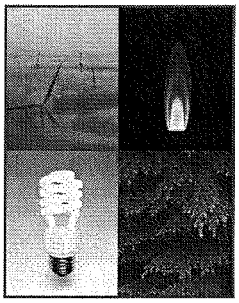
Puget Sound Energy

Meter and Billing Performance Quarterly Report

for the Quarter Ending June 30, 2011

Filed July 28, 201

Contents



Introduction

Executive summary

As of June 30, 2011, with the exceptions noted and discussed in this report, PSE has resolved 100% of the meter and billing problems within their specific timeframes and met its performance standards set for the following vintages: Phase-in Group One, Phase-in Interim, natural gas problems identified between January 2009 and February 2011, and electric problems identified between January 2009 and April 2011. PSE has rounded the results in this report to the nearest whole percentage and realizes that some results rounded to 100% do not reflect resolution of all meter and billing problems. These differences are discussed on the following pages of this report.

Background

In accordance with the multi-party Settlement Stipulation of Service Quality, Meter and Billing Performance, and Low-income Bill Assistance ("Settlement Stipulation") approved by the Washington Utilities and Transportation Commission on October 8, 2008, in consolidated Docket Nos. UE-072300 and UG-072301 Order 12: Final Order Approving and Adopting Settlement Stipulations; Authorizing and Requiring Compliance Filing, Puget Sound Energy ("PSE" or the "Company") submits this report for the quarter ending June 30, 2011.

Definitions and Standards

Definitions

Definitions of "Identified"

The following definitions the Settlement Stipulation are used throughout this document and define when a specific category of meter issues is considered "identified".

a. Stopped Meter: Date the meter is validated to be a probable stopped meter from manual analysis of the zero consumption report or other similar report.

b. Unassigned Energy Usage ("UEU"): Date that energy usage reaches the following established thresholds:

Customer group	Gas	Electric
Residential	100 therms	1,000 kWh
Commercial and Industrial	100 therms	7,150 kWh

c. Lost Meter: Date that the meter has been correctly transmitting energy usage for more than sixty days; yet no associated account exists in the ConsumerLinX ("CLX") system.

d. Meter Mix/Other Field Identified: Date of notification of a potential meter mix (meter correctly recording and transmitting energy, but is assigned to an incorrect account in CLX) or other field identified problem as reported either from a customer or a PSE field representative.

e. Other: For meter and billing problems that do not fall into one of the above categories, that problem will be considered "identified" when it is first brought to the attention of a PSE representative by any party, or when through the course of normal work, a representative identifies a meter and billing error or problem.

Definition of "Resolved"

An identified meter and billing problem will be considered resolved when a correct bill is issued to the customer and any associated equipment problems are corrected.

Performance Standards

Phase-in Standards

Group One: As of June 30, 2008, PSE had identified potential problems with 17,276 meters. PSE commits to resolving 100 percent of this legacy population by June 30, 2009. The Company will also resolve 75 percent of the population by December 31, 2008.

Interim: PSE will resolve potential gas and electric meter and billing problems identified between July 1, 2008, and December 31, 2008, by June 30, 2009.

Ongoing Standards, applicable starting January 1, 2009

Natural Gas: PSE will resolve identified potential natural gas meter and billing problems for each monthly vintage within four months of identification; 75 percent will be resolved within two months of identification. Potential metering and billing problems identified within the same month will be of the same vintage. (For example, potential problems identified on the 5th of the month or the 20th of the month will have the same monthly vintage.)

Electric: PSE will resolve identified potential electric meter and billing problems for each monthly vintage within two months of identification; 50 percent will be resolved within one month of identification. Potential metering and billing problems identified within the same month will be of the same vintage. (For example, potential problems identified on the 5th of the month or the 20th of the month will have the same monthly vintage.)

Summary Progress to Date

Meter and Billing Performance Summary

Phase-in Vintages as of June 30, 2011

(Performance results are rounded to the nearest whole percentage and some of 100% results do not reflect resolution of all meter and billing problems. These exceptions are discussed on the following pages of this report.)

Electric meter information:

Phase-in Vintage	# Electric Meter and Billing Issues	Resolved Within Standards	% Resolved Within Standards
Group One	5,538	5,537	100%
Interim	19,735	19,734	100%

Natural gas meter information:

Phase-in Vintage	# Gas Meter and Billing Issues	Resolved Within Standards	% Resolved Within Standards
Group One	11,738	11,734	100%
Interim	64,403	64,400	100%

Combined electric and natural gas meter information:

Phase-in Vintage	Total # Meter and Billing Issues	Resolved Within Standards	% Resolved Within Standards
Group One	17,276	17,271	100%
Interim	84,138	84,134	100%

Steady State (Ongoing Vintages) as June 30, 2011

(Performance results are rounded to the nearest whole percentage and some of 100% results do not reflect resolution of all meter and billing problems. These exceptions are discussed on the following pages of this report.)

Electric meter information:

Ongoing Vintage	# Electric Meter and Billing Issues	Resolved Within 1 Month of Identification	% Resolved Within 1 Month of Identification	Resolved Within 2 Months of Identification	% Resolved Within 2 Months of Identification	# of Issues Identified As Reported in Q1	Reason for Change
JAN_10	3,322	3,101	93%	3,321	100%		
FEB_10	2,513	2,408	96%	2,513	100%		
MAR_10	4,997	4,836	97%	4,997	100%		
APR_10	3,128	3,071	98%	3,128	100%		
MAY_10	7,427	7,170	97%	7,427	100%		
JUN_10	17,008	14,063	83%	17,006	100%		
JUL_10	15,109	13,669	90%	15,108	100%		
AUG_10	11,080	11,016	99%	11,078	100%		
SEP_10	6,386	6,090	95%	6,384	100%		
OCT_10	5,015	4,887	97%	5,013	100%		
NOV_10	3,731	3,567	96%	3,731	100%		
DEC_10	3,708	3,218	87%	3,708	100%		
JAN_11	3,546	3,307	93%	3,545	100%		
FEB_11	2,858	2,672	93%	2,857	100%		
MAR_11	2,176	2,089	96%	2,175	100%		
APR_11	3,554	3,456	97%	3,554	100%		
MAY_11	2,787	2,723	98%	Open			
JUN_11	2,225	1,711	77%	Open			

Natural gas meter information:

Ongoing Vintage	# Gas Meter and Billing Issues	Resolved Within 2 Month of Identification	% Resolved Within 2 Month of Identification	Resolved Within 4 Months of Identification	% Resolved Within 4 Months of Identification	# of Issues Identified As Reported in Q1	Reason for Change
JAN_10	7,716	7,588	98%	7,716	100%		
FEB_10	4,828	4,774	99%	4,828	100%		
MAR_10	6,435	6,331	98%	6,435	100%		
APR_10	4,949	4,891	99%	4,947	100%		
MAY_10	5,737	5,519	96%	5,737	100%		
JUN_10	3,799	3,282	86%	3,799	100%		
JUL_10	6,969	6,908	99%	6,969	100%		
AUG_10	1,648	1,644	100%	1,648	100%		
SEP_10	24,131	24,051	100%	24,130	100%		
OCT_10	7,080	7,030	99%	7,077	100%		
NOV_10	3,672	3,497	95%	3,672	100%		
DEC_10	4,112	3,748	91%	4,112	100%		
JAN_11	5,720	4,726	83%	5,719	100%		
FEB_11	4,654	3,792	81%	4,654	100%	4,652	Note 1
MAR_11	4,374	3,709	85%	4,319	99%	4,371	Note 2
APR_11	3,876	3,182	82%	Open			
MAY_11	3,733	2,907	78%	Open			
JUN_11	4,769	3,228	68%	Open			

Note 1: In the vintage noted, data has been adjusted to correct a data entry error in the 1st quarter report.

Note 2: In the vintage noted, additional meters related to a meter mix issue needed to be added to complete the investigation.

Issues Resolution

Phase-in Group One

As of June 30, 2008, PSE identified and resolved 17,276 meter problems.

- 17,271 items (100 percent) were resolved within Phase-in Standards.
- One meter problem, associated with electric meter ID 9694 has been located and resolved on August 11, 2009.
- The four remaining items (which constitute less than 0.02 percent) are lost meters and will be discussed in the *Exceptional Unresolved Issues* section of this report.

Phase-in Interim Group

From July 1, 2008, to December 31, 2008, PSE had identified potential problems with 84,138 meters.

- 84,134 items (100 percent) were resolved within Phase-in Standards.
- Three items, electric meter ID 8923 and natural gas meter IDs 4974 and 9711, were resolved outside of the Standards in July 2009.
- The remaining one item is a Lost Meter and will be discussed in the *Exceptional Unresolved Issues* section.

Steady State (Ongoing Standards)

This section describes the progress of 2011 monthly vintages and the 2009 and 2010 monthly vintages with residual unresolved meter or billing problems, although PSE has met its benchmark of 100 percent for each of the vintages. The meter and billing problems in 2009 and 2010 vintages not listed below have been resolved completely and detailed results can be found in PSE's 2009 4th quarter report, 2010 4th quarter report, and 2011 1st quarter report.

For some of the monthly vintages, the total number of meter and billing problems varies from what PSE presented in its prior quarterly reports. The reason for the change for each of affected vintages is noted at the end of the *Summary Progress to Date* section above for the Steady State vintages. The following discussion is based upon the revised monthly results as June 30, 2011.

Electric Meter Issue Resolution

- January 2010: PSE identified potential problems with 3,322 electric meters. 3,101 (93 percent) were resolved within one month of identification and 3,321 (100 percent) were resolved within 2 months. The only exception (which constitutes about 0.03 percent), listed as meter ID 0203 in the in the *Issues Discussion* section.

- January 2011: PSE identified potential problems with 3,546 electric meters. 3,307 (93 percent) were resolved within one month of identification and 3,545 (100 percent) were resolved within 2 months. The only exception (which constitutes less than 0.03 percent), identified as meter ID 2755 was resolved on April 26, 2011 when the hazardous weather conditions improved and PSE was able to gain access the meter.

- February 2011: PSE identified potential problems with 2,858 electric meters. 2,672 (93 percent) were resolved within one month of identification and 2,857 (100 percent) were resolved within 2 months. The only exception (which constitutes less than 0.03 percent) identified as meter ID 8967 will be discussed in the *Issues Discussion* section.

- March 2011: PSE identified potential problems with 2,176 electric meters. 2,089 (96 percent) were resolved within one month of identification and 2,175 (100 percent) were resolved within 2 months. The only exception (which constitutes less than 0.05 percent) was resolved on June 22, 2011 when the hazardous weather conditions improved and PSE was able to gain access to the meter.

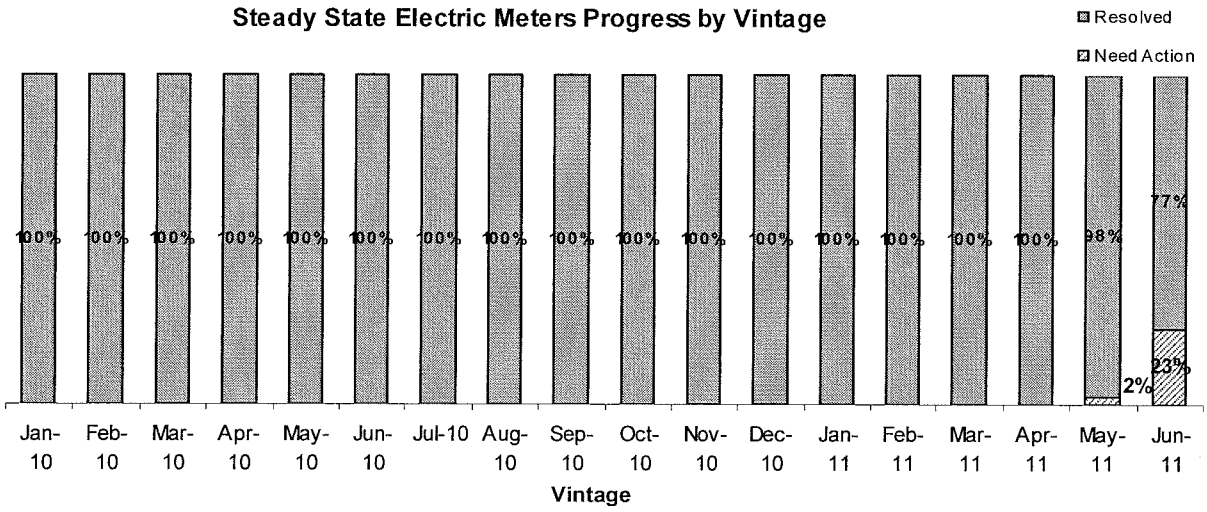
- April 2011: PSE identified potential problems with 3,554 electric meters. 3.456 (97 percent) were resolved within one month of identification and 3,554 (100 percent) were resolved with 2 months of identification.

- May 2011: PSE identified potential problems with 2,787 electric meters. 2,723 (98 percent) were resolved within one month of identification and PSE is on track to resolve 100 percent of the potential problems by July 31, 2011.

- June 2011: PSE identified potential problems with 2,225 electric meters. PSE is on track to meet the interim threshold of 50 percent resolved by July 31, 2011 and resolve 100 percent of the potential problems by August 31, 2011.

Aging and Composition comparisons

The following chart shows the aging of the Steady State electric meter vintages as of June 30, 2011.



The following table details the composition of Steady State Electric meters by vintage as of June 30, 2011.

Ongoing Vintage	Stopped Meter	Lost Meter	UEU	Meter Mix	Total
JAN_10	2,315	16	715	276	3,322
FEB_10	1,794	20	443	256	2,513
MAR_10	4,213	4	465	315	4,997
APR_10	2,184	3	332	609	3,128
MAY_10	6,906	16	272	233	7,427
JUN_10	16,507	12	268	221	17,008
JUL_10	14,325	4	201	579	15,109
AUG_10	10,605	13	286	176	11,080
SEP_10	5,624	19	560	183	6,386
OCT_10	3,933	8	908	166	5,015
NOV_10	2,753	20	852	106	3,731
DEC_10	2,349	9	1,186	164	3,708
JAN_11	2,277	13	1,068	188	3,546
FEB_11	1,241	15	1,326	276	2,858
MAR_11	1,321	11	707	137	2,176
APR_11	2,585	10	719	240	3,554
MAY_11	1,995	12	674	106	2,787
JUN_11	1,512	21	582	110	2,225

Gas Meter Issue Resolution

- December 2010: PSE identified potential problems with 4,112 gas meters. 3,748 (91 percent) were resolved within 2 months of identification and all 4,112 (100 percent) were resolved within 4 months of identification.

- January 2011: PSE identified potential problems with 5,720 gas meters. 4,726 (83 percent) were resolved within 2 months of identification. And 5,719 (100 percent) were resolved within 4 months of identification. The only exception (which constitutes less than .02 percent) was resolved on June 17, 2011.

- February 2011: PSE identified potential problems with 4,654 gas meters. 3,792 (82 percent) were resolved within 2 months of identification and 4,654 (100 percent) were resolved within 4 months of identification.

- March 2011: PSE identified potential problems with 4,374 gas meters. 3,709 (85 percent) were resolved within 2 months of identification. PSE is on track to resolve 100 percent of the potential problems by July 31, 2011.

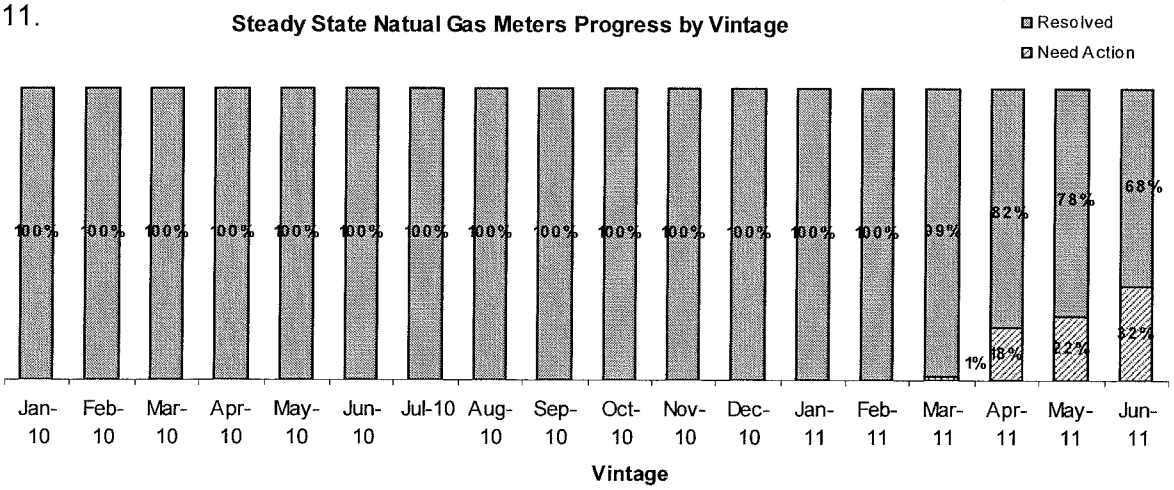
- April 2011: PSE identified potential problems with 3,876 gas meters. 3,182 (82 percent) were resolved within 2 month of identification. PSE is on track to meet to resolve 100 percent of the potential problems by August 31, 2011.

- May 2011: PSE identified potential problems with 3,733 gas meters. PSE is on track to meet the interim threshold of 75 percent resolved by July 31, 2011, and resolve 100 percent of the potential problems by September 30, 2011.

- June 2011: PSE identified potential problems with 4,769 gas meters. PSE is on track to meet the interim threshold of 75 percent resolved by August 31, 2011 and resolve 100 percent of the potential problems by October 31, 2011.

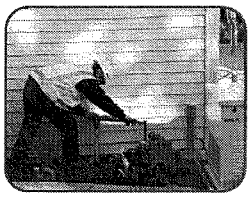
Aging and Composition comparisons

The following chart shows the aging of the Steady State natural gas meter vintages as of June 30, 2011.



The following table details the composition of Steady State natural gas meters by vintage as of June 30, 2011.

Ongoing Vintage	Stopped Meter	Lost Meter	UEU	Meter Mix	Total
JAN_10	6,549	11	933	223	7,716
FEB_10	4,029	18	494	287	4,828
MAR_10	5,549	9	546	331	6,435
APR_10	4,224	7	458	260	4,949
MAY_10	5,062	6	373	296	5,737
JUN_10	3,336	7	224	232	3,799
JUL_10	6,675	7	146	141	6,969
AUG_10	1,297	13	158	180	1,648
SEP_10	23661	13	311	146	24,131
OCT_10	6,366	8	530	176	7,080
NOV_10	2,922	7	614	129	3,672
DEC_10	2,955	12	1,022	123	4,112
JAN_11	4,032	11	1,497	180	5,720
FEB_11	3,371	4	1,026	253	4,654
MAR_11	3,264	12	910	188	4,374
APR_11	3,066	7	680	123	3,876
MAY_11	2,947	9	592	185	3,733
JUN_11	4,139	19	439	172	4,769



Tracking and Reporting Monthly Vintage of Meter/Billing Issues

Issues Discussion

During the last few months, PSE has been proactively addressing the following potential meter issues:

- Stopped Meters: In the previous quarterly report, PSE discussed the use of the DataRaker[1] analytic query[2] in identifying "frozen" gas modules as a result of the cold weather. An analysis of the resolved meter problems in the natural gas JAN_11 and FEB_11 vintages indicates that a 43% success rate in identification of these "frozen" modules. This 43% success rate does not take into account those meters that did not require a manually calculated back bill. Without the DataRaker analytic query, these JAN_11 and FEB_11 vintages meters would have been identified as the MAR_11 and APR_11 vintages, respectively, if just using the ZCON report[3]. The deployment of the DataRaker analytic query during the cold weather allows PSE to quickly identify/repair the "frozen" module and reduce the number and amount of retro billing.

- Irregular Use VEE Code: As reported in the first quarter report, in order to better finding the stopped meters that should require a field visit, PSE requested DataRaker to provide an analysis on a group 7,400 meters that had an irregular usage VEE (**V**alidation, **E**diting, and **E**stimation of meter data) code for one year or more and had shown no usage. Upon DataRaker's further analysis, PSE is able to identify 113 meters as probable stopped module/meters among the 7,400 meters. As of the June 30, 2011, PSE's field personnel confirmed that 40 of the 113 meters are not a stopped meter but a valid zero usage meter and only four meters required a billing adjustment. PSE have finished the review of remaining 69 meters and are currently working on the resolution of these meter issues. PSE will continue to work with DataRaker to identify criteria needed to improve the results of the analysis.

[1] PSE's vendor that provides data analysis supports for various PSE departments.

[2] The DataRaker query is an analytic platform that evaluates PSE's daily meter reads, weather data, and individual customer usage pattern to identify potential stopped meter problems within 10-15 days after meter module malfunction first occurred.

[3] ZCON Report is a monthly zero consumption report derived from the data stored in the PSE's Meter Data Management System which is the system of record for all automated-meter reads.

Unresolved Exception Issues

The following table summarizes, as of June 30, 2011, the status of those exceptional unresolved meter problems mentioned in the Issues Resolution sections above:

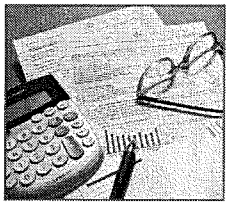
Vintage	Redacted Meter ID	Category	Issue Type
Group One Gas	0432	Lost Meter	Not Located
Group One Gas	0947	Lost Meter	Not Located
Group One Gas	1426	Lost Meter	Not Located
Group One Gas	9421	Lost Meter	Not Located
Interim Gas	1760	Lost Meter	Not Located
Apr-09 Gas	3028	Lost Meter	Not Located
Jun-09 Gas	5722	Lost Meter	Not Located
JAN_10	0203	Lost Meter	Not Located
Feb-11	8967	UEU	Not Completed

Not Located Issue

PSE has not been able to locate the above eight Lost Meters since the end of last quarter. PSE has continued its efforts to locate these meters whenever any of the meters shows some usage or sends a radio frequency that is strong enough for the locating equipment to pinpoint the meter location. Further status updates on these meter problems will be included in the next quarterly report.

Not Completed Issue

PSE has not been able to access Meter ID 8967 since the meter problem was first discovered. Resolution of this meter exception will be completed as soon as the snow has melted and the meter becomes accessible.



Addendum Reporting

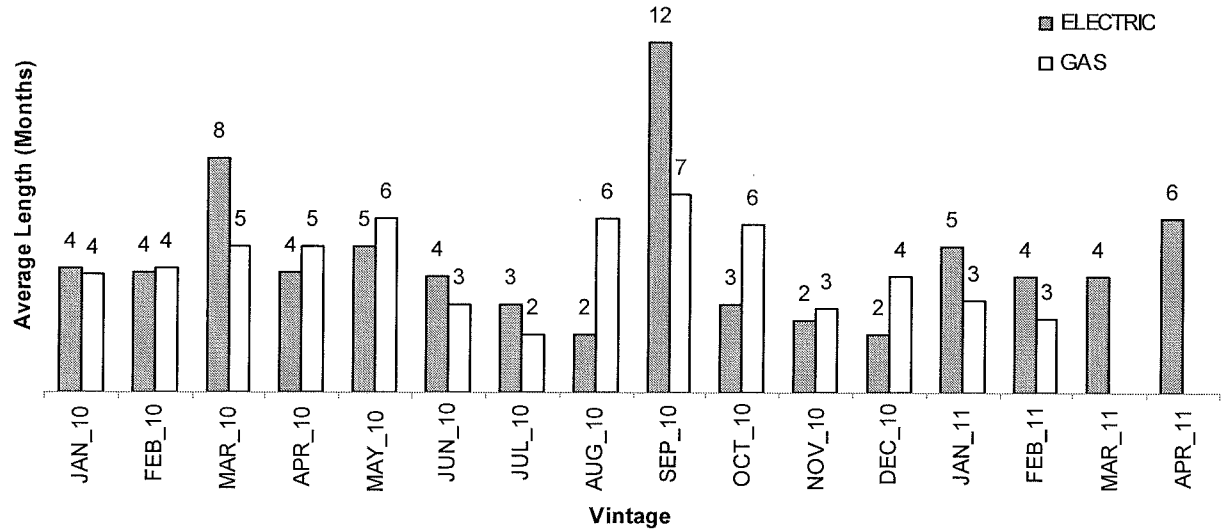
Backbilling Results of Stopped Meters

This additional data regarding the backbilling results of Stopped Meters are included in the quarterly filing per an informal WUTC staff request in September 2009. Specifically, the following information details the average duration of the Stopped Meter issue, the average length of backbilling, and the average backbilled amount by vintage as of June 30, 2011. The average backbilled information is not available for vintages that have not been completed including electric May_11 and June_11 vintages and natural gas vintages identified during March-June 2011.

Among the total 380,818[4] Stopped Meters, 7% of these meters require backbilling because of equipment problems. The other 93% are meters with seasonal usage and the potential meter and billing problems dissolved when customers start to use natural gas or electricity again in the coming season.

The chart below shows the average duration in months of meter stopped for Stopped Meters with automatic meter reading ("AMR") device by vintage as of June 30, 2011. The average duration of meter stopped is the average of the actual duration that a meter is stopped, i.e., the total number of months from the date the meter failed to the date the meter issue was resolved.

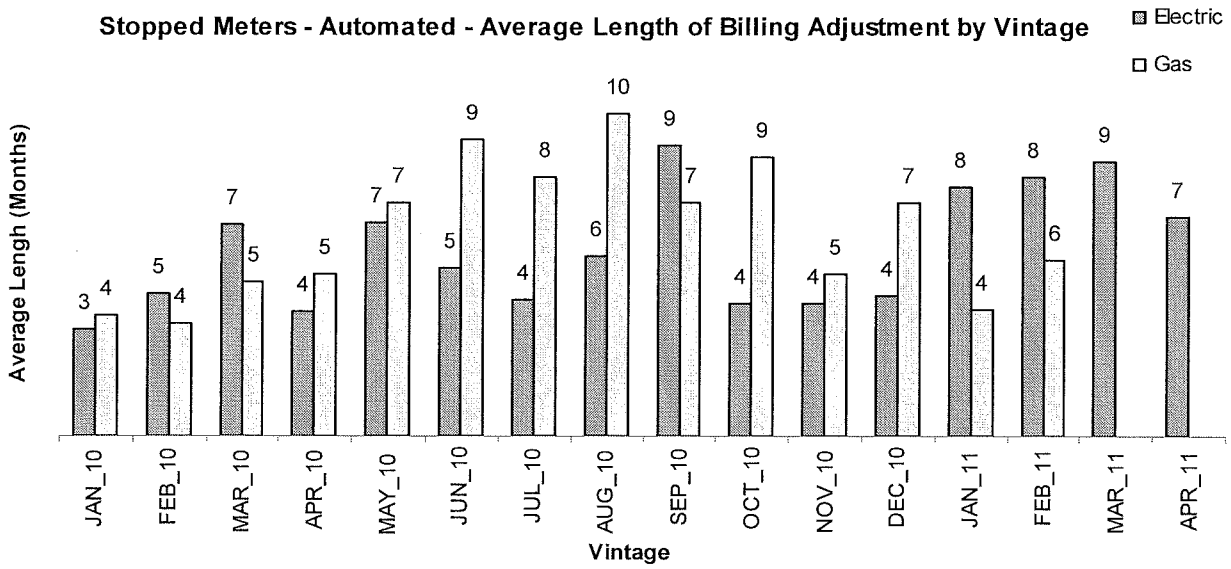
Stopped Meters - Automated - Average Duration of Meter Stopped by Vintage



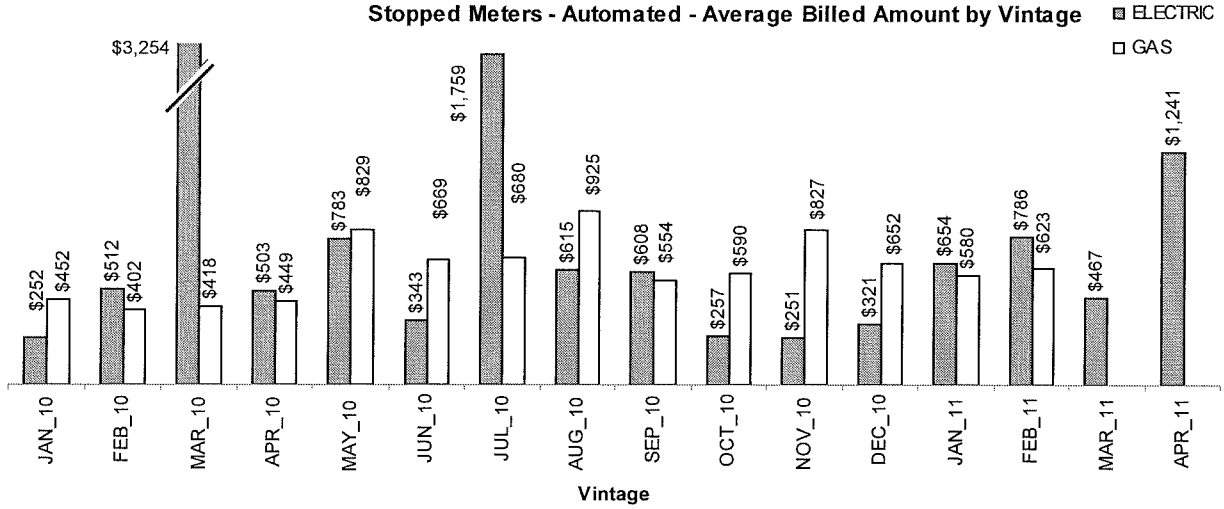
[4] The 380,818 includes only the number of Stopped Meters whereas the 455,033 reported in the 2011 1st quarter and the same reference in all the prior addendum reporting had been including all potential meter issues due to PSE's oversight.

The chart below shows the average length of the billing adjustment for Stopped Meters with AMR device as of June 30, 2011.

The average length of backbilling is the average of the actual backbilling period, which is the difference from the meter read date of the last accurate billing prior to the occurance of meter stopped to the meter read date of the first CLX billing after the resolution of the Stopped Meter issue. For any Stopped Meter, the duration of the meter stopped (shown above) may or may not be the same length of time as its billing adjustment period or the length of being identified as a Stopped Meter.

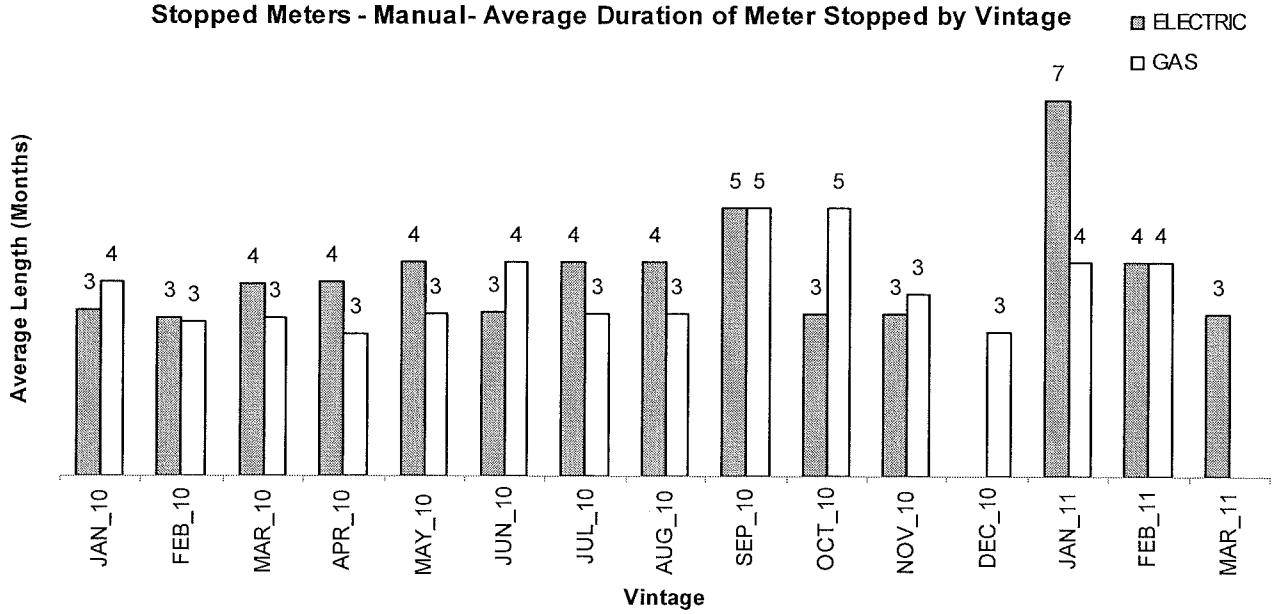


The chart below shows the average billed amount by vintage for AMR Stopped Meters as of June 30, 2011. The average billed amount is associated with the actual total number of months of the billing adjustment occurred. The actual backbilling period for a Stopped Meter problem does not change even though the billing adjustment amount may be increased or decreased due to subsequent adjustments.

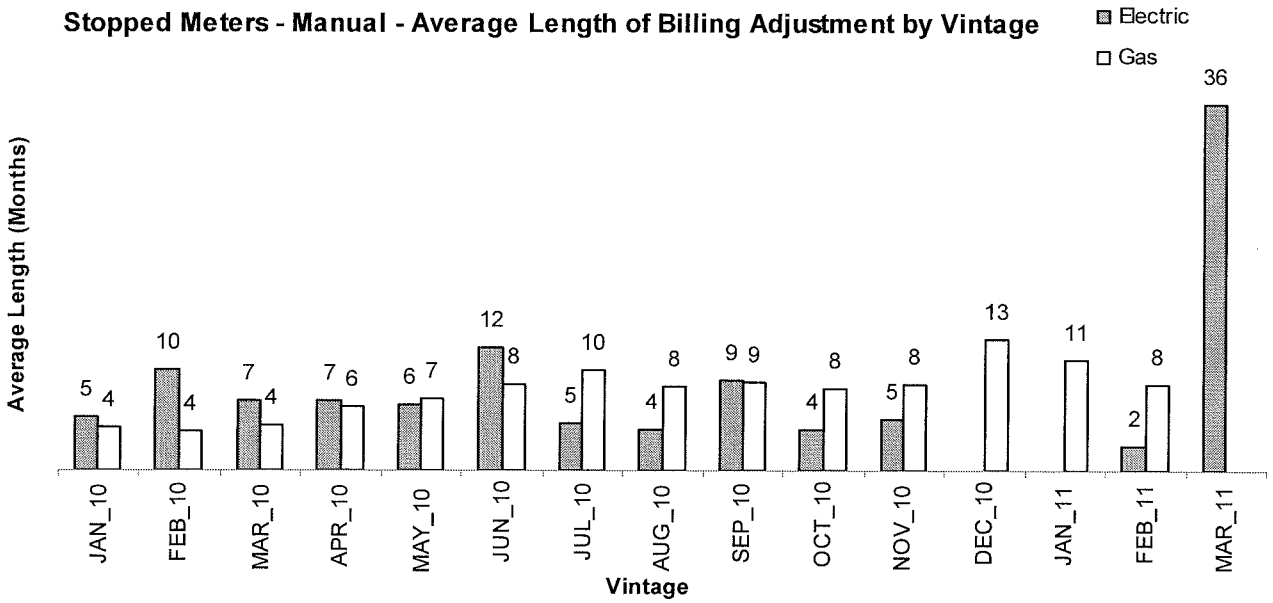


The chart below shows the average meter issue cycle time in months for manually-read Stopped Meters by vintage as June 30, 2011. There is no manually-read electric Stopped Meter in the following

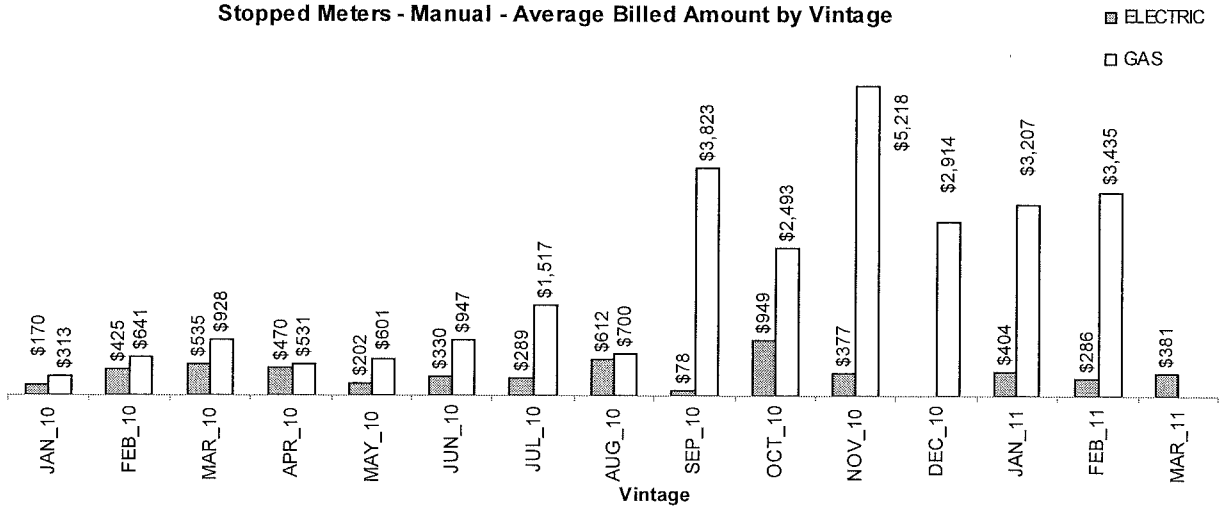
vintages: Dec_10, Jan_11, Mar_11 and Apr_11 vintages; and results for vintages that have not been closed, electric May_11 and June_11 vintages and natural gas vintages identified during March-June 2011 are not available at this time.



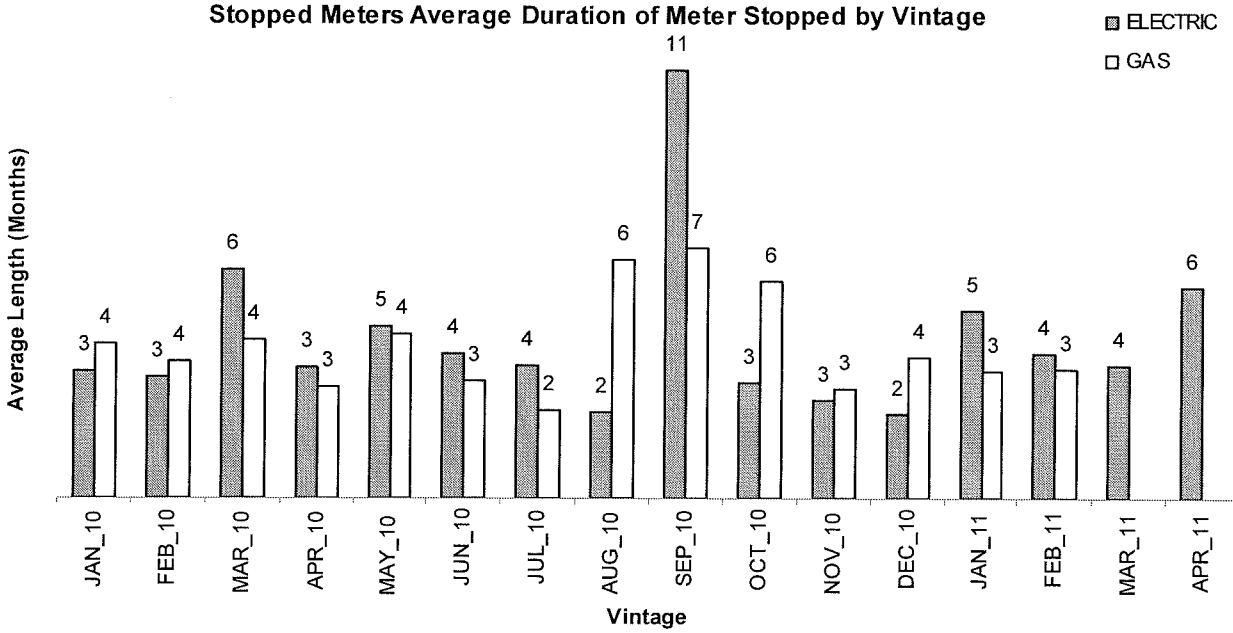
The chart below shows the average length of billing adjustment for manually read Stopped Meters as of June 30, 2011.

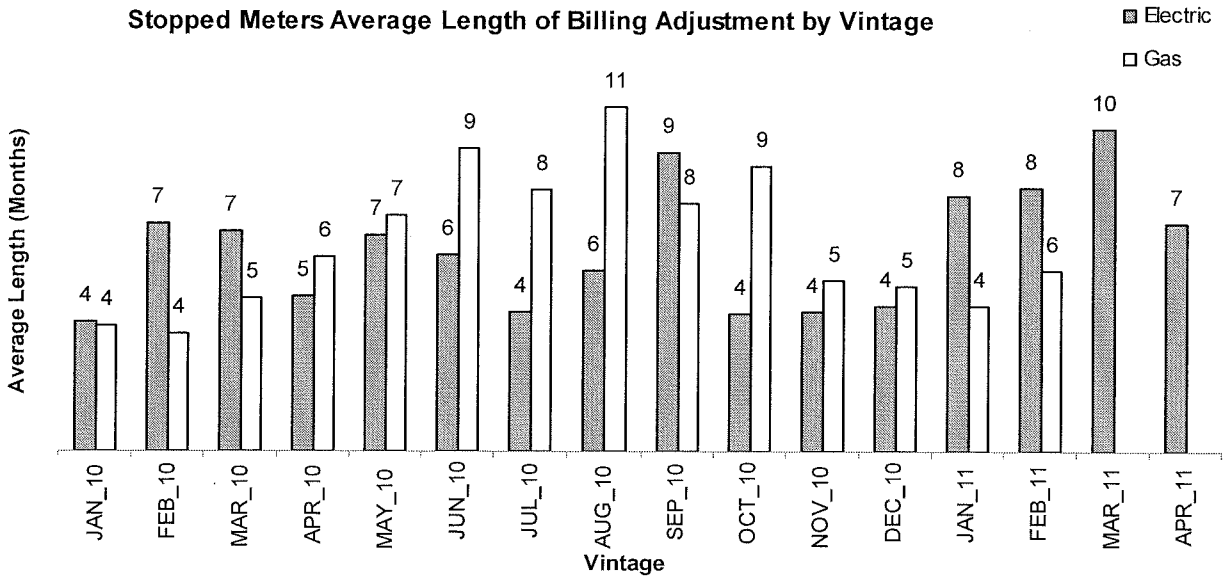


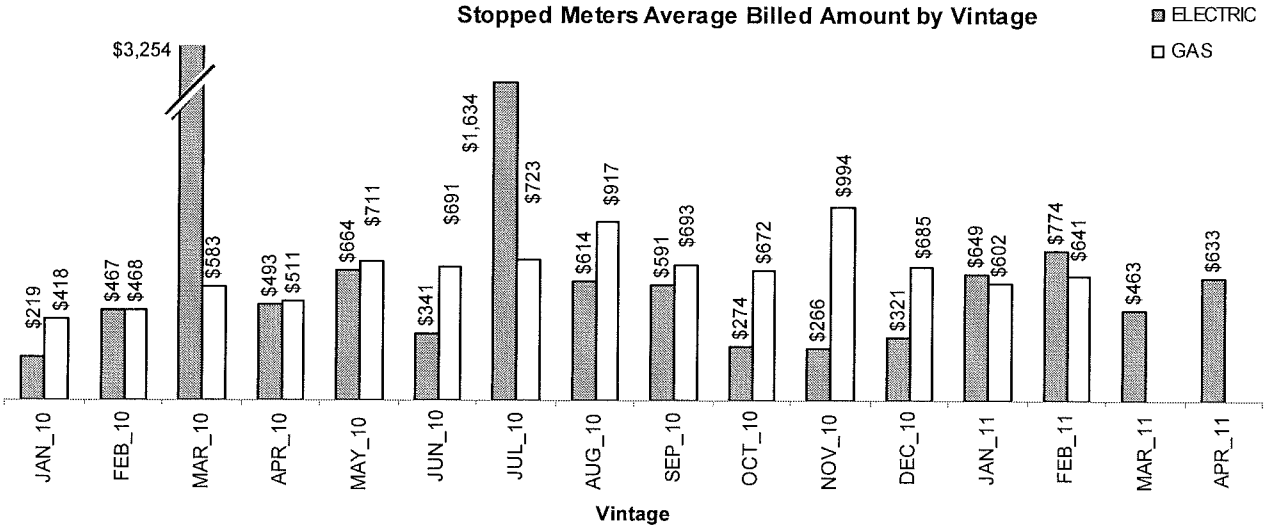
The chart below shows the average billed amount by vintage for manually read Stopped Meters issues as of June 30, 2011.



In the 2009 4th Quarterly Report, PSE added manually-read meters to the addendum reporting. However, due to the variance between PSE's backbilling performance for manually-read meters and automated meters, PSE has been showing the results separately to demonstrate the difference. The backbilling progress and results for the manually-read meters have been tracking with the automated meters for both meter issue and length of billing adjustment for most the months since 2010. Therefore, starting with the 2011 3rd quarter reporting, the Stopped Meters backbilling performance charts will show the combined results of both meter-reading types. The following charts are the combined results for this quarterly reporting.




Stopped Meters Average Length of Billing Adjustment by Vintage
Electric
Gas
Average Length (Months)
4 4
7 4
7 5
5 6
7 7
6 9
4 8
6 11
9 8
4 9
4 5
4 5
8 4
8 6
10
7
JAN_10
FEB_10
MAR_10
APR_10
MAY_10
JUN_10
JUL_10
AUG_10
SEP_10
OCT_10
NOV_10
DEC_10
JAN_11
FEB_11
MAR_11
APR_11
Vintage


Stopped Meters Average Billed Amount by Vintage
ELECTRIC
GAS
$219 $418
$467 $468
$3,254 $583
$493 $511
$664 $711
$341 $691
$1,634 $723
$614 $917
$591 $693
$274 $672
$266 $994
$321 $685
$649 $602
$774 $641
$463
$633
JAN_10
FEB_10
MAR_10
APR_10
MAY_10
JUN_10
JUL_10
AUG_10
SEP_10
OCT_10
NOV_10
DEC_10
JAN_11
FEB_11
MAR_11
APR_11
Vintage