



RECEIVED  
2010 JAN 29 PM 3:28  
IDAHO PUBLIC UTILITIES COMMISSION

Courtney Waites  
Pricing Analyst

January 29, 2010

Ms. Jean D. Jewell, Secretary  
Idaho Public Utilities Commission  
P. O. Box 83720  
Boise, ID 83720-0074

RE: Case No. IPC-E-07-05  
2009 Energy Watch and Time-of-Day Programs Annual Report

Dear Ms. Jewell:

Enclosed please find eight copies of Idaho Power Company's Energy Watch and Time-of-Day Programs Annual Report. This report is filed in compliance with Idaho Public Utilities Commission Order No. 30292. As you will see in the report, the Company is currently analyzing and evaluating the Energy Watch and Time-of-Day programs in preparation for increased participation due to the Advanced Metering Infrastructure (AMI) deployment. It is our plan to first offer the Energy Watch and Time-of-Day pricing options to our existing participants before opening enrollment to other customers. The Company is proposing this be the last Annual Report filed on this group of customers as the pricing options are no longer in a pilot phase. Idaho Power will file a report detailing the plans for new Energy Watch and Time-of-Day pricing options in compliance with Idaho Public Utilities Commission Order No. 30726.

If you have any questions regarding this filing, please contact me at 388-5612.

Sincerely,

Courtney Waites  
Pricing Analyst

CW/kkt

Enclosures

cc: Ric Gale  
P&RS Files  
Legal Files

RECEIVED  
2010 JAN 29 PM 3: 28  
IDAHO PUBLIC  
UTILITIES COMMISSION

## **2009 ENERGY WATCH AND TIME-OF-DAY PROGRAMS ANNUAL REPORT**

**January 29, 2010**

### **Background**

On April 12, 2007, the Idaho Public Utilities Commission (IPUC) approved Idaho Power's application to continue offering on an ongoing basis two time-variant energy pricing programs for customers with Advanced Meter Reading (AMR) capability in the Emmett and Letha areas: the Energy Watch program and the Time-of-Day program. These two programs were initially approved as pilot programs in March 2005 and were authorized by the Commission to continue through April 1, 2007.

### **Program Descriptions**

*Energy Watch* – The Energy Watch program is a simplified critical peak pricing program in which customers pay a flat energy rate in June, July and August other than during Energy Watch events, when participants pay a significantly higher rate. The Energy Watch events can be called on up to ten weekdays between June 15 and August 15. If called, the Energy Watch event runs between the hours of 5:00-9:00 p.m. and the electricity rate increases to 20¢ per kWh. During all other summer hours, participants pay a low energy rate of 6.3281¢ per kWh.

When an Energy Watch event is called, participants are notified by telephone and/or email by 4:00 p.m. the day preceding the Energy Watch event. The Company utilizes live operators for the notification call for the first Energy Watch event, notifying customers of the Energy Watch event date and times. After the initial Energy Watch event, the Company uses the autodialing system to deliver recorded messages about the next Energy Watch events.

*Time-of-Day* – The Time-of-Day program has two seasons: the summer season and the non-summer season. The summer season runs June 1 through August 31 and has three pricing blocks. There are no time differentiated blocks for the non-summer season; the rate structure is the same as the Schedule 1 Non-Summer rate structure.

The following chart outlines the time blocks and pricing used during the summer of 2009:

<b>Time-of-Day Program Summer Pricing 2009</b>			
<b>Price Block</b>	<b>Days</b>	<b>Hours</b>	<b>Cents/kWh</b>
On-Peak	Mon – Fri	1 p.m. – 9 p.m.	9.1840¢ / kWh
Mid-Peak	Mon – Fri	7 a.m. – 1 p.m.	6.7529¢ / kWh
Off-Peak	Mon – Fri	9 p.m. – 7 a.m.	5.0647¢ / kWh
Off-Peak	Sat, Sun, July 4 <sup>th</sup>	All hours	5.0647¢ / kWh

On the Time-of-Use program, customers who shift their energy consumption from the daytime hours to the late evening and weekend hours are rewarded by paying the lowest rate for electricity.

#### **Program Enrollment**

As of September 2009, Idaho Power had 49 customers participating in the Energy Watch program and 79 customers participating in the Time-of-Day program. This was a decrease of seven customers over 2008. The Company continues to see the total number of participants decline.

#### **Program Operation**

The Energy Watch and Time-of-Day programs were operated in the same way they were in previous years. The Company sent a letter to all program participants in May thanking them for participating and reminding customers of ideas to reduce energy usage during the summer months.

The Company continues to face the challenge of the manual intervention involved when moving a customer on or off of one of these programs. As has been noted in previous reports, this process requires a 'virtual' meter exchange within the Company's Customer Information System and is very time consuming for our Customer Service Representatives. However, the Meter Data Management System (MDMS) that required manual intervention during the 2005 and 2006 seasons passed acceptance testing in early 2007 and successfully validated, estimated, and aggregated the hourly meter data.

For the Energy Watch program, Idaho Power's program managers met on a daily basis between June 15<sup>th</sup> and August 15<sup>th</sup> to analyze forecasted temperatures and system load or supply side issues to determine if an event would be called the next day. The Company called seven Energy Watch events between June 15<sup>th</sup> and August 15<sup>th</sup>. This year, six events were called in July and one was called in August, with one instance of consecutive events. The following is a list of the event days called:

JUNE	JULY	AUGUST
	July 16 <sup>th</sup>	August 4 <sup>th</sup>
	July 17 <sup>th</sup>	
	July 22 <sup>nd</sup>	
	July 24 <sup>th</sup>	
	July 28 <sup>th</sup>	
	July 31 <sup>st</sup>	

When an event was called, an email was sent by 11 a.m. to those program participants who supplied an email address notifying them of the next day's scheduled event. This email also triggered the autodialing system which notified all program participants of the upcoming Energy Watch event by telephone. The following is a summary of the results by month of the telephone notification system that was completed by 4 p.m. on the day preceding an Energy Watch event:

Operator Call Out	Event Date	Calls Placed	Persons W/ Live Person	to An Answering Machine	Busy	No Answer	Hang Up	Other
1	7/16/2009	52	40	5	2	3	0	2
<b>Total</b>		<b>52</b>	<b>40</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>2</b>
			<b>77%</b>	<b>10%</b>	<b>4%</b>	<b>6%</b>	<b>0%</b>	<b>4%</b>

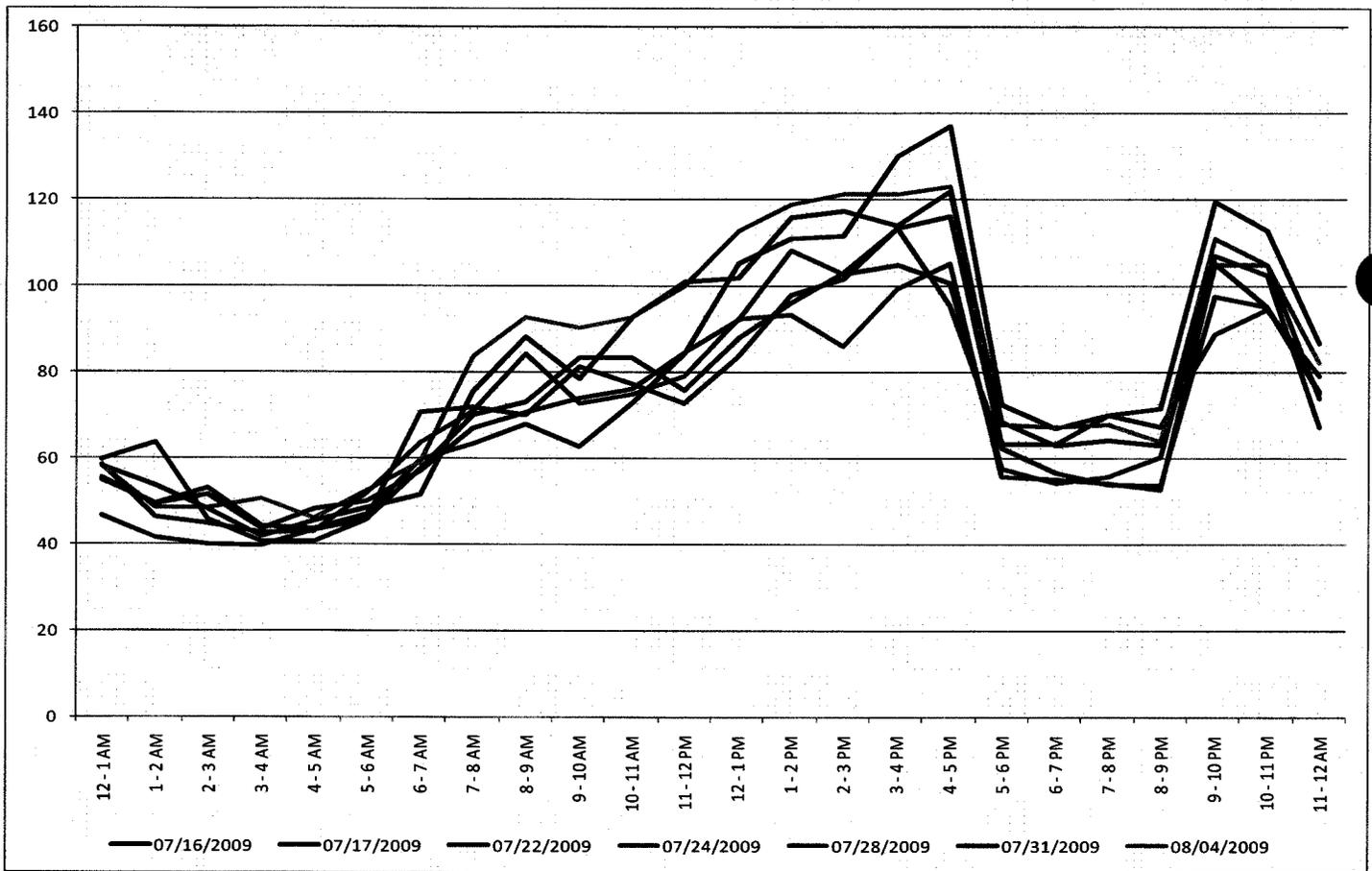
Operator Call Out	Event Date	Calls Placed	Persons W/ Live Person	to An Answering Machine	Busy	No Answer	Hang Up	Other
2	7/17/2009	52	35	3	2	4	4	2
3	7/22/2009	52	42	3	1	1	2	1
4	7/24/2009	52	40	3	0	0	6	1
5	7/28/2009	51	38	4	1	1	4	1
6	7/31/2009	50	40	3	1	0	3	1
7	8/4/2009	50	40	3	1	0	3	1
<b>Total</b>		<b>307</b>	<b>235</b>	<b>19</b>	<b>6</b>	<b>6</b>	<b>22</b>	<b>7</b>
			<b>77%</b>	<b>6%</b>	<b>2%</b>	<b>2%</b>	<b>7%</b>	<b>2%</b>

### **Program Results**

With the acceptance of the MDMS in 2007, Idaho Power was able to internally aggregate and analyze customer data for the 2009 summer season. The following is a review of the results of the Energy Watch and Time-of-Day programs.

*Energy Watch* – In order to analyze the data of the Energy Watch customers, the customers' aggregate hourly usage for each of the days an Energy Watch event was called is graphed below. The chart details the load shape for the Energy Watch customers on event days.

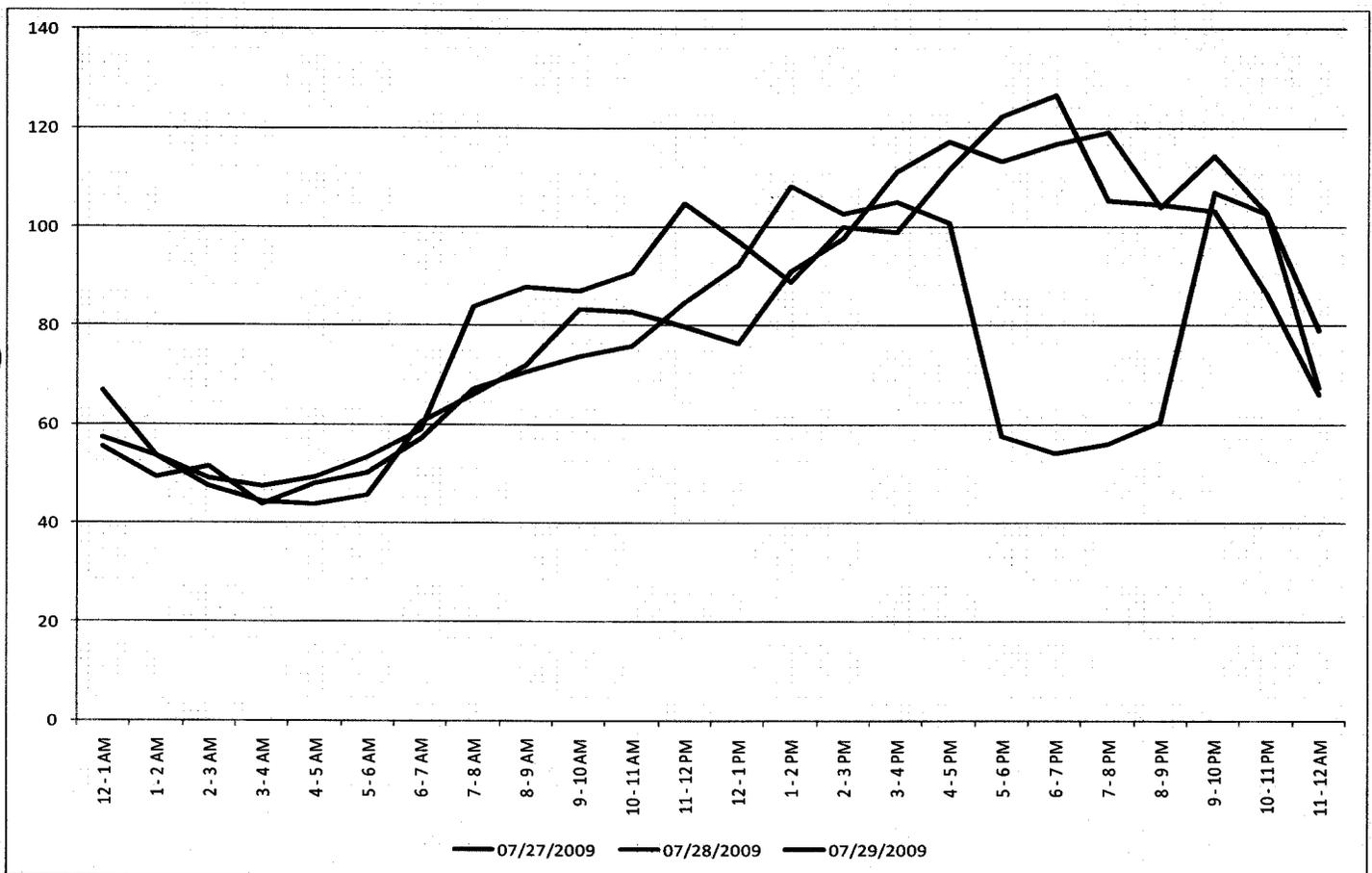
**All 2009 Energy Watch Event Dates**



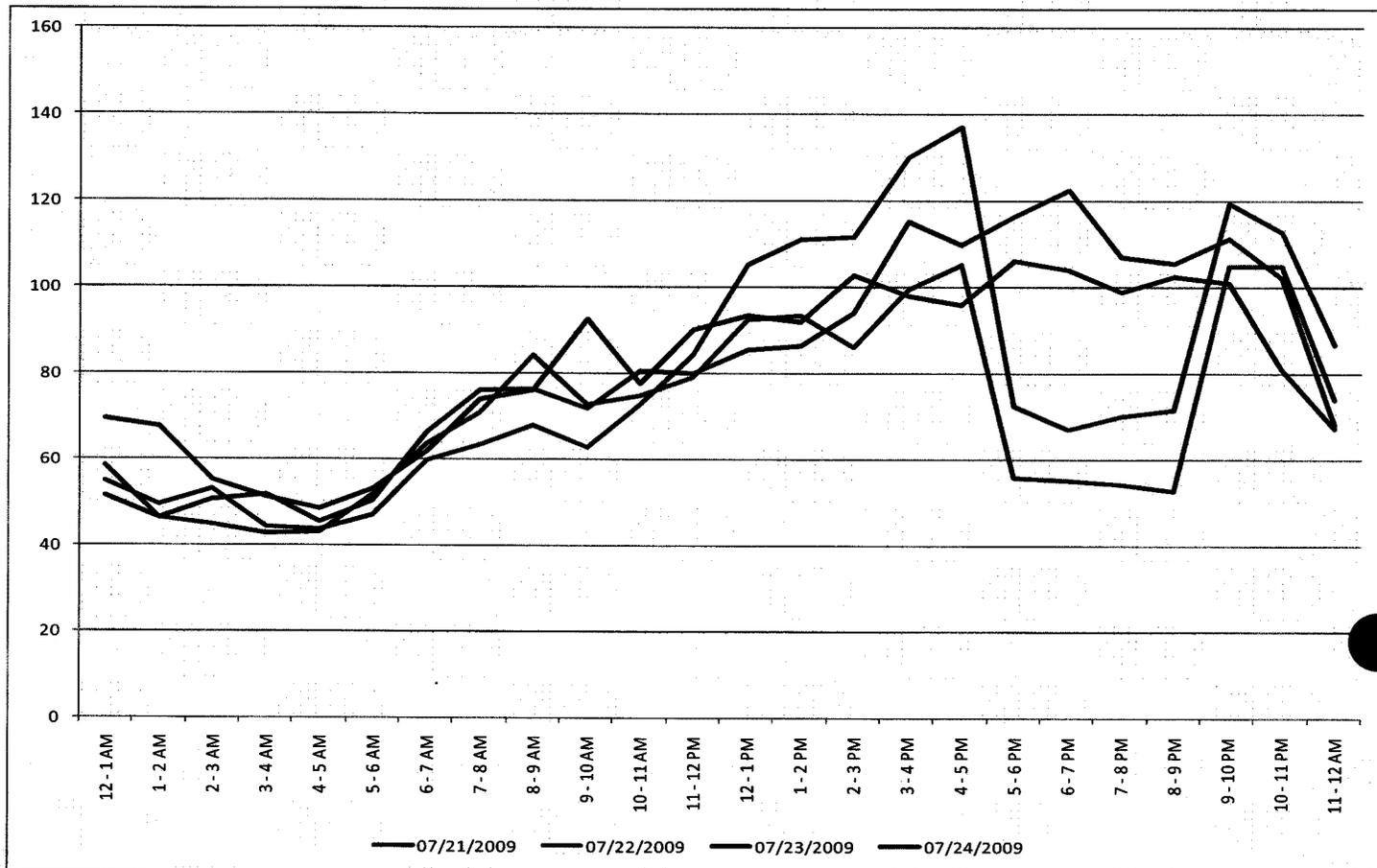
As can be seen from the graph above, customers substantially reduced their load during the Energy Watch events.

To further analyze the data, the hourly usage for each day of an Energy Watch event was compared to the hourly usage for the day before and the day after the event. In addition, hourly usage was analyzed during a week in which two event days were called to understand the impacts on customers and how they may respond to two events in one week. The following two charts illustrate these scenarios:

**Event Date: July 28<sup>th</sup>, 2009**



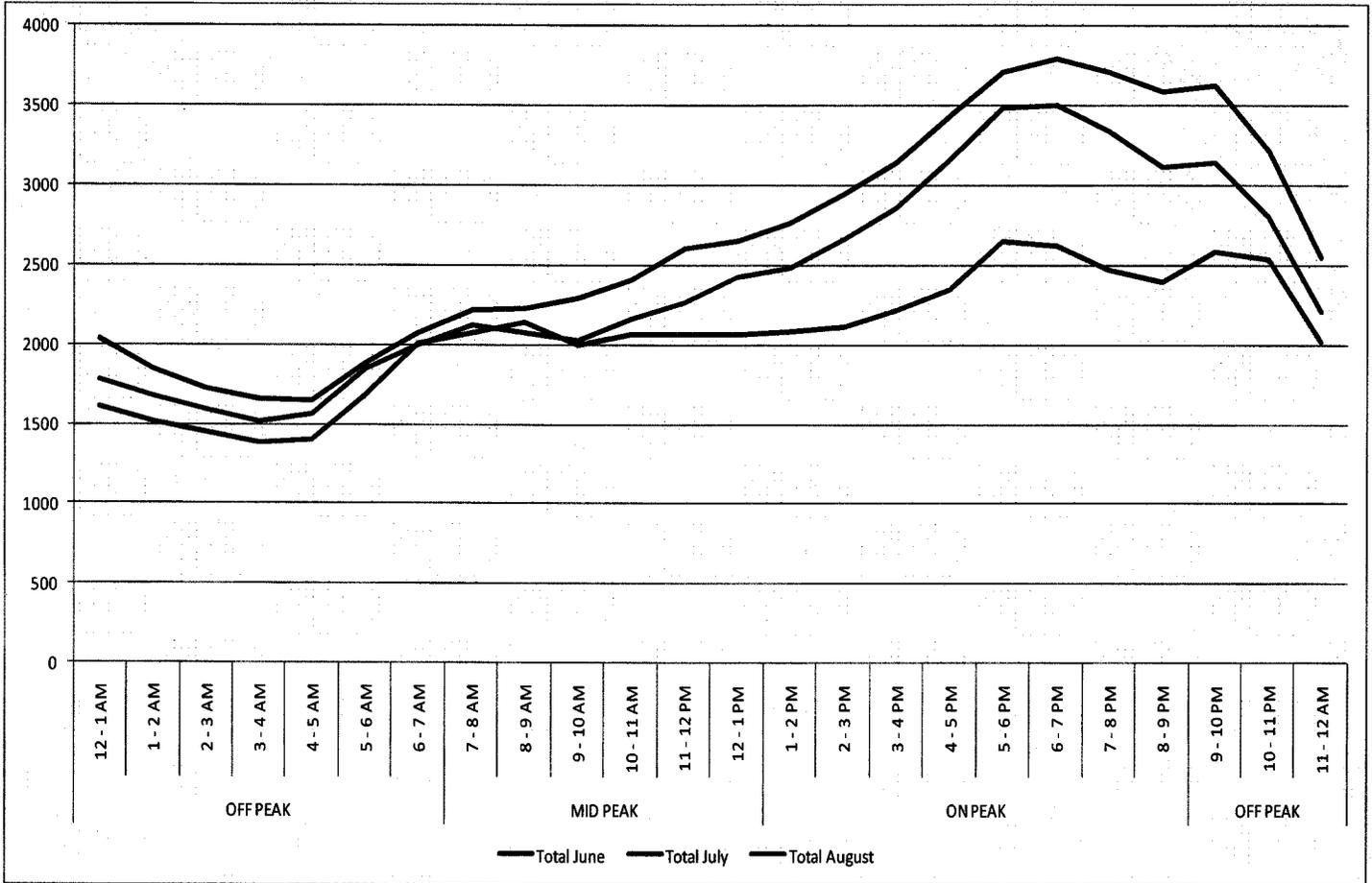
**Event Dates: July 22<sup>nd</sup> and 24<sup>th</sup>, 2009**



These charts clearly reflect that customers are reducing their usage during Energy Watch events.

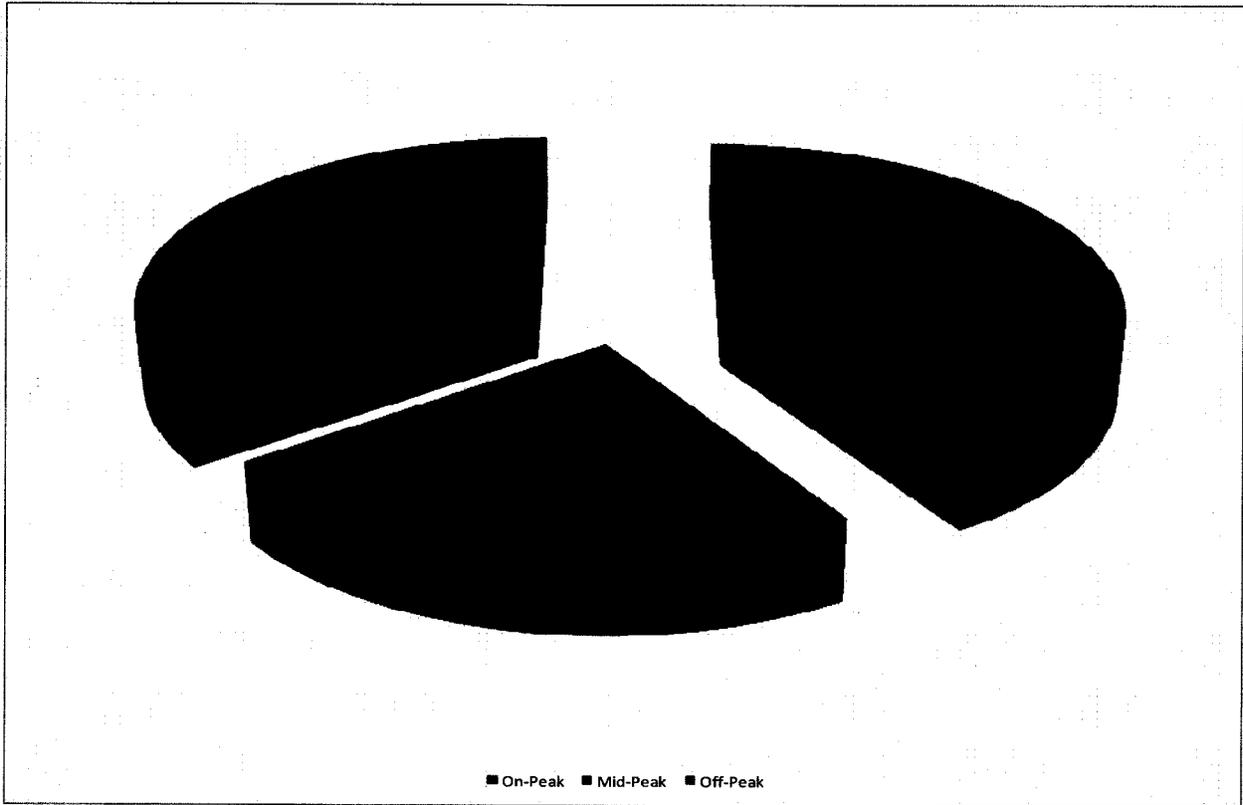
*Time of Day* – In order to analyze the data of the Time-of-Day customers, the total weekday hourly energy usage for the Time-of-Day customers during the 2009 summer season by month was totaled (excluding Independence Day). The following chart shows the total weekday usage by hour for each of the three summer months.

### Time of Day: 2009 Season



To evaluate what impact the Time-of-Day rates had on customers' usage patterns during on-peak periods, the hourly usage data was grouped by on-peak, mid-peak and off-peak time periods and compared with the percent of energy consumed during each of those periods. Below is a summary of that data for 2009 weekdays (excluding Independence Day).

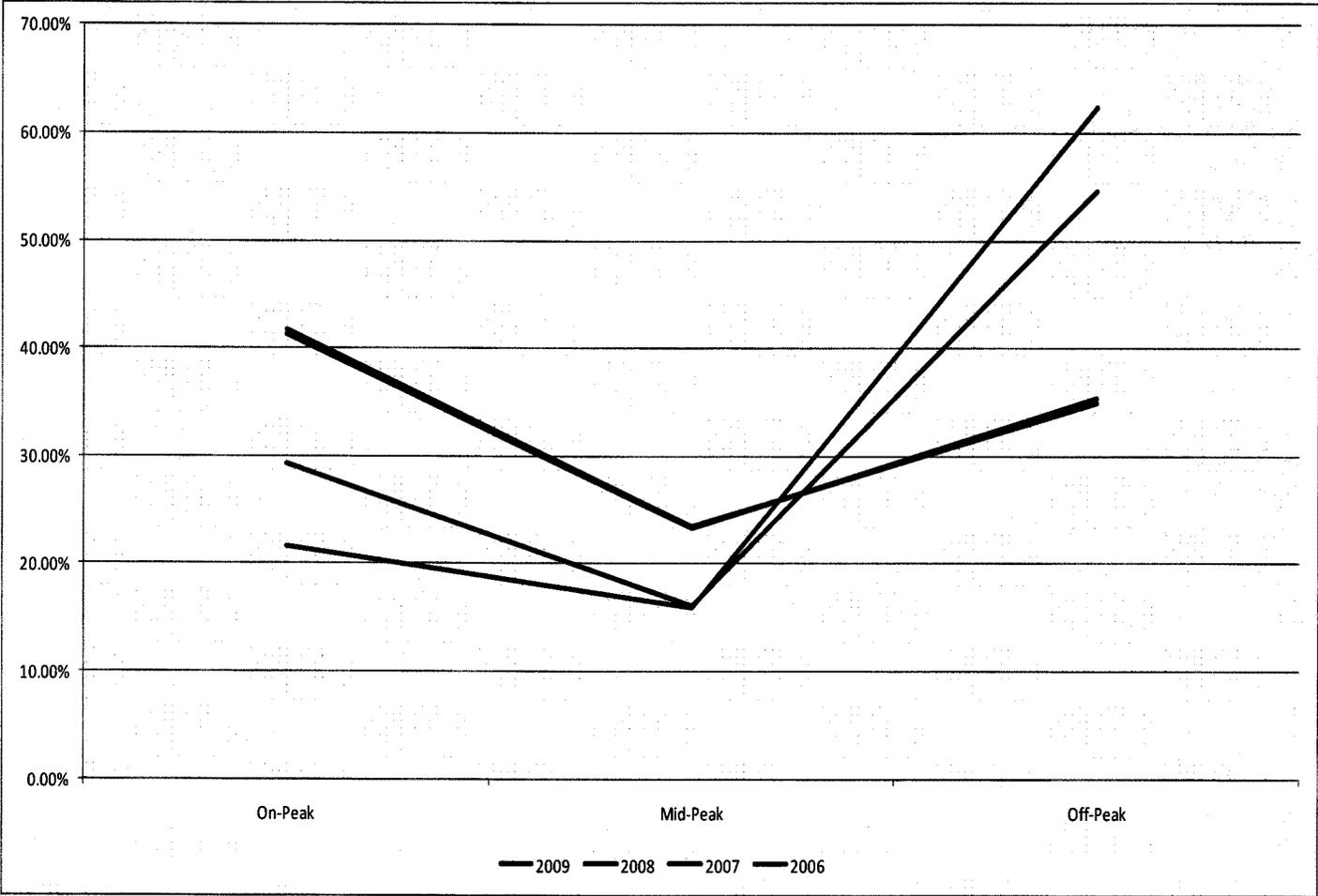
### Time of Day Percent of Usage by Time Period



To identify any changes in overall usage patterns, a comparison was made between the on-peak, mid-peak, and off-peak usage for 2006, 2007, 2008 and 2009. The chart below summarizes the percent of total use by time period for each year.

Period	2006	2007	2008	2009
<b>June</b>				
On-Peak	21.6%	27.7%	38.1%	38.2%
Mid-Peak	17.7%	16.7%	25.8%	25.1%
Off-Peak	60.8%	55.6%	36.1%	36.8%
<b>July</b>				
On-Peak	20.7%	28.9%	43.1%	42.5%
Mid-Peak	14.2%	14.9%	22.4%	22.6%
Off-Peak	65.1%	56.2%	34.6%	34.9%
<b>August</b>				
On-Peak	22.8%	31.1%	43.1%	42.6%
Mid-Peak	16.7%	17.1%	22.5%	22.6%
Off-Peak	60.5%	51.8%	34.4%	34.8%

The chart below compares the total summer season time period usage for the years 2006, 2007, 2008, and 2009. The time period usage in 2009 was almost identical to 2008, which is when customers made a significant shift of off-peak usage to on-peak.



### **Future of the Energy Watch and Time-of-Day Programs**

The Energy Watch and Time-of-Day programs continue to provide the Company with valuable information regarding customers' responses to time-variant pricing. Consistent with the findings from previous analyses, Energy Watch program participants appear to reduce load during the Energy Watch events while it appears that Time-of-Day program participants do not engage in load shifting.

As the Advanced Metering Infrastructure (AMI) is rolled out across our service territory, the Company is looking to expand the availability of its residential time-variant pricing options to as many as 5,000 additional customers a year during the deployment period. Current systems and processes are being evaluated and improved to adequately manage a greater number of customers. In addition, we are in the process of assessing the current programs to determine what changes, if any, need to be made to obtain increased participation and increased load shifting.