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January 8, 2013

## MEMORANDUM

**TO:** Council Members

**FROM:** Charlie Black, Power Planning Division Director

**SUBJECT:** Report on Changes in Northwest Residential Electricity Rates

In September 2012, the Pacific Northwest Utilities Conference Committee (PNUCC) issued a report entitled "Northwest Residential Electric Rates, A Look at Changes Since 2007". A copy of the report is attached.

During the Council meeting on Wednesday, January 16, 2013, Dick Adams, PNUCC's Executive Director, will give a presentation on the report.

# Northwest Residential Electric Rates

A look at changes since 2007  
PNUCC Communications Committee



September 2012

## **Acknowledgements**

This report was developed and reviewed by members of the PNUCC Communications Committee. Thanks to all that contributed.

Electronic copies of this report are available at  
[www.PNUCC.org](http://www.PNUCC.org)



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# Northwest Residential Electric Rates

## A look at changes since 2007

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## Are Rates Really Going Up?

The conventional wisdom says power rates are on the rise. Along with everything else, from gasoline to groceries, the perception is that we are paying more for electricity. PNUCC set out earlier this year to test the conventional wisdom and pull together evidence about whether it is true and what might be driving any changes we see. No one within our industry will be too surprised about what we found.

Residential electricity rates in the Northwest have jumped up and quite dramatically in some cases. Of the 26 utilities we looked at, all but one saw rates go up over the past six years, and that exception had implemented significant increases in the two years prior to our survey period.

The reasons for the increases vary almost as much as the utilities themselves. But there are common themes. This scan across the region's electricity providers illustrates that no matter where you are or what type of utility is providing service, costs and customer rates are on an upward trend.

The rate information we have compiled comes from public and published sources, including press releases, utility websites, and news articles in the general and trade media. We also followed up with utility rates staff to verify figures and discuss the reasons for rate hikes.

## A Representative Group

We cast a wide net to round up information about the trends in residential rates from 2007 to 2012. After sifting through a lot of data, we narrowed our group down to 26 utilities, primarily those with generation. This gave us a diverse swath of utilities – investor-owned, consumer-owned, cooperative, rural, and urban in all four Northwest states. Our method enabled us to capture about 80 percent of the region's electricity load.

While we don't claim to have a scientifically derived sample, we have a group that strongly represents the region's utilities. All of the Northwest's investor-owned utilities are included, along with the largest consumer-owned utilities and a sprinkling of small ones. Many small utilities in the region take most or all of their power from the Bonneville Power Administration, and their rates will generally move with BPA. We know that's the case and the quotes and statements from press releases and news stories explain that to the public. But it was not our objective to demonstrate that relationship.

*"The cost of power is going up for some rural residents as utilities respond to anticipated rate increases from the Bonneville Power Administration. . . ."*

*Oregon Cooperative*

*April 2009*

We included primarily utilities that have less direct influence from BPA. While they may purchase power from the federal power marketer on a firm or non-firm basis, they own and operate their own resources. They are affected by changes in fuel costs to run their plants and capital costs to keep their infrastructure up-to-date and reliable. Many buy and sell in the market, and they directly feel the effects of up and down wholesale power prices.

## The Numbers

The table below presents the results by year from 2007 to 2012 and a cumulative total for the six years. While most utilities weathered 2008 and the nation's economic upheaval without an increase, 2009 was a different story, and all but three utilities rates were up in 2010 or 2011 and several reported a significant increase in both years. A dash indicates no increase in that year.

Utility	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	Cumulative 6 year
A*	-5.0%	-4.0%	-	-	-	-	-8.8%
B	-	-15.8%	-	4.6%	8.0%	5.4%	0.2%
C	-	-	3.0%	-	-	-	3.0%
D	-	-	-	-	5.0%	-	5.0%
E	-8.3%	-	8.3%	4.0%	2.0%	-	5.4%
F	-	5.0%	9.0%	2.0%	-	-9.0%	6.2%
G	-	-	-	-	-	7.0%	7.0%
H	4.3%	-6.3%	6.1%	-2.1%	6.0%	-0.1%	7.5%
I	-	-	-	0.5%	3.5%	3.5%	7.7%
J	-	-	-	-	5.0%	3.1%	8.3%
K	-	-	-	5.7%	3.9%	-	9.8%
L	-	-	-	-	5.0%	5.0%	10.3%
M	-	-	-	8.0%	3.3%	-	11.6%
N	-	-	7.9%	-	0.9%	3.1%	12.3%
O	-	-	-	6.0%	6.0%	-	12.4%
P	-	-	6.4%	4.0%	-	4.0%	15.1%
Q	-	2.0%	-	5.0%	7.5%	-	15.2%
R	-	-	-	8.0%	7.0%	-	15.6%
S	-6.2%	-	1.7%	14.3%	4.3%	3.2%	17.3%
T	-	-	-	2.8%	6.0%	8.0%	17.7%
U	-	-1.8%	4.5%	2.5%	8.2%	5.5%	20.0%
V	-	9.4%	7.7%	3.1%	-2.6%	4.0%	22.9%
W	4.1%	-3.0%	7.4%	5.6%	-	8.1%	23.8%
X	8.5%	-	-	5.3%	14.0%	1.5%	32.2%
Y	-	-	6.0%	-	29.6%	-	37.4%
Z	11.0%	15.3%	17.1%	-5.2%	-3.2%	8.5%	49.2%

\* Utility A had increased rates significantly in 2005 and 2006

## Reality of Actual Rates

The changes in utility rates shown in the above table do not reflect utilities' actual residential rates (cents per kWh), nor are they an indication of a utility's rates in relation to other utilities. Therefore, some systems that experienced significant percentage increases may still have low rates relative to others.

In addition, while the percent change in some utilities' rates are significant, northwest utilities' rates remain some of the lowest in the nation.

## The Drivers

The numbers tell the story and sum up a key message in this report: with the exceedingly rare exception, rates have gone up across the board. From small hikes of a fraction of one percent to huge jumps of nearly 50 percent, the Northwest's millions of residential customers have experienced increases in their electric power rates.

Why now, when the region as a whole would appear to have adequate resources, demand slacked off with the economy and is recovering slowly, and we are adding energy efficiency at a brisk pace?

We can't explain the upward trend with a single reason. As always, it's more complicated than that. There are several factors that impose higher costs on electricity providers. Since utilities differ from one another in a number of ways, the factors have an uneven impact across the group.

The following are the most frequent reasons cited for residential rate increases:

- Volatility in wholesale power prices.
- Changes in demand (up and down) for power.
- New power supply.
- Upgrades and maintenance to generation and transmission facilities.
- Regulatory and policy requirements.

## Wholesale Prices

Changes in wholesale power prices have a big impact on rates, whether a utility is buying wholesale power on the market or selling into the market. While lower wholesale prices can mean lower costs for buyers, it means less revenue for sellers. The latter has been the case in recent years, which triggered rate increases. Overall, the drop in wholesale prices has depleted the revenue of the region's power sellers. With less revenue to offset costs, rates go up.

*The utility "sells surplus power, but the price has plummeted, so they've gotten less than half the revenue expected."*

*Washington Municipal Utility*

*January 2012*

The ups and downs in wholesale power prices results in winners and losers, depending on the season and circumstances. And a utility is not always on the same side of the buyer/seller equation. That position can shift, again, depending on the season and circumstances.

There are certainly instances in which the market works to a utility's advantage. We came across a decrease in which an advantageous wholesale market allowed a utility to lower its rates.

*"Reductions came from market purchase decreases of \$29 million. . ."*

*Oregon Investor-Owned Utility*

*January 2010*

The water supply fueling hydropower is always a factor in power availability and wholesale prices in the Northwest, and utilities cited the ups and downs of hydro generation in both rate increases and decreases.

*"Much of the increase resulted from drought-related poor hydroelectric generating conditions."*

*Idaho Investor-Owned Utility*

*June 2008*

## **Demand for Power**

The demand for power is another big influence on rates. Utilities plan and procure resources to meet forecast loads. If those loads don't materialize, a utility can end up with excess power. Or if loads exceed the forecast, a utility can be forced to purchase power at whatever price the sometimes volatile wholesale market offers. Utilities that have experienced rate increases in recent years as a result of changes in demand have generally faced a drop in sales. The excess power is sold into a flooded market at low prices.

*"...revenue levels were down sharply in 2009 and 2010 due to lower retail power sales, mostly as a result of warmer weather and a slow economy."*

*Washington Public Utility District*

*January 2011*

The loss of customers and their demand for power can affect utility revenues significantly. There were instances in which a utility cited the loss of customers' load and depressed revenues as a factor in a recent rate hike.

*The utility "has also seen significant load loss over the past five years, particularly in the industrial sector, and these revenues are no longer available to help cover fixed costs."*

*Oregon Public Utility District*

*April 2012*



## New Resources

A number of utilities have been in the position of adding resources in recent years. The utilities have built natural gas-fired plants as well as renewables, particularly wind farms. These new resources have increased utility costs and put significant pressure on rates. Utilities have also added to transmission facilities to serve load growth, bolster reliability and move resources to market.

*“Consuming the biggest portion of the revenue requests are the costs of developing new transmission, acquisition of two new wind farms, and upgrading emissions control systems” at existing plants.*

*Oregon Investor-Owned Utility*

*January 2011*

## Infrastructure Upgrades

Utilities continually upgrade and maintain their transmission, distribution, and resource infrastructure to assure a reliable system. In recent years, upgrades to aging infrastructure have been significant for some utilities and a factor in rate increases. Utilities attribute rate increases to upgrades at hydroelectric facilities, including turbine and generator replacements, new operations facilities, as well as the rising costs of routine system upgrades and maintenance.

*“The requested rate changes are driven primarily by increased costs associated with investment in facilities needed to improve reliability. . .”*

*Washington Public Utility District*

*October 2010*

The cost of technology is also a factor in more expensive infrastructure upgrades.

## Policy Requirements

Government regulations and policy-driven mandates are driving up costs for many utilities. State renewable portfolio standards play a role, with a number of Washington utilities citing conservation and renewable energy mandates in the Energy Independence Act (I-937) as a factor in one or more rate hikes in 2010 and 2011.

*“Most of the rate increase would cover the rising cost of renewable resources and conservation needed to meet voter-approved mandates under I-937. . .”*

*Washington Public Utility District*

*February 2011*

Federal dam licensing requirements, such as building parks and operating fish hatcheries; Clean Air Act regulations, including tighter emission controls at coal-fired plants; and federal rules pertaining to utilities' purchase of renewable resources play a role in the increases. In one case, federal licensing regulations that led to removal of a dam increased power costs and contributed to the utility's rate hike.

*Cost increases are related to “obligations to build parks, construct and operate fish hatcheries and protect cultural needs as required in the utility’s federal license.”*

*Washington Public Utility District*

*April 2010*

Utilities are also incurring costs related to more rigorous federal reliability regulations which are driving the need to make significant investments in such electrical grid components as substations, transmission lines and supporting technologies. The regulations also are boosting the amount of resources that must be dedicated to monitoring and reporting activities.

## Efficiency Lowers Bills at a Cost

Energy efficiency is an important component of the Northwest’s resource mix and it is a rare utility that isn’t promoting efficiency and operating programs to provide efficiency services. Because of the region’s emphasis on efficiency, consumers have gotten savvy about holding their bills stable while costs rise and pressures on raise increase.

Conservation and energy efficiency come with direct costs to utilities. Our look at the drivers of higher rates bears this out. In addition to generic references to the cost of meeting conservation and renewable resource mandates, utilities rates have increased to cover direct program costs, like providing customers with energy efficiency rebates.

*The utility is requesting an “energy efficiency tariff to help meet the growing customer demands for energy efficiency rebates.”*

*Washington Investor Owned Utility*

*June 2009*

## Utilities are Unique

Every utility is different. With their diversity of resources and unique rate designs, changes in the power market, fuel prices, demand for power, and regulatory policies affect each utility differently. Local circumstances also come into play. For instance, a utility that had load loss associated with the faltering economy or a major industrial closure will experience changes in the power market differently than a utility that has loads that continue to grow.

Utilities are different and over time, their rates fluctuate up and down. In this scan, there is one system that has had an overall rate decrease in the past six years. There are also instances over the six years in which a utility decreased rates or offset the magnitude of a hike with a downward adjustment. Several of these instances were associated with settlement of the residential exchange litigation. Others were related to good water conditions and an uptick in hydro generation.

What is clear, regardless of whether you are a utility that buys most of its power from BPA, a utility that has added a gas-fired generating plant in recent years, a utility that has an aggressive conservation program, or a system that sells large quantities of power into the wholesale market, costs and rates are going up. No matter their individual circumstances, the pattern consistently demonstrates that, in these times, utilities are feeling the economic squeeze and their rates are rising.