

**U 144155 – Meter and Billing Issues Rulemaking  
Summary of Comments in Response to CR 101 Notice**

Issue	Company/Agency Name	Company/Agency Response			Staff Comments	
1. Provide the average number of meters in service from 2012 to 2014.		<b>2012</b>	<b>2013</b>	<b>2014</b>		
	PSE	1,870,575	1,883,448	1,904,966		
	Avista	385,975	388,839	393,150		
	PPL	132,138	132,848	133,473		
	NWNG	Average for the 3 years = 72,500				
	CNGC	203,214	206,107	208,408		
	2. Please provide three years of historical data (2012 – 2014) for retroactive bills. 1. For stopped meters		The counts are for accounts with a stopped meter identified and rebilled			Percentage of retroactive bills by company that are less than or equal to 6 months.  PSE: 76 – 84 percent Avista: 95 – 97 percent PP&L: 95 – 100 percent NW Natural: 94 – 100 percent  Percentage of retroactive bills by company that exceed 12 months.  PSE: 7-8 percent Avista: 0 percent PP&L: 0 percent NW Natural: 0 percent
		Number of Accounts				
			<b>2012</b>	<b>2013</b>	<b>2014</b>	
		<b>6 months or less</b>				
PSE			3,637	2,371	2,104	
Avista			108	37	71	
PP&L			6	19	7	
NWNG			15	21	38	
CNGC <sup>1</sup>			UNK	UNK	UNK	
		<b>6 – 12 months (greater than 6 but less than or equal to 12 months)</b>				
PSE			398	327	453	
Avista			5	3	2	
PP&L				8		
NWNG			1	0	2	
CNGC			UNK	UNK	UNK	
		<b>12-24 months (greater than 12 months but less than or equal to 24 months)</b>				
PSE			193	165	178	
Avista			0	0	0	
PP&L			0	0	0	
NWNG			0	0	0	
CNGC		UNK	UNK	UNK		
	<b>Greater than 24 months)</b>					

<sup>1</sup> Cascade Natural Gas does not track this information

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	PSE	105	41	39	
	Avista	0	0	0	
	PP&L	0	0	0	
	NWNG	0	0	0	
	CNGC	UNK	UNK	UNK	

2. For unidentified energy usage meters.	The counts are for accounts with a unidentified energy use meter and rebilled				Percentage of retroactive bills by company that are less than or equal to 6 months.  PSE: 92 – 95 percent Avista: 99.8 – 99.9 percent PP&L: 98 – 99 percent NW Natural: Does not track
	Number of Accounts				
		2012	2013	2014	
	<b>6 months or less</b>				
	PSE	8,789	11,877	8,280	Percentage of retroactive bills by company that exceed 12 months.  PSE: .01 - .4 percent Avista: 0 percent PP&L: 0 percent NW Natural: Does not track
	Avista	1,425	1,691	1,467	
	PP&L	3,507	2,943	1,675	
	NWNG	UNK	UNK	UNK	
	CNGC	UNK	UNK	UNK	
	<b>6 – 12 months (greater than 6 but less than or equal to 12 months)</b>				
	PSE	398	586	8,280	
	Avista	3	4	2	
	PP&L	0	0	0	
	NWNG	UNK	UNK	UNK	
	CNGC	UNK	UNK	UNK	
	<b>12-24 months (greater than 12 months but less than or equal to 24 months)</b>				
	PSE	0	0	0	
	Avista	0	0	0	
	PP&L	0	0	0	
	NWNG	UNK	UNK	UNK	
	CNGC	UNK	UNK	UNK	
	<b>Greater than 24 months)</b>				
	PSE	33	90	8	
	Avista	0	0	0	

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	PP&L		0	0	0	
	NWNG		UNK	UNK	UNK	
	CNGC		UNK	UNK	UNK	
3. What is the company's policy regarding bill settlement for metering errors	PSE	PSE works with individual customers to settle bill estimation issues related to billing disputes. PSE takes the usage related information provided by the customer along with PSE's estimated usage and available actual usage into account in order to determine the revised estimated meter reads.				
	Avista	There are currently no specific timelines specified in Washington rules. Avista follows the Idaho guidelines which states that a utility may rebill for a period of six (6) months unless a reasonable person should have known of the inaccurate billing, in which case the rebilling may be extended for a period not to exceed three (3) years. Utilities shall implement procedures designed to monitor and identify customers who have not been billed or who have been inaccurately billed.				
	Cascade Natural Gas	<p>The company's practice is to comply with WAC 480-90-183 which states the utility must "adjust the bills to the customer based on the best information available to determine the appropriate charges."</p> <p>The company's practice for settling billing errors related to unidentified usage is established in Rule 6 of its tariff: "In the case of tampering or unauthorized use, probable consumption will be billed as determined by the maximum quantity of gas estimated to have been consumed by the various appliances of customer and a bill will be rendered for a period encompassing six (6) months prior to the detection of such abuse and/or disconnection for cause."</p>				

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	PP&L	Adjustments for billing errors will not exceed six months unless the company can identify the cause of the error and the date the error occurred. However, in no case would the company adjust the billing for more than three years.	
	NW Natural	Company will correct for metering errors back to the date that the error is determined to have first occurred, but for not more than one year of adjustment. If the date the meter error first occurred is not known, corrected bills will be issued for up to six months. The company may waive a bill correction for good cause.	
	PSE	<p>Natural Gas</p> <ul style="list-style-type: none"> <li>• A letter is sent to the occupant of the location if the cumulated usage reaches 86 CCFs or if the unassigned energy usage has been detected for 270 days but the 86 CCF usage threshold is not reached.</li> <li>• A service notification is generated if the cumulated usage reaches 100 CCFs or it has been 45 days since the letter was sent (with no customer response) or it has been 300 days since the initial detection if the 100-CCF usage threshold has not been reached.</li> </ul> <p>Electric Residential</p> <ul style="list-style-type: none"> <li>• A letter is sent to the occupant of the location if the cumulated usage reaches 425 KWH or if the unassigned energy usage has been detected for 270 days but the 425 KWH usage threshold has not been reached.</li> <li>• A service notification is created if the cumulated usage reaches 800 KWH or it has been 45 days since the letter was sent (with no customer</li> </ul>	<p>Thresholds vary widely between companies. There may be room for some improvement in efficiencies.</p> <p>Most stringent threshold criteria include:</p> <p><b>Electric</b></p> <ul style="list-style-type: none"> <li>• Review daily usage report to determine if field personnel are required to investigate potential equipment failure and replacement of the meter if necessary.</li> <li>• Manual review after two months of <ul style="list-style-type: none"> <li>- Zero usage for residential and non-residential service;</li> <li>- 25% fluctuation on nonresidential load;</li> <li>- Zero usage on an occupied rental; or</li> <li>- Zero consumption for more than 12 months on an irrigation service.</li> </ul> </li> <li>• Accounts with use on a meter and no open account (unidentified energy usage) should be disconnected if the use is more</li> </ul>

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		<p>response) or it has been 300 days from initial detection but the 800-KWH usage threshold has not been reached.</p> <p>Commercial/industrial customers</p> <ul style="list-style-type: none"> <li>• A letter is created if the cumulated usage reaches 6,000 KWH or it has been 270 days since the initial detection but the 6,000 KWH usage threshold has not been reached.</li> <li>• A service notification is created if the cumulated usage is more than 7,150 KWH or it has been 45 days since the letter was sent (and no customer response has been received) or it has been 300 days since the initial detection but the 7,150 KWH usage threshold has not been reached.</li> </ul>	<p>than 100 kWhs. Automated process is initiated which sends a series of two letters to the address requesting the resident to contact the company to set up service. If no response, the company will send a serviceman to disconnect service.</p> <p><b>Natural Gas</b></p> <ul style="list-style-type: none"> <li>• A bill message is reflected on the bill after 3 months of zero usage. The bill message informs the customer to call if they have been using their gas appliances as there may be a meter issue.</li> <li>• Accounts with use on a meter and no open account (unidentified energy usage) should be disconnected if the use is more than 10 therms. Automated process is initiated which sends a series of two letters to the address requesting the resident to contact the company to set up service. If no response, the company will send a serviceman to disconnect service.</li> <li>• Daily report for unidentified usage meters is generated and reviewed by the customer contact center department. This report is a list of accounts that are closed but where the meter is showing usage. A 5-day notice of disconnection is issued to the premise for each listed account. If no response is received, an order is dispatched to physically shut off the meter.</li> </ul>
	Avista	<ul style="list-style-type: none"> <li>• Accounts with zero use will hit the commercial report after one month of no use and the residential after three months of no use.</li> <li>• Accounts with use on a meter and no open account (unidentified energy usage) should be disconnected if the use is more than 100 kWhs or 10 therms.</li> </ul>	
	PP&L	<ul style="list-style-type: none"> <li>• Meters with zero use will be included on the Zero Consumption Report for manual review after two months of: <ul style="list-style-type: none"> <li>○ Zero usage for residential and non-residential service;</li> <li>○ 25 percent fluctuation on nonresidential load;</li> <li>○ Zero usage on an occupied rental; or</li> <li>○ Zero consumption for more than 12 months on an irrigation service.</li> </ul> </li> <li>• Meters with no customer record, or unidentified energy usage, will have a work order to disconnect service after 1,000 kWh are used.</li> </ul>	

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	NW Natural	<p>NW Natural will investigate zero-use meter reads after six consecutive months of zero usage. A bill message is reflected on the bill after 3 months of zero-use. The bill message informs the customer to call if they have been using their gas appliances as there may be a meter issue.</p> <p>It is NW Natural's practice to resolve any unidentified energy usage within two months. Typically do not issue a bill for usage that is two therms or less.</p>	
4. Does the company have specific goals regarding the identification and resolution of stopped meters and unidentified usage meters?	PSE	<ul style="list-style-type: none"> <li>• PSE will identify and correct 98 percent of all stopped meter and unassigned energy usage meter problems for both gas and electric meters within 12 months from initial occurrence of the problem.</li> <li>• PSE will identify and correct all stopped meter and unassigned energy problems for both gas and electric meters within 24 months from the initial problem.</li> </ul>	<p>Goals vary among the regulated companies. Staff believes it is reasonable to expect utilities to identify and correct stopped meters, as well as, unidentified energy usage within six months.</p> <p>Customers are continuing to receive retroactive bills for periods in excess of six months, and in some cases, more than 12 and 24 months.</p>
	Avista	<p>Avista has a daily zero use report that is used to help identify when a meter has no energy use. If issues are detected, field personnel are sent to investigate potential equipment failure and replacement of the meter, if necessary.</p> <p>When a meter has unidentified energy usage that hits the threshold of 100 kWhs or 10 therms it starts an automated process which sends a series of two letters to the address requesting the resident to contact the company to set up service. If there is no response, the company will send a serviceman to disconnect the service.</p>	
	Cascade Natural Gas	A report listing abnormally high or low reads is automatically generated when a read is 90 percent lower or higher than the expected bandwidth of normal usage.	

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		<p>Expected usage is 0.4 to 2.5 times estimated usage based on the demand at the premise for the prior three years. The reporting on low reads should alert the company to most dead meters; however, a zero read is not always abnormal depending on whether or not the usage at the site is seasonal.</p> <p>When unidentified energy usage is discovered, the company places a door hanger on the premise asking the occupant to establish service within 48 hours. If service is not established within that timeframe, the service is disconnected.</p> <p>The company believes goals are unnecessary since the company manages the issue in a reasonable manner by investigating meter read anomalies on daily basis.</p>	
	NWNG	NWNG strives to respond to and resolve meter issues and occupant use situations promptly and efficiently, although the company does not have specific defined goals relating to these practices.	
5. What types of reports does the company generate to help identify stopped meter and unidentified usage meter problems?	PSE	<ul style="list-style-type: none"> <li>• When a customer's bill has shown no usage from one billing period to the next, PSE's customer information system (CIS) identifies the account and creates a service notification in CIS for follow up.</li> <li>• A service notification can also be created if PSE's DataRaker query, a meter performance and customer usage analysis tool, identifies that a meter module malfunction has occurred based upon the meter reads, weather data, and individual customer usage pattern. The DataRaker query is able to identify a probable stopped meter within 3 days when the temperatures dip to below freezing or in a</li> </ul>	

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		5-10 day window when the temperatures are above freezing.	
	Avista	<ul style="list-style-type: none"> <li>• For unbilled usage, the company uses its zero use report. This report is reviewed daily.</li> <li>• For unidentified usage meters, the process is automated with the company's customer care and billing system (see response to 5 above).</li> </ul>	
	Cascade Natural Gas	<p>A daily report of high and low reads is automatically generated in the company's billing system. A high or low bill is one that is 90 percent outside the range of normal which is 0.4 to 2.5 times expected use based on the prior on three years of historic usage.</p> <p>Billing personnel manually review the report and determine if a bill should be issued in accordance with the meter or if a service request for a meter check is necessary. Based on the findings of a meter check, field personnel will either validate the accuracy of the meter and the bill will be issued, or the meter will be replaced. If the meter is replaced, an estimated bill is issued using the usage patterns for the same timeframe for the prior three years.</p>	
	NW Natural	<p>Zero Use Meters – Bill exception report is generated listing each account where there are six consecutive months of zero usage. The account services department reviews the report. If they cannot find a reasonable explanation for zero usage, a service order is created and a service technician is sent to the premise to inspect the meter.</p> <p>Unidentified Usage Meters – A daily report is generated and reviewed by the customer contact center department. This report is a list of accounts that are closed but where the meter is showing usage. A 5-day notice of</p>	



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		disconnection is issued to the premise for each listed account. If no response is received, an order is dispatched to physically shut off the meter.	
<b>Additional Comments</b>			
Anticipated improvements	Avista	<p>Deployment of an Advanced Metering Infrastructure (AMI) is expected to reduce retroactive billing in the following cases:</p> <ul style="list-style-type: none"> <li>• Theft Diversion – This can cause damage to the meter where it stops reading. These circumstances can represent cases of complete diversion, where no usage at all is registered on the meter, partial diversion, and intermittent diversion. AMI will allow the company to take advantage of meter alarming capability, coupled with powerful diagnostic analytics to identify meter locations where diversion is likely to be occurring.</li> <li>• Unbilled Usage – Unbilled usage is difficult to initially identify with conventional metering, and consequently, it can take several weeks to several months before each issue is resolved. AMI meters can either be disabled when an account is closed to prevent unbilled usage, or the meter can trigger an alarm when usage is occurring.</li> <li>• Slow or Failing Meters – These meters can be very difficult to isolate with conventional metering. The longer the time the meter is not functioning properly the more complex the issue is to resolve.</li> <li>• Stopped Meters – The great majority of the time meters are reported as potentially stopped, there has simply been no use at the premise and the meter is working properly. Avista experiences about 85 percent false positives for electric meters and 95</li> </ul>	Thank you for the information.

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		<p>percent false positives for natural gas meters. Reducing the number of field visits to investigate these false positives represents the core savings opportunity associated with stopped meters.</p> <ul style="list-style-type: none"> <li>• Billing Accuracy – Because of the use information is available from the AMI on a 5-15 minute interval, there is no longer a need to estimate bills during adverse weather, or for the processes of opening, closing or transferring utility service.</li> </ul>	
Other Affected Rules	NW Natural	<p>WAC 480-90-183(5), Complaint meter tests, currently contains language that establishes the parameters around correcting bills that are related to a meter error. As such, NW Natural suggests that this rulemaking consider whether changes to WAC 480-90-183 are also warranted in order to ensure that any duplicative or contradictory language is removed.</p>	<p>NW Natural’s comments are noted. WAC 480-90-183(5) states:</p> <p>(5) If a meter test reveals a meter error greater than specified as acceptable in WAC 480-90-338, Metering tolerance, the utility must repair or replace the meter at no cost to the customer. The utility must adjust the bills to the customer based on the best information available to determine the appropriate charges. The utility must offer payment arrangements in accordance with WAC 480-90-138(2), Payment arrangements.</p> <p>(a) If the utility can identify the date the customer was first billed from a defective meter, the utility must refund or bill the customer for the proper usage from that date:</p> <p>(b) If the utility cannot identify the date the customer was first billed from a defective meter, the utility must refund or bill the customer for the proper usage, not to exceed six months.</p>

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			Staff does expect there will be a conflict in the proposed rules under WAC 480-90-183(5).
Gas versus Electric	NW Natural	NW Natural strongly recommends that the commission consider the unique differences between gas and electric customer use when assessing the timeline under which a zero-use meter should be investigated. It is not uncommon for a customer that uses natural gas for space heat only to experience zero usage during the spring and fall shoulder months and for the entirety of the summer months. NW Natural’s experience shows that less than 2 percent of accounts with at least six consecutive months of zero usage are related to a meter failure.	Comments noted.
	PSE	At any given time a large number of meters (particularly gas meters) on PSE’s system may show no usage but are valid zero consumption meters. As a result, PSE faces a challenge filtering “valid zero-consumption meters” from zero-consumption usage due to a stopped meter.	Comments noted.
Corrected Billings	NW Natural	NW Natural encourages the commission to consider how far back a corrected bill should be issued. In addition, the company encourages the commission to provide sufficient flexibility to make the correction.	Comments noted.