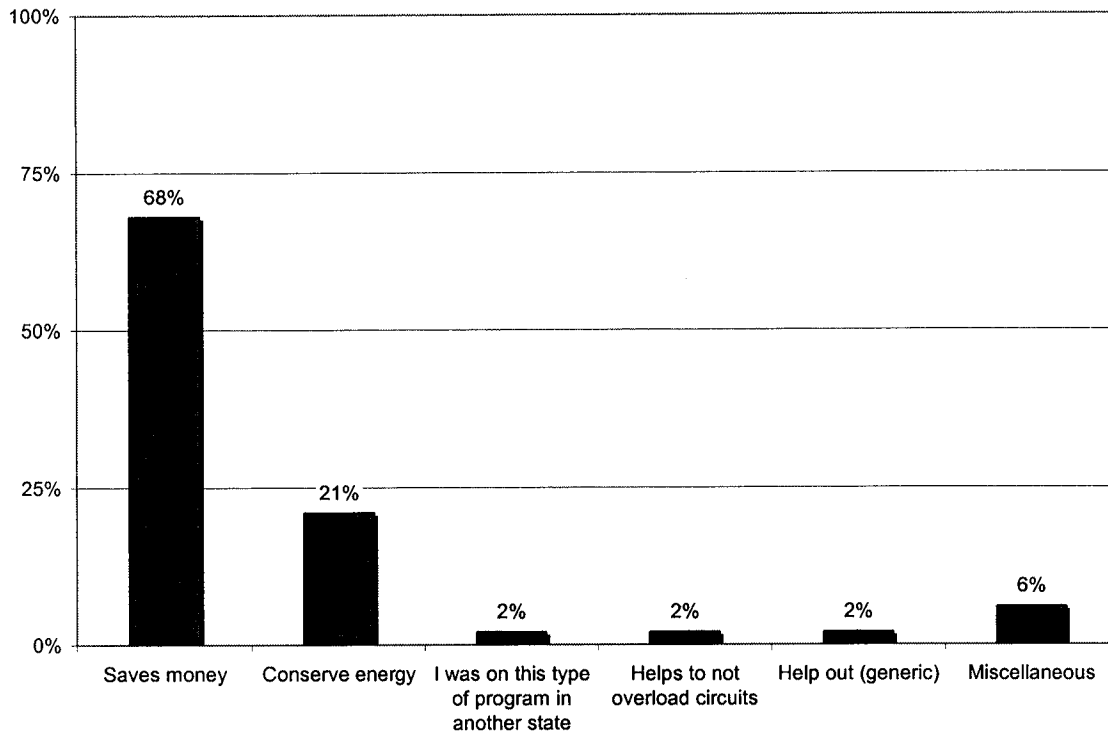
Satisfaction with Utah Power and Time-of-Day Program is High

Respondents tend to say that they are very satisfied with Utah Power, indicated by the mean score of 7.9 on a 0-10/not at all satisfied to completely satisfied scale. In fact, two-thirds of those polled (69%), give Utah Power a rating of eight, nine, or ten. Participants rate the Time-of-Day program even higher, given the mean score of 8.2 on the same 0-10 scale of satisfaction. In this case, three out of four participants (73%) rate their satisfaction with the Time-of-Day program as an eight, nine, or ten.

Saving Money is the Top Reason for Enrolling in the Time-of-Day Program

The number one reason respondents give (unaided) for enrolling in the Time-of-Day program is to save money, mentioned by two-thirds (68%). One in five people (21%) signed up for the program to conserve energy. Lesser reasons given for signing up for the program include: I was on this type of program in another state (2%), helps to not overload circuits (2%), and help out in general (2%).

Chart 8 – The Most Important Reason for Participating in the Program (Participants)

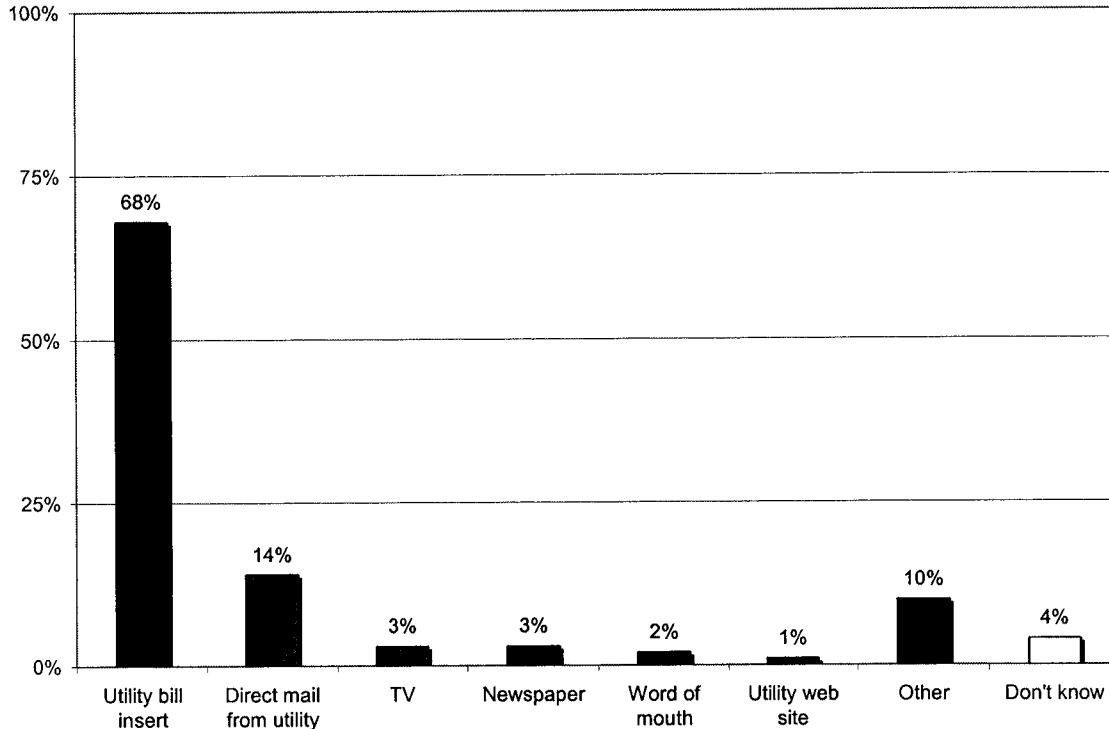


When presented with six reasons that may have influenced their decision to enroll in the Time-of-Day program, respondents indicate that saving money on their electric bill was a very important reason, indicated by the exceptionally high mean score of 9.4 on a 0-10/not at all important to very important scale. Other important reasons for enrolling in the Time-of-Day program include: helping Utah Power keep electricity prices reasonable (8.5); conserving electricity to protect the environment (8.0); having control over their electricity usage (7.8); conserving electricity for future generations (7.2), and lastly, reducing power outages in their area (7.1), with all reasons receiving mean scores above 7.0 on the 0-10 scale.

Utility Bill Insert is the Best Method of Communicating with Customers

Unaided, the vast majority of respondents report that they became aware of the Time-of-Day program through a utility bill insert (68%) or direct mail from the utility (14%).

Chart 9 – How Participants Heard about the Program

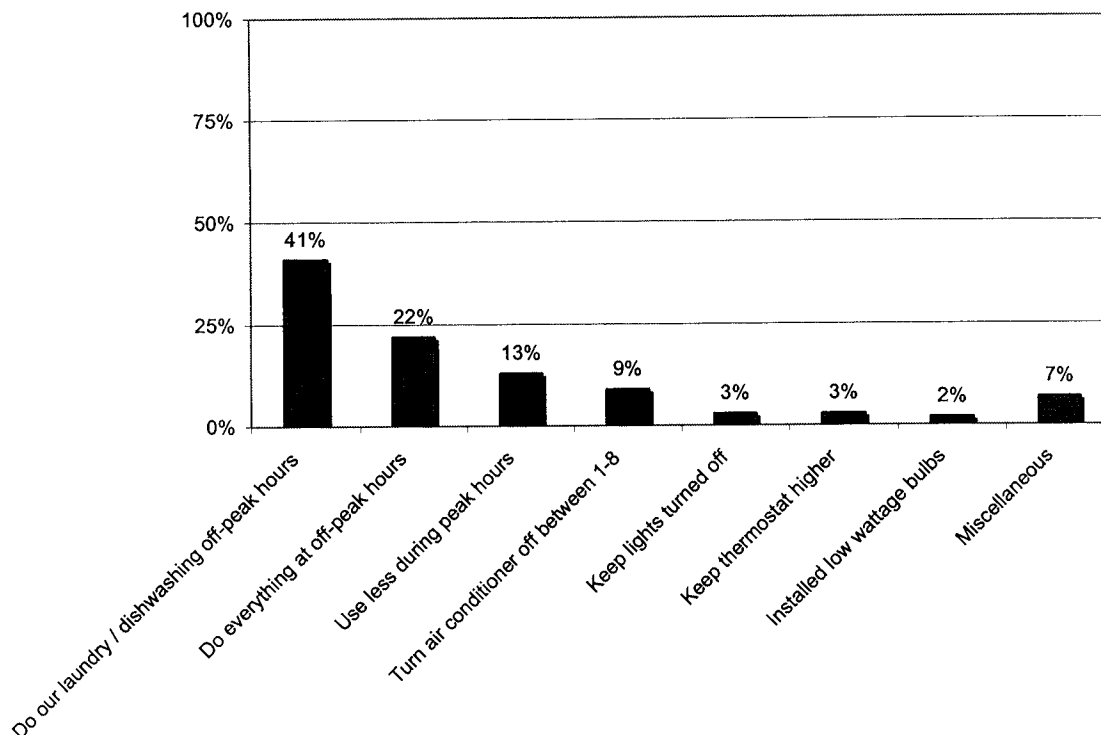


When asked to rate the effectiveness of several communication methods, participants tend to say that an insert in their electricity bill (4.5) is a very effective way to inform them about the Time-of-Day program, indicated by a mean score above 4.0 on a 1-5/not at all effective to very effective scale. Comparatively less effective communication methods include: TV ads (2.5), radio ads (2.3), and newspaper ads (2.2), with mean scores between two and three on the 1-5 scale. Communication methods that people perceive to be ineffective are press releases (1.9) and Utah Power's web site (1.7), given the mean scores below 2.0 on the 1-5 scale of effectiveness.

Customers' Experience with the Time-of-Day Program is Mostly Positive

One of the most positive findings from the research, nearly all participants (94%) report that the enrollment process for the Time-of-Day program was very easy or somewhat easy, with responses leaning heavily toward *very easy*. The good news is that the vast majority of those who enrolled in the Time-of-Day program (86%) confirm that their household has made changes in how they use electricity at their home. Among this group, a plurality of respondents (41%) explain that they now do their laundry and/or dishwashing during off-peak hours. Others report that they do everything during off-peak hours (22%), use less energy during on-peak hours (13%), or turn the air conditioner off between 1:00 and 8:00 pm (9%).

Chart 10 – Usage Changes Implemented (Participants)



When presented with three statements and asked which one best describes how their household has changed its use of electricity since enrolling in the program, a majority of 57% agree with the following statement: We have done everything possible to change the times we use electricity. One-third of participants (35%) agree with the statement: We have done a few things to change the times we use electricity. Only 8% of those polled agree with the statement: We really haven't done anything to change the times we use electricity.

Nearly three-fourths of participants (72%) think that being enrolled in the Time-of-Day program has saved them money on their electricity bill compared to not being on the program. One in five people (20%) admit that they don't know if they've saved money, while 9% report that they have not saved money on their electricity bill from being enrolled in the program.

Among those who have saved money on their electric bill, there is a consensus that respondents have saved more than they expected (21%) or about what they expected (48%) on their electricity bill compared to not being on the program. One in five people (18%) who saved money on their electricity bill confirm that the savings were less than they expected.

As might be expected, nearly all participants (96%) confirm that they are aware of the on- and off-peak hours associated with the Time-of-Day program.

Additional Time-of-Day Participants' Perceptions

Nearly all respondents (99%) think that it is very important or somewhat important for Utah Power to offer the Time-of-Day program to customers, with responses leaning heavily toward *very important*.

One-half of participants (53%) confirm that they have recommended the Time-of-Day program to a friend or family member, and 6% have mentioned the program in passing. Two in five people (39%) have not recommended the program, and only 1% report that they will never recommend the program.

The good news is that nine out of ten participants (90%) declare that they plan to continue with the Time-of-Day program. Only 3% do not plan to continue with the program, while 7% admit that they don't know if they will continue with it. Among those who plan to continue with the Time-of-Day program, respondents tend to say that they will continue with the program because it saves money (46%), it saves electricity (16%), savings in general (8%), and it fits their lifestyle (8%).

When asked for suggestions to help make the Time-of-Day program more attractive to customers, participants suggest changing the on-peak hours (17%), offer bigger savings or better incentives (14%), and advertise or give more information (11%). One in four people (28%) acknowledge that they don't have any suggestions for Utah Power to make the Time-of-Day program more attractive to non-participants.

iii. Recommendations

The following recommendations are based on the opinions expressed by both Time-of-Day program participants and non-participants.

- Perhaps most importantly, the research supports that the Time-of-Day program should be continued. In fact, nine out of ten participants (90%) report that they plan to continue with the program, which is quite promising.
- Unaided awareness of the Time-of-Day program among non-participants is currently around 2%. Aided awareness of the program is around 19%, bringing the total awareness level of the Time-of-Day program to 21%. These percentages suggest that Utah Power should continue promoting the Time-of-Day program through advertising and communications with customers, particularly via utility bill inserts.

VI. Program Costs

The total cost of the Time-of-Day program since its inception in March 2004 through September 31, 2005 was \$109,778. The meter hardware and installation labor costs were estimated. The administrative support and communications and advertising costs, however, were tracked. As shown below, the approximate cost per participant at the end of September 2005 was \$338.

Table 11 – Approximate Utah Time-of-Day Program Cost for 2004 and 2005

	Per Participant at the End of Sept 05 (Total / 325)	Total
Meter Hardware	\$118	\$38,400 *
Meter Labor	\$95	\$30,720 *
Total Meter Installation Cost	\$213	\$69,120
 Administrative Support	 \$78	 \$25,487
 Communications and Advertising	 \$38	 \$12,359
 Net Credit Cost	 \$9	 \$2,813
 Total Program Cost	 \$338	 \$109,778

* Total installation costs are based on the total number of installs (384) multiplied by the estimated cost of installation (\$100 for hardware; \$80 for labor)

VII. System Benefits

During the first two seasons of the Time-of-Day program, participants used 1,664,831 kWh. 1,309,684 kWh or 79% of this usage was off-peak. The revenue neutral design of Schedule 2 is based on data indicating that the average Utah customer uses approximately 76% of their total kWh consumption during the off-peak period. Presuming that the participants' behavior prior to enrollment was the same as that of the average Utah customer, 49,945 kWh were shifted from the on-peak period to the off-peak period. This is a very simplistic approach, which ignores the unknown effects of free ridership which would act to diminish any benefits of the program.

VIII. Conclusions and Recommendations

In its first two seasons, enrollments in the new residential Time-of-Day program continued to comprise only a small fraction of qualifying residential customers. However, compared to the prior Time-of-Day program, participation improved substantially. While many customers feel that the program is important, customer enrollment has remained relatively low, with only 325 participants at the conclusion of the program's second season. Program recognition as measured by aided and unaided awareness is 21%.

From the customer research conducted, both non-participants and participants feel that utility billing inserts are an effective outreach tactic. In order to increase participation, Utah Power should continue to promote the program through cost effective means such as bill inserts, the *Voices* newsletter, and the company's website. The information on promotional materials should be enhanced and include some of the results achieved by program participants.

In terms of enrollment processing and program operations, no program revisions are recommended. Participants have expressed satisfaction with the enrollment process.