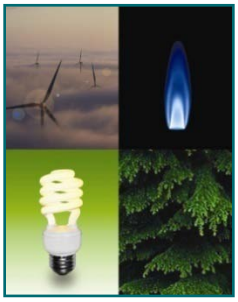
Puget Sound Energy

Meter and Billing Performance Quarterly Report

For the Quarter Ending March 31, 2012

Filed April 27, 2012

Contents



Introduction

Executive summary

As of March 31, 2012, 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 November 2011, and electric problems identified between January 2009 and January 2012. 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 in the *Unresolved Exception Issues* section of this report.

Background

This report is prepared in compliance with the terms of the Partial Settlement Stipulation of Service Quality, Meter and Billing Performance, and Low-Income Bill Assistance ("Settlement Stipulation") approved by the Commission in consolidated Docket Nos. UE-072300 and UG-072301 Order 12 ("Order"). The report details the following:

- Puget Sound Energy, Inc.'s ("PSE's") ability to plan, track, and report monthly vintages of potential meter and billing problems (per paragraph 34.i of the Settlement Stipulation); and
- PSE's meter and billing performance under the phase-in period standards for meter and billing problems identified in 2008 and under the ongoing standards for problems identified in 2009 and after (per paragraph 36 of the Settlement Stipulation). These standards are applicable to all PSE's meters regardless how they are read, automatically or manually, and the class of the meters; residential, commercial, or industrial.

Definitions and Standards

Definitions

Definitions of "Identified"

The following definitions from 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 March 31, 2012

(Performance results are rounded to the nearest whole percentage. Some vintages with 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 March 31, 2012

(Performance results are rounded to the nearest whole percentage. Some vintages with 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 2011 Q4	Reason for Change
OCT_11	3,294	3,020	92%	3,293	100%		
NOV_11	4,146	3,922	95%	4,145	100%	4,144	Note 1
DEC_11	3,455	3,225	93%	3,454	100%	3,452	Note 1
JAN_12	6,121	5,637	92%	6,120	100%		
FEB_12	3,051	2,791	91%	Open			
MAR_12	2,715	1,899	70%	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 Q4	Reason for Change
AUG_11	22,171	21,958	99%	22,170	100%		
SEP_11	11,968	11,882	99%	11,968	100%		
OCT_11	4,113	4,029	98%	4,113	100%		
NOV_11	4,125	4,024	98%	4,123	100%	4,124	Note 1
DEC_11	4,646	4,462	96%	Open		4,623	Note 1
JAN_12	8,964	8,611	96%	Open			
FEB_12	4,335	3,618	83%	Open			
MAR_12	3,635	2,308	63%	Open			

Note 1: 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 probable 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 recent 2011 monthly vintages and the year-to-date 2012 monthly vintages. The section also includes discussion on 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 those vintages. The meter and billing problems in 2009, 2010, and 2011 vintages not listed below have been resolved completely and detailed results can be found in PSE's year-end 4th quarter reports for 2009 through 2011.

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 difference for each of affected vintages is noted at the end of the *Summary Progress to Date* section above. The following discussion is based upon the updated monthly results as March 31, 2012.

Electric Meter Issue Resolution

- January 2010: PSE identified probable 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) is listed as meter ID 0203 in the in the *Issues Discussion* section.

- October 2011: PSE identified probable problems with 3,294 electric meters. 3,020 (92 percent) were resolved within one month of identification. 3,293 meters were resolved within two months. The one exception (which constitutes less than 0.04 percent), a meter with Unassigned Energy Usage, was resolved on January 10, 2012. Unsafe electric facilities prevented PSE personnel from resolving this meter issue without a whole crew. Once the repair work was completed, PSE was able to disconnect the meter to stop the UEU.

- November 2011: PSE identified probable problems with 4,146 electric meters. 3,922 (95 percent), were resolved within one month of identification. 4,145 meters (100 percent) were resolved within

two months of identification. The one exception (which constitutes less than 0.03 percent) was resolved on February 9, 2012, after the customer completed the repair work required for PSE to resolve the meter issue.

- December 2011: PSE identified probable problems with 3,455 electric meters. 3,225 (93 percent), were resolved within one month of identification. 3,454 meters were resolved within two months of identification. The one exception (which constitutes less than 0.03 percent) was resolved on March 27, 2012, after the customer completed the repair work required for PSE to exchange the meter.

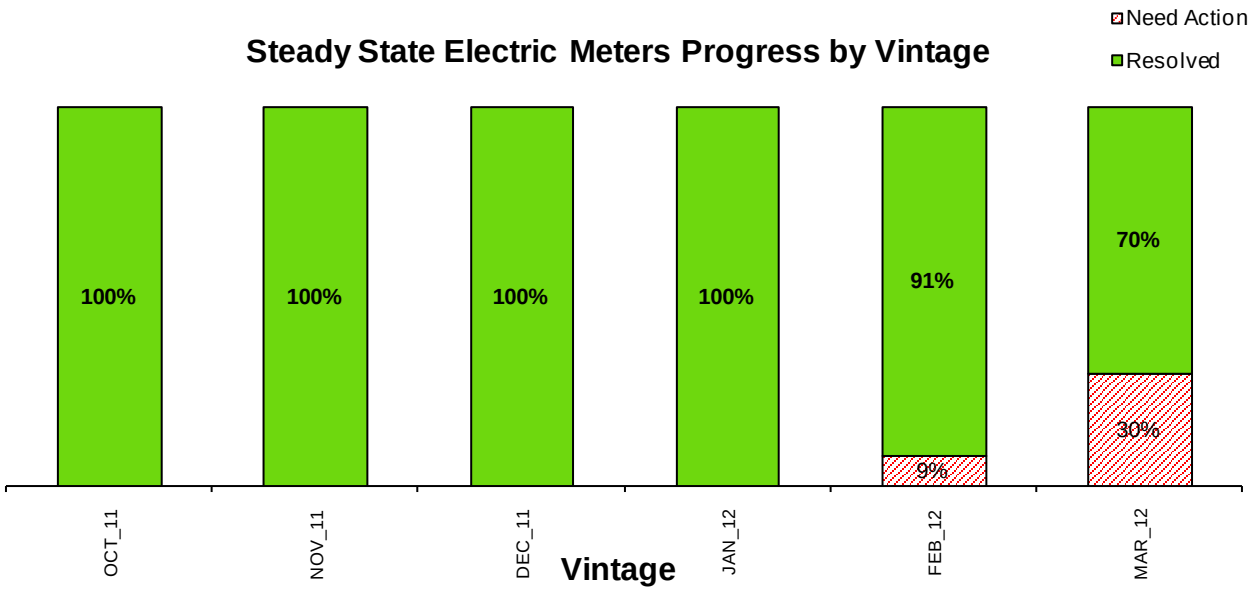
- January 2012: PSE identified probable problems with 6,121 electric meters. 5,637 (92 percent), were resolved within one month of identification. 6,120 meters were resolved within two months of identification. The one exception (which constitutes less than 0.02 percent) will be discussed in the Unresolved Exceptions Issues section of this report.

- February 2012: PSE identified probable problems with 3,051 electric meters. 2,791 (91 percent), were resolved within one month of identification. PSE is on track to resolve 100 percent of the probable problems by April, 30, 2012.

- March 2012: PSE identified probably problems with 2,715 electric meters. PSE is on track to resolved 100 percent of the meters by May 31, 2012.

Aging and Composition comparisons

The following chart shows the aging of the Steady State electric meter vintages as of March 31, 2012.



The following table details the composition of Steady State Electric meters by vintage as of March 31, 2012.

Ongoing Vintage	Stopped Meter	Lost Meter	UEU	Meter Mix	Total
OCT_11	2,168	26	911	189	3,294
NOV_11	2,920	9	1,136	81	4,146
DEC_11	2,016	25	1,265	149	3,455
JAN_12	4,877	11	904	329	6,121
FEB_12	1,848	12	1,026	165	3,051
MAR_12	1,690	19	830	176	2,715

Gas Meter Issue Resolution

- April 2009: PSE identified probable problems with 2,489 gas meters. 2,488 (100 percent) were resolved within 4 months of identification. The exception (which constitutes about 0.04 percent) will be discussed in the *Issues Discussion* section.

- June 2009: PSE identified probable problems with 8,720 gas meters. Within two months of identification, 8,615 (99 percent) were resolved. 8,719 of the issues were resolved by October 31, 2009. The one exception (which constitutes about 0.01 percent) will be discussed in the *Issues Discussion* section.

- August 2011: PSE identified probable problems with 22,171 gas meters. 21,958 meters (99 percent) were resolved within two months of identification and 22,170 meters were resolved within four months of identification. The only exception (which constitutes less than 0.005 percent) was resolved on January 23, 2012 after PSE was able to establish contact with the customer.

- September 2011: PSE identified probable problems with 11,968 gas meters. 11,882 meters (99 percent) were resolved within two months of identification. All 11,968 meters were resolved within four months of identification.

- October 2011: PSE identified probable problems with 4,113 gas meters. 4,029 (98 percent) were resolved within two months of identification. All 4,113 meters were resolved within four months of identification.

- November 2011: PSE identified probable problems with 4,125 gas meters. 4,024 (98 percent) were resolved within two months of identification. 4,123 were resolved within 4 months of identification. The two exceptions (which constitute less than 0.05 percent) will be discussed in the Unresolved Exceptions Issues section of this report.

- December 2011: PSE identified probable problems with 4,646 gas meters. 4,462 (96 percent) were resolved within two months of identification. PSE is on track to resolve 100 percent of the meters by April 30, 2012.

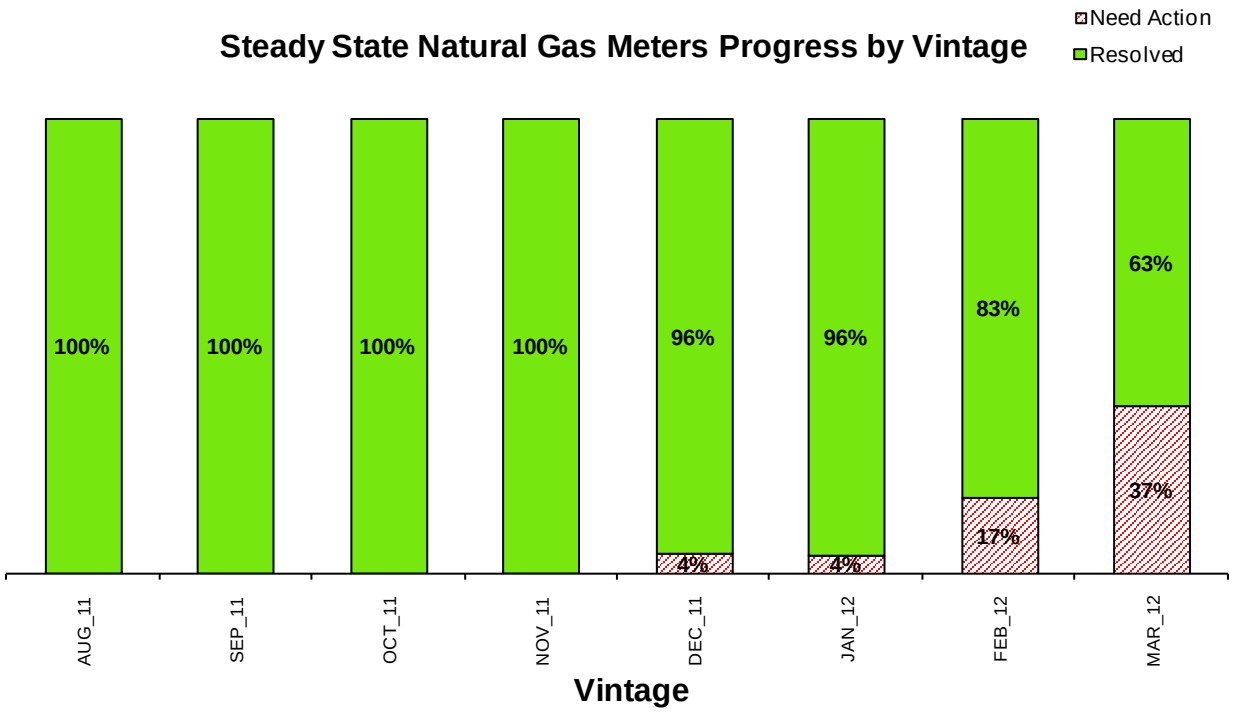
- January 2012: PSE identified probable problems with 8,964 gas meters. 8,611 (96 percent) were resolved within 2 months of identification. PSE is on track to resolve 100 percent of the meters by May 31, 2012.

- February 2012: PSE identified probable problems with 4,335 gas meters. PSE is on track to resolve 100 percent of the meters by June 30, 2012.

- March 2012: PSE identified probable problems with 3,635 gas meters. PSE is on track to resolve 100 percent of the meters by July 31, 2012.

Aging and Composition comparisons

The following chart shows the aging of the Steady State natural gas meter vintages as of March 31, 2012.



The following table details the composition of Steady State natural gas meters by vintage as of March 31, 2012.

Ongoing Vintage	Stopped Meter	Lost Meter	UEU	Meter Mix	Total
AUG-11	21,712	10	320	129	22,171
SEP_11	11,533	11	286	138	11,968
OCT_11	3,672	12	307	122	4,113
NOV_11	3,399	10	598	118	4,125
DEC_11	3,316	17	1,180	133	4,646
JAN_12	7,345	5	1,371	243	8,964
FEB_12	3,304	12	860	159	4,335
MAR_12	2,748	3	662	222	3,635

Tracking and Reporting Monthly Vintage of Meter/Billing Issues

Issues Discussion

ZCON[1] Reporting

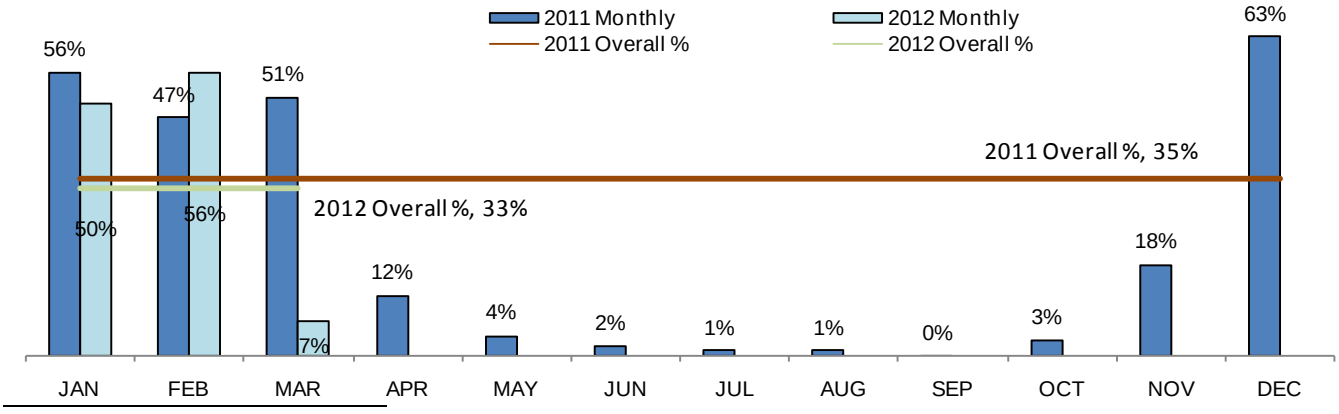
In order to better manage the potential Stopped Meter issues, PSE initiated a process change on how soon the Stopped Meters would be included in the ZCON reporting. The process change is designed to identify a Stopped Meter sooner therefore reducing the potential length of the billing adjustments if needed. Prior to the change, a meter that had registered zero consumption for 60 days would be designated in the ZCON reporting process as a probable Stopped Meter. The ZCON reporting threshold for meters with zero consumption has been shortened to 30 days with the process change. The impact of this change will be more apparent in the next quarterly report as more vintages become closed.

DataRaker Analytic Query[2]

For the 2011 natural gas Stopped Meter issues that had been resolved as of December 31, 2011, PSE reported in its last quarterly report an overall 32% of all probable Stopped Meters identified by DataRaker had a success rate. The success rate is defined as those meters that were initially identified as a probable stopped meter and were later identified as a failed module/meter requiring a billing adjustment. During the first quarter of 2012, we were still resolving the 2011 vintages. As more of the 2011 issues are now resolved in this quarter, the success rate has been increased to 35%.

The year-to-date success rate for the probable stopped meters identified in 2012 and resolved as of March 31, 2012, is 33% as indicated in the chart below. This percentage will be changing as more 2012 issues are resolved.

Billing Adjustment Percentage of Probable Natural Gas Stopped Meters Identified via DataRaker Query



[1] ZCON Reporting is a monthly reporting tool of zero consumption meters derived from the data stored in the PSE's Meter Data Warehouse, which is the system of records for all automated-meter reads.

[2] The query has been in place since the 4th quarter of 2010. It uses the natural gas daily meter reads data in PSE's Meter Data Warehouse to detect irregular usage pattern and facilitate the identification of a probable natural gas Stopped Meter. The query is most effective in identifying potential natural gas meter issues during the heating season as customers are expected to turn on the heat to keep their home warm.

Unresolved Exception Issues

The following table summarizes, as of March 31, 2012, 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 Electric	0203	Lost Meter	Not Located
JAN_12 Electric	0408	Stopped Meter	Customer Issue
NOV_11 Gas	1496	Stopped Meter	Process Error
NOV_11 Gas	6604	Stopped Meter	Process Error

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.

Customer Issue

In order for PSE to correct the meter issue (ID 0408), repair work on customer owned facility needed to be addressed by the customer prior to PSE's work. The customer repair work had not been completed as of March 31, 2012. PSE is monitoring the situation and will follow-up to resolve this meter issue as soon as the customer repair work is completed.

Process Error

Resolution dates for the two Stopped Meters were entered by mistake while the issues were still outstanding. When the mistakes were discovered, it was too late to resolve the meter issues in time before the vintage closure. This type of error has been addressed and the additional monitoring steps have been added to PSE's process flow to prevent this error from recurring. ID1496 was resolved on April 12, 2012.

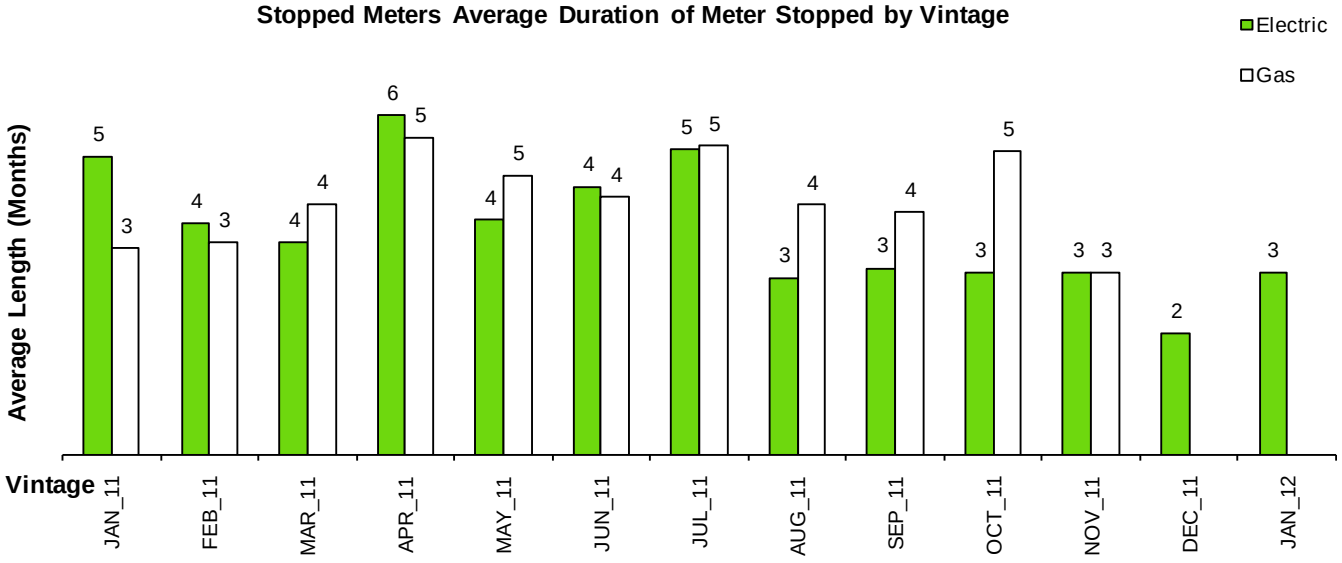
Addendum Reporting

Back-billing Results of Stopped Meters

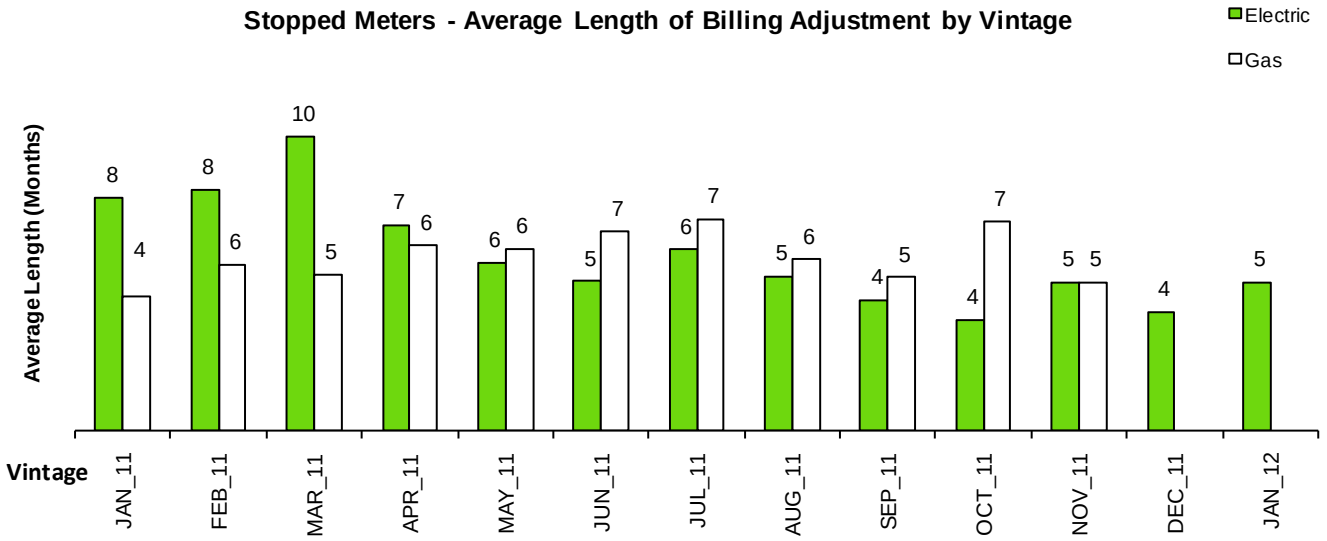
This additional data regarding the back-billing results of Stopped Meters, including both residential and non-residential meters, have been added in the quarterly filing since September 2009 per an informal WUTC staff request. Specifically, this section details the average duration of the Stopped Meter issues, the average length of back-billing, and the average back-billed amount by vintage for the Stopped Meters that required back-billing. The monthly Stopped Meter vintages discussed in this quarterly report include the following closed 2011 and 2012 vintages: electric JAN_11 through JAN_12 and natural gas JAN_11 through NOV_11. The average back-billed information does not reflect vintages that have not been closed, including the following: electric FEB_12 and MAR_12 vintages and natural gas vintages identified from DEC_11 through MAR_12.

There are 101,230 Stopped Meters reported in the closed 2011 and 2012 vintages. 94.1% of those reported meter issues are meters with seasonal usage. When customers started to use the natural gas or electricity again, the probable meter issues resolved themselves without PSE intervention. The average back-billed information presented in the section pertains only to the 4.9% of those Stopped Meters that were actually stopped due to a reason other than seasonal usage and therefore required back-billing.

The chart below shows the average duration of the meter stopped by vintage, including both the automaticaly and manually read Stopped Meters. The number reported represents vintages that have been closed on March 31, 2012. The average duration of the meter stopped is the average of the actual duration that a meter has remained stopped, i.e., the total number of months from the date the meter failed to the date the meter issue was resolved.



The chart below shows the average length of the back-billing adjustment for Stopped Meters as of March 31, 2012. The average length of back-billing is the average of the actual back-billing period, which is the difference from the last day of the last accurate billing prior to being identifed as a Stopped Meter to the meter read date of the first correct 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 back-billed amount by vintage for Stopped Meters as of March 31, 2012. The average billed amount is associated with the actual total number of months of the billing adjustment that occurred. The actual back-billing period for a Stopped Meter problem does not change even though the billing adjustment amount may be increased or decreased due to subsequent adjustments. Some of the results shown in the chart below for the prior vintages vary from the prior quarterly reports. The results shown in the chart below reflect the correction in the determination of the final back-billing amount when there are multiple billing adjustments in the PSE's Meter Exception Management System for a single Stopped Meter issue.