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October 29, 2009

#### MEMORANDUM

**TO:** Council Members

**FROM:** Tom Eckman and Charles Grist

**SUBJECT:** Results of the Regional Technical Forum's 2008 Survey of Regional Conservation Savings and Expenditures

The Regional Technical Forum (RTF) is charged with tracking the regional conservation savings and expenditures. Each year the RTF asks all of the region's utilities, the Energy Trust of Oregon (ETO), Bonneville and the Northwest Energy Efficiency Alliance (NEEA) to report on their conservation achievements and investments. The survey results are supplemented with data obtained from the RTF's regional Planning, Tracking and Reporting (PTR) system. The PTR system tracks the savings reported by the region's public utilities participating in Bonneville's conservation programs. Staff will provide a summary of the results of this survey. Some highlights of the survey's findings are provided below.

This year's survey represents the activities of 127 utilities serving just over ninety-nine percent of the region's retail electricity sales. In aggregate, the region acquired 234 average megawatts of savings in 2008. This far exceeds the Fifth Plan's target of 145 average megawatts for the year. As a result of their collective efforts, the region's utilities, the ETO, NEEA and Bonneville have accomplished the Fifth Plan's five-year regional goal of 700 average megawatts in just four years.

Utility program savings were spread across all sectors. Just over 40% of local program savings were from the residential sector. Slightly more than 30% of local program savings came from the commercial sector while about 20% came from improvements in industrial efficiency. The weatherization of low-income housing and improvements in irrigated agriculture each contributed approximately three percent of the total savings from local programs.

NEEA's market transformation programs contributed 38 average megawatts or 16% of the regional total. Approximately 70 percent of NEEA's savings came from residential lighting. In addition, non-programmatic savings (i.e., those that happen outside utility and NEEA's programs) were estimated to produce an additional 48 average megawatts of savings, largely from consumer purchases of compact fluorescent lighting and high efficiency clothes washers.

Total utility system expenditures, including NEEA and Bonneville regional support activities, are estimated at \$251 million or about 2.2 percent of regional retail revenues. The average "first year" cost of utility program savings was just under \$1.6 million per average megawatt. Assuming an average measure life of 10 years the levelized cost of these savings is approximately \$20 megawatt-hour. These expenditures do not include customer contributions.

Since 1978 when the first utility conservation programs were initiated the region's utilities, Bonneville and more recently the ETO have acquired just over 2400 average megawatts of conservation resources. In addition, improvements in state energy codes and the enactment of federal appliance and equipment efficiency standards have contributed an additional 1500 average megawatts of savings. In aggregate, these efforts now produce just over 3900 average megawatts of yearly savings. For scale, this is equivalent to the annual critical water output of two Grand Coulee Dams.

## Results of RTF 2008 Regional Conservation Survey

November 13, 2009



Regional Technical Forum Survey Utility Conservation Achievements in 2008



Returns Counted . . . So Far

127 Utilities 99% of Regional Load



# So What's The Result?



235 aMW

The Region Has Exceeded the 5<sup>th</sup> Plan's Targets Every Year (We exceeded 5-year goal in 4-years)



## Source of Savings



#### Source of Local Program Savings



#### Source of NEEA Savings (70% From Residential Lighting)







# Source of Total Savings



## Regional Utility/SBC Conservation Expenditures\*





#### PNW Energy Efficiency Achievements 1978 – 2008



#### Energy Efficiency Is The Region's Third Largest Resource



We're Saving More Than The Annual Critical Water Output of <u>Two</u> Grand Coulee Dams





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