

# **AVISTA UTILITIES 2006 NATURAL GAS INTEGRATED RESOURCE PLAN APPENDICES**

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# **Natural Gas Demand Forecast Detail**

## **Appendix 2.1**

## Appendix 2.1 - Natural Gas Demand Forecast Detail

What follows in narrative is the process of preparing the company base customer growth forecast. The first step is a framework-forecast of the national economy, followed by regional economic forecasts consistent with the national outlook. The employment and population forecasts are the key drivers for the natural gas customer forecast.

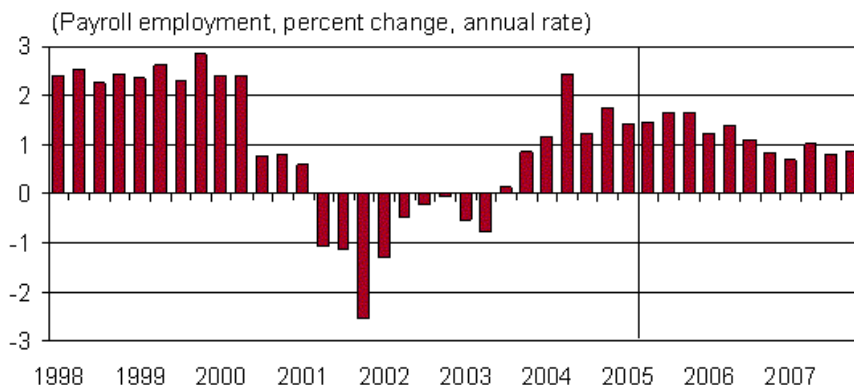
### National Economic Outlook

Avista has contracted with Global Insight, Inc. (formerly known as DRI-McGraw Hill) for national economic forecasts for the last 25 years. The 25 year long term forecast, prepared in Spring 2005, was used as the basis for the 2005 effort. The following narrative with Avista remarks and Global Insight graphics (used with permission) and is consistent with the presentation at the TAC meeting in October 2005, with a focus on the near-term national outlook.

One of the vexing issues in economic forecasting deals with employment. After the technology bust in the late 1990s, employment levels dropped across the country. Of course, the geographic areas with technology sectors were disproportionately harder hit. The resulting declines in the stock market affected consumer spending, leading to weak employment demand in most sectors.

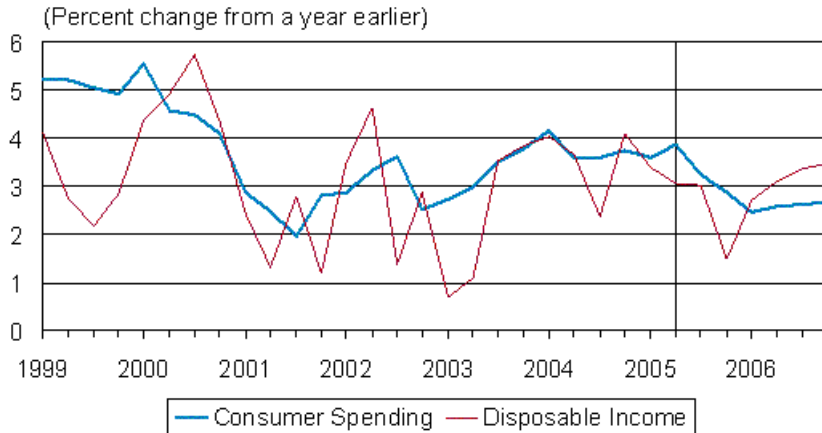
The following chart shows the quarterly payroll employment as percent changes, at annual rates from 1998 to 2007, as of early 2005. Employers have taken the Alan Greenspan approach to hiring, adding workers at a “measured pace.” Other than the residential construction sector, this timid hiring practice appears to be driven by global competition, strong labor productivity gains and loose labor markets, at least until recently.

### *Employment Has Improved — But Not Like The Last Cycle*



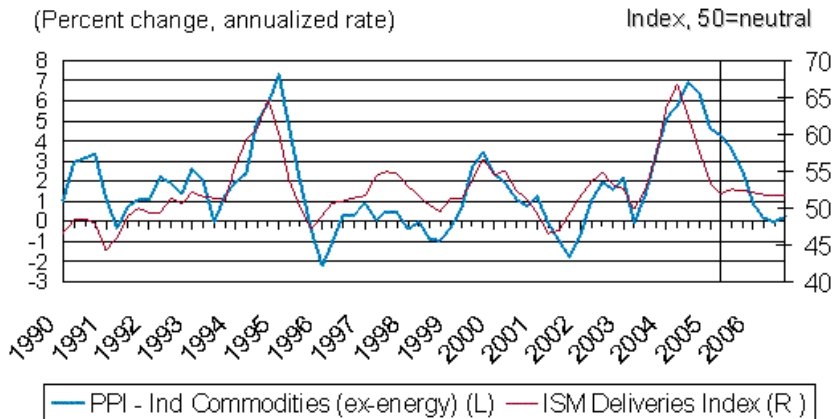
Consumer spending has been supported by low interest rates, both for mortgages and for major purchases, including automobiles. As the slide below suggests, consumer-spending growth is expected to slow.

## Consumer Spending Growth Expected to Slow



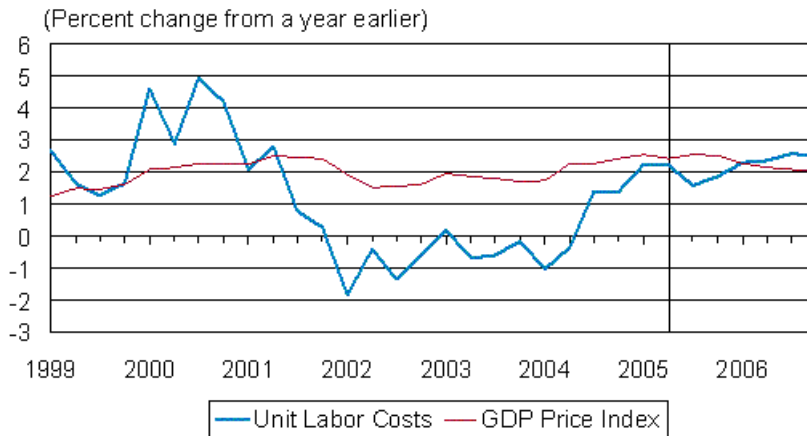
There is an improved picture with respect to commodities inflation, which excludes the impact of hurricanes in the fall of 2005. Eventually, commodity prices end up in final goods.

## Commodities Inflation Has Peaked...



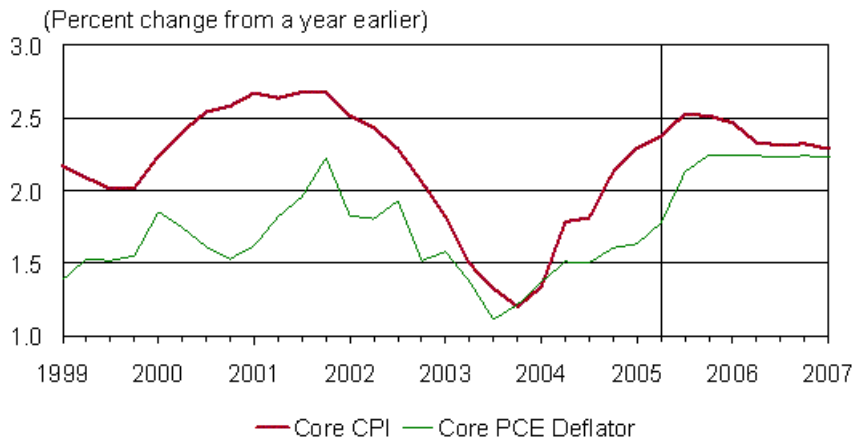
Unit labor costs have declined during the brief recession in 2001, but the picture has changed.

### *...But Unit Labor Costs Are No Longer Declining*



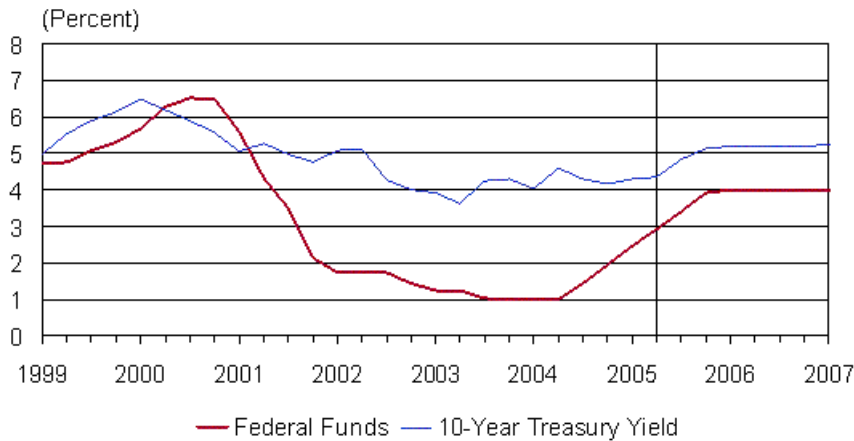
Commodities inflation and unit labor costs lead to changes in the core Consumer Price Index (CPI) and core PCE deflator (Personal Consumption Expenditure).

### *Core Inflation Has Risen*



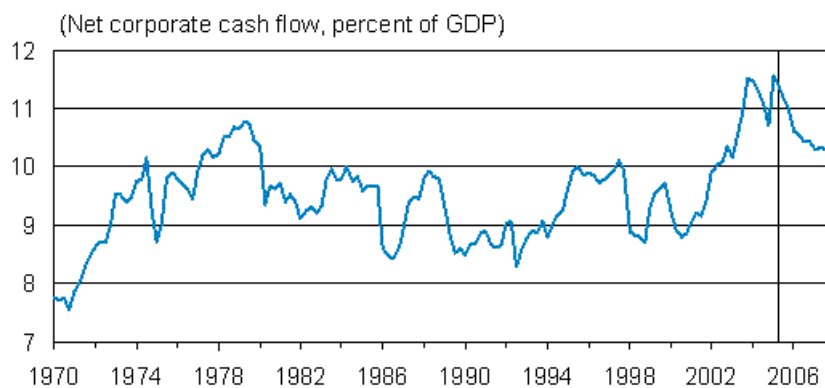
And finally, changes in core inflation inevitably lead to higher interest rates, as the Federal Reserve responds with raising interest rates to tame rising prices.

## The Fed Has More Work to Do



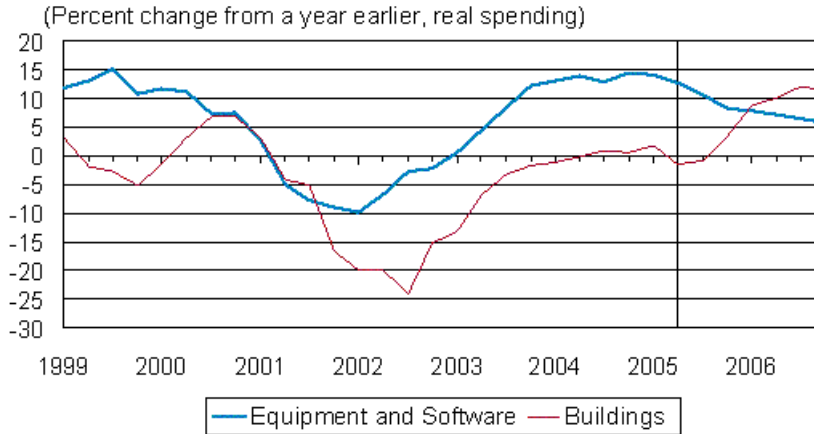
As the business cycle moves forward, the typical improvements in corporate cash flow are revealed in the next graphic.

## Corporate Cash Flow Is at Record Levels



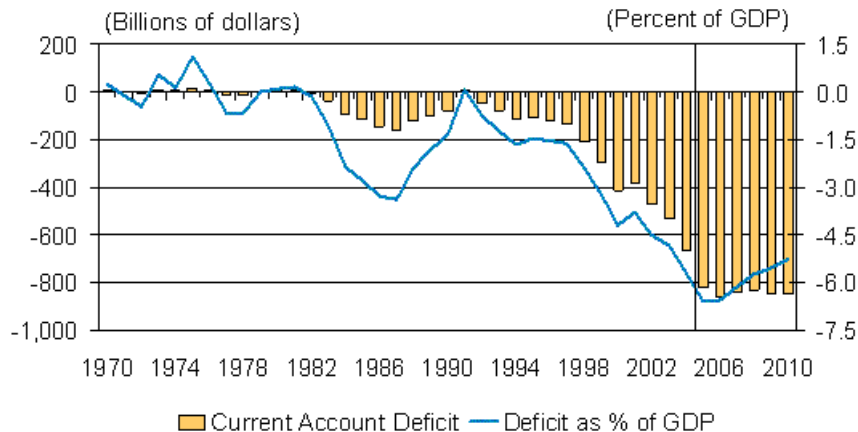
Business investment is one of the final phases in driving the post-recession expansion forward, best illustrated by business capital spending. Equipment and software investment typically rebound sooner than building investment. The next graph predicts real spending changes from the prior year.

## The Business Capital Spending Cycle



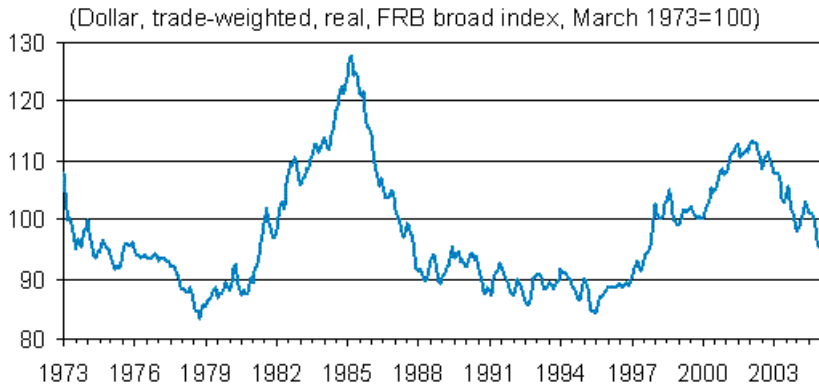
The nation's current account deficit is the net result of imports and exports. A current account surplus occurs when the U.S. exports more than it imports. The chart indicates recent history and forecasts continued large current account deficits.

## Current Account Deficit: \$800 Billion as Far as the Eye Can See



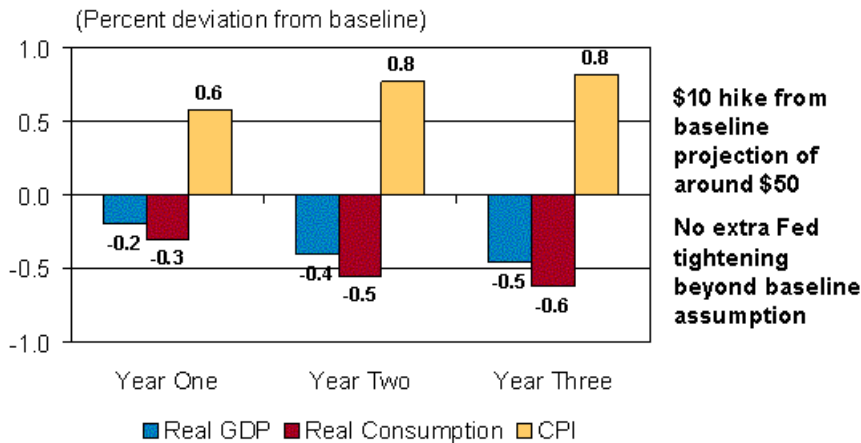
The ultimate impact to the United States economy is further declines in the U.S. dollar, illustrated below as a trade-weighted index supplied by the Federal Reserve Board. This graphic covers 1973 to 2005, and the implication here is this index should fall further, resulting in increased exports of capital goods and decreased imports of everything except oil and refined petroleum products.

**The Exchange Rate Has Not Yet Fallen as Far as in the late 1980s — It Has Further to Fall**



As discussed at the TAC meeting in October 2005, oil prices have jumped considerably. The next four charts were used to address some of the obvious concerns. The discussion during this part of the presentation was helpful in scenario determination. This chart was particularly useful as a marginal impact analysis.

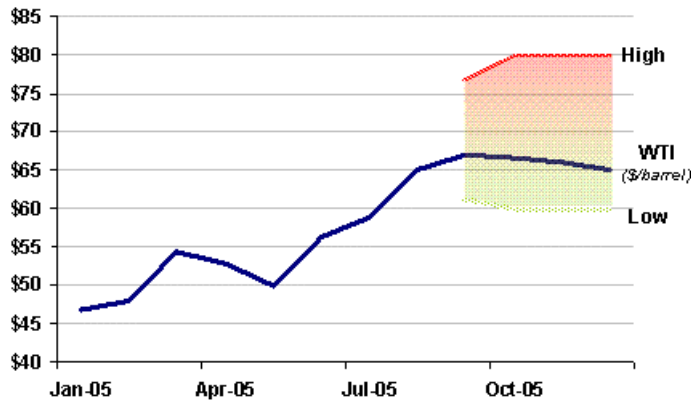
**Impact of a \$10 Rise in Oil Prices On the US Economy in the Global Insight Model**





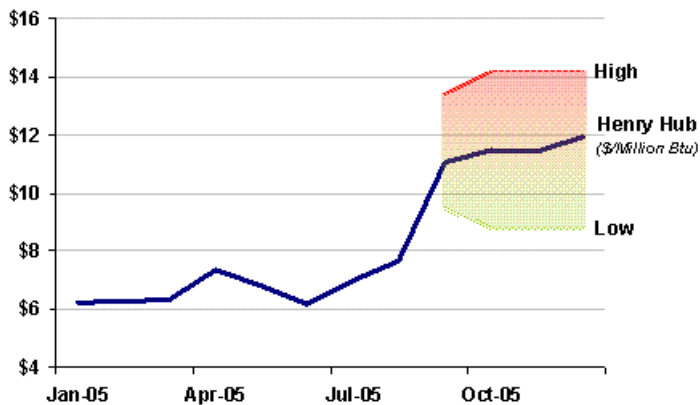
Global Insight had prepared some sensitivity analyses, and used the following to illustrate the range of West Texas Intermediate (WTI) oil prices.

### WTI: Price Range in \$/Barrel



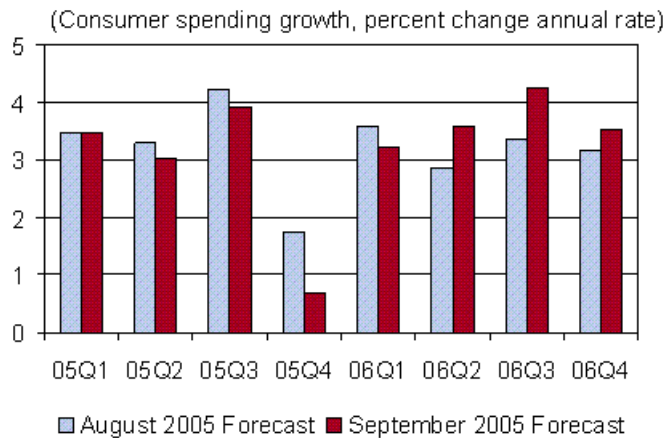
Oil prices and natural gas prices have a relationship, and the following chart illustrates uncertainty ranges expected by Global Insight in the Henry Hub Index.

### Henry Hub Index: Price Range in \$/Million BTU



Additionally, concerns were noted by Global Insight that higher gasoline prices could dampen consumer-spending growth, as shown below.

## Gasoline Prices Dampen Consumer Spending Growth



Every \$0.10 on the price of gasoline is like a tax hike of 0.13% of disposable income.

Global Insight characterizes the national housing market as follows.

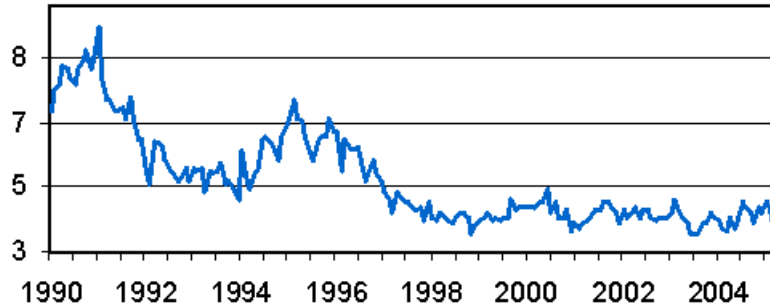
## The Housing Market Today

- ◆ **New and existing home sales at record highs four straight years**
- ◆ **Demand strong**
- ◆ **Supply tight**
- ◆ **As a result, home prices have soared, and construction is booming**
- ◆ **Activity is strongest in the South, followed by the West, NE and Midwest**

Nationally, housing inventories for new single-family homes are at low levels.

## *Inventories are Lean*

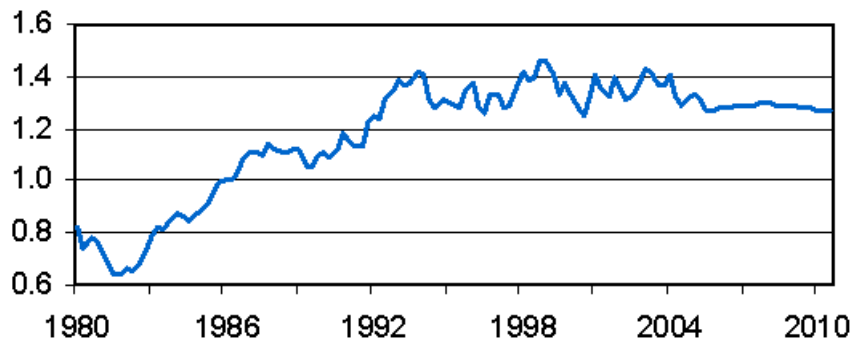
**Months Supply of New One Family Homes**  
(Months)



In most markets in the United States, single-family homes are affordable.

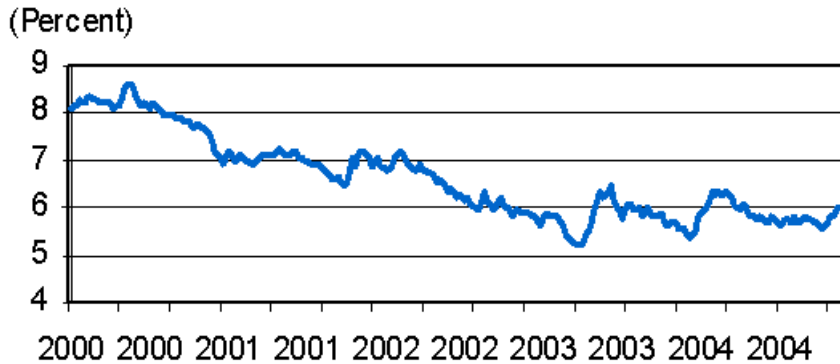
## *Houses Remain Affordable*

**Single-family Home Affordability Index**



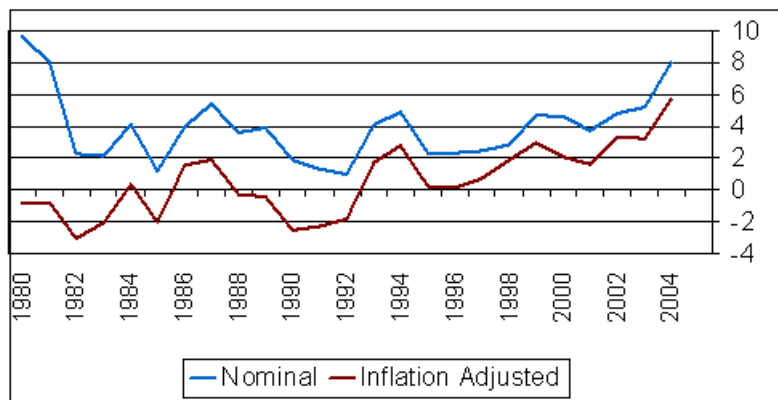
Mortgage rates throughout most of 2005 have remained low.

## Mortgage Rates Remain Low



The final chart in the national outlook takes a look at housing prices relative to the national average from 1980 to 2005, in both nominal and inflation adjusted annual changes. The key point is in the chart title, with the non-subtle warning that housing prices have moved both up and down -- with emphasis on down -- as recently as 1991. Although Global Insight does not predict a housing price meltdown, it does concede that housing prices in some markets may not be sustainable at recent levels.

## Housing Prices Do Fall

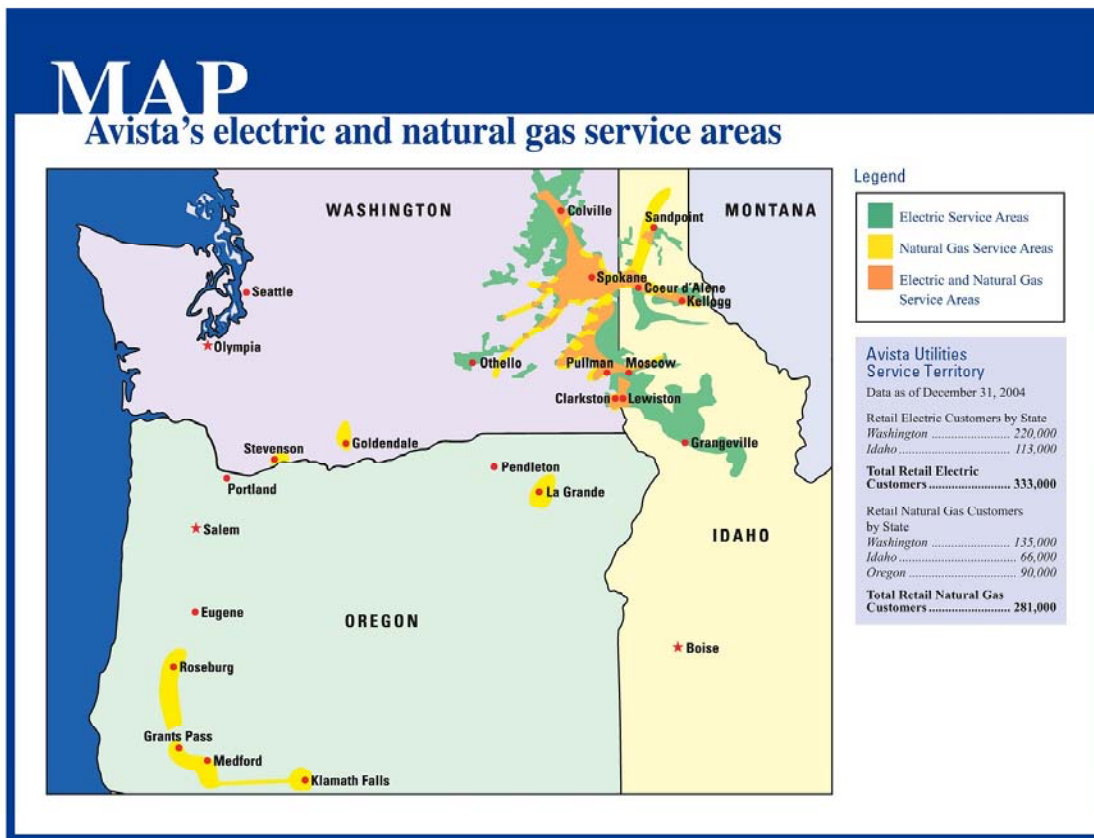


This concludes a condensed version of Global Insight, Inc.'s national economic forecast used as the basis for Avista's regional economic outlook. The purpose of including it in this appendix is to frame the economic situation that existed when the base case customer forecast was prepared.

## Regional Economic Outlook

Avista serves natural gas customers in eastern Washington, northern Idaho and in portions of five counties in Oregon. The principal county in Washington is Spokane, while in Idaho, Kootenai and Bonner are barometers of service area growth. Kootenai County includes Coeur d'Alene, Post Falls, Hayden and a host of smaller municipalities. Sandpoint anchors Bonner County. The primary cities in Spokane County are the City of Spokane, City of Spokane Valley and the City of Liberty Lake. In Oregon, the counties (principal city) of Jackson (Medford), Josephine (Grants Pass), Douglas (Roseburg), Klamath (Klamath Falls) and Union (La Grande) round out the service territory.

The following map shows the breadth of the service area.



Global Insight, Inc., has been providing county-level forecasts to Avista for a number of years. These forecasts are consistent with and driven by the national forecast already articulated.

The economic concepts provided are forecast forward for 25 years. This forecast ends in the year 2029.

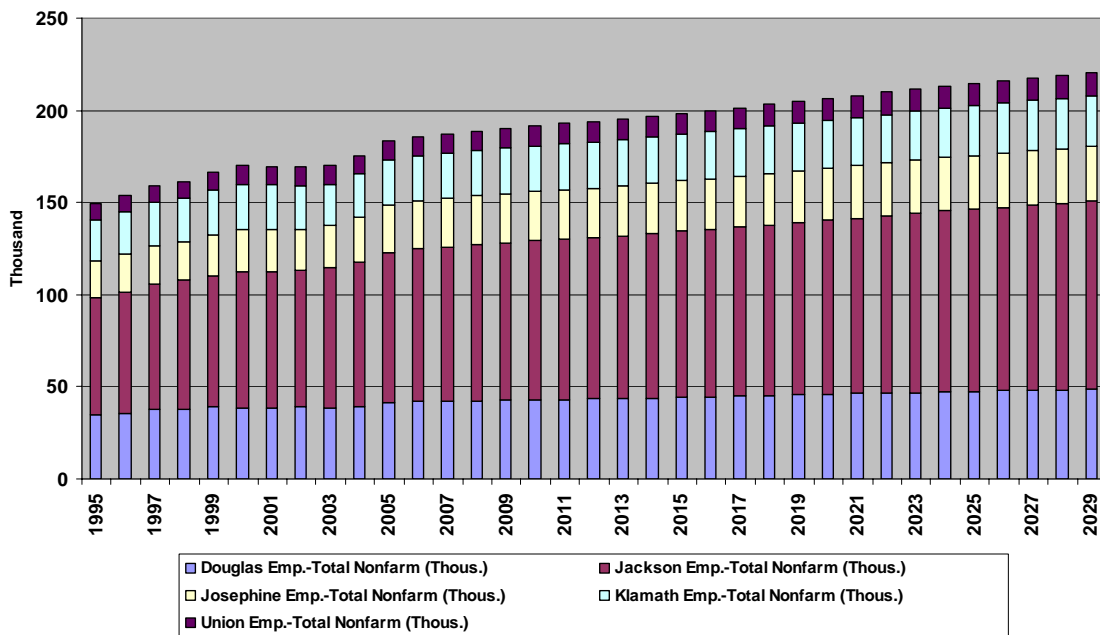
Overall, the results of the economic forecasts suggest the following impacts on Avista’s customer growth: Near term the strength in the construction boom will be mirrored by strong customer growth, while longer term underlying employment and population growth will drive customer growth.

Customer use of natural gas will be tempered by rising retail prices as a result of price elasticity of demand, but rising personal income growth will lead to a gradual rise in use per customer, supplemented by rapid population growth in the “over 65 years of age” category.

The charts that follow are the actual employment, population, population age 65 and over, household, personal income and wage and salary income forecasts used to produce the natural gas customer forecasts by state, by area, by customer class (residential, commercial and industrial) and by rate schedule (firm – small, medium and large-sized customers).

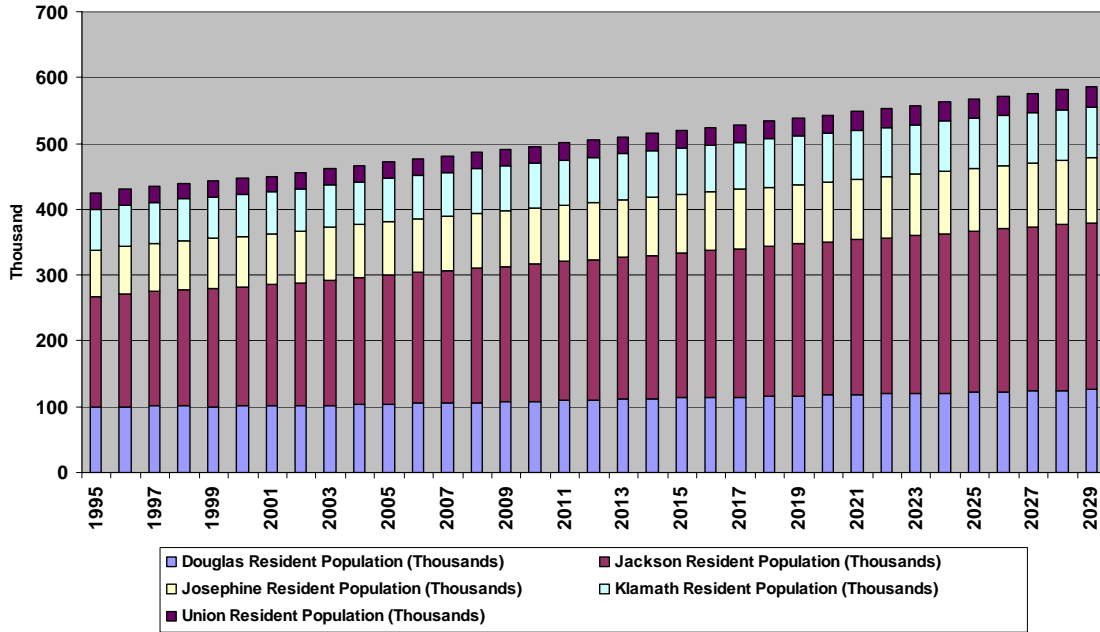
We start by reporting economic forecasts for Oregon. First is employment.

## Oregon Employment



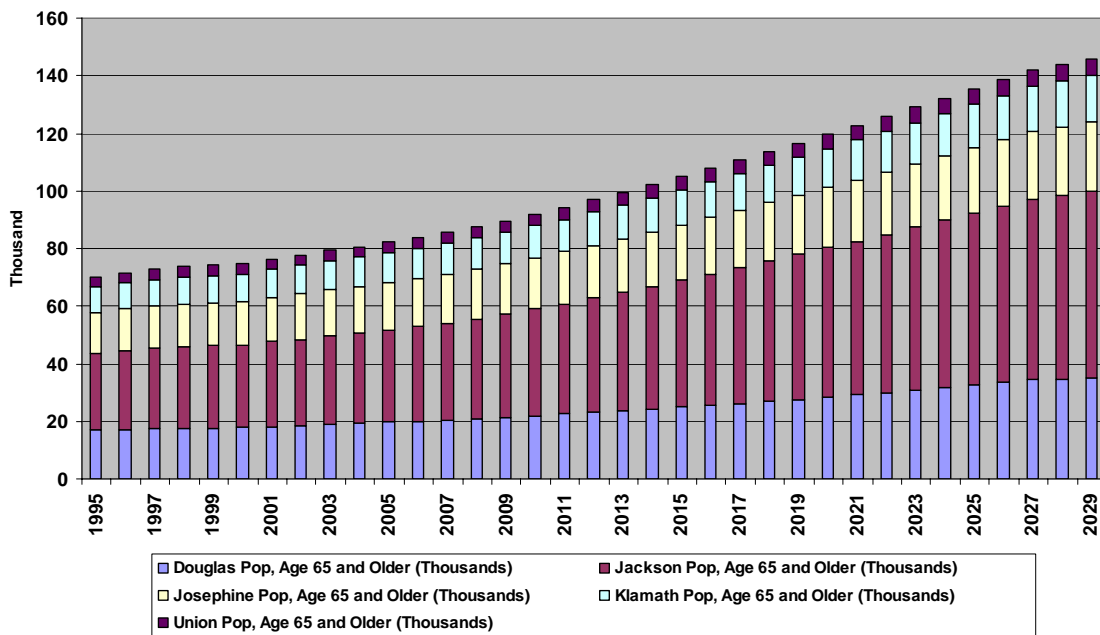
Next is Oregon resident population.

## Oregon Resident Population



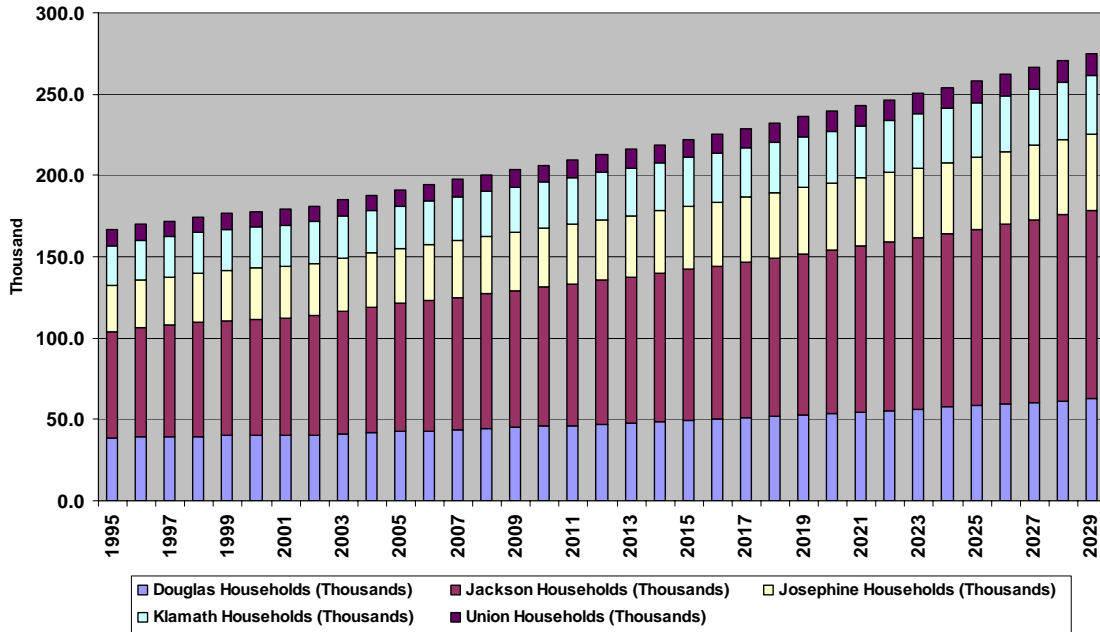
Oregon population age 65 and older grows rapidly during the forecast.

## Oregon Population Age 65 and Older



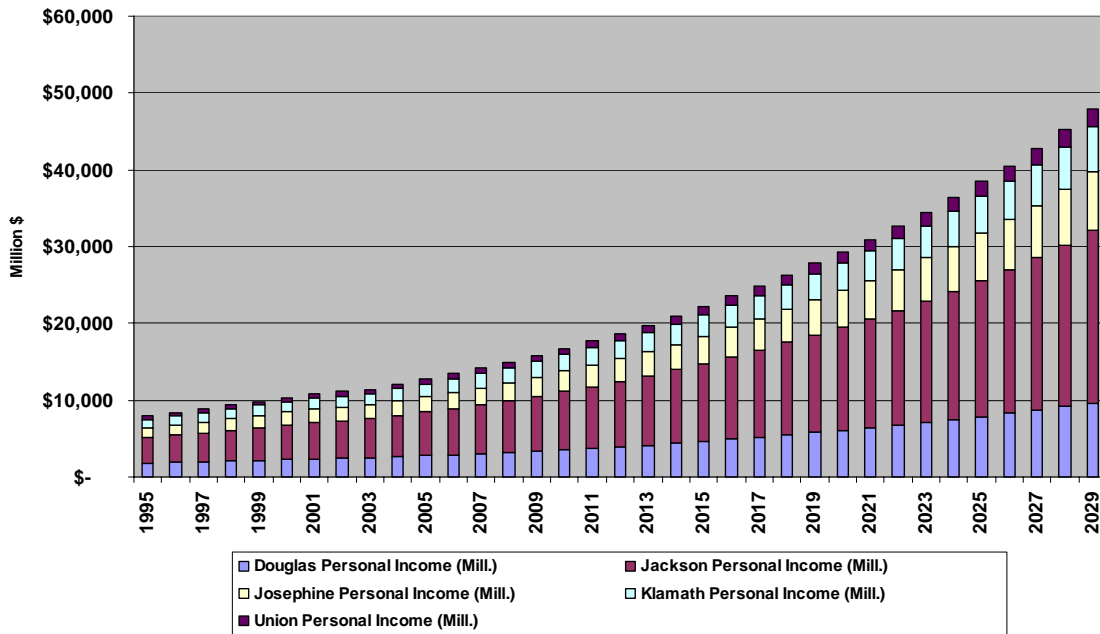
Oregon household growth is impacted by strong employment growth, retirement relocation and smaller household size as a larger proportion of elderly occurs.

## Oregon Households



Oregon personal income is shown in nominal dollars in total.

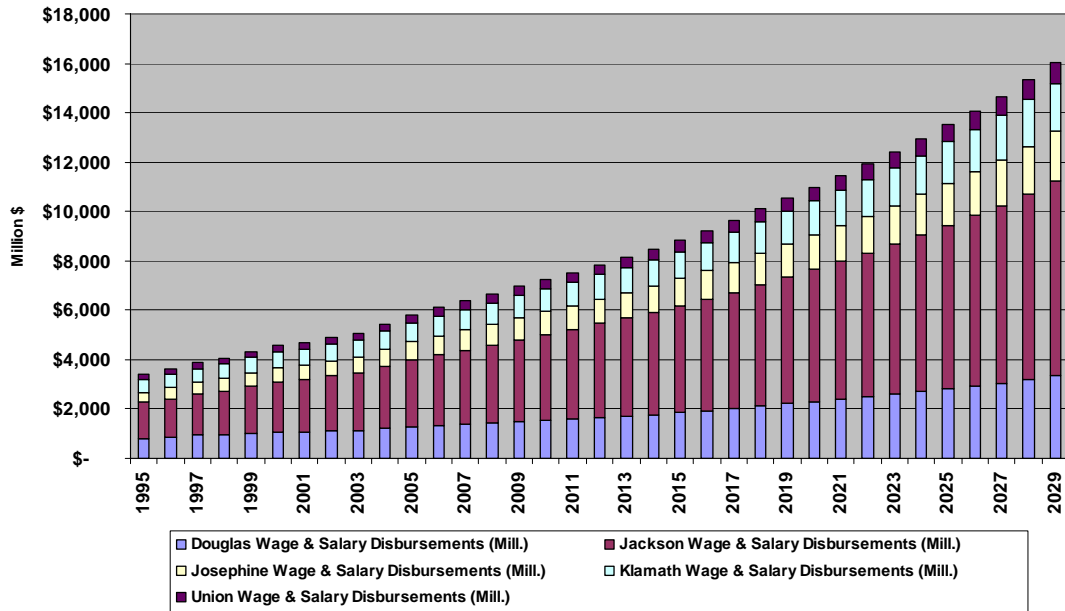
## Oregon Personal Income





The final chart for Oregon shows wage and salary income, which is approximately one-third of personal income.

### Oregon Wage & Salary Income



The table below compares compound growth rates (CGR) between the 1995-2005 decade and the two decade forecast period 2005-2025.

	<u>1995-2005 CGR</u>	<u>2005-2025 CGR</u>
<b>Douglas County, OR</b>		
Douglas Emp.-Total Nonfarm (Thous.)	1.8%	0.7%
Douglas Resident Population (Thousands)	0.5%	0.8%
Douglas Pop, Age 65 and Older (Thousands)	1.6%	2.5%
Douglas Households (Thousands)	1.0%	1.6%
Douglas Personal Income (Mill.)	4.4%	5.4%
Douglas Wage & Salary Disbursements (Mill.)	4.8%	4.0%
<b>Jackson County OR</b>		
Jackson Emp.-Total Nonfarm (Thous.)	2.5%	1.0%
Jackson Resident Population (Thousands)	1.6%	1.1%
Jackson Pop, Age 65 and Older (Thousands)	1.9%	3.2%
Jackson Households (Thousands)	1.8%	1.6%
Jackson Personal Income (Mill.)	5.3%	5.9%
Jackson Wage & Salary Disbursements (Mill.)	6.3%	4.6%
<b>Josephine County, OR</b>		
Josephine Emp.-Total Nonfarm (Thous.)	2.6%	0.6%
Josephine Resident Population (Thousands)	1.3%	0.8%
Josephine Pop, Age 65 and Older (Thousands)	1.5%	1.6%
Josephine Households (Thousands)	1.7%	1.4%
Josephine Personal Income (Mill.)	4.9%	5.8%
Josephine Wage & Salary Disbursements (Mill.)	6.3%	4.2%

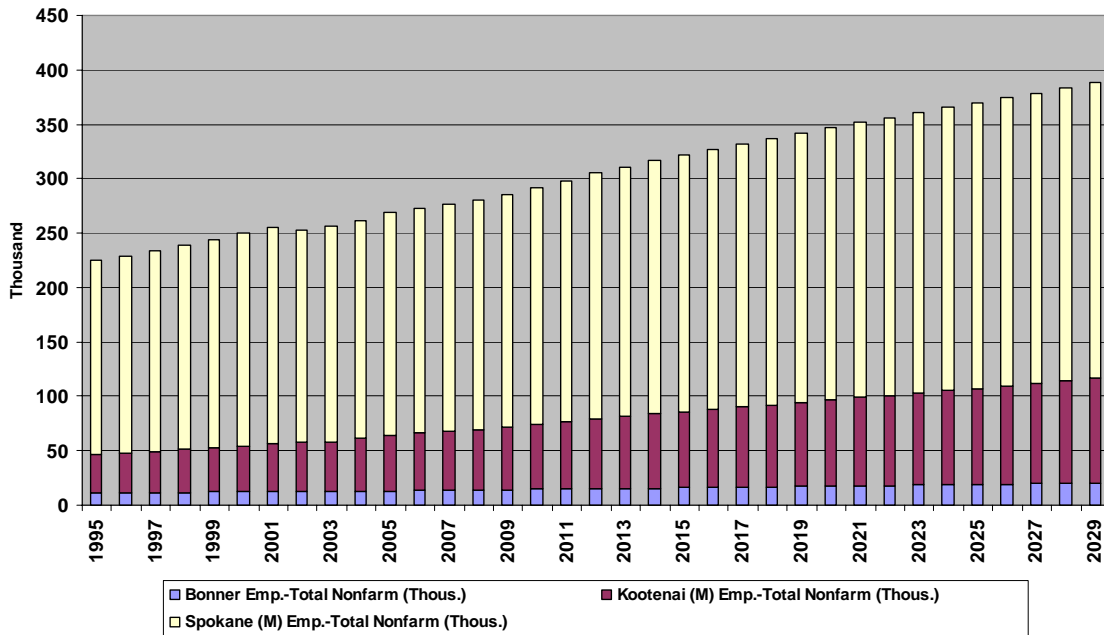
Klamath County, OR	<u>1995-2005 CGR</u>	<u>2005-2025 CGR</u>
Klamath Emp.-Total Nonfarm (Thous.)	0.8%	0.6%
Klamath Resident Population (Thousands)	0.7%	0.7%
Klamath Pop, Age 65 and Older (Thousands)	1.3%	2.0%
Klamath Households (Thousands)	1.0%	1.2%
Klamath Personal Income (Mill.)	4.2%	5.4%
Klamath Wage & Salary Disbursements (Mill.)	3.9%	4.0%

Union County, OR	<u>1995-2005 CGR</u>	<u>2005-2025 CGR</u>
Union Emp.-Total Nonfarm (Thous.)	1.4%	0.8%
Union Resident Population (Thousands)	-0.1%	0.8%
Union Pop, Age 65 and Older (Thousands)	0.8%	2.0%
Union Households (Thousands)	0.3%	1.3%
Union Personal Income (Mill.)	3.7%	5.5%
Union Wage & Salary Disbursements (Mill.)	4.4%	4.0%

From the table above, forecasted household growth increases faster than the previous decade. The economic dislocations during the previous decade are largely over, and household growth is accelerated by the growth in elderly households.

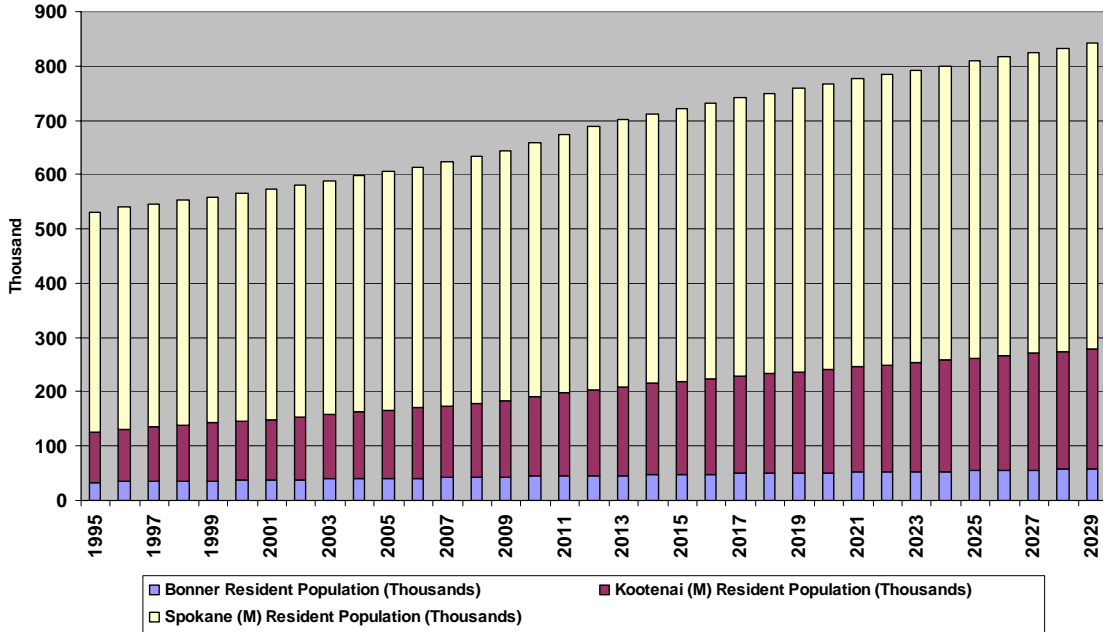
Idaho and Washington historical and forecasted data follows in the same format for the three primary counties. The first is employment for nonfarm workers.

## Idaho & Washington Employment



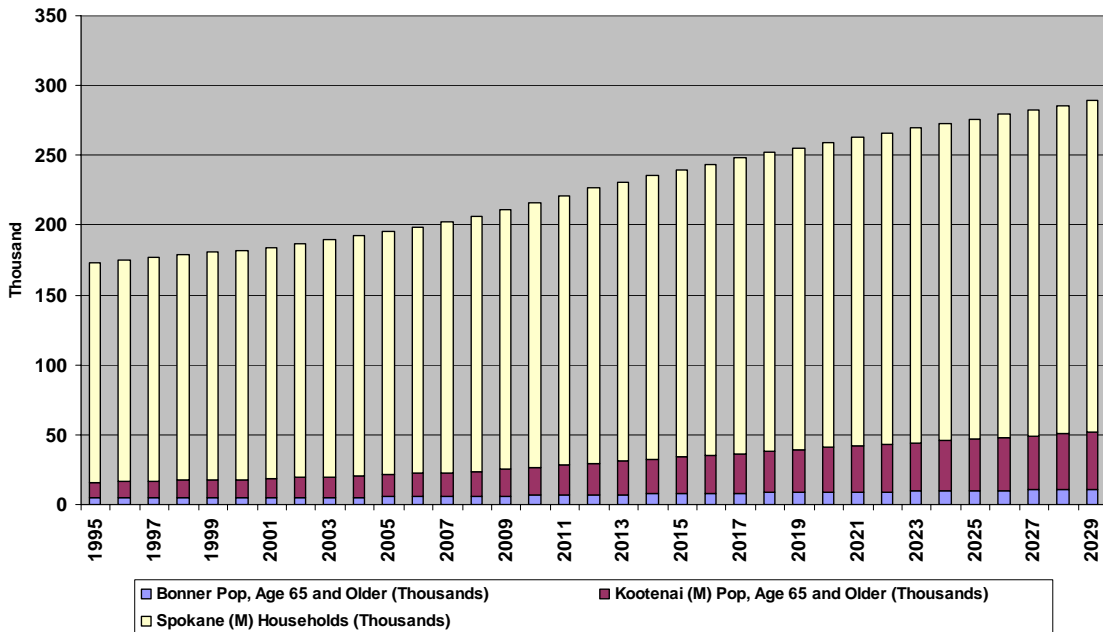
Next is resident population for the three counties. In both the employment and population charts, Spokane County is the larger, with Kootenai growing fastest.

### Idaho & Washington Population



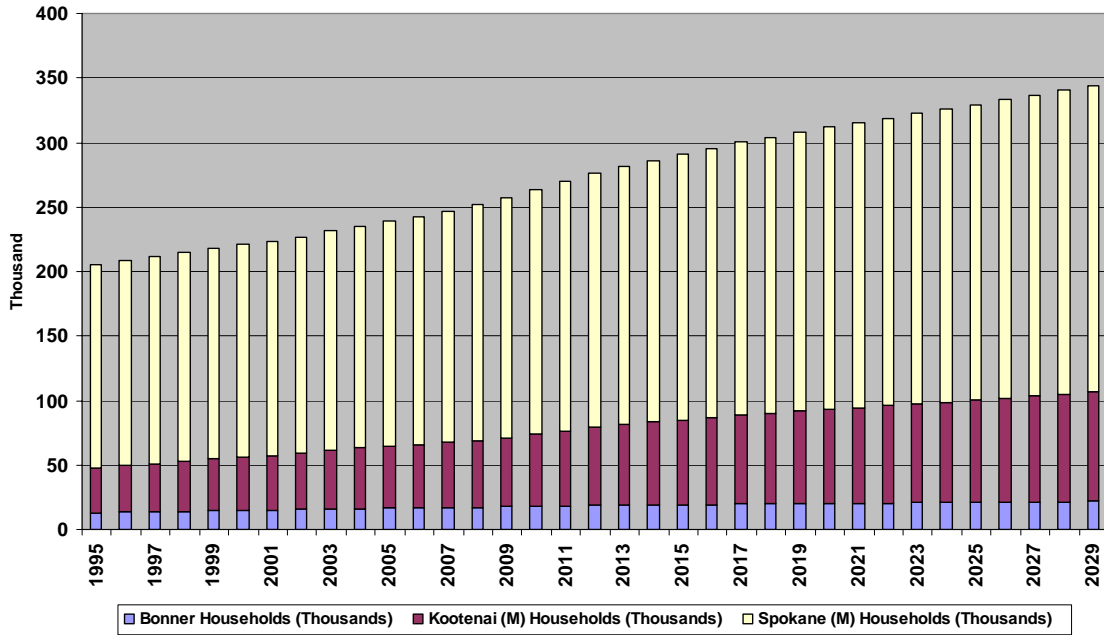
Spokane County has a significant population over 65 years of age, and the prevalence of these residents remain over the forecast period, which results in slightly faster customer growth.

### Idaho & Washington Age 65 & Over



Household growth remains strong during the next twenty years.

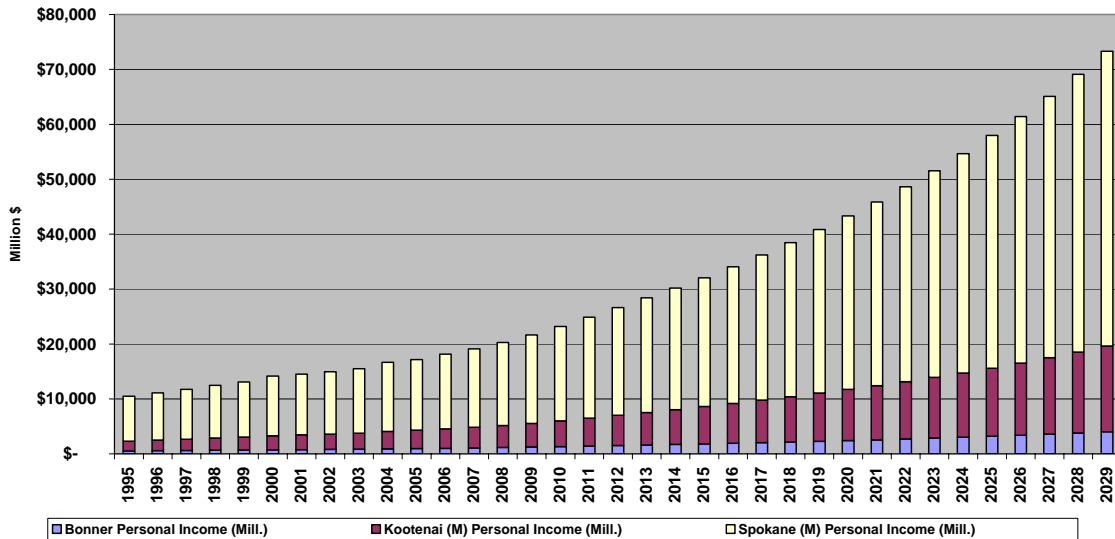
## Idaho & Washington Households



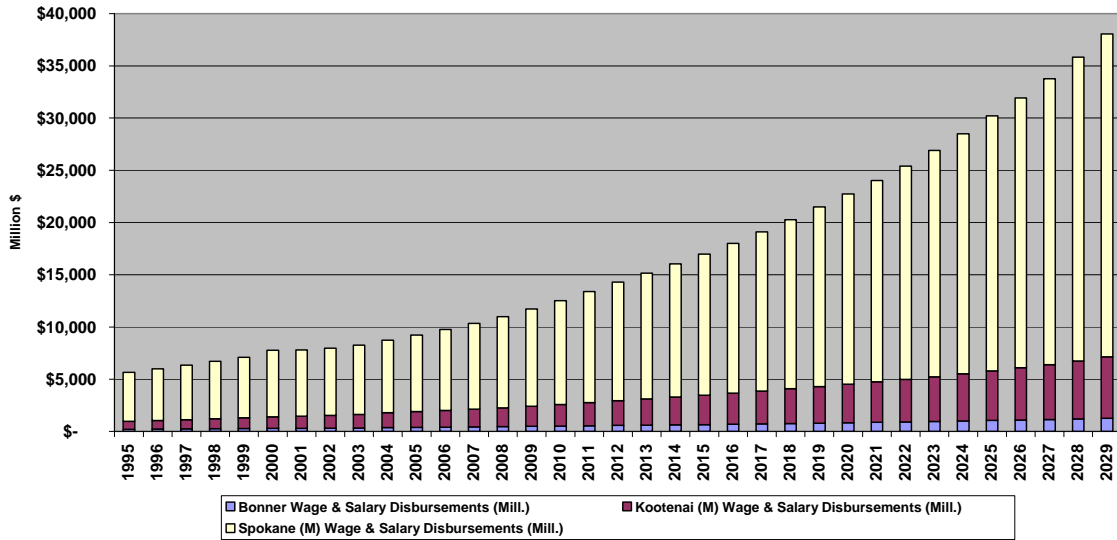
The two income figures below illustrate the largest difference between the Oregon economies and the Washington/Idaho economies.

Although personal income growth is strong, as is wage and salary income, as shown below, the proportion of wage and salary income is about one half.

## Idaho & Washington Personal Income



## Idaho & Washington Wage & Salary Income



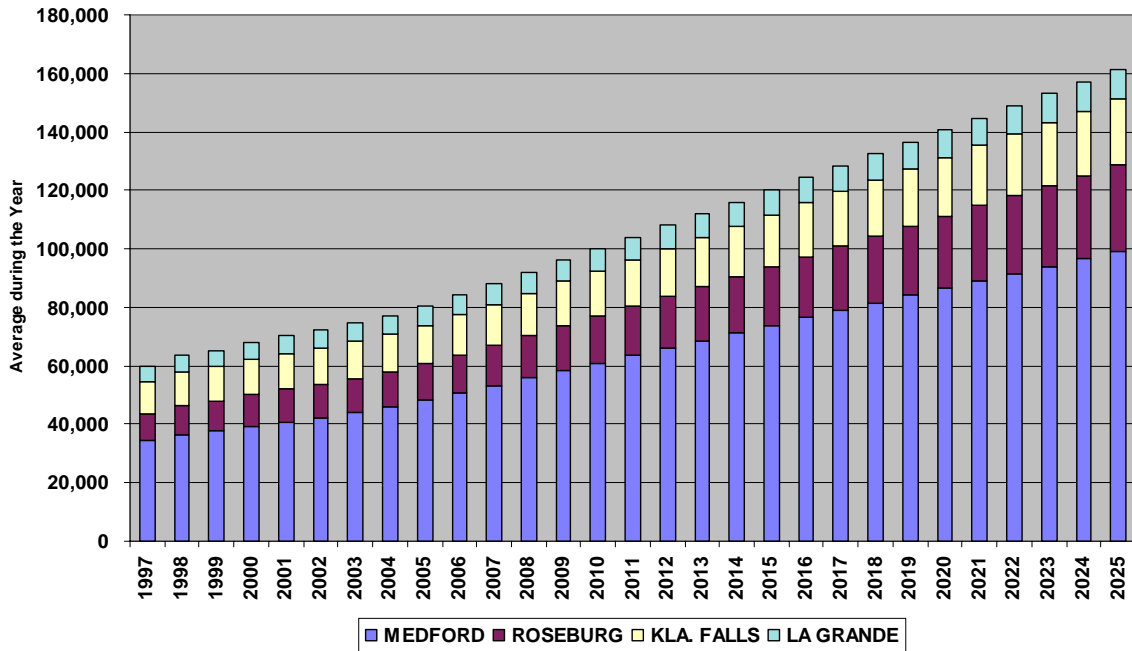
As the final table in the county economics section shows, growth throughout the three county areas is expected to be robust, although not as rapid in Idaho in the decade ahead as in the last decade. Both Idaho counties transformed their economies from resource-based to manufacturing and tourism-based economies during the last decade. This transformation has improved the economic health of the area and has made the entire region less sensitive to business cycles.

<b>Bonner County, ID</b>	<b><u>1995-2005 CGR</u></b>	<b><u>2005-2025 CGR</u></b>
Bonner Emp.-Total Nonfarm (Thous.)	1.9%	1.9%
Bonner Resident Population (Thousands)	2.0%	1.5%
Bonner Pop, Age 65 and Older (Thousands)	1.9%	3.1%
Bonner Households (Thousands)	2.5%	1.2%
Bonner Personal Income (Mill.)	6.0%	6.2%
Bonner Wage & Salary Disbursements (Mill.)	6.1%	5.2%
<b>Kootenai County, ID</b>	<b><u>1995-2005 CGR</u></b>	<b><u>2005-2025 CGR</u></b>
Kootenai (M) Emp.-Total Nonfarm (Thous.)	3.7%	2.7%
Kootenai (M) Resident Population (Thousands)	3.1%	2.5%
Kootenai (M) Pop, Age 65 and Older (Thousands)	3.3%	4.3%
Kootenai (M) Households (Thousands)	3.3%	2.5%
Kootenai (M) Personal Income (Mill.)	6.5%	6.7%
Kootenai (M) Wage & Salary Disbursements (Mill.)	7.1%	5.9%
<b>Spokane County WA</b>	<b><u>1995-2005 CGR</u></b>	<b><u>2005-2025 CGR</u></b>
Spokane (M) Emp.-Total Nonfarm (Thous.)	1.3%	1.3%
Spokane (M) Resident Population (Thousands)	0.8%	1.1%
Spokane (M) Pop, Age 65 and Older (Thousands)	1.2%	3.4%
Spokane (M) Households (Thousands)	1.0%	1.4%
Spokane (M) Personal Income (Mill.)	4.6%	6.1%
Spokane (M) Wage & Salary Disbursements (Mill.)	4.6%	6.2%

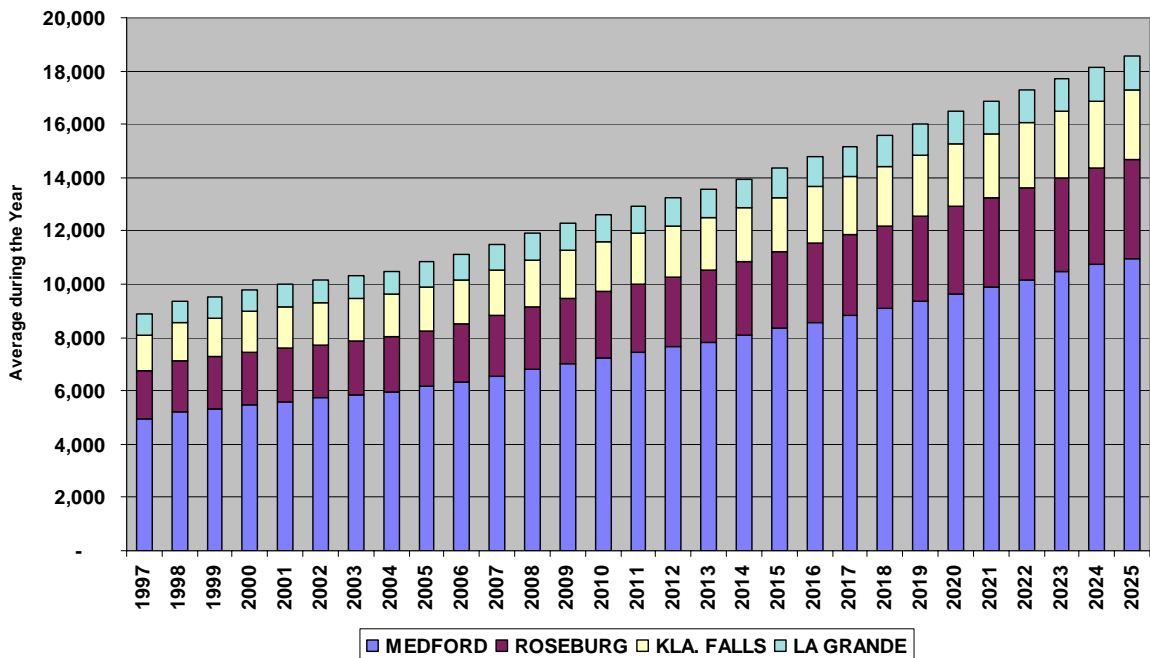
## Oregon Customer Forecast

Base case customer forecasts for residential and commercial sectors are shown in the next two figures, and are consistent with the economic forecasts.

### Oregon Residential Customers

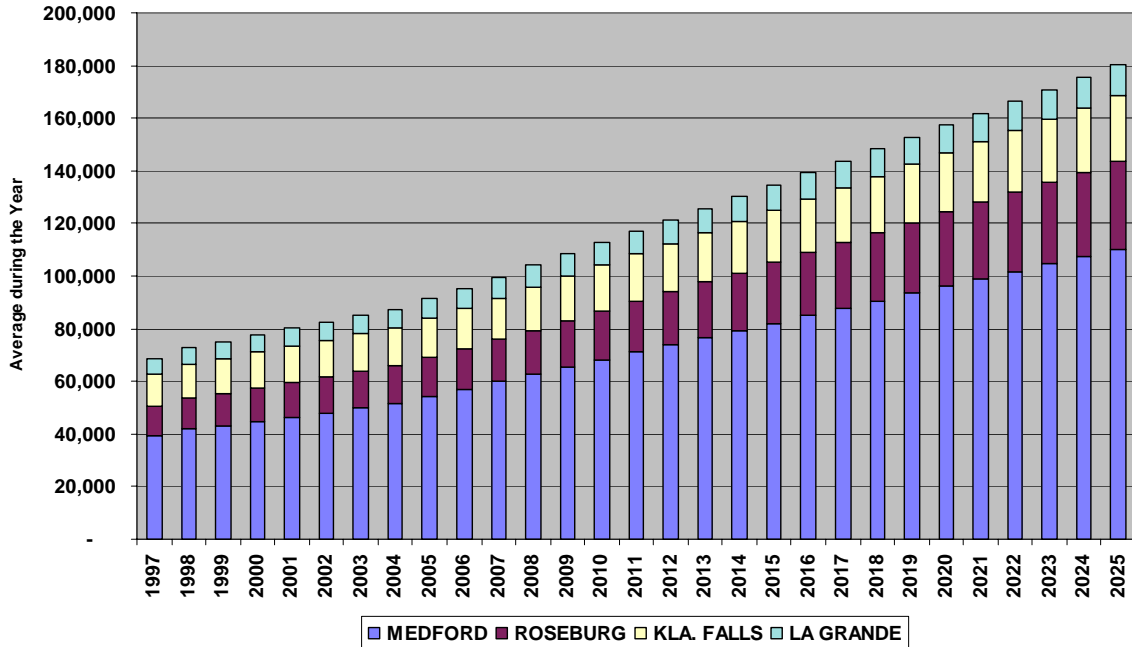


### Oregon Commercial Customers



The customer forecasts by area within Oregon are shown in the following figure. Presently, the Medford area has 60 percent of the Avista customers in Oregon. By 2025, Medford's share shows a slight increase to 61 percent. Roseburg's share increases from 16 percent to 19 percent over the two-decade period, while Klamath Falls shows a share slippage from 16 percent to 14, and La Grande drops from 8 percent to 6 percent.

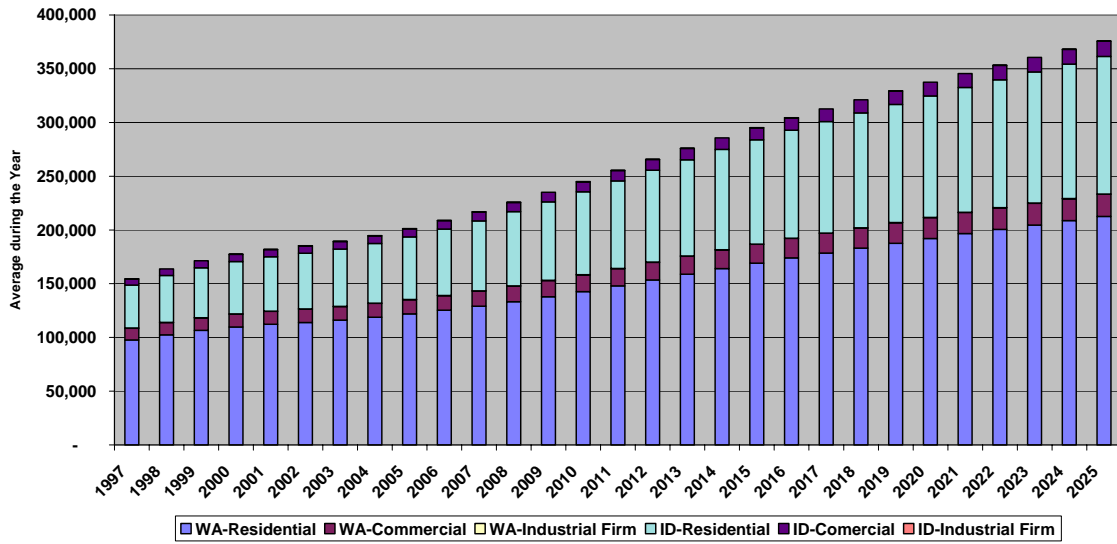
### Oregon Total Customers



### Washington/Idaho Customer Forecast

The analysis and methodology for Oregon is replicated for the Avista natural gas service areas located in eastern Washington and northern Idaho. Firm customer forecasts are shown in the following chart:

## Washington & Idaho Firm Customers





# **Customer Forecasts**

## **Appendix 2.2**

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Base Case (Utilized in Cases #1, #2 & #3)

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande				
	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	
Nov-06	190,447	21,775	271	51,728	6,378	0	13,312	2,203	1,682	0	6,815	963	6
Dec-06	191,163	21,837	272	52,295	6,393	0	13,514	2,225	1,691	0	6,878	966	1
Jan-07	192,042	21,978	275	52,480	6,461	0	13,619	2,228	1,704	0	6,933	969	2
Feb-07	192,093	22,048	274	52,615	6,491	0	13,656	2,262	1,706	0	6,939	973	3
Mar-07	192,347	22,028	271	52,581	6,507	0	13,658	2,248	1,704	0	6,933	976	2
Apr-07	192,568	22,062	271	52,585	6,535	0	13,668	2,240	1,701	0	6,879	978	2
May-07	192,405	22,024	269	52,657	6,548	0	13,544	2,244	1,690	0	6,882	980	2
Jun-07	192,811	22,058	272	52,486	6,565	0	13,516	2,240	1,691	0	6,837	972	2
Jul-07	193,822	22,253	274	54,980	6,580	0	13,446	2,241	1,689	0	6,866	972	3
Aug-07	194,483	22,386	275	52,721	6,592	0	13,452	2,248	1,699	0	6,808	973	3
Sep-07	195,544	22,403	278	53,141	6,608	0	13,469	2,257	1,706	0	6,818	975	7
Oct-07	196,695	22,499	276	53,758	6,620	0	13,683	2,268	1,720	0	6,945	976	7
Nov-07	198,053	22,611	276	54,328	6,628	0	13,912	2,278	1,727	0	6,990	978	6
Dec-07	198,769	22,673	277	54,895	6,643	0	14,164	2,300	1,736	0	7,053	981	1
Jan-08	200,238	22,831	280	55,013	6,706	0	14,332	2,312	1,732	0	7,132	988	2
Feb-08	200,293	22,906	278	55,162	6,738	0	14,373	2,349	1,754	0	7,139	992	3
Mar-08	200,460	22,885	275	55,124	6,756	0	14,320	2,334	1,752	0	7,132	996	2
Apr-08	200,699	22,922	275	55,129	6,786	0	14,386	2,325	1,749	0	7,075	998	2
May-08	200,414	22,881	273	55,208	6,800	0	14,304	2,329	1,738	0	7,079	1,000	2
Jun-08	200,854	22,917	276	55,020	6,818	0	14,218	2,325	1,739	0	7,031	991	2
Jul-08	201,839	23,101	280	57,770	6,834	0	14,141	2,326	1,736	0	7,062	991	3
Aug-08	202,446	23,244	281	55,279	6,847	0	14,148	2,334	1,747	0	7,000	992	3
Sep-08	203,377	23,262	284	55,742	6,865	0	14,167	2,343	1,754	0	7,011	995	7
Oct-08	204,514	23,366	282	56,422	6,878	0	14,402	2,355	1,769	0	7,145	996	7
Nov-08	205,982	23,487	282	57,051	6,886	0	14,654	2,366	1,777	0	7,193	998	6
Dec-08	206,757	23,554	283	57,676	6,902	0	14,877	2,389	1,786	0	7,259	1,001	1
Jan-09	208,671	23,682	284	57,598	6,930	0	15,117	2,384	1,799	0	7,334	1,006	2
Feb-09	208,729	23,761	282	57,754	6,964	0	15,159	2,421	1,801	0	7,341	1,010	3
Mar-09	208,902	23,738	279	57,715	6,981	0	15,104	2,406	1,799	0	7,334	1,013	2
Apr-09	209,151	23,776	279	57,802	7,013	0	15,173	2,397	1,796	0	7,276	1,015	2
May-09	208,855	23,734	277	57,802	7,027	0	15,087	2,401	1,784	0	7,279	1,017	2
Jun-09	209,313	23,772	280	57,605	7,046	0	14,997	2,397	1,785	0	7,230	1,009	2
Jul-09	210,339	23,962	284	60,485	7,063	0	14,916	2,398	1,783	0	7,262	1,009	3
Aug-09	210,972	24,111	285	57,876	7,076	0	14,923	2,406	1,793	0	7,199	1,010	3
Sep-09	211,942	24,130	288	58,361	7,094	0	14,942	2,416	1,801	0	7,210	1,012	7
Oct-09	213,127	24,237	286	59,074	7,108	0	15,191	2,428	1,816	0	7,347	1,013	7
Nov-09	214,657	24,363	286	59,732	7,117	0	15,457	2,439	1,824	0	7,396	1,015	6
Dec-09	215,465	24,432	287	60,387	7,133	0	15,691	2,463	1,834	0	7,465	1,018	1
Jan-10	217,598	24,533	290	60,065	7,134	0	15,881	2,456	1,846	0	7,527	1,023	2
Feb-10	217,658	24,614	288	60,228	7,169	0	15,926	2,495	1,848	0	7,534	1,028	3
Mar-10	217,839	24,591	285	60,187	7,187	0	15,867	2,479	1,846	0	7,527	1,031	2
Apr-10	218,099	24,630	285	60,192	7,219	0	15,841	2,470	1,843	0	7,467	1,033	2
May-10	217,790	24,586	283	60,278	7,234	0	15,850	2,474	1,831	0	7,470	1,035	2
Jun-10	218,267	24,626	286	60,072	7,254	0	15,755	2,470	1,832	0	7,420	1,027	2
Jul-10	219,338	24,823	290	63,076	7,271	0	15,670	2,471	1,830	0	7,453	1,027	3
Aug-10	219,997	24,977	291	60,355	7,285	0	15,677	2,479	1,841	0	7,388	1,028	3
Sep-10	221,009	24,997	294	60,861	7,303	0	15,698	2,489	1,848	0	7,399	1,030	7
Oct-10	222,245	25,108	292	61,604	7,317	0	15,959	2,502	1,864	0	7,541	1,031	7
Nov-10	223,841	25,238	292	62,290	7,326	0	16,238	2,513	1,872	0	7,591	1,033	6
Dec-10	224,682	25,309	293	62,973	7,343	0	16,485	2,538	1,882	0	7,661	1,036	1
Jan-11	227,021	25,353	295	62,548	7,332	0	16,666	2,520	1,883	0	7,720	1,042	2
Feb-11	227,084	25,437	293	62,717	7,368	0	16,713	2,560	1,885	0	7,727	1,046	3
Mar-11	227,273	25,413	290	62,674	7,387	0	16,652	2,544	1,883	0	7,720	1,050	2
Apr-11	227,544	25,453	290	62,679	7,420	0	16,729	2,534	1,880	0	7,659	1,052	2
May-11	227,221	25,408	288	62,770	7,435	0	16,634	2,539	1,867	0	7,662	1,054	2

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Base Case (Utilized in Cases #1, #2 & #3)

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Jun-11	227,719	25,449	62,555	7,455	16,534	2,534	15,878	1,868	7,611	1,045
Jul-11	228,836	25,652	65,683	7,473	16,444	2,536	15,814	1,866	7,644	1,045
Aug-11	229,524	25,812	62,850	7,487	16,452	2,544	15,744	1,877	7,578	1,046
Sep-11	230,580	25,832	63,377	7,506	16,474	2,554	15,798	1,885	7,589	1,049
Oct-11	231,869	25,947	64,150	7,520	16,748	2,567	16,058	1,901	7,734	1,050
Nov-11	233,534	26,081	64,865	7,529	17,041	2,579	16,327	1,909	7,786	1,052
Dec-11	234,412	26,155	65,576	7,547	17,300	2,605	16,574	1,919	7,858	1,055
Jan-12	236,443	26,174	65,092	7,515	17,465	2,585	16,537	1,916	7,915	1,059
Feb-12	236,508	26,260	65,268	7,551	17,514	2,626	16,569	1,918	7,922	1,063
Mar-12	236,705	26,235	65,224	7,570	17,450	2,609	16,542	1,916	7,915	1,067
Apr-12	236,987	26,278	65,229	7,604	17,531	2,600	16,524	1,913	7,852	1,069
May-12	236,651	26,231	65,323	7,620	17,431	2,605	16,476	1,900	7,855	1,071
Jun-12	237,170	26,273	65,100	7,641	17,327	2,600	16,306	1,901	7,803	1,062
Jul-12	238,333	26,483	68,355	7,659	17,233	2,601	16,240	1,899	7,837	1,062
Aug-12	239,050	26,647	65,407	7,673	17,241	2,609	16,168	1,910	7,769	1,063
Sep-12	240,149	26,668	65,955	7,693	17,264	2,620	16,224	1,918	7,780	1,066
Oct-12	241,492	26,787	66,760	7,707	17,551	2,633	16,491	1,935	7,929	1,067
Nov-12	243,226	26,925	67,504	7,717	17,858	2,645	16,768	1,943	7,982	1,069
Dec-12	244,140	27,002	68,244	7,735	18,129	2,672	17,021	1,953	8,056	1,072
Jan-13	245,757	26,995	67,623	7,711	18,307	2,660	16,992	1,950	8,115	1,077
Feb-13	245,825	27,084	67,806	7,749	18,359	2,702	17,025	1,953	8,123	1,081
Mar-13	246,029	27,058	67,760	7,768	18,292	2,684	16,997	1,950	8,115	1,085
Apr-13	246,323	27,102	67,765	7,803	18,376	2,674	16,979	1,947	8,050	1,087
May-13	245,974	27,053	67,863	7,819	18,272	2,679	16,929	1,934	8,054	1,089
Jun-13	246,513	27,097	67,631	7,840	18,162	2,674	16,754	1,935	8,000	1,080
Jul-13	247,722	27,313	71,012	7,859	18,064	2,676	16,687	1,933	8,035	1,080
Aug-13	248,467	27,483	67,950	7,874	18,072	2,684	16,613	1,944	7,965	1,081
Sep-13	249,609	27,505	68,519	7,894	18,096	2,695	16,670	1,953	7,977	1,084
Oct-13	251,005	27,627	69,355	7,909	18,397	2,709	16,945	1,969	8,130	1,085
Nov-13	252,807	27,770	70,128	7,919	18,719	2,721	17,229	1,977	8,184	1,087
Dec-13	253,758	27,849	70,897	7,937	19,003	2,748	17,489	1,988	8,259	1,090
Jan-14	254,773	27,736	70,073	7,941	19,149	2,740	17,432	1,996	8,308	1,094
Feb-14	254,844	27,828	70,263	7,980	19,204	2,783	17,465	1,998	8,316	1,099
Mar-14	255,055	27,802	70,215	8,000	19,133	2,766	17,437	1,996	8,308	1,102
Apr-14	255,360	27,846	70,221	8,036	19,221	2,755	17,418	1,992	8,242	1,104
May-14	254,998	27,797	70,322	8,053	19,113	2,760	17,367	1,979	8,246	1,107
Jun-14	255,556	27,841	70,082	8,074	18,998	2,755	17,188	1,980	8,190	1,098
Jul-14	256,810	28,064	73,585	8,094	18,895	2,757	17,119	1,978	8,226	1,098
Aug-14	257,582	28,238	70,412	8,109	18,904	2,766	17,043	1,990	8,155	1,099
Sep-14	258,767	28,261	71,002	8,129	18,929	2,777	17,102	1,998	8,167	1,101
Oct-14	260,213	28,386	71,869	8,145	19,243	2,791	17,384	2,015	8,323	1,102
Nov-14	262,082	28,533	72,669	8,155	19,580	2,804	17,675	2,024	8,378	1,104
Dec-14	263,067	28,614	73,466	8,174	19,877	2,832	17,942	2,035	8,456	1,108
Jan-15	263,296	28,478	72,615	8,198	20,010	2,833	17,869	2,050	8,483	1,112
Feb-15	263,368	28,572	72,812	8,238	20,067	2,878	17,902	2,053	8,491	1,117
Mar-15	263,587	28,545	72,762	8,259	19,993	2,859	17,874	2,050	8,483	1,120
Apr-15	263,902	28,591	72,768	8,296	20,085	2,849	17,854	2,047	8,415	1,123
May-15	263,527	28,540	72,873	8,313	19,971	2,854	17,802	2,033	8,419	1,125
Jun-15	264,105	28,586	72,624	8,336	19,852	2,849	17,618	2,034	8,363	1,116
Jul-15	265,400	28,815	76,255	8,355	19,744	2,850	17,548	2,032	8,399	1,116
Aug-15	266,198	28,993	72,966	8,371	19,753	2,859	17,470	2,044	8,326	1,117
Sep-15	267,423	29,016	73,578	8,392	19,779	2,871	17,530	2,053	8,339	1,119
Oct-15	268,918	29,146	74,476	8,408	20,108	2,886	17,819	2,070	8,498	1,120
Nov-15	270,849	29,296	75,306	8,419	20,460	2,899	18,118	2,079	8,555	1,123
Dec-15	271,867	29,380	76,131	8,439	20,771	2,928	18,391	2,090	8,634	1,126

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Base Case (Utilized in Cases #1, #2 & #3)

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande					
	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.		
Jan-16	271,619	29,220	316	75,211	8,443	0	20,905	2,922	18,319	2,103	0	8,661	1,130	2
Feb-16	271,694	29,317	314	75,415	8,484	0	20,965	2,968	18,354	2,106	0	8,669	1,135	3
Mar-16	271,920	29,289	311	75,363	8,505	0	20,888	2,949	18,325	2,103	0	8,661	1,138	2
Apr-16	272,244	29,336	311	75,369	8,543	0	20,984	2,938	18,305	2,099	0	8,592	1,141	2
May-16	271,858	29,284	309	75,478	8,561	0	20,865	2,943	18,251	2,085	0	8,596	1,143	2
Jun-16	272,454	29,330	312	75,220	8,584	0	20,740	2,938	18,063	2,087	0	8,538	1,133	2
Jul-16	273,790	29,565	316	78,981	8,605	0	20,627	2,939	17,991	2,084	0	8,575	1,133	3
Aug-16	274,613	29,749	317	75,574	8,621	0	20,637	2,949	17,910	2,097	0	8,501	1,135	3
Sep-16	275,877	29,772	320	76,208	8,643	0	20,664	2,961	17,972	2,106	0	8,514	1,137	7
Oct-16	277,419	29,905	318	77,138	8,659	0	21,008	2,976	18,269	2,123	0	8,677	1,138	7
Nov-16	279,411	30,059	318	77,997	8,670	0	21,376	2,989	18,575	2,132	0	8,734	1,141	6
Dec-16	280,461	30,145	319	78,852	8,690	0	21,700	3,019	18,855	2,144	0	8,815	1,144	1
Jan-17	279,246	29,877	318	77,724	8,679	0	21,822	3,004	18,773	2,153	0	8,836	1,147	2
Feb-17	279,323	29,976	316	77,934	8,721	0	21,884	3,051	18,809	2,156	0	8,844	1,152	3
Mar-17	279,555	29,948	313	77,881	8,744	0	21,803	3,032	18,779	2,153	0	8,836	1,156	2
Apr-17	271,858	29,995	313	77,888	8,783	0	21,904	3,020	18,758	2,149	0	8,766	1,158	2
May-17	280,104	29,990	314	77,733	8,825	0	21,649	3,020	18,704	2,135	0	8,770	1,161	2
Jun-17	281,478	30,230	318	81,620	8,846	0	21,532	3,032	18,437	2,134	0	8,749	1,151	3
Jul-17	282,324	30,418	319	78,100	8,862	0	21,542	3,032	18,354	2,147	0	8,673	1,152	3
Aug-17	283,623	30,442	322	78,754	8,885	0	21,570	3,044	18,417	2,156	0	8,686	1,155	7
Sep-17	285,208	30,577	320	79,716	8,902	0	21,929	3,059	18,721	2,174	0	8,852	1,156	7
Oct-17	287,256	30,735	320	80,604	8,913	0	22,313	3,073	19,035	2,183	0	8,911	1,158	6
Nov-17	288,336	30,823	321	81,487	8,934	0	22,651	3,104	19,323	2,195	0	8,993	1,162	1
Dec-17	286,871	30,530	322	80,247	8,930	0	22,745	3,086	19,234	2,206	0	9,013	1,165	2
Jan-18	286,950	30,631	320	80,464	8,973	0	22,810	3,135	19,271	2,208	0	9,021	1,170	3
Feb-18	287,189	30,602	317	80,416	8,996	0	22,726	3,115	19,240	2,202	0	9,013	1,174	2
Mar-18	287,531	30,651	317	80,416	9,037	0	22,831	3,103	19,219	2,202	0	8,941	1,176	2
Apr-18	287,124	30,596	314	80,532	9,055	0	22,702	3,109	19,163	2,187	0	8,945	1,178	2
May-18	287,753	30,645	318	80,257	9,080	0	22,565	3,103	18,965	2,186	0	8,885	1,169	2
Jun-18	289,165	30,890	322	84,269	9,101	0	22,443	3,105	18,889	2,186	0	8,923	1,169	3
Jul-18	290,034	31,082	323	80,635	9,119	0	22,453	3,115	18,805	2,199	0	8,846	1,170	3
Aug-18	291,368	31,107	326	81,311	9,142	0	22,483	3,128	18,869	2,208	0	8,859	1,172	7
Sep-18	292,996	31,245	324	82,303	9,159	0	22,857	3,143	19,181	2,227	0	9,029	1,174	7
Oct-18	295,101	31,407	324	83,220	9,170	0	23,257	3,158	19,502	2,236	0	9,089	1,176	6
Nov-18	296,210	31,496	325	84,132	9,192	0	23,610	3,189	19,797	2,248	0	9,173	1,180	1
Dec-18	294,399	31,183	326	82,796	9,195	0	23,690	3,169	19,703	2,262	0	9,191	1,183	2
Jan-19	294,480	31,286	324	83,020	9,239	0	23,758	3,219	19,740	2,264	0	9,199	1,188	3
Feb-19	294,725	31,256	321	82,964	9,263	0	23,670	3,198	19,709	2,262	0	9,191	1,192	2
Mar-19	295,076	31,307	321	82,970	9,304	0	23,780	3,187	19,687	2,257	0	9,117	1,194	2
Apr-19	294,658	31,251	318	83,090	9,324	0	23,645	3,193	19,630	2,242	0	9,121	1,197	2
May-19	295,304	31,301	322	82,806	9,349	0	23,503	3,187	19,427	2,244	0	9,060	1,187	2
Jun-19	296,752	31,551	326	86,946	9,371	0	23,376	3,188	19,349	2,241	0	9,100	1,187	3
Jul-19	297,644	31,747	327	83,196	9,389	0	23,386	3,198	19,263	2,255	0	9,021	1,188	3
Aug-19	299,014	31,772	330	83,893	9,412	0	23,417	3,212	19,329	2,264	0	9,034	1,190	7
Sep-19	300,685	31,914	328	84,917	9,430	0	23,807	3,228	19,648	2,283	0	9,207	1,192	7
Oct-19	302,844	32,078	328	85,864	9,442	0	24,224	3,243	19,977	2,293	0	9,268	1,194	6
Nov-19	303,983	32,170	329	86,805	9,464	0	24,591	3,275	20,279	2,305	0	9,354	1,198	1
Dec-19	301,926	31,731	328	85,270	9,475	0	24,633	3,258	20,152	2,323	0	9,371	1,200	2
Jan-20	302,009	31,836	326	85,500	9,520	0	24,703	3,309	20,190	2,326	0	9,379	1,206	3
Feb-20	302,260	31,806	323	85,442	9,545	0	24,613	3,288	20,158	2,323	0	9,371	1,209	2
Mar-20	302,620	31,857	323	85,449	9,587	0	24,726	3,276	20,136	2,319	0	9,296	1,212	2
Apr-20	302,191	31,800	320	85,572	9,607	0	24,586	3,282	20,077	2,304	0	9,300	1,214	2
May-20	302,853	31,851	324	85,280	9,633	0	24,439	3,276	19,870	2,305	0	9,238	1,204	2
Jun-20	304,339	32,106	328	89,543	9,656	0	24,306	3,278	19,790	2,302	0	9,278	1,204	3

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Base Case (Utilized in Cases #1, #2 & #3)

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Aug-20	305,254	32,305	85,682	9,674	24,317	3,288	19,702	2,316	9,198	1,206
Sep-20	306,658	32,331	86,400	9,699	24,350	3,302	19,770	2,326	9,212	1,208
Oct-20	308,372	32,475	87,454	9,717	24,754	3,318	20,096	2,346	9,388	1,209
Nov-20	310,587	32,642	88,429	9,729	25,188	3,334	20,433	2,356	9,450	1,212
Dec-20	311,755	32,735	89,398	9,752	25,570	3,367	20,741	2,368	9,537	1,216
Jan-21	309,354	32,281	87,712	9,737	25,572	3,327	20,594	2,371	9,547	1,216
Feb-21	309,439	32,388	87,949	9,784	25,645	3,380	20,633	2,374	9,556	1,222
Mar-21	309,697	32,357	87,890	9,809	25,551	3,358	20,600	2,371	9,547	1,225
Apr-21	310,066	32,409	87,897	9,853	25,669	3,346	20,577	2,367	9,471	1,228
May-21	309,627	32,351	88,023	9,874	25,523	3,352	20,517	2,351	9,475	1,230
Jun-21	310,305	32,403	87,722	9,900	25,370	3,346	20,306	2,352	9,412	1,220
Jul-21	311,827	32,663	92,108	9,924	25,233	3,347	20,224	2,349	9,453	1,220
Aug-21	312,765	32,865	88,136	9,943	25,244	3,358	20,134	2,364	9,371	1,222
Sep-21	314,203	32,891	88,874	9,968	25,278	3,372	20,203	2,374	9,385	1,224
Oct-21	315,959	33,038	89,959	9,986	25,698	3,389	20,537	2,394	9,564	1,225
Nov-21	318,229	33,208	90,962	9,999	26,148	3,405	20,881	2,404	9,628	1,228
Dec-21	319,425	33,303	91,959	10,022	26,545	3,439	21,196	2,417	9,717	1,232
Jan-22	316,287	32,830	90,195	10,008	26,540	3,409	21,046	2,427	9,726	1,233
Feb-22	316,374	32,939	90,439	10,057	26,615	3,462	21,085	2,429	9,735	1,238
Mar-22	316,637	32,908	90,378	10,083	26,518	3,440	21,052	2,427	9,726	1,242
Apr-22	317,015	32,961	90,385	10,128	26,640	3,428	21,029	2,422	9,648	1,245
May-22	316,565	32,902	90,515	10,149	26,489	3,434	20,967	2,406	9,653	1,247
Jun-22	317,259	33,0	90,206	10,176	26,330	3,428	20,751	2,408	9,588	1,237
Jul-22	318,815	33,218	94,716	10,200	26,187	3,429	20,668	2,405	9,630	1,237
Aug-22	319,774	33,424	90,631	10,220	26,200	3,440	20,576	2,419	9,546	1,238
Sep-22	321,245	33,451	91,391	10,245	26,234	3,454	20,646	2,429	9,561	1,241
Oct-22	323,040	33,600	92,506	10,265	26,670	3,472	20,987	2,450	9,743	1,242
Nov-22	325,360	33,773	93,537	10,278	27,137	3,488	21,339	2,460	9,808	1,245
Dec-22	326,584	33,870	94,562	10,302	27,549	3,523	21,661	2,473	9,899	1,249
Jan-23	323,221	33,329	92,584	10,283	27,542	3,489	21,509	2,485	9,907	1,250
Feb-23	323,310	33,440	92,834	10,333	27,620	3,544	21,550	2,488	9,916	1,255
Mar-23	323,579	33,408	92,771	10,359	27,519	3,522	21,516	2,485	9,907	1,259
Apr-23	323,965	33,462	92,779	10,406	27,646	3,509	21,492	2,481	9,828	1,261
May-23	323,505	33,402	92,912	10,427	27,489	3,515	21,429	2,464	9,833	1,264
Jun-23	324,214	33,455	92,595	10,455	27,324	3,509	21,208	2,466	9,767	1,254
Jul-23	325,805	33,723	97,224	10,480	27,176	3,510	21,123	2,463	9,809	1,254
Aug-23	326,784	33,932	93,031	10,500	27,189	3,522	21,029	2,478	9,724	1,255
Sep-23	328,287	33,959	93,811	10,527	27,225	3,536	21,101	2,488	9,739	1,257
Oct-23	330,122	34,110	94,956	10,547	27,677	3,554	21,450	2,509	9,925	1,259
Nov-23	332,493	34,287	96,014	10,560	28,162	3,570	21,809	2,519	9,991	1,261
Dec-23	333,743	34,384	97,066	10,585	28,589	3,606	22,139	2,533	10,083	1,265
Jan-24	330,155	33,829	95,007	10,551	28,573	3,566	21,982	2,542	10,091	1,264
Feb-24	330,246	33,941	95,264	10,602	28,654	3,622	22,024	2,545	10,100	1,270
Mar-24	330,520	33,909	95,200	10,629	28,549	3,599	21,989	2,542	10,091	1,274
Apr-24	330,914	33,963	95,207	10,676	28,681	3,586	21,965	2,537	10,010	1,276
May-24	330,445	33,903	95,344	10,698	28,518	3,592	21,900	2,520	10,014	1,279
Jun-24	331,169	33,957	95,019	10,727	28,347	3,586	21,674	2,522	9,947	1,268
Jul-24	332,794	34,229	99,769	10,753	28,193	3,587	21,588	2,519	9,991	1,268
Aug-24	333,794	34,441	95,466	10,773	28,207	3,599	21,492	2,534	9,904	1,270
Sep-24	335,330	34,468	96,266	10,800	28,244	3,614	21,565	2,545	9,919	1,272
Oct-24	337,204	34,622	97,441	10,821	28,714	3,632	21,921	2,566	10,108	1,274
Nov-24	339,626	34,801	98,527	10,834	29,216	3,649	22,289	2,577	10,176	1,276
Dec-24	340,903	34,900	99,607	10,860	29,659	3,685	22,625	2,591	10,270	1,280
Jan-25	337,088	34,329	97,524	10,802	29,656	3,637	22,477	2,596	10,281	1,279
Feb-25	337,181	34,442	97,788	10,854	29,741	3,695	22,520	2,599	10,290	1,284

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Base Case (Utilized in Cases #1, #2 & #3)

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Mar-25	337,462	34,410	97,721	10,882	29,631	3,671	22,484	2,596	10,281	1,288
Apr-25	337,864	34,465	97,729	10,930	29,768	3,658	22,459	2,591	10,199	1,291
May-25	337,385	34,404	97,870	10,953	29,600	3,665	22,393	2,574	10,203	1,293
Jun-25	338,124	34,459	97,536	10,983	29,422	3,658	22,162	2,576	10,135	1,283
Jul-25	339,783	34,734	102,412	11,009	29,262	3,659	22,074	2,572	10,179	1,283
Aug-25	340,805	34,950	97,995	11,030	29,276	3,671	21,975	2,588	10,091	1,284
Sep-25	342,372	34,978	98,816	11,057	29,315	3,686	22,051	2,599	10,106	1,287
Oct-25	344,286	35,133	100,023	11,078	29,802	3,705	22,415	2,621	10,299	1,288
Nov-25	346,759	35,315	101,137	11,092	30,324	3,722	22,790	2,632	10,367	1,291
Dec-25	348,062	35,416	102,246	11,118	30,784	3,759	23,135	2,646	10,463	1,295
Jan-26	337,088	34,329	97,524	10,802	29,656	3,637	22,477	2,596	10,281	1,279
Feb-26	337,181	34,442	97,788	10,854	29,741	3,695	22,520	2,599	10,290	1,284
Mar-26	337,462	34,410	97,721	10,882	29,631	3,671	22,484	2,596	10,281	1,288
Apr-26	337,864	34,465	97,729	10,930	29,768	3,658	22,459	2,591	10,199	1,291
May-26	337,385	34,404	97,870	10,953	29,600	3,665	22,393	2,574	10,203	1,293
Jun-26	338,124	34,459	97,536	10,983	29,422	3,658	22,162	2,576	10,135	1,283
Jul-26	339,783	34,734	102,412	11,009	29,262	3,659	22,074	2,572	10,179	1,283
Aug-26	340,805	34,950	97,995	11,030	29,276	3,671	21,975	2,588	10,091	1,284
Sep-26	342,372	34,978	98,816	11,057	29,315	3,686	22,051	2,599	10,106	1,287
Oct-26	344,286	35,133	100,023	11,078	29,802	3,705	22,415	2,621	10,299	1,288

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Low Growth Case (Utilized in Cases #4, #5 & #6)

	WV/ID		Medford		Roseburg		Klamath Falls		La Grande		
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	
Nov-06	186,944	21,377	50,428	6,278	13,037	2,173	13,674	1,662	6,740	956	6
Dec-06	187,302	21,408	50,712	6,286	13,138	2,184	13,779	1,667	6,772	957	1
Jan-07	187,742	21,478	50,804	6,320	13,191	2,186	13,829	1,673	6,799	959	2
Feb-07	187,767	21,513	50,872	6,335	13,209	2,203	13,842	1,674	6,802	961	3
Mar-07	187,894	21,503	50,855	6,343	13,210	2,196	13,831	1,673	6,799	962	2
Apr-07	188,005	21,520	50,857	6,357	13,215	2,192	13,823	1,672	6,772	963	2
May-07	187,923	21,501	50,893	6,363	13,153	2,194	13,803	1,666	6,774	964	2
Jun-07	188,126	21,518	50,807	6,372	13,139	2,192	13,733	1,666	6,751	960	2
Jul-07	188,632	21,616	52,054	6,379	13,104	2,192	13,706	1,666	6,766	960	3
Aug-07	188,962	21,682	50,925	6,385	13,107	2,196	13,676	1,671	6,737	961	3
Sep-07	189,493	21,691	51,135	6,393	13,116	2,200	13,699	1,674	6,742	962	7
Oct-07	190,068	21,739	51,443	6,399	13,223	2,206	13,810	1,681	6,805	962	7
Nov-07	190,747	21,795	51,728	6,403	13,337	2,211	13,924	1,685	6,828	963	6
Dec-07	191,105	21,826	52,012	6,411	13,463	2,222	14,029	1,689	6,859	965	1
Jan-08	191,840	21,904	52,070	6,442	13,547	2,228	14,078	1,697	6,899	968	2
Feb-08	191,867	21,942	52,145	6,458	13,567	2,246	14,091	1,698	6,902	970	3
Mar-08	191,950	21,931	52,126	6,467	13,541	2,238	14,080	1,697	6,899	972	2
Apr-08	192,070	21,950	52,128	6,482	13,574	2,234	14,072	1,696	6,870	973	2
May-08	191,928	21,929	52,168	6,489	13,533	2,236	14,050	1,697	6,872	974	2
Jun-08	192,147	21,948	52,074	6,498	13,490	2,234	13,975	1,690	6,848	970	2
Jul-08	192,640	22,039	53,449	6,506	13,452	2,235	13,946	1,689	6,863	970	3
Aug-08	192,943	22,111	52,203	6,513	13,455	2,238	13,913	1,695	6,833	971	3
Sep-08	193,409	22,120	52,435	6,521	13,464	2,243	13,938	1,698	6,838	970	7
Oct-08	193,977	22,172	52,775	6,528	13,582	2,249	14,057	1,706	6,905	972	7
Nov-08	194,712	22,232	53,090	6,532	13,708	2,254	14,180	1,709	6,929	973	6
Dec-08	195,099	22,266	53,402	6,540	13,819	2,266	14,293	1,714	6,962	974	1
Jan-09	196,056	22,330	53,363	6,554	13,939	2,263	14,328	1,720	7,000	977	2
Feb-09	196,085	22,369	53,441	6,571	13,961	2,282	14,342	1,722	7,003	979	3
Mar-09	196,172	22,388	53,421	6,580	13,933	2,274	14,330	1,719	7,000	981	2
Apr-09	196,296	22,356	53,424	6,595	13,968	2,270	14,322	1,719	6,970	982	2
May-09	196,148	22,377	53,465	6,603	13,925	2,272	14,300	1,713	6,972	983	2
Jun-09	196,377	22,375	53,366	6,612	13,879	2,270	14,221	1,713	6,948	978	2
Jul-09	196,890	22,470	54,806	6,620	13,859	2,270	14,191	1,718	6,963	978	3
Aug-09	197,206	22,544	53,502	6,627	13,842	2,274	14,158	1,718	6,932	979	3
Sep-09	197,692	22,554	53,745	6,636	13,852	2,279	14,184	1,722	6,937	980	7
Oct-09	198,284	22,608	54,101	6,643	13,976	2,285	14,307	1,729	7,006	981	7
Nov-09	199,049	22,670	54,430	6,647	14,109	2,291	14,434	1,733	7,031	982	6
Dec-09	199,453	22,705	54,757	6,656	14,227	2,303	14,550	1,738	7,065	983	1
Jan-10	200,520	22,755	54,597	6,656	14,321	2,299	14,564	1,744	7,096	986	2
Feb-10	200,550	22,796	54,678	6,673	14,344	2,319	14,579	1,745	7,099	988	3
Mar-10	200,640	22,784	54,657	6,682	14,315	2,311	14,567	1,744	7,096	989	2
Apr-10	200,770	22,804	54,660	6,699	14,351	2,306	14,558	1,742	7,066	991	2
May-10	200,615	22,782	54,703	6,706	14,306	2,309	14,535	1,736	7,068	992	2
Jun-10	200,854	22,802	54,600	6,716	14,259	2,306	14,455	1,737	7,043	987	2
Jul-10	201,389	22,900	56,102	6,724	14,216	2,307	14,424	1,736	7,059	987	3
Aug-10	201,719	22,977	54,742	6,731	14,220	2,311	14,389	1,741	7,027	988	3
Sep-10	202,225	22,987	54,995	6,740	14,230	2,316	14,416	1,745	7,032	989	7
Oct-10	202,843	23,043	55,366	6,747	14,360	2,322	14,543	1,753	7,103	989	7
Nov-10	203,641	23,108	55,709	6,752	14,500	2,328	14,674	1,757	7,128	991	6
Dec-10	204,062	23,144	56,051	6,761	14,623	2,341	14,794	1,762	7,163	992	1
Jan-11	205,231	23,165	55,838	6,755	14,714	2,332	14,776	1,763	7,193	995	2
Feb-11	205,262	23,207	55,922	6,773	14,738	2,352	14,791	1,764	7,196	997	3
Mar-11	205,357	23,195	55,901	6,782	14,707	2,343	14,778	1,763	7,193	999	2
Apr-11	205,492	23,216	55,904	6,799	14,745	2,339	14,770	1,761	7,162	1,000	2
May-11	205,331	23,193	55,949	6,806	14,698	2,341	14,746	1,755	7,164	1,001	2

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Low Growth Case (Utilized in Cases #4, #5 & #6)

	WVA/ID		Medford		Roseburg		Klamath Falls		La Grande		
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	
Jun-11	205,580	23,213	55,842	6,816	14,648	2,339	14,663	1,755	7,138	997	2
Jul-11	206,139	23,315	57,405	6,825	14,603	2,339	14,632	1,754	7,154	997	3
Aug-11	206,483	23,395	55,989	6,832	14,607	2,343	14,596	1,760	7,121	997	3
Sep-11	207,010	23,405	56,252	6,842	14,618	2,349	14,623	1,764	7,127	998	7
Oct-11	207,655	23,462	56,639	6,849	14,755	2,355	14,754	1,772	7,200	999	7
Nov-11	208,487	23,530	56,996	6,854	14,901	2,361	14,888	1,776	7,225	1,000	6
Dec-11	208,926	23,567	57,352	6,863	15,031	2,374	15,012	1,781	7,261	1,002	1
Jan-12	209,942	23,576	57,110	6,846	15,113	2,364	14,993	1,779	7,290	1,003	3
Feb-12	209,975	23,619	57,198	6,865	15,138	2,385	15,009	1,780	7,294	1,006	3
Mar-12	210,073	23,607	57,176	6,874	15,106	2,376	14,996	1,779	7,290	1,007	2
Apr-12	210,214	23,628	57,179	6,891	15,146	2,371	14,986	1,777	7,258	1,008	2
May-12	210,046	23,604	57,226	6,899	15,097	2,374	14,962	1,771	7,260	1,010	2
Jun-12	210,305	23,625	57,114	6,909	15,044	2,371	14,877	1,772	7,234	1,005	2
Jul-12	210,887	23,730	58,741	6,918	14,997	2,372	14,845	1,770	7,251	1,005	3
Aug-12	211,245	23,813	57,267	6,926	15,001	2,376	14,809	1,776	7,217	1,006	3
Sep-12	211,795	23,823	57,541	6,935	15,013	2,382	14,836	1,780	7,223	1,007	7
Oct-12	212,466	23,882	57,944	6,943	15,156	2,388	14,970	1,788	7,297	1,007	7
Nov-12	213,334	23,952	58,316	6,947	15,310	2,394	15,108	1,792	7,323	1,008	6
Dec-12	213,791	23,990	58,686	6,956	15,445	2,407	15,235	1,796	7,360	1,010	1
Jan-13	214,599	23,986	58,375	6,945	15,535	2,401	15,221	1,796	7,390	1,012	2
Feb-13	214,633	24,031	58,467	6,963	15,561	2,422	15,237	1,797	7,394	1,015	3
Mar-13	214,735	24,018	58,444	6,973	15,527	2,414	15,223	1,796	7,390	1,016	2
Apr-13	214,882	24,040	58,447	6,991	15,569	2,409	15,214	1,794	7,358	1,018	2
May-13	214,707	24,016	58,495	6,999	15,517	2,411	15,189	1,788	7,360	1,019	2
Jun-13	214,977	24,037	58,380	7,009	15,462	2,409	15,102	1,789	7,333	1,014	2
Jul-13	215,581	24,146	60,070	7,019	15,413	2,409	15,068	1,787	7,350	1,014	3
Aug-13	215,954	24,230	58,539	7,026	15,417	2,414	15,031	1,793	7,315	1,015	3
Sep-13	216,525	24,241	58,823	7,036	15,429	2,419	15,060	1,797	7,321	1,016	7
Oct-13	217,223	24,303	59,242	7,043	15,580	2,426	15,197	1,806	7,397	1,016	7
Nov-13	218,124	24,374	59,628	7,048	15,741	2,432	15,339	1,810	7,424	1,018	6
Dec-13	218,599	24,413	60,012	7,058	15,883	2,446	15,469	1,815	7,462	1,019	1
Jan-14	219,107	24,357	59,601	7,060	15,956	2,442	15,441	1,819	7,487	1,021	2
Feb-14	219,142	24,403	59,695	7,079	15,983	2,463	15,457	1,820	7,490	1,023	3
Mar-14	219,248	24,390	59,672	7,089	15,948	2,454	15,443	1,819	7,487	1,025	2
Apr-14	219,400	24,412	59,674	7,107	15,992	2,449	15,434	1,817	7,453	1,026	2
May-14	219,219	24,387	59,725	7,115	15,937	2,452	15,408	1,811	7,455	1,027	2
Jun-14	219,499	24,410	59,605	7,126	15,880	2,449	15,319	1,811	7,428	1,023	2
Jul-14	220,126	24,521	61,357	7,136	15,828	2,450	15,284	1,810	7,445	1,023	3
Aug-14	220,512	24,608	59,770	7,143	15,833	2,454	15,246	1,816	7,410	1,023	3
Sep-14	221,104	24,619	60,065	7,154	15,845	2,460	15,275	1,820	7,416	1,024	7
Oct-14	221,827	24,682	60,498	7,161	16,003	2,467	15,416	1,829	7,494	1,025	7
Nov-14	222,762	24,756	60,899	7,166	16,171	2,473	15,562	1,833	7,522	1,026	6
Dec-14	223,254	24,796	61,297	7,176	16,320	2,487	15,696	1,838	7,560	1,028	1
Jan-15	223,368	24,778	60,872	7,188	16,386	2,488	15,659	1,846	7,574	1,030	2
Feb-15	223,405	24,775	60,970	7,208	16,414	2,510	15,676	1,847	7,578	1,032	3
Mar-15	223,514	24,762	60,945	7,219	16,377	2,501	15,661	1,846	7,574	1,034	2
Apr-15	223,671	24,785	60,948	7,237	16,424	2,496	15,652	1,844	7,540	1,035	2
May-15	223,484	24,759	61,000	7,246	16,367	2,498	15,626	1,838	7,542	1,036	2
Jun-15	223,773	24,782	60,876	7,257	16,307	2,496	15,534	1,838	7,514	1,032	2
Jul-15	224,421	24,896	62,691	7,267	16,253	2,496	15,498	1,837	7,532	1,032	3
Aug-15	224,820	24,986	61,047	7,275	16,258	2,501	15,459	1,843	7,496	1,032	3
Sep-15	225,432	24,997	61,353	7,285	16,271	2,507	15,489	1,847	7,502	1,034	7
Oct-15	226,179	25,062	61,802	7,293	16,435	2,514	15,634	1,856	7,582	1,034	7
Nov-15	227,145	25,137	62,217	7,298	16,611	2,521	15,783	1,860	7,610	1,035	6
Dec-15	227,654	25,179	62,630	7,308	16,766	2,535	15,920	1,866	7,649	1,037	1



**Appendix 2.2 - Customer Forecast - Number by Region**  
 Low Growth Case (Utilized in Cases #4, #5 & #6)

	WV/ID		Medford		Roseburg		Klamath Falls		La Grande					
	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.		
Jan-16	227,530	25,099	291	62,169	7,310	0	16,834	2,532	15,884	1,873	0	7,663	1,039	2
Feb-16	227,567	25,147	290	62,271	7,331	0	16,863	2,555	15,902	1,874	0	7,667	1,041	3
Mar-16	227,680	25,134	288	62,246	7,342	0	16,825	2,546	15,887	1,873	0	7,663	1,043	2
Apr-16	227,843	25,157	288	62,249	7,361	0	16,873	2,540	15,877	1,871	0	7,629	1,044	2
May-16	227,650	25,131	287	62,303	7,370	0	16,814	2,543	15,850	1,864	0	7,630	1,045	2
Jun-16	227,947	25,154	289	62,174	7,381	0	16,751	2,540	15,756	1,864	0	7,602	1,041	2
Jul-16	228,616	25,272	291	64,054	7,391	0	16,695	2,541	15,720	1,863	0	7,620	1,041	3
Aug-16	229,027	25,363	291	62,351	7,399	0	16,700	2,546	15,680	1,869	0	7,583	1,041	3
Sep-16	229,659	25,375	293	62,668	7,410	0	16,713	2,552	15,710	1,874	0	7,589	1,042	7
Oct-16	230,430	25,441	292	63,133	7,418	0	16,885	2,559	15,859	1,883	0	7,671	1,043	7
Nov-16	231,426	25,519	292	63,563	7,424	0	17,069	2,566	16,012	1,887	0	7,700	1,044	6
Dec-16	231,951	25,561	293	63,990	7,434	0	17,231	2,581	16,152	1,893	0	7,740	1,046	1
Jan-17	231,343	25,427	292	63,426	7,429	0	17,292	2,573	16,111	1,898	0	7,751	1,048	1
Feb-17	231,382	25,477	291	63,531	7,450	0	17,323	2,587	16,129	1,899	0	7,755	1,050	3
Mar-17	231,498	25,463	289	63,505	7,461	0	17,283	2,587	16,114	1,899	0	7,751	1,052	2
Apr-17	231,665	25,487	289	63,508	7,480	0	17,333	2,582	16,104	1,896	0	7,751	1,053	2
May-17	227,650	25,131	287	63,564	7,489	0	17,271	2,584	16,076	1,889	0	7,717	1,054	2
Jun-17	231,772	25,484	290	63,431	7,501	0	17,205	2,582	15,980	1,889	0	7,688	1,049	2
Jul-17	232,459	25,604	292	65,374	7,512	0	17,147	2,582	15,943	1,888	0	7,707	1,049	3
Aug-17	232,883	25,698	292	63,614	7,520	0	17,152	2,587	15,902	1,894	0	7,669	1,050	3
Sep-17	233,532	25,710	294	63,941	7,531	0	17,166	2,594	15,933	1,899	0	7,676	1,051	7
Oct-17	234,325	25,778	293	64,422	7,540	0	17,345	2,601	16,085	1,908	0	7,759	1,052	7
Nov-17	235,349	25,857	293	64,866	7,545	0	17,537	2,608	16,242	1,913	0	7,788	1,053	6
Dec-17	235,889	25,900	294	65,308	7,556	0	17,707	2,624	16,386	1,918	0	7,829	1,055	1
Jan-18	235,156	25,754	294	64,688	7,554	0	17,754	2,614	16,342	1,924	0	7,839	1,057	2
Feb-18	235,196	25,804	293	64,796	7,576	0	17,786	2,639	16,360	1,925	0	7,843	1,059	3
Mar-18	235,315	25,790	291	64,772	7,587	0	17,744	2,629	16,344	1,924	0	7,839	1,061	2
Apr-18	235,486	25,815	291	64,772	7,607	0	17,796	2,623	16,334	1,922	0	7,803	1,062	2
May-18	235,282	25,787	290	64,830	7,617	0	17,732	2,626	16,306	1,915	0	7,805	1,063	2
Jun-18	235,597	25,812	292	64,692	7,629	0	17,664	2,623	16,207	1,915	0	7,775	1,058	2
Jul-18	236,303	25,934	294	66,699	7,640	0	17,602	2,624	16,169	1,914	0	7,794	1,058	3
Aug-18	236,737	26,030	294	64,881	7,648	0	17,608	2,629	16,127	1,921	0	7,755	1,059	3
Sep-18	237,404	26,042	296	65,219	7,660	0	17,623	2,635	16,159	1,925	0	7,762	1,060	7
Oct-18	238,219	26,112	295	65,716	7,668	0	17,810	2,643	16,315	1,935	0	7,847	1,061	7
Nov-18	239,271	26,192	295	66,174	7,674	0	18,010	2,650	16,476	1,939	0	7,877	1,062	6
Dec-18	239,826	26,237	296	66,630	7,685	0	18,186	2,666	16,623	1,945	0	7,919	1,064	1
Jan-19	238,920	26,080	296	65,962	7,686	0	18,226	2,656	16,576	1,952	0	7,928	1,066	2
Feb-19	238,960	26,132	295	66,074	7,709	0	18,260	2,681	16,595	1,953	0	7,932	1,068	3
Mar-19	239,083	26,117	293	66,046	7,720	0	18,216	2,671	16,579	1,952	0	7,928	1,070	2
Apr-19	239,259	26,142	293	66,049	7,741	0	18,271	2,665	16,568	1,950	0	7,891	1,071	2
May-19	239,050	26,114	292	66,109	7,751	0	18,203	2,668	16,539	1,942	0	7,893	1,072	2
Jun-19	239,372	26,139	294	65,967	7,763	0	18,132	2,665	16,438	1,943	0	7,863	1,067	2
Jul-19	240,097	26,265	296	68,037	7,774	0	18,069	2,666	16,399	1,942	0	7,882	1,067	3
Aug-19	240,543	26,363	296	66,162	7,783	0	18,074	2,671	16,356	1,948	0	7,843	1,068	3
Sep-19	241,227	26,375	298	66,511	7,795	0	18,090	2,677	16,389	1,953	0	7,850	1,069	7
Oct-19	242,063	26,446	297	67,023	7,804	0	18,284	2,685	16,549	1,963	0	7,936	1,070	7
Nov-19	243,143	26,528	297	67,496	7,810	0	18,493	2,693	16,713	1,967	0	7,967	1,071	6
Dec-19	243,712	26,574	298	67,966	7,821	0	18,677	2,709	16,864	1,974	0	8,009	1,073	1
Jan-20	242,683	26,355	297	67,199	7,826	0	18,698	2,700	16,800	1,983	0	8,018	1,074	2
Feb-20	242,725	26,407	296	67,314	7,849	0	18,733	2,726	16,820	1,984	0	8,022	1,077	3
Mar-20	242,850	26,392	294	67,285	7,861	0	18,687	2,716	16,803	1,983	0	8,018	1,079	2
Apr-20	243,031	26,417	294	67,289	7,883	0	18,744	2,710	16,792	1,981	0	7,981	1,080	2
May-20	242,816	26,389	293	67,350	7,893	0	18,674	2,713	16,763	1,973	0	7,983	1,081	2
Jun-20	243,147	26,414	295	67,204	7,906	0	18,600	2,710	16,659	1,974	0	7,951	1,076	2
Jul-20	243,890	26,542	297	69,336	7,917	0	18,534	2,710	16,620	1,972	0	7,972	1,076	3

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Low Growth Case (Utilized in Cases #4, #5 & #6)

	WVA/ID		Medford		Roseburg		Klamath Falls		La Grande			
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial		
Aug-20	244,348	26,642	297	7,926	0	2,716	1,979	1,077	0	7,931	1,077	3
Sep-20	245,050	26,654	299	7,938	0	2,722	1,984	1,078	0	7,938	1,078	7
Oct-20	245,907	26,726	298	7,948	0	2,731	1,994	1,079	0	8,026	1,079	7
Nov-20	247,014	26,810	298	7,954	0	2,738	1,999	1,080	0	8,058	1,080	6
Dec-20	247,598	26,857	299	7,965	0	2,755	2,005	1,082	0	8,101	1,082	1
Jan-21	246,398	26,630	298	7,958	0	2,735	2,006	1,082	0	8,106	1,082	2
Feb-21	246,440	26,683	298	7,981	0	2,761	2,008	1,085	0	8,110	1,085	3
Mar-21	246,569	26,668	296	7,994	0	2,751	2,006	1,087	0	8,106	1,087	2
Apr-21	246,754	26,694	296	8,016	0	2,744	2,004	1,088	0	8,068	1,088	2
May-21	246,534	26,665	295	8,026	0	2,747	1,996	1,089	0	8,070	1,089	2
Jun-21	246,873	26,691	296	8,039	0	2,744	1,997	1,084	0	8,038	1,084	2
Jul-21	247,634	26,820	298	8,051	0	2,745	1,996	1,084	0	8,059	1,084	3
Aug-21	248,103	26,922	299	8,060	0	2,751	2,003	1,085	0	8,018	1,085	3
Sep-21	248,822	26,935	301	8,073	0	2,758	2,008	1,086	0	8,025	1,086	7
Oct-21	249,700	27,008	300	8,082	0	2,766	2,018	1,087	0	8,115	1,087	7
Nov-21	250,835	27,093	300	8,088	0	2,774	2,023	1,088	0	8,146	1,088	6
Dec-21	251,433	27,141	300	8,100	0	2,791	2,029	1,090	0	8,191	1,090	1
Jan-22	249,864	26,904	300	8,093	0	2,776	2,034	1,091	0	8,196	1,091	2
Feb-22	249,908	26,959	299	8,117	0	2,803	2,036	1,093	0	8,200	1,093	3
Mar-22	250,039	26,943	297	8,130	0	2,792	2,034	1,095	0	8,196	1,095	2
Apr-22	250,228	26,969	297	8,153	0	2,785	2,032	1,096	0	8,157	1,096	2
May-22	250,003	26,940	296	8,163	0	2,788	2,024	1,098	0	8,159	1,098	2
Jun-22	250,350	26,966	298	8,177	0	2,785	2,025	1,093	0	8,126	1,093	2
Jul-22	251,128	27,098	300	8,189	0	2,786	2,023	1,093	0	8,147	1,093	3
Aug-22	251,607	27,201	300	8,199	0	2,792	2,031	1,094	0	8,106	1,094	3
Sep-22	252,343	27,214	302	8,212	0	2,799	2,036	1,093	0	8,113	1,093	7
Oct-22	253,241	27,289	301	8,221	0	2,807	2,046	1,095	0	8,204	1,095	7
Nov-22	254,401	27,376	301	8,228	0	2,815	2,051	1,096	0	8,237	1,096	6
Dec-22	255,012	27,424	302	8,240	0	2,833	2,058	1,098	0	8,282	1,098	1
Jan-23	253,331	27,154	301	8,231	0	2,816	2,064	1,099	0	8,286	1,099	2
Feb-23	253,375	27,209	301	8,255	0	2,844	2,065	1,101	0	8,291	1,101	3
Mar-23	253,510	27,193	299	8,269	0	2,832	2,064	1,103	0	8,286	1,103	2
Apr-23	253,703	27,220	299	8,292	0	2,826	2,061	1,105	0	8,247	1,105	2
May-23	253,473	27,190	298	8,303	0	2,829	2,053	1,106	0	8,249	1,106	2
Jun-23	253,828	27,217	299	8,317	0	2,826	2,054	1,101	0	8,216	1,101	2
Jul-23	254,623	27,350	301	8,329	0	2,827	2,052	1,101	0	8,237	1,101	3
Aug-23	255,113	27,455	302	8,339	0	2,832	2,060	1,101	0	8,195	1,101	3
Sep-23	255,864	27,469	304	8,352	0	2,840	2,075	1,103	0	8,202	1,103	7
Oct-23	256,782	27,544	303	8,362	0	2,848	2,075	1,103	0	8,295	1,103	7
Nov-23	257,967	27,632	303	8,369	0	2,857	2,081	1,105	0	8,328	1,105	6
Dec-23	258,592	27,681	303	8,381	0	2,874	2,087	1,107	0	8,374	1,107	1
Jan-24	256,798	27,404	302	8,364	0	2,854	2,092	1,106	0	8,378	1,106	2
Feb-24	256,843	27,459	302	8,390	0	2,883	2,093	1,109	0	8,382	1,109	3
Mar-24	256,981	27,444	300	8,403	0	2,871	2,092	1,111	0	8,378	1,111	2
Apr-24	257,178	27,471	300	8,427	0	2,864	2,090	1,112	0	8,337	1,112	2
May-24	256,943	27,440	299	8,438	0	2,868	2,081	1,114	0	8,340	1,114	2
Jun-24	257,305	27,467	300	8,453	0	2,864	2,082	1,108	0	8,306	1,108	2
Jul-24	258,117	27,603	302	8,465	0	2,865	2,082	1,108	0	8,328	1,108	3
Aug-24	258,618	27,710	303	8,476	0	2,871	2,088	1,109	0	8,284	1,109	3
Sep-24	259,385	27,723	305	8,489	0	2,878	2,093	1,110	0	8,292	1,110	7
Oct-24	260,323	27,800	304	8,499	0	2,887	2,104	1,111	0	8,387	1,111	7
Nov-24	261,533	27,889	304	8,506	0	2,896	2,110	1,112	0	8,420	1,112	6
Dec-24	262,172	27,939	304	8,519	0	2,914	2,116	1,114	0	8,467	1,114	1
Jan-25	260,265	27,653	304	8,490	0	2,910	2,119	1,113	0	8,473	1,113	2
Feb-25	260,311	27,710	303	8,516	0	2,919	2,121	1,116	0	8,477	1,116	3

**Appendix 2.2 - Customer Forecast - Number by Region**  
 Low Growth Case (Utilized in Cases #4, #5 & #6)

	WVA/ID		Medford		Roseburg		Klamath Falls		La Grande	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Mar-25	260,451	27,694	73,425	8,530	21,197	2,907	17,966	2,119	8,473	1,118
Apr-25	260,653	27,722	73,429	8,554	21,265	2,900	17,954	2,117	8,432	1,119
May-25	260,413	27,691	73,499	8,566	21,181	2,904	17,921	2,108	8,434	1,121
Jun-25	260,783	27,718	73,332	8,580	21,092	2,900	17,806	2,109	8,400	1,115
Jul-25	261,612	27,856	75,770	8,593	21,012	2,901	17,761	2,107	8,422	1,115
Aug-25	262,123	27,964	73,562	8,604	21,019	2,907	17,712	2,115	8,378	1,116
Sep-25	262,907	27,978	73,972	8,618	21,038	2,915	17,750	2,121	8,385	1,117
Oct-25	263,863	28,056	74,575	8,628	21,282	2,924	17,932	2,131	8,482	1,118
Nov-25	265,100	28,147	75,133	8,635	21,543	2,932	18,120	2,137	8,516	1,119
Dec-25	265,752	28,197	75,687	8,648	21,773	2,951	18,292	2,144	8,564	1,121
Jan-26	260,265	27,653	73,326	8,490	21,209	2,890	17,963	2,119	8,473	1,113
Feb-26	260,311	27,710	73,458	8,516	21,251	2,919	17,984	2,121	8,477	1,116
Mar-26	260,451	27,694	73,425	8,530	21,197	2,907	17,966	2,119	8,473	1,118
Apr-26	260,653	27,722	73,429	8,554	21,265	2,900	17,954	2,117	8,432	1,119
May-26	260,413	27,691	73,499	8,566	21,181	2,904	17,921	2,108	8,434	1,121
Jun-26	260,783	27,718	73,332	8,580	21,092	2,900	17,806	2,109	8,400	1,115
Jul-26	261,612	27,856	75,770	8,593	21,012	2,901	17,761	2,107	8,422	1,115
Aug-26	262,123	27,964	73,562	8,604	21,019	2,907	17,712	2,115	8,378	1,116
Sep-26	262,907	27,978	73,972	8,618	21,038	2,915	17,750	2,121	8,385	1,117
Oct-26	263,863	28,056	74,575	8,628	21,282	2,924	17,932	2,131	8,482	1,118

**Appendix 2.2 - Customer Forecast - Number by Region**  
**High Growth Case (Utilized in Cases #7, #8 and #9)**

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Nov-06	193,950	22,174	53,028	6,478	13,587	2,233	14,124	1,702	6,890	971
Dec-06	195,024	22,267	53,879	6,501	13,890	2,266	14,439	1,716	6,985	975
Jan-07	196,343	22,478	54,156	6,603	14,048	2,271	14,588	1,735	7,067	980
Feb-07	196,419	22,583	54,359	6,648	14,103	2,322	14,627	1,738	7,076	986
Mar-07	196,800	22,553	54,308	6,672	14,106	2,301	14,594	1,735	7,067	990
Apr-07	197,132	22,604	54,314	6,714	14,121	2,289	14,571	1,731	7,067	993
May-07	196,887	22,547	54,422	6,733	13,935	2,295	14,511	1,714	6,991	996
Jun-07	197,496	22,598	54,165	6,759	13,893	2,289	14,300	1,716	6,923	984
Jul-07	199,013	22,891	57,906	6,781	13,788	2,290	14,219	1,713	6,967	984
Aug-07	200,004	23,090	54,518	6,799	13,797	2,301	14,129	1,728	6,880	986
Sep-07	201,596	23,116	55,148	6,823	13,823	2,314	14,198	1,738	6,895	989
Oct-07	203,322	23,260	56,073	6,841	14,144	2,331	14,531	1,759	7,085	990
Nov-07	205,359	23,428	56,928	6,853	14,487	2,346	14,874	1,770	7,153	993
Dec-07	206,433	23,521	57,779	6,876	14,865	2,379	15,189	1,783	7,247	998
Jan-08	208,637	23,757	57,955	6,970	15,117	2,397	15,335	1,807	7,366	1,008
Feb-08	208,719	23,871	58,179	7,018	15,178	2,452	15,376	1,811	7,376	1,015
Mar-08	208,969	23,838	58,122	7,044	15,099	2,429	15,341	1,807	7,366	1,019
Apr-08	209,328	23,893	58,129	7,090	15,198	2,416	15,317	1,803	7,281	1,022
May-08	208,901	23,832	58,248	7,111	15,076	2,423	15,252	1,785	7,285	1,026
Jun-08	209,560	23,887	57,965	7,138	14,947	2,416	15,026	1,787	7,214	1,013
Jul-08	211,038	24,162	62,091	7,163	14,831	2,418	14,939	1,784	7,260	1,013
Aug-08	211,948	24,377	58,354	7,182	14,841	2,429	14,842	1,800	7,168	1,015
Sep-08	213,345	24,405	59,049	7,208	14,869	2,443	14,916	1,811	7,184	1,018
Oct-08	215,050	24,560	60,070	7,227	15,222	2,461	15,273	1,833	7,385	1,019
Nov-08	217,253	24,741	61,013	7,240	15,601	2,477	15,642	1,844	7,456	1,022
Dec-08	218,415	24,841	61,951	7,265	15,934	2,513	15,980	1,858	7,556	1,027
Jan-09	221,286	25,035	61,833	7,306	16,294	2,504	16,086	1,877	7,669	1,035
Feb-09	221,373	25,152	62,067	7,356	16,358	2,560	16,129	1,881	7,679	1,041
Mar-09	221,633	25,119	62,008	7,383	16,275	2,537	16,092	1,877	7,669	1,046
Apr-09	222,007	25,176	62,015	7,430	16,379	2,524	16,068	1,872	7,581	1,049
May-09	221,562	25,112	62,140	7,452	16,250	2,530	16,001	1,855	7,586	1,052
Jun-09	222,248	25,169	61,843	7,480	16,114	2,524	15,766	1,856	7,513	1,039
Jul-09	223,789	25,454	66,163	7,505	15,992	2,525	15,676	1,853	7,560	1,039
Aug-09	224,737	25,677	62,250	7,526	16,003	2,537	15,577	1,869	7,465	1,041
Sep-09	226,193	25,706	62,978	7,552	16,033	2,552	15,653	1,881	7,482	1,044
Oct-09	227,970	25,867	64,047	7,572	16,405	2,570	16,023	1,903	7,689	1,046
Nov-09	230,266	26,055	65,034	7,586	16,804	2,587	16,404	1,915	7,762	1,049
Dec-09	231,476	26,159	66,016	7,611	17,156	2,623	16,753	1,929	7,864	1,054
Jan-10	234,677	26,310	65,534	7,612	17,440	2,612	16,795	1,948	7,958	1,061
Feb-10	234,767	26,432	65,778	7,664	17,508	2,671	16,840	1,952	7,968	1,068
Mar-10	235,039	26,397	65,716	7,691	17,420	2,647	16,802	1,948	7,958	1,072
Apr-10	235,428	26,456	65,723	7,740	17,530	2,633	16,776	1,943	7,868	1,076
May-10	234,964	26,390	65,853	7,762	17,394	2,640	16,708	1,925	7,873	1,079
Jun-10	235,680	26,449	65,545	7,791	17,252	2,633	16,466	1,923	7,798	1,066
Jul-10	237,286	26,745	70,049	7,817	17,124	2,635	16,373	1,923	7,846	1,066
Aug-10	238,275	26,976	65,969	7,838	17,135	2,647	16,270	1,940	7,750	1,068
Sep-10	239,793	27,006	66,728	7,865	17,166	2,662	16,349	1,952	7,766	1,071
Oct-10	241,646	27,173	67,842	7,886	17,557	2,681	16,730	1,975	7,978	1,072
Nov-10	244,040	27,367	68,872	7,900	17,976	2,698	17,123	1,987	8,054	1,076
Dec-10	245,303	27,475	69,896	7,926	18,346	2,736	17,483	2,002	8,159	1,080
Jan-11	248,811	27,540	69,257	7,909	18,618	2,709	17,430	2,004	8,248	1,089
Feb-11	248,905	27,666	69,511	7,962	18,689	2,769	17,476	2,007	8,258	1,096
Mar-11	249,189	27,630	69,447	7,991	18,597	2,744	17,437	2,004	8,248	1,100
Apr-11	249,595	27,691	69,455	8,040	18,712	2,730	17,411	1,998	8,156	1,104
May-11	249,111	27,623	69,590	8,063	18,570	2,737	17,340	1,980	8,161	1,107

**Appendix 2.2 - Customer Forecast - Number by Region**  
**High Growth Case (Utilized in Cases #7, #8 and #9)**

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande			
	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.
Jun-11	249,858	27,684	304	69,269	8,093	0	18,420	2,730	0	17,092	1,981	0
Jul-11	251,534	27,989	309	73,960	8,120	0	18,286	2,732	0	16,997	1,978	0
Aug-11	252,566	28,228	310	69,711	8,141	0	18,297	2,744	0	16,891	1,975	0
Sep-11	254,149	28,259	315	70,501	8,170	0	18,330	2,760	0	16,972	2,007	0
Oct-11	256,082	28,431	312	71,661	8,191	0	18,741	2,779	0	17,363	2,031	0
Nov-11	258,580	28,633	312	72,733	8,205	0	19,180	2,797	0	17,767	2,043	0
Dec-11	259,897	28,744	314	73,800	8,232	0	19,568	2,835	0	18,137	2,058	0
Jan-12	262,944	28,772	315	73,074	8,183	0	19,816	2,806	0	18,081	2,053	0
Feb-12	263,042	28,901	313	73,339	8,238	0	19,891	2,868	0	18,128	2,057	0
Mar-12	263,337	28,864	308	73,272	8,267	0	19,794	2,843	0	18,089	2,053	0
Apr-12	263,760	28,927	308	73,280	8,317	0	19,915	2,828	0	18,061	2,048	0
May-12	263,257	28,857	305	73,421	8,341	0	19,766	2,835	0	17,989	2,029	0
Jun-12	264,034	28,920	310	73,086	8,372	0	19,609	2,828	0	17,734	2,031	0
Jul-12	265,780	29,235	315	77,968	8,399	0	19,468	2,830	0	17,636	2,027	0
Aug-12	266,854	29,482	316	73,546	8,421	0	19,480	2,843	0	17,528	2,045	0
Sep-12	268,504	29,513	321	74,368	8,450	0	19,514	2,859	0	17,611	2,057	0
Oct-12	270,517	29,691	318	75,576	8,472	0	19,945	2,879	0	18,013	2,081	0
Nov-12	273,119	29,899	318	76,692	8,486	0	20,406	2,897	0	18,427	2,093	0
Dec-12	274,490	30,014	320	77,802	8,513	0	20,812	2,936	0	18,807	2,109	0
Jan-13	276,915	30,003	319	76,870	8,478	0	21,080	2,918	0	18,764	2,104	0
Feb-13	277,017	30,137	318	77,145	8,534	0	21,158	2,981	0	18,812	2,108	0
Mar-13	277,324	30,098	313	77,076	8,564	0	21,057	2,955	0	18,771	2,104	0
Apr-13	277,764	30,163	313	77,084	8,616	0	21,183	2,940	0	18,744	2,099	0
May-13	277,240	30,091	309	77,230	8,640	0	21,027	2,947	0	18,669	2,080	0
Jun-13	278,048	30,156	314	76,883	8,672	0	20,863	2,940	0	18,407	2,082	0
Jul-13	279,862	30,481	319	81,954	8,700	0	20,715	2,942	0	18,307	2,078	0
Aug-13	280,979	30,735	321	77,360	8,722	0	20,728	2,955	0	18,195	2,096	0
Sep-13	282,694	30,768	326	78,214	8,752	0	20,763	2,972	0	18,281	2,108	0
Oct-13	284,786	30,952	323	79,469	8,774	0	21,215	2,992	0	18,693	2,133	0
Nov-13	287,490	31,166	323	80,628	8,789	0	21,698	3,010	0	19,119	2,145	0
Dec-13	288,916	31,284	324	81,781	8,817	0	22,124	3,051	0	19,510	2,161	0
Jan-14	290,440	31,116	327	80,546	8,823	0	22,343	3,039	0	19,424	2,173	0
Feb-14	290,545	31,253	325	80,830	8,881	0	22,425	3,104	0	19,473	2,177	0
Mar-14	290,863	31,214	320	80,759	8,911	0	22,319	3,077	0	19,431	2,173	0
Apr-14	291,319	31,281	320	80,767	8,965	0	22,451	3,062	0	19,403	2,168	0
May-14	290,776	31,206	317	80,919	8,990	0	22,288	3,069	0	19,327	2,148	0
Jun-14	291,614	31,273	322	80,559	9,023	0	22,116	3,062	0	19,058	2,150	0
Jul-14	293,495	31,607	327	85,814	9,051	0	21,961	3,064	0	18,955	2,146	0
Aug-14	294,653	31,868	329	81,054	9,074	0	21,975	3,077	0	18,840	2,164	0
Sep-14	296,430	31,902	334	81,939	9,105	0	22,012	3,094	0	18,928	2,177	0
Oct-14	298,599	32,090	330	83,239	9,128	0	22,484	3,115	0	19,351	2,202	0
Nov-14	301,403	32,311	330	84,440	9,143	0	22,989	3,134	0	19,788	2,215	0
Dec-14	302,881	32,432	332	85,635	9,172	0	23,435	3,176	0	20,189	2,231	0
Jan-15	303,223	32,228	333	84,359	9,208	0	23,634	3,178	0	20,078	2,255	0
Feb-15	303,332	32,370	331	84,654	9,268	0	23,719	3,245	0	20,129	2,258	0
Mar-15	303,660	32,329	326	84,580	9,300	0	23,608	3,217	0	20,086	2,255	0
Apr-15	304,132	32,398	326	84,588	9,355	0	23,747	3,201	0	20,057	2,249	0
May-15	303,571	32,321	322	84,775	9,381	0	23,576	3,209	0	19,979	2,249	0
Jun-15	304,437	32,390	328	84,372	9,414	0	23,396	3,201	0	19,703	2,230	0
Jul-15	306,380	32,733	333	89,818	9,444	0	23,235	3,203	0	19,597	2,227	0
Aug-15	307,577	33,001	335	84,885	9,468	0	23,249	3,217	0	19,480	2,245	0
Sep-15	309,414	33,036	340	85,802	9,500	0	23,288	3,235	0	19,570	2,258	0
Oct-15	311,656	33,229	336	87,150	9,523	0	23,781	3,257	0	20,004	2,284	0
Nov-15	314,553	33,455	336	88,394	9,539	0	24,309	3,276	0	20,452	2,297	0
Dec-15	316,080	33,580	338	89,633	9,569	0	24,775	3,320	0	20,862	2,314	0

**Appendix 2.2 - Customer Forecast - Number by Region**  
**High Growth Case (Utilized in Cases #7, #8 and #9)**

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande					
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial				
Jan-16	315,708	33,341	340	9,575	0	24,977	3,311	2	20,754	2,334	0	9,659	1,221	2
Feb-16	315,820	33,486	339	9,636	0	25,066	3,380	2	20,807	2,337	0	9,671	1,228	3
Mar-16	316,159	33,445	333	9,669	0	24,950	3,352	2	20,762	2,334	0	9,659	1,233	2
Apr-16	316,646	33,515	333	9,726	0	25,095	3,335	2	20,732	2,328	0	9,556	1,237	2
May-16	316,067	33,436	330	9,753	0	24,917	3,343	2	20,652	2,307	0	9,561	1,240	2
Jun-16	316,960	33,507	335	9,787	0	24,729	3,335	2	20,370	2,309	0	9,475	1,226	2
Jul-16	318,965	33,859	340	9,818	0	24,560	3,337	2	20,261	2,305	0	9,531	1,226	3
Aug-16	320,200	34,134	342	9,842	0	24,575	3,352	2	20,141	2,324	0	9,419	1,228	3
Sep-16	322,094	34,169	347	9,875	0	24,616	3,370	2	20,233	2,337	0	9,438	1,231	7
Oct-16	324,407	34,368	344	9,899	0	25,131	3,392	2	20,678	2,364	0	9,682	1,233	7
Nov-16	327,396	34,600	344	9,916	0	25,683	3,413	2	21,137	2,377	0	9,769	1,237	6
Dec-16	328,972	34,728	343	9,946	0	26,169	3,457	2	21,558	2,395	0	9,890	1,242	1
Jan-17	327,148	34,326	343	9,930	0	26,351	3,434	2	21,436	2,409	0	9,922	1,247	1
Feb-17	327,263	34,475	342	9,993	0	26,444	3,505	2	21,489	2,413	0	9,934	1,254	3
Mar-17	327,612	34,432	336	9,928	0	26,324	3,476	2	21,444	2,409	0	9,922	1,260	2
Apr-17	328,112	34,504	330	10,085	0	26,475	3,459	2	21,413	2,403	0	9,816	1,263	2
May-17	316,067	33,436	330	9,246	0	26,288	3,467	2	21,331	2,382	0	9,822	1,267	2
Jun-17	328,435	34,496	338	9,206	0	26,092	3,459	2	21,041	2,384	0	9,734	1,252	2
Jul-17	330,496	34,856	343	9,786	0	25,916	3,461	2	20,930	2,380	0	9,791	1,252	3
Aug-17	331,766	35,137	345	9,585	0	25,931	3,476	2	20,807	2,399	0	9,677	1,254	3
Sep-17	333,714	35,173	350	9,567	0	25,974	3,495	2	20,902	2,413	0	9,697	1,258	7
Oct-17	336,092	35,377	347	9,509	0	26,512	3,518	2	21,358	2,440	0	9,946	1,260	7
Nov-17	339,164	35,614	347	9,634	0	27,088	3,539	2	21,828	2,454	0	10,034	1,263	6
Dec-17	340,784	35,745	349	9,767	0	27,596	3,585	2	22,259	2,471	0	10,157	1,269	1
Jan-18	338,586	35,306	349	9,587	0	27,737	3,557	2	22,127	2,488	0	10,187	1,274	2
Feb-18	338,705	35,457	348	9,633	0	27,834	3,631	2	22,182	2,492	0	10,199	1,281	3
Mar-18	339,063	35,414	342	9,605	0	27,708	3,600	2	22,135	2,488	0	10,187	1,286	2
Apr-18	339,576	35,488	342	9,606	0	27,865	3,583	2	22,104	2,482	0	10,079	1,290	2
May-18	338,965	35,405	339	9,6234	0	27,671	3,592	2	22,019	2,460	0	10,085	1,294	2
Jun-18	339,909	35,479	344	9,521	0	27,467	3,583	2	21,723	2,462	0	9,995	1,279	2
Jul-18	342,026	35,847	349	10,184	0	27,283	3,585	2	21,609	2,458	0	10,053	1,279	3
Aug-18	343,330	36,134	351	9,638	0	27,299	3,600	2	21,483	2,478	0	9,936	1,281	3
Sep-18	345,331	36,171	357	9,702	0	27,344	3,620	2	21,580	2,492	0	9,957	1,285	7
Oct-18	347,774	36,379	353	9,891	0	27,905	3,643	2	22,047	2,520	0	10,211	1,286	7
Nov-18	350,931	36,621	353	10,266	0	28,505	3,665	2	22,529	2,533	0	10,301	1,290	6
Dec-18	352,595	36,755	355	10,1635	0	29,034	3,712	2	22,971	2,551	0	10,427	1,296	1
Jan-19	349,878	36,285	355	9,630	0	29,155	3,682	2	22,830	2,571	0	10,454	1,301	2
Feb-19	349,999	36,440	354	9,966	0	29,256	3,757	2	22,886	2,575	0	10,466	1,308	3
Mar-19	350,367	36,396	348	9,982	0	29,125	3,726	2	22,839	2,571	0	10,454	1,314	2
Apr-19	350,894	36,471	348	9,982	0	29,288	3,709	2	22,806	2,565	0	10,343	1,317	2
May-19	350,267	36,387	345	10,071	0	29,086	3,717	2	22,720	2,543	0	10,349	1,321	2
Jun-19	351,235	36,462	350	9,645	0	28,873	3,709	2	22,416	2,545	0	10,258	1,306	2
Jul-19	353,408	36,838	355	10,585	0	28,682	3,711	2	22,300	2,541	0	10,317	1,306	3
Aug-19	354,746	37,132	357	10,020	0	28,699	3,726	2	22,170	2,561	0	10,199	1,308	3
Sep-19	356,800	37,169	363	10,130	0	28,745	3,746	2	22,269	2,575	0	10,219	1,312	7
Oct-19	359,307	37,381	359	10,282	0	29,329	3,770	2	22,748	2,604	0	10,478	1,314	7
Nov-19	362,546	37,629	359	10,4231	0	29,954	3,792	2	23,242	2,618	0	10,570	1,317	6
Dec-19	364,254	37,766	361	10,5643	0	30,506	3,841	2	23,695	2,637	0	10,698	1,323	1
Jan-20	361,168	37,108	358	10,340	0	30,569	3,815	2	23,503	2,664	0	10,724	1,327	2
Feb-20	361,293	37,265	357	10,3687	0	30,674	3,892	2	23,561	2,668	0	10,736	1,334	3
Mar-20	361,669	37,220	351	10,3599	0	30,538	3,861	2	23,512	2,664	0	10,724	1,344	2
Apr-20	362,210	37,296	351	10,3610	0	30,708	3,843	2	23,479	2,658	0	10,612	1,344	2
May-20	361,567	37,211	347	10,3794	0	30,498	3,852	2	23,391	2,635	0	10,618	1,348	2
Jun-20	362,560	37,287	353	10,3356	0	30,277	3,843	2	23,080	2,637	0	10,524	1,332	2
Jul-20	364,788	37,670	358	10,9751	0	30,078	3,845	2	22,961	2,633	0	10,585	1,332	3

**Appendix 2.2 - Customer Forecast - Number by Region**  
**High Growth Case (Utilized in Cases #7, #8 and #9)**

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande						
	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.	Residential	Commercial	Firm Ind.			
Aug-20	366,161	37,969	360	103,958	11,423	0	30,095	3,861	2	22,829	2,654	0	10,464	1,334	3
Sep-20	368,267	38,007	366	105,035	11,459	0	30,143	3,881	2	22,930	2,668	0	10,485	1,338	7
Oct-20	370,838	38,223	362	106,617	11,487	0	30,751	3,906	2	23,420	2,698	0	10,749	1,340	7
Nov-20	374,160	38,475	362	108,079	11,505	0	31,401	3,929	2	23,925	2,712	0	10,843	1,344	6
Dec-20	375,911	38,614	363	109,533	11,539	0	31,974	3,974	2	24,388	2,731	0	10,974	1,349	1
Jan-21	372,311	37,933	364	107,004	11,517	0	31,978	3,919	2	24,166	2,735	0	10,989	1,351	2
Feb-21	372,439	38,093	361	107,360	11,587	0	32,087	3,998	2	24,225	2,740	0	11,001	1,358	3
Mar-21	372,825	38,047	356	107,270	11,625	0	31,945	3,966	2	24,175	2,735	0	10,989	1,364	2
Apr-21	373,379	38,125	356	107,281	11,691	0	32,122	3,947	2	24,142	2,729	0	10,874	1,368	2
May-21	372,719	38,038	352	107,471	11,721	0	31,904	3,956	2	24,052	2,705	0	10,881	1,372	2
Jun-21	373,737	38,116	357	107,020	11,761	0	31,674	3,947	2	23,734	2,708	0	10,785	1,356	2
Jul-21	376,020	38,505	363	113,598	11,797	0	31,468	3,950	2	23,612	2,703	0	10,847	1,356	3
Aug-21	377,426	38,809	365	110,640	11,825	0	31,486	3,966	2	23,477	2,725	0	10,724	1,358	3
Sep-21	379,584	38,848	370	108,747	11,862	0	31,536	3,987	2	23,581	2,740	0	10,745	1,362	7
Oct-21	382,219	39,068	367	110,375	11,891	0	32,166	4,012	2	24,081	2,770	0	11,014	1,364	7
Nov-21	385,622	39,324	367	111,878	11,909	0	32,841	4,035	2	24,597	2,785	0	11,109	1,368	6
Dec-21	387,417	39,466	368	113,374	11,945	0	33,436	4,086	2	25,070	2,804	0	11,243	1,374	1
Jan-22	382,710	38,757	367	110,729	11,924	0	33,429	4,041	2	24,844	2,819	0	11,257	1,376	2
Feb-22	382,841	38,920	366	111,095	11,996	0	33,542	4,122	2	24,904	2,823	0	11,270	1,383	3
Mar-22	383,235	38,873	360	111,003	12,035	0	33,395	4,089	2	24,853	2,819	0	11,257	1,389	2
Apr-22	383,802	38,952	360	111,014	12,103	0	33,579	4,070	2	24,818	2,812	0	11,140	1,393	2
May-22	383,128	38,864	356	111,209	12,134	0	33,353	4,079	2	24,726	2,788	0	11,146	1,397	2
Jun-22	384,168	38,943	362	110,745	12,175	0	33,114	4,070	2	24,402	2,790	0	11,049	1,382	2
Jul-22	386,503	39,338	367	117,510	12,211	0	32,900	4,072	2	24,277	2,786	0	11,112	1,382	3
Aug-22	387,940	39,648	369	111,383	12,240	0	32,918	4,089	2	24,139	2,808	0	10,987	1,383	3
Sep-22	390,147	39,687	375	112,522	12,279	0	32,970	4,110	2	24,245	2,823	0	11,008	1,387	7
Oct-22	392,840	39,911	371	114,195	12,308	0	33,625	4,136	2	24,756	2,854	0	11,282	1,389	7
Nov-22	396,320	40,171	371	115,742	12,327	0	34,325	4,160	2	25,284	2,869	0	11,380	1,393	6
Dec-22	398,155	40,315	373	117,279	12,364	0	34,943	4,212	2	25,767	2,889	0	11,516	1,399	1
Jan-23	393,111	39,505	372	114,312	12,336	0	34,932	4,162	2	25,540	2,907	0	11,529	1,400	2
Feb-23	393,244	39,670	370	114,688	12,410	0	35,049	4,245	2	25,601	2,911	0	11,542	1,408	3
Mar-23	393,648	39,623	364	114,593	12,450	0	34,897	4,211	2	25,549	2,907	0	11,529	1,414	2
Apr-23	394,226	39,703	364	114,604	12,520	0	35,087	4,191	2	25,514	2,900	0	11,410	1,418	2
May-23	393,538	39,614	361	114,804	12,552	0	34,853	4,201	2	25,420	2,875	0	11,417	1,422	2
Jun-23	394,601	39,694	366	114,328	12,594	0	34,605	4,191	2	25,088	2,877	0	11,318	1,406	2
Jul-23	396,987	40,095	372	121,272	12,631	0	34,383	4,194	2	24,961	2,873	0	11,381	1,406	3
Aug-23	398,456	40,410	374	114,983	12,661	0	34,402	4,211	2	24,819	2,895	0	11,254	1,408	3
Sep-23	400,710	40,450	379	116,152	12,701	0	34,456	4,233	2	24,928	2,911	0	11,276	1,412	7
Oct-23	403,463	40,676	376	117,870	12,731	0	35,135	4,259	2	25,450	2,942	0	11,555	1,414	7
Nov-23	407,019	40,941	376	119,457	12,751	0	35,862	4,284	2	25,989	2,958	0	11,654	1,418	6
Dec-23	408,894	41,087	378	121,036	12,788	0	36,503	4,337	2	26,484	2,978	0	11,793	1,424	1
Jan-24	403,511	40,255	375	117,947	12,737	0	36,479	4,277	2	26,249	2,992	0	11,803	1,423	2
Feb-24	403,648	40,422	373	118,333	12,813	0	36,600	4,362	2	26,311	2,996	0	11,817	1,431	3
Mar-24	404,060	40,375	367	118,235	12,854	0	36,442	4,307	2	26,258	2,992	0	11,803	1,437	2
Apr-24	404,651	40,456	367	118,247	12,925	0	36,640	4,307	2	26,222	2,985	0	11,682	1,441	2
May-24	403,947	40,365	364	118,453	12,959	0	36,396	4,317	2	26,126	2,960	0	11,689	1,445	2
Jun-24	405,034	40,446	369	117,964	13,002	0	36,140	4,307	2	25,787	2,962	0	11,588	1,429	2
Jul-24	407,470	40,854	375	125,090	13,040	0	35,909	4,309	2	25,657	2,957	0	11,653	1,429	3
Aug-24	408,971	41,173	377	118,635	13,071	0	35,929	4,327	2	25,513	2,980	0	11,523	1,431	3
Sep-24	411,274	41,214	382	119,835	13,111	0	35,985	4,349	2	25,623	2,996	0	11,546	1,435	7
Oct-24	414,086	41,444	379	121,598	13,142	0	36,689	4,376	2	26,157	3,029	0	11,830	1,437	7
Nov-24	417,718	41,712	379	123,227	13,162	0	37,443	4,401	2	26,708	3,045	0	11,931	1,441	6
Dec-24	419,633	41,861	381	124,847	13,201	0	38,108	4,456	2	27,213	3,065	0	12,072	1,447	1
Jan-25	413,912	41,004	379	121,722	13,114	0	38,104	4,385	2	26,991	3,073	0	12,089	1,444	2
Feb-25	414,051	41,175	378	122,118	13,192	0	38,230	4,471	2	27,055	3,078	0	12,102	1,452	3

**Appendix 2.2 - Customer Forecast - Number by Region**  
**High Growth Case (Utilized in Cases #7, #8 and #9)**

	WA/ID		Medford		Roseburg		Klamath Falls		La Grande	
	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Commercial
Mar-25	414,472	41,126	122,018	13,234	38,066	4,435	27,001	3,073	12,089	1,458
Apr-25	415,076	41,209	122,030	13,307	38,271	4,415	26,964	3,066	11,965	1,462
May-25	414,357	41,116	122,241	13,341	38,018	4,425	26,866	3,040	11,972	1,466
Jun-25	415,466	41,199	121,740	13,385	37,752	4,415	26,519	3,042	11,869	1,450
Jul-25	417,954	41,613	129,054	13,424	37,513	4,418	26,386	3,038	11,936	1,450
Aug-25	419,486	41,936	122,429	13,455	37,533	4,435	26,239	3,061	11,803	1,452
Sep-25	421,838	41,978	123,660	13,497	37,591	4,458	26,352	3,078	11,826	1,456
Oct-25	424,708	42,211	125,470	13,528	38,322	4,486	26,898	3,110	12,116	1,458
Nov-25	428,417	42,484	127,142	13,549	39,105	4,511	27,461	3,127	12,219	1,462
Dec-25	430,373	42,634	128,805	13,588	39,795	4,567	27,977	3,148	12,362	1,468
Jan-26	413,912	41,004	121,722	13,114	38,104	4,385	26,991	3,073	12,089	1,444
Feb-26	414,051	41,175	122,118	13,192	38,230	4,471	27,055	3,078	12,102	1,452
Mar-26	414,472	41,126	122,018	13,234	38,066	4,435	27,001	3,073	12,089	1,458
Apr-26	415,076	41,209	122,030	13,307	38,271	4,415	26,964	3,066	11,965	1,462
May-26	414,357	41,116	122,241	13,341	38,018	4,425	26,866	3,040	11,972	1,466
Jun-26	415,466	41,199	121,740	13,385	37,752	4,415	26,519	3,042	11,869	1,450
Jul-26	417,954	41,613	129,054	13,424	37,513	4,418	26,386	3,038	11,936	1,450
Aug-26	419,486	41,936	122,429	13,455	37,533	4,435	26,239	3,061	11,803	1,452
Sep-26	421,838	41,978	123,660	13,497	37,591	4,458	26,352	3,078	11,826	1,456
Oct-26	424,708	42,211	125,470	13,528	38,322	4,486	26,898	3,110	12,116	1,458



# **Demand Coefficients**

## **Appendix 2.3**

**Appendix 2.3 - Avista Utilities 2006 Firm Natural Gas Forecast Sendout Model Coefficients**

<b>Regression--Residential WA &amp; ID</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.0643	0.0051	12.6035	2.31918E-28
NHDDD	0.0077	0.0003	23.3502	4.96042E-64
NQDDD	0.0028	0.0003	9.2488	1.20662E-17
a Dependent Variable: RNDT				

<b>Regression--Residential WA &amp; ID</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>0.0643</b>	<b>0.8338</b>
<b>Shoulder</b>	<b>0.0077</b>	<b>0.9949</b>
<b>Dec-Jan-Feb</b>	<b>0.0105</b>	<b>0.9949</b>
		<b>0.0536</b>
		<b>0.0077</b>
		<b>0.0104</b>

<b>Regression--Commercial WA &amp; ID</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.4506	0.0252	17.8646	3.75778E-46
NHDDD	0.0348	0.0016	21.3428	1.2145E-57
NQDDD	0.0161	0.0015	10.9375	6.64481E-23
a Dependent Variable: CNDT				

<b>Regression--Commercial WA &amp; ID</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>0.4506</b>	<b>0.8338</b>
<b>Shoulder</b>	<b>0.0348</b>	<b>0.9949</b>
<b>Dec-Jan-Feb</b>	<b>0.0509</b>	<b>0.9949</b>
		<b>0.3757</b>
		<b>0.0346</b>
		<b>0.0506</b>

<b>Regression--Industrial Firm WA &amp; ID</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	4.9951	0.0694	71.9937	6.7538E-166
NHDDD	0.1382	0.0045	30.8456	5.40506E-86
NQDDD	0.0426	0.0041	10.5052	1.58638E-21
a Dependent Variable: INDT				

<b>Regression--Industrial Firm WA &amp; ID</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>4.9951</b>	<b>0.8338</b>
<b>Shoulder</b>	<b>0.1382</b>	<b>0.9949</b>
<b>Dec-Jan-Feb</b>	<b>0.1807</b>	<b>0.9949</b>
		<b>4.1648</b>
		<b>0.1375</b>
		<b>0.1798</b>

<b>Regression--Residential Medford</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.0624	0.0040	15.5902	1.8892E-38
MHDDD	0.0072	0.0004	18.9490	8.79367E-50
MQDDD	0.0044	0.0004	12.4908	5.49618E-28
a Dependent Variable: RMDT				

<b>Regression--Residential Medford</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>0.0624</b>	<b>0.7317</b>
<b>Shoulder</b>	<b>0.0072</b>	<b>0.9697</b>
<b>Dec-Jan-Feb</b>	<b>0.0116</b>	<b>0.9697</b>
		<b>0.0457</b>
		<b>0.0070</b>
		<b>0.0113</b>

<b>Regression--Commercial Medford</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.4316	0.0158	27.2788	6.36763E-76
MHDDD	0.0284	0.0015	18.9966	6.10584E-50
MQDDD	0.0197	0.0014	14.0385	3.4927E-33
a Dependent Variable: CMDT				

<b>Regression--Commercial Medford</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>0.4316</b>	<b>0.7317</b>
<b>Shoulder</b>	<b>0.0284</b>	<b>0.9697</b>
<b>Dec-Jan-Feb</b>	<b>0.0481</b>	<b>0.9697</b>
		<b>0.3158</b>
		<b>0.0276</b>
		<b>0.0467</b>

<b>Regression--Residential Roseburg</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.0525	0.0036	14.5863	4.86366E-35
RHDDD	0.0087	0.0004	22.2809	1.18563E-60
RQDDD	0.0029	0.0004	7.8538	1.29554E-13
a Dependent Variable: RRDT				

<b>Regression--Residential Roseburg</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>0.0525</b>	<b>1.2997</b>
<b>Shoulder</b>	<b>0.0087</b>	<b>0.9974</b>
<b>Dec-Jan-Feb</b>	<b>0.0115</b>	<b>0.9974</b>
		<b>0.0682</b>
		<b>0.0087</b>
		<b>0.0115</b>

<b>Regression--Commercial Roseburg</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.3382	0.0140	24.0826	2.60566E-66
RHDDD	0.0289	0.0015	19.0055	5.70236E-50
RQDDD	0.0168	0.0014	11.8422	7.65352E-26
a Dependent Variable: CRDT				

<b>Regression--Commercial Roseburg</b>		
	<b>Calibration</b>	<b>Final</b>
	<b>Correction (%)</b>	
<b>Base</b>	<b>0.3382</b>	<b>1.2997</b>
<b>Shoulder</b>	<b>0.0289</b>	<b>0.9974</b>
<b>Dec-Jan-Feb</b>	<b>0.0457</b>	<b>0.9974</b>
		<b>0.4395</b>
		<b>0.0288</b>
		<b>0.0456</b>

**Appendix 2.3 - Avista Utilities 2006 Firm Natural Gas Forecast Sendout Model Coefficients**

<b>Regression--Industrial Firm Roseburg</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	11.2737	0.3693	30.5295	3.9604E-85
RHDDD	0.3957	0.0400	9.8879	1.35669E-19
RQDDD	(0.1390)	0.0373	(3.7224)	0.00024527

a Dependent Variable: IRDT

<b>Regression--Industrial Firm Roseburg</b>			
<b>Base</b>	<b>11.2737</b>	1.2997	<b>14.6529</b>
<b>Shoulder</b>	<b>0.3957</b>	0.9974	<b>0.3946</b>
<b>Dec-Jan-Feb</b>	<b>0.2567</b>	0.9974	<b>0.2560</b>

<b>Regression--Residential Klamath Falls</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.0322	0.0055	5.8760	1.37752E-08
KHDDD	0.0065	0.0003	19.0936	2.90359E-50
KQDDD	0.0035	0.0003	12.1496	7.43026E-27

a Dependent Variable: RKDT

<b>Regression--Residential Klamath Falls</b>			
<b>Base</b>	<b>0.0322</b>	1.5804	<b>0.0509</b>
<b>Shoulder</b>	<b>0.0065</b>	0.7895	<b>0.0051</b>
<b>Dec-Jan-Feb</b>	<b>0.0100</b>	0.7895	<b>0.0079</b>

<b>Regression--Commercial Klamath Falls</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.2455	0.0203	12.0710	1.35135E-26
KHDDD	0.0236	0.0013	18.6908	6.38794E-49
KQDDD	0.0150	0.0011	14.0894	2.34868E-33

a Dependent Variable: CKDT

<b>Regression--Commercial Klamath Falls</b>			
<b>Base</b>	<b>0.2455</b>	1.5804	<b>0.3880</b>
<b>Shoulder</b>	<b>0.0236</b>	0.7895	<b>0.0186</b>
<b>Dec-Jan-Feb</b>	<b>0.0386</b>	0.7895	<b>0.0305</b>

<b>Regression--Residential La Grande</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.0467	0.0062	7.4723	1.41839E-12
LHDDD	0.0078	0.0004	18.5116	2.53713E-48
LQDDD	0.0020	0.0004	5.5189	8.73254E-08

a Dependent Variable: RLDT

<b>Regression--Residential La Grande</b>			
<b>Base</b>	<b>0.0467</b>	0.9885	<b>0.0462</b>
<b>Shoulder</b>	<b>0.0078</b>	1.0117	<b>0.0079</b>
<b>Dec-Jan-Feb</b>	<b>0.0098</b>	1.0117	<b>0.0099</b>

<b>Regression--Commercial La Grande</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	0.2512	0.0278	9.0255	5.60655E-17
LHDDD	0.0278	0.0019	14.8103	8.44083E-36
LQDDD	0.0112	0.0016	6.9517	3.30707E-11

a Dependent Variable: CLDT

<b>Regression--Commercial La Grande</b>			
<b>Base</b>	<b>0.2512</b>	0.9885	<b>0.2483</b>
<b>Shoulder</b>	<b>0.0278</b>	1.0117	<b>0.0282</b>
<b>Dec-Jan-Feb</b>	<b>0.0391</b>	1.0117	<b>0.0395</b>

<b>Regression--Industrial Firm La Grande</b>				
Coefficients				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	18.0576	1.8580	9.7187	4.50666E-19
LHDDD	(0.4669)	0.1254	(3.7219)	0.000245711
LQDDD	0.0598	0.1078	0.5545	0.579751186

a Dependent Variable: ILDT

<b>Regression--Industrial Firm La Grande</b>			
<b>Base</b>	<b>18.0576</b>	0.9885	<b>17.8507</b>
<b>Shoulder</b>	-	1.0117	-
<b>Dec-Jan-Feb</b>	-	1.0117	-

Shoulder months = March, April, May, June, September, October, November  
 Summer months = July and August with no temperature sensitive load

# **Detailed Demand Data**

## **Appendix 2.4**

**Appendix 2.4 - A**  
**Annual Avg. Demand (MDth/d)**  
 (Net of DSM Savings)

Area	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
<b>Case #2</b>										
Klam Falls	3.82	4.03	4.15	4.30	4.41	4.51	4.57	4.66	4.75	4.87
La Grande	2.29	2.41	2.47	2.54	2.60	2.66	2.70	2.74	2.78	2.83
Medford	10.18	10.93	11.39	11.92	12.39	12.87	13.19	13.59	14.00	14.51
Medford NWP	3.39	3.64	3.80	3.97	4.13	4.29	4.40	4.53	4.67	4.84
Roseburg	4.39	4.69	4.90	5.14	5.35	5.58	5.76	5.97	6.19	6.44
<b>OR Sub-total</b>	<b>24.07</b>	<b>25.70</b>	<b>26.70</b>	<b>27.87</b>	<b>28.87</b>	<b>29.92</b>	<b>30.62</b>	<b>31.48</b>	<b>32.39</b>	<b>33.49</b>
Spokane	48.72	52.14	54.24	56.90	59.29	61.77	63.54	65.47	67.29	69.41
Spokane NWP	20.88	22.34	23.24	24.38	25.40	26.47	27.22	28.05	28.83	29.73
<b>WA/ID Sub-total</b>	<b>69.60</b>	<b>74.49</b>	<b>77.48</b>	<b>81.28</b>	<b>84.69</b>	<b>88.24</b>	<b>90.76</b>	<b>93.52</b>	<b>96.12</b>	<b>99.14</b>
<b>Scenario #2 Total</b>	<b>93.67</b>	<b>100.19</b>	<b>104.17</b>	<b>109.15</b>	<b>113.57</b>	<b>118.15</b>	<b>121.38</b>	<b>125.00</b>	<b>128.50</b>	<b>132.64</b>
<b>Case #6</b>										
Klam Falls	3.67	3.75	3.82	3.89	3.93	3.97	3.97	3.99	4.01	4.05
La Grande	2.21	2.25	2.29	2.33	2.36	2.38	2.38	2.39	2.39	2.41
Medford	9.69	10.02	10.27	10.55	10.75	10.95	11.03	11.17	11.32	11.52
Medford NWP	3.23	3.34	3.42	3.52	3.58	3.65	3.68	3.72	3.77	3.84
Roseburg	4.21	4.34	4.45	4.58	4.68	4.77	4.84	4.92	5.01	5.12
<b>OR Sub-total</b>	<b>23.02</b>	<b>23.70</b>	<b>24.26</b>	<b>24.87</b>	<b>25.31</b>	<b>25.72</b>	<b>25.89</b>	<b>26.19</b>	<b>26.50</b>	<b>26.94</b>
Spokane	46.64	48.06	49.30	50.69	51.78	52.77	53.32	54.04	54.66	55.47
Spokane NWP	19.99	20.60	21.13	21.73	22.19	22.62	22.85	23.16	23.43	23.77
<b>WA/ID Sub-total</b>	<b>66.63</b>	<b>68.66</b>	<b>70.43</b>	<b>72.42</b>	<b>73.97</b>	<b>75.39</b>	<b>76.18</b>	<b>77.19</b>	<b>78.09</b>	<b>79.24</b>
<b>Scenario #6 Total</b>	<b>89.65</b>	<b>92.37</b>	<b>94.69</b>	<b>97.29</b>	<b>99.27</b>	<b>101.10</b>	<b>102.07</b>	<b>103.39</b>	<b>104.59</b>	<b>106.18</b>
<b>Case #7</b>										
Klam Falls	4.11	4.31	4.51	4.72	4.90	5.08	5.21	5.38	5.56	5.76
La Grande	2.46	2.56	2.65	2.75	2.86	2.95	3.03	3.11	3.19	3.29
Medford	11.05	11.85	12.57	13.32	14.08	14.82	15.42	16.12	16.85	17.69
Medford NWP	3.68	3.95	4.19	4.44	4.69	4.94	5.14	5.37	5.62	5.90
Roseburg	4.71	5.04	5.36	5.70	6.05	6.39	6.71	7.06	7.43	7.84
<b>OR Sub-total</b>	<b>26.00</b>	<b>27.70</b>	<b>29.28</b>	<b>30.94</b>	<b>32.58</b>	<b>34.18</b>	<b>35.51</b>	<b>37.04</b>	<b>38.65</b>	<b>40.48</b>
Spokane	52.78	56.30	59.64	63.42	67.32	71.15	74.44	77.87	81.15	84.71
Spokane NWP	22.62	24.13	25.56	27.18	28.85	30.49	31.90	33.37	34.78	36.31
<b>WA/ID Sub-total</b>	<b>75.41</b>	<b>80.42</b>	<b>85.21</b>	<b>90.60</b>	<b>96.17</b>	<b>101.64</b>	<b>106.34</b>	<b>111.24</b>	<b>115.93</b>	<b>121.02</b>
<b>Scenario #7 Total</b>	<b>101.41</b>	<b>108.13</b>	<b>114.48</b>	<b>121.54</b>	<b>128.75</b>	<b>135.82</b>	<b>141.85</b>	<b>148.29</b>	<b>154.59</b>	<b>161.50</b>

**Appendix 2.4 - A**  
**Annual Avg. Demand (MDth/d)**  
 (Net of DSM Savings)

Area	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026
<b>Case #2</b>										
Klam Falls	4.95	5.05	5.17	5.31	5.40	5.51	5.64	5.79	5.89	5.95
La Grande	2.86	2.89	2.94	2.99	3.03	3.07	3.11	3.17	3.21	3.23
Medford	14.81	15.20	15.64	16.18	16.52	16.98	17.43	17.97	18.32	18.51
Medford NWP	4.94	5.07	5.21	5.39	5.51	5.66	5.81	5.99	6.11	6.17
Roseburg	6.63	6.84	7.08	7.34	7.54	7.77	8.02	8.30	8.53	8.61
<b>OR Sub-total</b>	<b>34.18</b>	<b>35.06</b>	<b>36.04</b>	<b>37.21</b>	<b>37.99</b>	<b>38.99</b>	<b>40.01</b>	<b>41.21</b>	<b>42.06</b>	<b>42.47</b>
Spokane	70.44	71.89	73.46	75.24	76.41	77.79	79.19	80.84	81.94	82.40
Spokane NWP	30.19	30.81	31.48	32.24	32.74	33.34	33.93	34.64	35.11	35.31
<b>WAID Sub-total</b>	<b>100.62</b>	<b>102.70</b>	<b>104.94</b>	<b>107.48</b>	<b>109.16</b>	<b>111.13</b>	<b>113.13</b>	<b>115.48</b>	<b>117.05</b>	<b>117.71</b>
<b>Scenario #2 Total</b>	<b>134.80</b>	<b>137.76</b>	<b>140.98</b>	<b>144.69</b>	<b>147.14</b>	<b>150.12</b>	<b>153.14</b>	<b>156.69</b>	<b>159.10</b>	<b>160.19</b>
<b>Case #6</b>										
Klam Falls	4.08	4.13	4.19	4.26	4.29	4.35	4.41	4.49	4.54	4.57
La Grande	2.42	2.44	2.46	2.49	2.50	2.52	2.54	2.57	2.58	2.59
Medford	11.63	11.84	12.05	12.32	12.46	12.68	12.90	13.18	13.33	13.44
Medford NWP	3.88	3.95	4.02	4.11	4.15	4.23	4.30	4.39	4.44	4.48
Roseburg	5.20	5.31	5.42	5.55	5.64	5.75	5.87	6.01	6.12	6.17
<b>OR Sub-total</b>	<b>27.20</b>	<b>27.66</b>	<b>28.12</b>	<b>28.73</b>	<b>29.05</b>	<b>29.53</b>	<b>30.02</b>	<b>30.65</b>	<b>31.00</b>	<b>31.25</b>
Spokane	55.96	56.74	57.46	58.36	58.82	59.47	60.09	60.93	61.32	61.56
Spokane NWP	23.98	24.32	24.63	25.01	25.21	25.48	25.75	26.11	26.27	26.38
<b>WAID Sub-total</b>	<b>79.94</b>	<b>81.05</b>	<b>82.09</b>	<b>83.37</b>	<b>84.03</b>	<b>84.95</b>	<b>85.84</b>	<b>87.04</b>	<b>87.59</b>	<b>87.94</b>
<b>Scenario #6 Total</b>	<b>107.14</b>	<b>108.71</b>	<b>110.21</b>	<b>112.10</b>	<b>113.08</b>	<b>114.48</b>	<b>115.86</b>	<b>117.69</b>	<b>118.60</b>	<b>119.19</b>
<b>Case #7</b>										
Klam Falls	5.90	6.10	6.30	6.53	6.69	6.89	7.10	7.34	7.53	7.61
La Grande	3.34	3.42	3.50	3.60	3.67	3.75	3.83	3.92	3.99	4.03
Medford	18.28	19.01	19.77	20.64	21.27	22.03	22.79	23.66	24.29	24.57
Medford NWP	6.09	6.34	6.59	6.88	7.09	7.34	7.60	7.89	8.10	8.19
Roseburg	8.18	8.56	8.94	9.37	9.71	10.10	10.51	10.95	11.33	11.46
<b>OR Sub-total</b>	<b>41.80</b>	<b>43.43</b>	<b>45.11</b>	<b>47.01</b>	<b>48.43</b>	<b>50.12</b>	<b>51.82</b>	<b>53.77</b>	<b>55.24</b>	<b>55.85</b>
Spokane	86.30	89.21	91.97	94.97	97.17	99.70	102.13	104.92	106.98	107.71
Spokane NWP	36.99	38.23	39.42	40.70	41.64	42.72	43.76	44.96	45.84	46.16
<b>WAID Sub-total</b>	<b>123.29</b>	<b>127.44</b>	<b>131.39</b>	<b>135.67</b>	<b>138.82</b>	<b>142.42</b>	<b>145.89</b>	<b>149.88</b>	<b>152.83</b>	<b>153.87</b>
<b>Scenario #7 Total</b>	<b>165.09</b>	<b>170.87</b>	<b>176.49</b>	<b>182.68</b>	<b>187.25</b>	<b>192.54</b>	<b>197.71</b>	<b>203.65</b>	<b>208.06</b>	<b>209.72</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area Case #2	2006/2007			2007/2008				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	2.40	1.42	-	3.82	2.54	1.49	-	4.03
La Grande	1.40	0.82	0.06	2.29	1.48	0.86	0.06	2.41
Medford	6.35	3.83	-	10.18	6.86	4.08	-	10.93
Medford NWP	2.12	1.28	-	3.39	2.29	1.36	-	3.64
Roseburg	2.45	1.91	0.04	4.39	2.63	2.02	0.04	4.69
<b>OR Sub-total</b>	<b>14.72</b>	<b>9.26</b>	<b>0.09</b>	<b>24.07</b>	<b>15.80</b>	<b>9.81</b>	<b>0.09</b>	<b>25.70</b>
Spokane	29.57	17.80	1.35	48.72	31.79	18.96	1.39	52.14
Spokane NWP	12.67	7.63	0.58	20.88	13.62	8.12	0.60	22.34
<b>WA/ID Sub-total</b>	<b>42.25</b>	<b>25.42</b>	<b>1.92</b>	<b>69.60</b>	<b>45.42</b>	<b>27.08</b>	<b>1.99</b>	<b>74.49</b>
<b>Scenario #2 Total</b>	<b>56.97</b>	<b>34.68</b>	<b>2.02</b>	<b>93.67</b>	<b>61.21</b>	<b>36.89</b>	<b>2.09</b>	<b>100.19</b>
<b>Case #6</b>								
Klam Falls	2.30	1.38	-	3.67	2.35	1.41	-	3.75
La Grande	1.35	0.80	0.06	2.21	1.38	0.82	0.06	2.25
Medford	6.02	3.67	-	9.69	6.23	3.78	-	10.02
Medford NWP	2.01	1.22	-	3.23	2.08	1.26	-	3.34
Roseburg	2.33	1.85	0.04	4.21	2.41	1.89	0.04	4.34
<b>OR Sub-total</b>	<b>14.01</b>	<b>8.92</b>	<b>0.09</b>	<b>23.02</b>	<b>14.45</b>	<b>9.16</b>	<b>0.09</b>	<b>23.70</b>
Spokane	28.28	17.05	1.32	46.64	29.21	17.52	1.34	48.06
Spokane NWP	12.12	7.31	0.56	19.99	12.52	7.51	0.57	20.60
<b>WA/ID Sub-total</b>	<b>40.40</b>	<b>24.35</b>	<b>1.88</b>	<b>66.63</b>	<b>41.73</b>	<b>25.03</b>	<b>1.91</b>	<b>68.66</b>
<b>Scenario #6 Total</b>	<b>54.41</b>	<b>33.27</b>	<b>1.97</b>	<b>89.65</b>	<b>56.17</b>	<b>34.19</b>	<b>2.00</b>	<b>92.37</b>
<b>Case #7</b>								
Klam Falls	2.60	1.51	-	4.11	2.74	1.58	-	4.31
La Grande	1.52	0.88	0.06	2.46	1.59	0.91	0.06	2.56
Medford	6.94	4.10	-	11.05	7.48	4.37	-	11.85
Medford NWP	2.31	1.37	-	3.68	2.49	1.46	-	3.95
Roseburg	2.64	2.03	0.04	4.71	2.85	2.15	0.04	5.04
<b>OR Sub-total</b>	<b>16.01</b>	<b>9.89</b>	<b>0.10</b>	<b>26.00</b>	<b>17.15</b>	<b>10.46</b>	<b>0.09</b>	<b>27.70</b>
Spokane	32.16	19.21	1.41	52.78	34.46	20.39	1.45	56.30
Spokane NWP	13.78	8.23	0.60	22.62	14.77	8.74	0.62	24.13
<b>WA/ID Sub-total</b>	<b>45.95</b>	<b>27.44</b>	<b>2.02</b>	<b>75.41</b>	<b>49.23</b>	<b>29.12</b>	<b>2.07</b>	<b>80.42</b>
<b>Scenario #7 Total</b>	<b>61.96</b>	<b>37.33</b>	<b>2.11</b>	<b>101.41</b>	<b>66.38</b>	<b>39.58</b>	<b>2.17</b>	<b>108.13</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area	2008/2009				2009/2010			
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
<b>Case #2</b>								
Klam Falls	2.62	1.53	-	4.15	2.71	1.58	-	4.30
La Grande	1.53	0.88	0.06	2.47	1.58	0.91	0.06	2.54
Medford	7.17	4.22	-	11.39	7.54	4.38	-	11.92
Medford NWP	2.39	1.41	-	3.80	2.51	1.46	-	3.97
Roseburg	2.77	2.09	0.04	4.90	2.93	2.17	0.04	5.14
<b>OR Sub-total</b>	<b>16.47</b>	<b>10.13</b>	<b>0.09</b>	<b>26.70</b>	<b>17.28</b>	<b>10.50</b>	<b>0.09</b>	<b>27.87</b>
Spokane	33.16	19.66	1.42	54.24	34.93	20.51	1.46	56.90
Spokane NWP	14.21	8.42	0.61	23.24	14.97	8.79	0.62	24.38
<b>WA/ID Sub-total</b>	<b>47.37</b>	<b>28.08</b>	<b>2.03</b>	<b>77.48</b>	<b>49.90</b>	<b>29.30</b>	<b>2.08</b>	<b>81.28</b>
<b>Scenario #2 Total</b>	<b>63.85</b>	<b>38.21</b>	<b>2.12</b>	<b>104.17</b>	<b>67.18</b>	<b>39.80</b>	<b>2.17</b>	<b>109.15</b>
<b>Case #6</b>								
Klam Falls	2.39	1.43	-	3.82	2.43	1.46	-	3.89
La Grande	1.41	0.83	0.06	2.29	1.43	0.84	0.06	2.33
Medford	6.40	3.87	-	10.27	6.59	3.96	-	10.55
Medford NWP	2.13	1.29	-	3.42	2.20	1.32	-	3.52
Roseburg	2.48	1.93	0.04	4.45	2.57	1.98	0.04	4.58
<b>OR Sub-total</b>	<b>14.81</b>	<b>9.35</b>	<b>0.09</b>	<b>24.26</b>	<b>15.22</b>	<b>9.55</b>	<b>0.09</b>	<b>24.87</b>
Spokane	30.03	17.92	1.35	49.30	30.96	18.36	1.37	50.69
Spokane NWP	12.87	7.68	0.58	21.13	13.27	7.87	0.59	21.73
<b>WA/ID Sub-total</b>	<b>42.90</b>	<b>25.60</b>	<b>1.93</b>	<b>70.43</b>	<b>44.23</b>	<b>26.23</b>	<b>1.96</b>	<b>72.42</b>
<b>Scenario #6 Total</b>	<b>57.72</b>	<b>34.95</b>	<b>2.02</b>	<b>94.69</b>	<b>59.44</b>	<b>35.78</b>	<b>2.06</b>	<b>97.29</b>
<b>Case #7</b>								
Klam Falls	2.87	1.64	-	4.51	3.01	1.71	-	4.72
La Grande	1.65	0.94	0.06	2.65	1.72	0.97	0.06	2.75
Medford	7.98	4.59	-	12.57	8.51	4.81	-	13.32
Medford NWP	2.66	1.53	-	4.19	2.84	1.60	-	4.44
Roseburg	3.07	2.25	0.04	5.36	3.30	2.36	0.04	5.70
<b>OR Sub-total</b>	<b>18.24</b>	<b>10.95</b>	<b>0.09</b>	<b>29.28</b>	<b>19.39</b>	<b>11.45</b>	<b>0.09</b>	<b>30.94</b>
Spokane	36.67	21.49	1.49	59.64	39.19	22.69	1.54	63.42
Spokane NWP	15.71	9.21	0.64	25.56	16.80	9.73	0.66	27.18
<b>WA/ID Sub-total</b>	<b>52.38</b>	<b>30.70</b>	<b>2.13</b>	<b>85.21</b>	<b>55.99</b>	<b>32.42</b>	<b>2.20</b>	<b>90.60</b>
<b>Scenario #7 Total</b>	<b>70.62</b>	<b>41.65</b>	<b>2.22</b>	<b>114.48</b>	<b>75.37</b>	<b>43.87</b>	<b>2.29</b>	<b>121.54</b>



**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area	2010/2011			2011/2012				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
<b>Case #2</b>								
Klam Falls	2.79	1.62	-	4.41	2.86	1.65	-	4.51
La Grande	1.62	0.93	0.06	2.60	1.66	0.95	0.06	2.66
Medford	7.87	4.52	-	12.39	8.22	4.66	-	12.87
Medford NWP	2.62	1.51	-	4.13	2.74	1.55	-	4.29
Roseburg	3.08	2.23	0.04	5.35	3.24	2.30	0.04	5.58
<b>OR Sub-total</b>	<b>17.98</b>	<b>10.80</b>	<b>0.09</b>	<b>28.87</b>	<b>18.71</b>	<b>11.11</b>	<b>0.09</b>	<b>29.92</b>
Spokane	36.57	21.24	1.49	59.29	38.28	21.97	1.52	61.77
Spokane NWP	15.67	9.10	0.64	25.40	16.40	9.42	0.65	26.47
<b>WA/ID Sub-total</b>	<b>52.23</b>	<b>30.34</b>	<b>2.12</b>	<b>84.69</b>	<b>54.68</b>	<b>31.39</b>	<b>2.17</b>	<b>88.24</b>
<b>Scenario #2 Total</b>	<b>70.21</b>	<b>41.14</b>	<b>2.22</b>	<b>113.57</b>	<b>73.39</b>	<b>42.50</b>	<b>2.26</b>	<b>118.15</b>
<b>Case #6</b>								
Klam Falls	2.46	1.48	-	3.93	2.48	1.49	-	3.97
La Grande	1.45	0.85	0.06	2.36	1.46	0.86	0.06	2.38
Medford	6.73	4.02	-	10.75	6.87	4.08	-	10.95
Medford NWP	2.24	1.34	-	3.58	2.29	1.36	-	3.65
Roseburg	2.63	2.01	0.04	4.68	2.70	2.04	0.04	4.77
<b>OR Sub-total</b>	<b>15.51</b>	<b>9.70</b>	<b>0.09</b>	<b>25.31</b>	<b>15.80</b>	<b>9.83</b>	<b>0.09</b>	<b>25.72</b>
Spokane	31.71	18.68	1.39	51.78	32.41	18.96	1.40	52.77
Spokane NWP	13.59	8.00	0.60	22.19	13.89	8.12	0.60	22.62
<b>WA/ID Sub-total</b>	<b>45.30</b>	<b>26.68</b>	<b>1.98</b>	<b>73.97</b>	<b>46.30</b>	<b>27.08</b>	<b>2.00</b>	<b>75.39</b>
<b>Scenario #6 Total</b>	<b>60.81</b>	<b>36.38</b>	<b>2.08</b>	<b>99.27</b>	<b>62.10</b>	<b>36.91</b>	<b>2.10</b>	<b>101.10</b>
<b>Case #7</b>								
Klam Falls	3.14	1.77	-	4.90	3.26	1.82	-	5.08
La Grande	1.80	1.00	0.06	2.86	1.86	1.03	0.06	2.95
Medford	9.05	5.03	-	14.08	9.59	5.24	-	14.82
Medford NWP	3.02	1.68	-	4.69	3.20	1.75	-	4.94
Roseburg	3.55	2.46	0.04	6.05	3.79	2.56	0.04	6.39
<b>OR Sub-total</b>	<b>20.54</b>	<b>11.94</b>	<b>0.09</b>	<b>32.58</b>	<b>21.69</b>	<b>12.39</b>	<b>0.10</b>	<b>34.18</b>
Spokane	41.85	23.89	1.59	67.32	44.50	25.02	1.63	71.15
Spokane NWP	17.93	10.24	0.68	28.85	19.07	10.72	0.70	30.49
<b>WA/ID Sub-total</b>	<b>59.78</b>	<b>34.12</b>	<b>2.27</b>	<b>96.17</b>	<b>63.57</b>	<b>35.75</b>	<b>2.32</b>	<b>101.64</b>
<b>Scenario #7 Total</b>	<b>80.32</b>	<b>46.06</b>	<b>2.36</b>	<b>128.75</b>	<b>85.26</b>	<b>48.14</b>	<b>2.42</b>	<b>135.82</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area	2012/2013				2013/2014			
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
<b>Case #2</b>								
Klam Falls	2.90	1.67	-	4.57	2.95	1.70	-	4.66
La Grande	1.69	0.95	0.06	2.70	1.72	0.97	0.06	2.74
Medford	8.45	4.74	-	13.19	8.73	4.86	-	13.59
Medford NWP	2.82	1.58	-	4.40	2.91	1.62	-	4.53
Roseburg	3.37	2.35	0.04	5.76	3.51	2.42	0.04	5.97
<b>OR Sub-total</b>	<b>19.23</b>	<b>11.30</b>	<b>0.09</b>	<b>30.62</b>	<b>19.82</b>	<b>11.57</b>	<b>0.09</b>	<b>31.48</b>
Spokane	39.54	22.47	1.53	63.54	40.92	23.00	1.55	65.47
Spokane NWP	16.94	9.63	0.65	27.22	17.53	9.86	0.66	28.05
<b>WA/ID Sub-total</b>	<b>56.48</b>	<b>32.10</b>	<b>2.18</b>	<b>90.76</b>	<b>58.44</b>	<b>32.86</b>	<b>2.21</b>	<b>93.52</b>
<b>Scenario #2 Total</b>	<b>75.71</b>	<b>43.40</b>	<b>2.27</b>	<b>121.38</b>	<b>78.26</b>	<b>44.43</b>	<b>2.31</b>	<b>125.00</b>
<b>Case #6</b>								
Klam Falls	2.48	1.49	-	3.97	2.49	1.50	-	3.99
La Grande	1.46	0.86	0.06	2.38	1.47	0.86	0.06	2.39
Medford	6.93	4.10	-	11.03	7.02	4.15	-	11.17
Medford NWP	2.31	1.37	-	3.68	2.34	1.38	-	3.72
Roseburg	2.75	2.05	0.04	4.84	2.81	2.08	0.04	4.92
<b>OR Sub-total</b>	<b>15.92</b>	<b>9.87</b>	<b>0.09</b>	<b>25.89</b>	<b>16.12</b>	<b>9.98</b>	<b>0.09</b>	<b>26.19</b>
Spokane	32.84	19.08	1.40	53.32	33.37	19.25	1.41	54.04
Spokane NWP	14.07	8.18	0.60	22.85	14.30	8.25	0.61	23.16
<b>WA/ID Sub-total</b>	<b>46.91</b>	<b>27.26</b>	<b>2.01</b>	<b>76.18</b>	<b>47.67</b>	<b>27.50</b>	<b>2.02</b>	<b>77.19</b>
<b>Scenario #6 Total</b>	<b>62.83</b>	<b>37.13</b>	<b>2.10</b>	<b>102.07</b>	<b>63.80</b>	<b>37.48</b>	<b>2.11</b>	<b>103.39</b>
<b>Case #7</b>								
Klam Falls	3.36	1.86	-	5.21	3.47	1.91	-	5.38
La Grande	1.92	1.05	0.06	3.03	1.98	1.08	0.06	3.11
Medford	10.03	5.39	-	15.42	10.51	5.61	-	16.12
Medford NWP	3.34	1.80	-	5.14	3.50	1.87	-	5.37
Roseburg	4.01	2.65	0.04	6.71	4.26	2.76	0.04	7.06
<b>OR Sub-total</b>	<b>22.66</b>	<b>12.75</b>	<b>0.09</b>	<b>35.51</b>	<b>23.72</b>	<b>13.23</b>	<b>0.09</b>	<b>37.04</b>
Spokane	46.81	25.98	1.65	74.44	49.23	26.96	1.69	77.87
Spokane NWP	20.06	11.13	0.71	31.90	21.10	11.55	0.72	33.37
<b>WA/ID Sub-total</b>	<b>66.87</b>	<b>37.11</b>	<b>2.36</b>	<b>106.34</b>	<b>70.33</b>	<b>38.51</b>	<b>2.41</b>	<b>111.24</b>
<b>Scenario #7 Total</b>	<b>89.53</b>	<b>49.87</b>	<b>2.45</b>	<b>141.85</b>	<b>94.05</b>	<b>51.74</b>	<b>2.50</b>	<b>148.29</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area Case #2	2014/2015			2015/2016				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	3.01	1.74	-	4.75	3.07	1.79	-	4.87
La Grande	1.74	0.98	0.06	2.78	1.78	1.00	0.06	2.83
Medford	9.00	5.00	-	14.00	9.34	5.17	-	14.51
Medford NWP	3.00	1.67	-	4.67	3.11	1.72	-	4.84
Roseburg	3.66	2.49	0.04	6.19	3.83	2.58	0.04	6.44
<b>OR Sub-total</b>	<b>20.41</b>	<b>11.89</b>	<b>0.09</b>	<b>32.39</b>	<b>21.14</b>	<b>12.26</b>	<b>0.09</b>	<b>33.49</b>
Spokane	42.20	23.52	1.57	67.29	43.66	24.15	1.60	69.41
Spokane NWP	18.07	10.08	0.67	28.83	18.70	10.35	0.68	29.73
<b>WA/ID Sub-total</b>	<b>60.27</b>	<b>33.60</b>	<b>2.24</b>	<b>96.12</b>	<b>62.37</b>	<b>34.49</b>	<b>2.28</b>	<b>99.14</b>
<b>Scenario #2 Total</b>	<b>80.68</b>	<b>45.49</b>	<b>2.33</b>	<b>128.50</b>	<b>83.50</b>	<b>46.76</b>	<b>2.38</b>	<b>132.64</b>
<b>Case #6</b>								
Klam Falls	2.49	1.52	-	4.01	2.51	1.54	-	4.05
La Grande	1.47	0.87	0.06	2.39	1.48	0.87	0.06	2.41
Medford	7.11	4.20	-	11.32	7.25	4.28	-	11.52
Medford NWP	2.37	1.40	-	3.77	2.42	1.43	-	3.84
Roseburg	2.86	2.11	0.04	5.01	2.93	2.15	0.04	5.12
<b>OR Sub-total</b>	<b>16.31</b>	<b>10.10</b>	<b>0.09</b>	<b>26.50</b>	<b>16.58</b>	<b>10.26</b>	<b>0.09</b>	<b>26.94</b>
Spokane	33.84	19.40	1.42	54.66	34.41	19.63	1.43	55.47
Spokane NWP	14.50	8.31	0.61	23.43	14.75	8.41	0.61	23.77
<b>WA/ID Sub-total</b>	<b>48.34</b>	<b>27.72</b>	<b>2.03</b>	<b>78.09</b>	<b>49.15</b>	<b>28.04</b>	<b>2.05</b>	<b>79.24</b>
<b>Scenario #6 Total</b>	<b>64.65</b>	<b>37.81</b>	<b>2.12</b>	<b>104.59</b>	<b>65.73</b>	<b>38.30</b>	<b>2.14</b>	<b>106.18</b>
<b>Case #7</b>								
Klam Falls	3.58	1.98	-	5.56	3.70	2.06	-	5.76
La Grande	2.04	1.10	0.06	3.19	2.10	1.13	0.06	3.29
Medford	11.00	5.85	-	16.85	11.57	6.12	-	17.69
Medford NWP	3.67	1.95	-	5.62	3.86	2.04	-	5.90
Roseburg	4.51	2.89	0.04	7.43	4.78	3.02	0.04	7.84
<b>OR Sub-total</b>	<b>24.79</b>	<b>13.77</b>	<b>0.09</b>	<b>38.65</b>	<b>26.01</b>	<b>14.37</b>	<b>0.10</b>	<b>40.48</b>
Spokane	51.53	27.91	1.72	81.15	53.98	28.97	1.76	84.71
Spokane NWP	22.08	11.96	0.74	34.78	23.13	12.42	0.76	36.31
<b>WA/ID Sub-total</b>	<b>73.61</b>	<b>39.87</b>	<b>2.46</b>	<b>115.93</b>	<b>77.11</b>	<b>41.39</b>	<b>2.52</b>	<b>121.02</b>
<b>Scenario #7 Total</b>	<b>98.40</b>	<b>53.64</b>	<b>2.55</b>	<b>154.59</b>	<b>103.12</b>	<b>55.76</b>	<b>2.62</b>	<b>161.50</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area Case #2	2016/2017			2017/2018				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	3.13	1.83	-	4.95	3.19	1.86	-	5.05
La Grande	1.79	1.01	0.06	2.86	1.82	1.02	0.06	2.89
Medford	9.53	5.28	-	14.81	9.79	5.41	-	15.20
Medford NWP	3.18	1.76	-	4.94	3.26	1.80	-	5.07
Roseburg	3.96	2.64	0.04	6.63	4.11	2.70	0.04	6.84
<b>OR Sub-total</b>	<b>21.58</b>	<b>12.50</b>	<b>0.09</b>	<b>34.18</b>	<b>22.18</b>	<b>12.79</b>	<b>0.09</b>	<b>35.06</b>
Spokane	44.32	24.51	1.60	70.44	45.32	24.96	1.61	71.89
Spokane NWP	19.00	10.50	0.69	30.19	19.42	10.70	0.69	30.81
<b>WA/ID Sub-total</b>	<b>63.32</b>	<b>35.02</b>	<b>2.29</b>	<b>100.62</b>	<b>64.74</b>	<b>35.65</b>	<b>2.31</b>	<b>102.70</b>
<b>Scenario #2 Total</b>	<b>84.90</b>	<b>47.52</b>	<b>2.38</b>	<b>134.80</b>	<b>86.91</b>	<b>48.44</b>	<b>2.40</b>	<b>137.76</b>
<b>Case #6</b>								
Klam Falls	2.53	1.55	-	4.08	2.56	1.57	-	4.13
La Grande	1.48	0.88	0.06	2.42	1.50	0.88	0.06	2.44
Medford	7.31	4.32	-	11.63	7.45	4.39	-	11.84
Medford NWP	2.44	1.44	-	3.88	2.48	1.46	-	3.95
Roseburg	2.98	2.18	0.04	5.20	3.06	2.21	0.04	5.31
<b>OR Sub-total</b>	<b>16.75</b>	<b>10.36</b>	<b>0.09</b>	<b>27.20</b>	<b>17.05</b>	<b>10.51</b>	<b>0.09</b>	<b>27.66</b>
Spokane	34.76	19.77	1.43	55.96	35.29	20.00	1.44	56.74
Spokane NWP	14.90	8.47	0.61	23.98	15.12	8.57	0.62	24.32
<b>WA/ID Sub-total</b>	<b>49.65</b>	<b>28.24</b>	<b>2.05</b>	<b>79.94</b>	<b>50.41</b>	<b>28.58</b>	<b>2.06</b>	<b>81.05</b>
<b>Scenario #6 Total</b>	<b>66.40</b>	<b>38.60</b>	<b>2.14</b>	<b>107.14</b>	<b>67.47</b>	<b>39.09</b>	<b>2.15</b>	<b>108.71</b>
<b>Case #7</b>								
Klam Falls	3.78	2.12	-	5.90	3.91	2.19	-	6.10
La Grande	2.13	1.15	0.06	3.34	2.19	1.17	0.06	3.42
Medford	11.96	6.32	-	18.28	12.46	6.55	-	19.01
Medford NWP	3.99	2.11	-	6.09	4.15	2.18	-	6.34
Roseburg	5.01	3.13	0.04	8.18	5.28	3.24	0.04	8.56
<b>OR Sub-total</b>	<b>26.88</b>	<b>14.82</b>	<b>0.09</b>	<b>41.80</b>	<b>27.99</b>	<b>15.34</b>	<b>0.09</b>	<b>43.43</b>
Spokane	54.83	29.69	1.78	86.30	56.81	30.59	1.81	89.21
Spokane NWP	23.50	12.73	0.76	36.99	24.35	13.11	0.77	38.23
<b>WA/ID Sub-total</b>	<b>78.33</b>	<b>42.42</b>	<b>2.54</b>	<b>123.29</b>	<b>81.16</b>	<b>43.70</b>	<b>2.58</b>	<b>127.44</b>
<b>Scenario #7 Total</b>	<b>105.21</b>	<b>57.24</b>	<b>2.64</b>	<b>165.09</b>	<b>109.15</b>	<b>59.05</b>	<b>2.67</b>	<b>170.87</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area Case #2	2018/2019			2019/2020				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	3.26	1.91	-	5.17	3.34	1.96	-	5.31
La Grande	1.85	1.03	0.06	2.94	1.89	1.05	0.06	2.99
Medford	10.08	5.56	-	15.64	10.43	5.75	-	16.18
Medford NWP	3.36	1.85	-	5.21	3.48	1.92	-	5.39
Roseburg	4.27	2.77	0.04	7.08	4.45	2.85	0.04	7.34
<b>OR Sub-total</b>	<b>22.83</b>	<b>13.12</b>	<b>0.09</b>	<b>36.04</b>	<b>23.59</b>	<b>13.53</b>	<b>0.09</b>	<b>37.21</b>
Spokane	46.40	25.43	1.63	73.46	47.65	25.95	1.65	75.24
Spokane NWP	19.88	10.90	0.70	31.48	20.42	11.12	0.71	32.24
<b>WA/ID Sub-total</b>	<b>66.28</b>	<b>36.33</b>	<b>2.33</b>	<b>104.94</b>	<b>68.06</b>	<b>37.07</b>	<b>2.35</b>	<b>107.48</b>
<b>Scenario #2 Total</b>	<b>89.11</b>	<b>49.45</b>	<b>2.42</b>	<b>140.98</b>	<b>91.65</b>	<b>50.59</b>	<b>2.44</b>	<b>144.69</b>
<b>Case #6</b>								
Klam Falls	2.59	1.59	-	4.19	2.64	1.62	-	4.26
La Grande	1.51	0.89	0.06	2.46	1.53	0.90	0.06	2.49
Medford	7.58	4.46	-	12.05	7.76	4.56	-	12.32
Medford NWP	2.53	1.49	-	4.02	2.59	1.52	-	4.11
Roseburg	3.14	2.24	0.04	5.42	3.23	2.29	0.04	5.55
<b>OR Sub-total</b>	<b>17.36</b>	<b>10.67</b>	<b>0.09</b>	<b>28.12</b>	<b>17.74</b>	<b>10.89</b>	<b>0.09</b>	<b>28.73</b>
Spokane	35.79	20.22	1.45	57.46	36.41	20.49	1.46	58.36
Spokane NWP	15.34	8.67	0.62	24.63	15.60	8.78	0.62	25.01
<b>WA/ID Sub-total</b>	<b>51.13</b>	<b>28.89</b>	<b>2.07</b>	<b>82.09</b>	<b>52.01</b>	<b>29.28</b>	<b>2.08</b>	<b>83.37</b>
<b>Scenario #6 Total</b>	<b>68.48</b>	<b>39.56</b>	<b>2.16</b>	<b>110.21</b>	<b>69.75</b>	<b>40.17</b>	<b>2.18</b>	<b>112.10</b>
<b>Case #7</b>								
Klam Falls	4.03	2.27	-	6.30	4.17	2.36	-	6.53
La Grande	2.25	1.20	0.06	3.50	2.31	1.23	0.06	3.60
Medford	12.96	6.81	-	19.77	13.53	7.11	-	20.64
Medford NWP	4.32	2.27	-	6.59	4.51	2.37	-	6.88
Roseburg	5.56	3.35	0.04	8.94	5.85	3.48	0.04	9.37
<b>OR Sub-total</b>	<b>29.12</b>	<b>15.89</b>	<b>0.09</b>	<b>45.11</b>	<b>30.37</b>	<b>16.54</b>	<b>0.10</b>	<b>47.01</b>
Spokane	58.70	31.44	1.84	91.97	60.81	32.30	1.86	94.97
Spokane NWP	25.16	13.47	0.79	39.42	26.06	13.84	0.80	40.70
<b>WA/ID Sub-total</b>	<b>83.86</b>	<b>44.91</b>	<b>2.62</b>	<b>131.39</b>	<b>86.86</b>	<b>46.15</b>	<b>2.66</b>	<b>135.67</b>
<b>Scenario #7 Total</b>	<b>112.98</b>	<b>60.80</b>	<b>2.72</b>	<b>176.49</b>	<b>117.23</b>	<b>62.69</b>	<b>2.75</b>	<b>182.68</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area	2020/2021			2021/2022				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
<b>Case #2</b>								
Klam Falls	3.40	2.00	-	5.40	3.47	2.04	-	5.51
La Grande	1.91	1.06	0.06	3.03	1.94	1.07	0.06	3.07
Medford	10.65	5.87	-	16.52	10.94	6.03	-	16.98
Medford NWP	3.55	1.96	-	5.51	3.65	2.01	-	5.66
Roseburg	4.60	2.90	0.04	7.54	4.77	2.97	0.04	7.77
<b>OR Sub-total</b>	<b>24.11</b>	<b>13.79</b>	<b>0.09</b>	<b>37.99</b>	<b>24.78</b>	<b>14.12</b>	<b>0.09</b>	<b>38.99</b>
Spokane	48.52	26.24	1.65	76.41	49.49	26.64	1.66	77.79
Spokane NWP	20.79	11.24	0.71	32.74	21.21	11.42	0.71	33.34
<b>WA/ID Sub-total</b>	<b>69.32</b>	<b>37.48</b>	<b>2.36</b>	<b>109.16</b>	<b>70.70</b>	<b>38.06</b>	<b>2.38</b>	<b>111.13</b>
<b>Scenario #2 Total</b>	<b>93.42</b>	<b>51.27</b>	<b>2.45</b>	<b>147.14</b>	<b>95.48</b>	<b>52.18</b>	<b>2.47</b>	<b>150.12</b>
<b>Case #6</b>								
Klam Falls	2.66	1.64	-	4.29	2.69	1.66	-	4.35
La Grande	1.54	0.90	0.06	2.50	1.55	0.91	0.06	2.52
Medford	7.85	4.62	-	12.46	7.99	4.69	-	12.68
Medford NWP	2.62	1.54	-	4.15	2.66	1.56	-	4.23
Roseburg	3.29	2.31	0.04	5.64	3.38	2.34	0.04	5.75
<b>OR Sub-total</b>	<b>17.95</b>	<b>11.00</b>	<b>0.09</b>	<b>29.05</b>	<b>18.28</b>	<b>11.16</b>	<b>0.09</b>	<b>29.53</b>
Spokane	36.77	20.59	1.46	58.82	37.22	20.78	1.46	59.47
Spokane NWP	15.75	8.83	0.63	25.21	15.95	8.91	0.63	25.48
<b>WA/ID Sub-total</b>	<b>52.52</b>	<b>29.42</b>	<b>2.08</b>	<b>84.03</b>	<b>53.17</b>	<b>29.69</b>	<b>2.09</b>	<b>84.95</b>
<b>Scenario #6 Total</b>	<b>70.48</b>	<b>40.42</b>	<b>2.18</b>	<b>113.08</b>	<b>71.45</b>	<b>40.85</b>	<b>2.18</b>	<b>114.48</b>
<b>Case #7</b>								
Klam Falls	4.28	2.42	-	6.69	4.40	2.49	-	6.89
La Grande	2.36	1.24	0.06	3.67	2.42	1.27	0.06	3.75
Medford	13.94	7.33	-	21.27	14.44	7.59	-	22.03
Medford NWP	4.65	2.44	-	7.09	4.81	2.53	-	7.34
Roseburg	6.10	3.57	0.04	9.71	6.38	3.68	0.04	10.10
<b>OR Sub-total</b>	<b>31.32</b>	<b>17.01</b>	<b>0.09</b>	<b>48.43</b>	<b>32.46</b>	<b>17.57</b>	<b>0.09</b>	<b>50.12</b>
Spokane	62.41	32.89	1.87	97.17	64.19	33.61	1.90	99.70
Spokane NWP	26.74	14.09	0.80	41.64	27.51	14.40	0.81	42.72
<b>WA/ID Sub-total</b>	<b>89.16</b>	<b>46.98</b>	<b>2.68</b>	<b>138.82</b>	<b>91.70</b>	<b>48.01</b>	<b>2.71</b>	<b>142.42</b>
<b>Scenario #7 Total</b>	<b>120.48</b>	<b>63.99</b>	<b>2.77</b>	<b>187.25</b>	<b>124.15</b>	<b>65.58</b>	<b>2.80</b>	<b>192.54</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area Case #2	2022/2023			2023/2024				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	3.55	2.09	-	5.64	3.64	2.15	-	5.79
La Grande	1.98	1.08	0.06	3.11	2.02	1.10	0.06	3.17
Medford	11.23	6.19	-	17.43	11.58	6.38	-	17.97
Medford NWP	3.74	2.06	-	5.81	3.86	2.13	-	5.99
Roseburg	4.95	3.04	0.04	8.02	5.15	3.11	0.04	8.30
<b>OR Sub-total</b>	<b>25.45</b>	<b>14.47</b>	<b>0.09</b>	<b>40.01</b>	<b>26.25</b>	<b>14.87</b>	<b>0.09</b>	<b>41.21</b>
Spokane	50.50	27.01	1.68	79.19	51.67	27.48	1.69	80.84
Spokane NWP	21.64	11.58	0.72	33.93	22.14	11.78	0.72	34.64
<b>WA/ID Sub-total</b>	<b>72.14</b>	<b>38.59</b>	<b>2.39</b>	<b>113.13</b>	<b>73.81</b>	<b>39.26</b>	<b>2.41</b>	<b>115.48</b>
<b>Scenario #2 Total</b>	<b>97.59</b>	<b>53.06</b>	<b>2.49</b>	<b>153.14</b>	<b>100.06</b>	<b>54.12</b>	<b>2.51</b>	<b>156.69</b>
<b>Case #6</b>								
Klam Falls	2.73	1.68	-	4.41	2.78	1.71	-	4.49
La Grande	1.57	0.91	0.06	2.54	1.59	0.92	0.06	2.57
Medford	8.13	4.77	-	12.90	8.31	4.87	-	13.18
Medford NWP	2.71	1.59	-	4.30	2.77	1.62	-	4.39
Roseburg	3.46	2.37	0.04	5.87	3.56	2.41	0.04	6.01
<b>OR Sub-total</b>	<b>18.60</b>	<b>11.33</b>	<b>0.09</b>	<b>30.02</b>	<b>19.01</b>	<b>11.54</b>	<b>0.09</b>	<b>30.65</b>
Spokane	37.67	20.95	1.47	60.09	38.27	21.19	1.48	60.93
Spokane NWP	16.14	8.98	0.63	25.75	16.39	9.08	0.63	26.11
<b>WA/ID Sub-total</b>	<b>53.81</b>	<b>29.93</b>	<b>2.10</b>	<b>85.84</b>	<b>54.66</b>	<b>30.27</b>	<b>2.11</b>	<b>87.04</b>
<b>Scenario #6 Total</b>	<b>72.41</b>	<b>41.26</b>	<b>2.19</b>	<b>115.86</b>	<b>73.67</b>	<b>41.81</b>	<b>2.20</b>	<b>117.69</b>
<b>Case #7</b>								
Klam Falls	4.53	2.57	-	7.10	4.68	2.66	-	7.34
La Grande	2.48	1.29	0.06	3.83	2.55	1.32	0.06	3.92
Medford	14.93	7.86	-	22.79	15.50	8.16	-	23.66
Medford NWP	4.98	2.62	-	7.60	5.17	2.72	-	7.89
Roseburg	6.68	3.79	0.04	10.51	7.00	3.92	0.04	10.95
<b>OR Sub-total</b>	<b>33.59</b>	<b>18.14</b>	<b>0.09</b>	<b>51.82</b>	<b>34.90</b>	<b>18.77</b>	<b>0.10</b>	<b>53.77</b>
Spokane	65.93	34.28	1.92	102.13	67.92	35.06	1.94	104.92
Spokane NWP	28.25	14.69	0.82	43.76	29.10	15.02	0.83	44.96
<b>WA/ID Sub-total</b>	<b>94.18</b>	<b>48.97</b>	<b>2.74</b>	<b>145.89</b>	<b>97.02</b>	<b>50.08</b>	<b>2.77</b>	<b>149.88</b>
<b>Scenario #7 Total</b>	<b>127.78</b>	<b>67.10</b>	<b>2.83</b>	<b>197.71</b>	<b>131.92</b>	<b>68.86</b>	<b>2.87</b>	<b>203.65</b>

**Appendix 2.4 - B**  
**Annual Avg. Demand (MDth/d)**  
 By Class (Net of DSM Savings)

Area	2024/2025				2025/2026			
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
<b>Case #2</b>								
Klam Falls	3.71	2.19	-	5.89	3.75	2.20	-	5.95
La Grande	2.04	1.10	0.06	3.21	2.06	1.11	0.06	3.23
Medford	11.82	6.50	-	18.32	11.96	6.55	-	18.51
Medford NWP	3.94	2.17	-	6.11	3.99	2.18	-	6.17
Roseburg	5.33	3.16	0.04	8.53	5.40	3.18	0.04	8.61
<b>OR Sub-total</b>	<b>26.84</b>	<b>15.12</b>	<b>0.09</b>	<b>42.06</b>	<b>27.15</b>	<b>15.23</b>	<b>0.09</b>	<b>42.47</b>
Spokane	52.50	27.74	1.70	81.94	52.84	27.86	1.70	82.40
Spokane NWP	22.49	11.89	0.73	35.11	22.64	11.94	0.73	35.31
<b>WA/ID Sub-total</b>	<b>74.99</b>	<b>39.63</b>	<b>2.42</b>	<b>117.05</b>	<b>75.48</b>	<b>39.80</b>	<b>2.43</b>	<b>117.71</b>
<b>Scenario #2 Total</b>	<b>101.84</b>	<b>54.75</b>	<b>2.52</b>	<b>159.10</b>	<b>102.64</b>	<b>55.03</b>	<b>2.52</b>	<b>160.19</b>
<b>Case #6</b>								
Klam Falls	2.81	1.73	-	4.54	2.84	1.74	-	4.57
La Grande	1.60	0.92	0.06	2.58	1.61	0.93	0.06	2.59
Medford	8.41	4.92	-	13.33	8.49	4.95	-	13.44
Medford NWP	2.80	1.64	-	4.44	2.83	1.65	-	4.48
Roseburg	3.65	2.44	0.04	6.12	3.68	2.45	0.04	6.17
<b>OR Sub-total</b>	<b>19.26</b>	<b>11.65</b>	<b>0.09</b>	<b>31.00</b>	<b>19.45</b>	<b>11.71</b>	<b>0.09</b>	<b>31.25</b>
Spokane	38.57	21.27	1.48	61.32	38.75	21.33	1.48	61.56
Spokane NWP	16.52	9.12	0.63	26.27	16.60	9.14	0.63	26.38
<b>WA/ID Sub-total</b>	<b>55.10</b>	<b>30.39</b>	<b>2.11</b>	<b>87.59</b>	<b>55.35</b>	<b>30.47</b>	<b>2.11</b>	<b>87.94</b>
<b>Scenario #6 Total</b>	<b>74.36</b>	<b>42.03</b>	<b>2.20</b>	<b>118.60</b>	<b>74.81</b>	<b>42.18</b>	<b>2.21</b>	<b>119.19</b>
<b>Case #7</b>								
Klam Falls	4.80	2.72	-	7.53	4.86	2.74	-	7.61
La Grande	2.60	1.33	0.06	3.99	2.63	1.34	0.06	4.03
Medford	15.92	8.37	-	24.29	16.12	8.45	-	24.57
Medford NWP	5.31	2.79	-	8.10	5.37	2.82	-	8.19
Roseburg	7.29	4.00	0.04	11.33	7.39	4.03	0.04	11.46
<b>OR Sub-total</b>	<b>35.92</b>	<b>19.22</b>	<b>0.09</b>	<b>55.24</b>	<b>36.37</b>	<b>19.38</b>	<b>0.09</b>	<b>55.85</b>
Spokane	69.45	35.58	1.96	106.98	69.99	35.77	1.96	107.71
Spokane NWP	29.76	15.25	0.84	45.84	29.99	15.33	0.84	46.16
<b>WA/ID Sub-total</b>	<b>99.21</b>	<b>50.82</b>	<b>2.79</b>	<b>152.83</b>	<b>99.97</b>	<b>51.10</b>	<b>2.80</b>	<b>153.87</b>
<b>Scenario #7 Total</b>	<b>135.13</b>	<b>70.04</b>	<b>2.89</b>	<b>208.06</b>	<b>136.35</b>	<b>70.48</b>	<b>2.90</b>	<b>209.72</b>



**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2006/2007			2007/2008			Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial	
Klam Falls	876.10	518.76	-	927.25	544.47	-	1,471.72
La Grande	512.27	300.66	21.35	541.60	315.44	21.24	878.27
Medford	2,318.33	1,396.65	-	2,503.05	1,487.80	-	3,990.85
Medford NWP	772.78	465.55	-	834.35	495.93	-	1,330.28
Roseburg	892.68	698.29	13.17	959.41	738.09	13.24	1,710.74
<b>OR Sub-total</b>	<b>5,372.16</b>	<b>3,379.90</b>	<b>34.52</b>	<b>5,765.65</b>	<b>3,581.73</b>	<b>34.48</b>	<b>9,381.86</b>
Spokane	10,794.49	6,495.69	491.74	11,604.50	6,918.91	508.89	19,032.30
Spokane NWP	4,625.78	2,783.87	210.75	4,972.49	2,965.25	218.10	8,155.84
<b>WA/ID Sub-total</b>	<b>15,420.27</b>	<b>9,279.55</b>	<b>702.49</b>	<b>16,576.99</b>	<b>9,884.16</b>	<b>726.99</b>	<b>27,188.14</b>
<b>Case #2 Total</b>	<b>20,792.43</b>	<b>12,659.46</b>	<b>737.01</b>	<b>22,342.65</b>	<b>13,465.89</b>	<b>761.47</b>	<b>36,570.01</b>
<b>Case #6</b>							
Klam Falls	838.15	502.52	-	857.06	513.18	-	1,370.24
La Grande	492.67	291.34	21.35	503.77	297.51	21.24	822.51
Medford	2,197.48	1,340.99	-	2,275.27	1,381.41	-	3,656.68
Medford NWP	732.49	447.00	-	758.42	460.47	-	1,218.89
Roseburg	851.20	674.11	13.10	878.76	691.43	13.11	1,583.30
<b>OR Sub-total</b>	<b>5,111.99</b>	<b>3,255.96</b>	<b>34.45</b>	<b>5,273.28</b>	<b>3,344.00</b>	<b>34.34</b>	<b>8,651.62</b>
Spokane	10,322.40	6,221.68	480.33	10,661.19	6,394.93	487.52	17,543.64
Spokane NWP	4,423.89	2,666.43	205.85	4,569.08	2,740.68	208.94	7,518.70
<b>WA/ID Sub-total</b>	<b>14,746.28</b>	<b>8,888.12</b>	<b>686.18</b>	<b>15,230.27</b>	<b>9,135.61</b>	<b>696.46</b>	<b>25,062.34</b>
<b>Case #6 Total</b>	<b>19,858.28</b>	<b>12,144.07</b>	<b>720.63</b>	<b>20,503.54</b>	<b>12,479.61</b>	<b>730.80</b>	<b>33,713.96</b>
<b>Case #7</b>							
Klam Falls	948.41	550.24	-	999.48	575.18	-	1,574.66
La Grande	553.42	321.53	21.35	578.80	332.78	21.24	932.81
Medford	2,533.25	1,498.30	-	2,731.02	1,593.44	-	4,324.47
Medford NWP	844.42	499.43	-	910.34	531.15	-	1,441.49
Roseburg	965.17	741.32	13.38	1,040.04	784.61	13.37	1,838.02
<b>OR Sub-total</b>	<b>5,844.68</b>	<b>3,610.83</b>	<b>34.73</b>	<b>6,259.68</b>	<b>3,817.16</b>	<b>34.61</b>	<b>10,111.45</b>
Spokane	11,739.79	7,011.46	515.03	12,577.39	7,440.86	530.15	20,548.40
Spokane NWP	5,031.34	3,004.91	220.73	5,390.31	3,188.94	227.21	8,806.46
<b>WA/ID Sub-total</b>	<b>16,771.13</b>	<b>10,016.37</b>	<b>735.75</b>	<b>17,967.70</b>	<b>10,629.80</b>	<b>757.35</b>	<b>29,354.86</b>
<b>Case #7 Total</b>	<b>22,615.80</b>	<b>13,627.21</b>	<b>770.48</b>	<b>24,227.38</b>	<b>14,446.97</b>	<b>791.96</b>	<b>39,466.30</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2008/2009			2009/2010			Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial	
Klam Falls	955.67	559.27	-	990.36	577.86	-	1,568.22
La Grande	556.70	322.07	21.18	575.80	330.84	21.18	927.83
Medford	2,617.69	1,539.35	-	2,752.55	1,598.86	-	4,351.41
Medford NWP	872.56	513.12	-	917.52	532.95	-	1,450.47
Roseburg	1,010.63	762.86	13.24	1,069.84	791.44	13.28	1,874.57
<b>OR Sub-total</b>	<b>6,013.25</b>	<b>3,696.67</b>	<b>34.42</b>	<b>6,306.07</b>	<b>3,831.96</b>	<b>34.47</b>	<b>10,172.49</b>
Spokane	12,104.17	7,174.74	517.66	12,750.34	7,485.43	531.45	20,767.23
Spokane NWP	5,186.21	3,074.89	221.85	5,462.71	3,208.04	227.77	8,898.52
<b>WA/ID Sub-total</b>	<b>17,290.37</b>	<b>10,249.64</b>	<b>739.51</b>	<b>18,213.05</b>	<b>10,693.47</b>	<b>759.22</b>	<b>29,665.74</b>
<b>Case #2 Total</b>	<b>23,303.62</b>	<b>13,946.31</b>	<b>773.93</b>	<b>24,519.12</b>	<b>14,525.43</b>	<b>793.69</b>	<b>39,838.24</b>
<b>Case #6</b>							
Klam Falls	871.92	522.14	-	888.56	532.33	-	1,420.89
La Grande	512.98	302.47	21.18	522.83	307.83	21.18	851.84
Medford	2,336.56	1,411.42	-	2,405.09	1,444.03	-	3,849.11
Medford NWP	778.85	470.47	-	801.70	481.34	-	1,283.04
Roseburg	906.32	705.76	13.12	936.57	721.37	13.16	1,671.10
<b>OR Sub-total</b>	<b>5,406.63</b>	<b>3,412.27</b>	<b>34.30</b>	<b>5,554.75</b>	<b>3,486.90</b>	<b>34.34</b>	<b>9,075.99</b>
Spokane	10,961.56	6,541.02	493.37	11,299.63	6,702.20	501.53	18,503.35
Spokane NWP	4,697.81	2,803.30	211.44	4,842.70	2,872.37	214.94	7,930.01
<b>WA/ID Sub-total</b>	<b>15,659.38</b>	<b>9,344.32</b>	<b>704.81</b>	<b>16,142.33</b>	<b>9,574.57</b>	<b>716.47</b>	<b>26,433.36</b>
<b>Case #6 Total</b>	<b>21,066.01</b>	<b>12,756.59</b>	<b>739.11</b>	<b>21,697.08</b>	<b>13,061.47</b>	<b>750.81</b>	<b>35,509.35</b>
<b>Case #7</b>							
Klam Falls	1,048.05	598.26	-	1,098.30	623.60	-	1,721.90
La Grande	603.36	342.74	21.18	629.19	353.84	21.18	1,004.21
Medford	2,913.80	1,674.01	-	3,106.88	1,755.78	-	4,862.66
Medford NWP	971.27	558.00	-	1,035.63	585.29	-	1,620.91
Roseburg	1,120.12	822.57	13.37	1,206.31	862.28	13.40	2,081.99
<b>OR Sub-total</b>	<b>6,656.61</b>	<b>3,995.59</b>	<b>34.55</b>	<b>7,076.31</b>	<b>4,180.79</b>	<b>34.58</b>	<b>11,291.68</b>
Spokane	13,382.82	7,844.10	543.11	14,304.62	8,282.81	561.48	23,148.91
Spokane NWP	5,735.49	3,361.76	232.76	6,130.55	3,549.77	240.64	9,920.96
<b>WA/ID Sub-total</b>	<b>19,118.31</b>	<b>11,205.86</b>	<b>775.87</b>	<b>20,435.17</b>	<b>11,832.58</b>	<b>802.12</b>	<b>33,069.87</b>
<b>Case #7 Total</b>	<b>25,774.92</b>	<b>15,201.45</b>	<b>810.42</b>	<b>27,511.48</b>	<b>16,013.37</b>	<b>836.70</b>	<b>44,361.55</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2010/2011			2011/2012			Total	Residential	Commercial	Firm Industrial	Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial					
<b>Case #2</b>											
Klam Falls	1,016.71	591.52	-	1,608.23	1,042.34	604.06	1,646.39				
La Grande	591.03	338.05	21.18	950.27	606.41	345.02	972.67			21.24	
Medford	2,871.97	1,648.69	-	4,520.66	2,999.24	1,699.48	4,698.72			-	
Medford NWP	957.32	549.56	-	1,506.89	999.75	566.49	1,566.24			-	
Roseburg	1,124.86	815.12	13.30	1,953.28	1,182.33	839.29	2,034.97			13.35	
<b>OR Sub-total</b>	<b>6,561.90</b>	<b>3,942.94</b>	<b>34.49</b>	<b>10,539.33</b>	<b>6,830.06</b>	<b>4,054.34</b>	<b>10,918.99</b>			<b>34.59</b>	
Spokane	13,347.10	7,750.79	542.93	21,640.82	13,972.67	8,019.95	22,545.91			553.30	
Spokane NWP	5,718.03	3,321.77	232.69	9,272.48	5,985.69	3,437.12	9,659.94			237.13	
<b>WA/ID Sub-total</b>	<b>19,065.12</b>	<b>11,072.55</b>	<b>775.62</b>	<b>30,913.30</b>	<b>19,958.36</b>	<b>11,457.06</b>	<b>32,205.85</b>			<b>790.42</b>	
<b>Case #2 Total</b>	<b>25,627.02</b>	<b>15,015.49</b>	<b>810.11</b>	<b>41,452.63</b>	<b>26,788.43</b>	<b>15,511.40</b>	<b>43,124.84</b>			<b>825.01</b>	
<b>Case #6</b>											
Klam Falls	897.45	538.76	-	1,436.22	904.50	543.59	1,448.08			-	
La Grande	528.51	311.29	21.18	860.98	532.85	313.79	867.88			21.24	
Medford	2,456.27	1,467.60	-	3,923.87	2,506.88	1,489.52	3,996.40			-	
Medford NWP	818.76	489.20	-	1,307.96	835.63	496.51	1,332.13			-	
Roseburg	961.47	732.87	13.17	1,707.51	985.41	743.54	1,742.15			13.20	
<b>OR Sub-total</b>	<b>5,662.46</b>	<b>3,539.72</b>	<b>34.36</b>	<b>9,236.53</b>	<b>5,765.27</b>	<b>3,586.94</b>	<b>9,386.64</b>			<b>34.44</b>	
Spokane	11,574.06	6,817.41	507.15	18,898.61	11,830.48	6,919.00	19,261.60			512.12	
Spokane NWP	4,960.31	2,921.75	217.35	8,099.41	5,070.21	2,965.28	8,254.97			219.48	
<b>WA/ID Sub-total</b>	<b>16,534.37</b>	<b>9,739.15</b>	<b>724.50</b>	<b>26,998.02</b>	<b>16,900.69</b>	<b>9,884.28</b>	<b>27,516.57</b>			<b>731.60</b>	
<b>Case #6 Total</b>	<b>22,196.83</b>	<b>13,278.87</b>	<b>758.85</b>	<b>36,234.55</b>	<b>22,665.95</b>	<b>13,471.22</b>	<b>36,903.21</b>			<b>766.04</b>	
<b>Case #7</b>											
Klam Falls	1,144.30	645.74	-	1,790.04	1,188.58	664.32	1,852.90			-	
La Grande	655.45	365.46	21.18	1,042.09	679.69	375.58	1,076.50			21.24	
Medford	3,302.25	1,835.68	-	5,137.93	3,499.20	1,910.87	5,410.07			-	
Medford NWP	1,100.75	611.89	-	1,712.64	1,166.40	636.96	1,803.36			-	
Roseburg	1,294.71	899.68	13.43	2,207.82	1,382.61	935.55	2,331.64			13.48	
<b>OR Sub-total</b>	<b>7,497.46</b>	<b>4,358.45</b>	<b>34.62</b>	<b>11,890.52</b>	<b>7,916.49</b>	<b>4,523.27</b>	<b>12,474.47</b>			<b>34.71</b>	
Spokane	15,274.44	8,718.43	579.07	24,571.94	16,242.06	9,133.35	25,969.11			593.71	
Spokane NWP	6,546.19	3,736.47	248.17	10,530.83	6,960.88	3,914.29	11,129.62			254.45	
<b>WA/ID Sub-total</b>	<b>21,820.63</b>	<b>12,454.90</b>	<b>827.25</b>	<b>35,102.78</b>	<b>23,202.94</b>	<b>13,047.64</b>	<b>37,098.73</b>			<b>848.16</b>	
<b>Case #7 Total</b>	<b>29,318.08</b>	<b>16,813.35</b>	<b>861.86</b>	<b>46,993.30</b>	<b>31,119.43</b>	<b>17,570.91</b>	<b>49,573.20</b>			<b>882.87</b>	

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2012/2013			2013/2014				
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	1,058.59	610.62	-	1,669.21	1,077.73	622.15	-	1,699.88
La Grande	615.60	348.49	21.18	985.27	626.69	353.09	21.18	1,000.96
Medford	3,085.95	1,729.49	-	4,815.44	3,185.47	1,774.34	-	4,959.81
Medford NWP	1,028.65	576.50	-	1,605.15	1,061.82	591.45	-	1,653.27
Roseburg	1,229.73	857.89	13.31	2,100.93	1,282.30	881.74	13.30	2,177.35
<b>OR Sub-total</b>	<b>7,018.52</b>	<b>4,122.98</b>	<b>34.49</b>	<b>11,175.99</b>	<b>7,234.02</b>	<b>4,222.76</b>	<b>34.49</b>	<b>11,491.26</b>
Spokane	14,432.95	8,201.81	557.01	23,191.77	14,934.98	8,396.78	564.98	23,896.74
Spokane NWP	6,182.53	3,515.06	238.72	9,936.31	6,397.26	3,598.62	242.13	10,238.01
<b>WA/ID Sub-total</b>	<b>20,615.48</b>	<b>11,716.87</b>	<b>795.73</b>	<b>33,128.09</b>	<b>21,332.24</b>	<b>11,995.39</b>	<b>807.11</b>	<b>34,134.74</b>
<b>Case #2 Total</b>	<b>27,634.00</b>	<b>15,839.85</b>	<b>830.22</b>	<b>44,304.08</b>	<b>28,566.26</b>	<b>16,218.15</b>	<b>841.60</b>	<b>45,626.01</b>
<b>Case #6</b>								
Klam Falls	904.33	544.26	-	1,448.59	907.24	548.30	-	1,455.54
La Grande	533.16	314.03	21.18	868.37	535.02	315.20	21.18	871.41
Medford	2,528.97	1,496.45	-	4,025.42	2,563.65	1,513.80	-	4,077.44
Medford NWP	842.99	498.82	-	1,341.81	854.55	504.60	-	1,359.15
Roseburg	1,003.07	749.77	13.16	1,765.99	1,024.04	759.70	13.15	1,796.88
<b>OR Sub-total</b>	<b>5,812.52</b>	<b>3,603.32</b>	<b>34.34</b>	<b>9,450.18</b>	<b>5,884.50</b>	<b>3,641.61</b>	<b>34.33</b>	<b>9,560.43</b>
Spokane	11,985.22	6,964.81	512.77	19,462.80	12,180.64	7,026.41	515.94	19,722.99
Spokane NWP	5,136.52	2,984.92	219.76	8,341.20	5,220.27	3,011.32	221.12	8,452.71
<b>WA/ID Sub-total</b>	<b>17,121.74</b>	<b>9,949.73</b>	<b>732.53</b>	<b>27,804.00</b>	<b>17,400.91</b>	<b>10,037.73</b>	<b>737.06</b>	<b>28,175.71</b>
<b>Case #6 Total</b>	<b>22,934.27</b>	<b>13,553.05</b>	<b>766.87</b>	<b>37,254.18</b>	<b>23,285.41</b>	<b>13,679.34</b>	<b>771.39</b>	<b>37,736.14</b>
<b>Case #7</b>								
Klam Falls	1,224.79	678.16	-	1,902.95	1,265.75	698.80	-	1,964.56
La Grande	700.43	383.39	21.18	1,105.00	722.45	392.43	21.18	1,136.07
Medford	3,660.37	1,968.95	-	5,629.32	3,836.46	2,046.53	-	5,883.00
Medford NWP	1,220.12	656.32	-	1,876.44	1,278.82	682.18	-	1,961.00
Roseburg	1,465.43	968.58	13.45	2,447.46	1,554.63	1,008.47	13.46	2,576.56
<b>OR Sub-total</b>	<b>8,271.14</b>	<b>4,655.40</b>	<b>34.63</b>	<b>12,961.17</b>	<b>8,658.12</b>	<b>4,828.42</b>	<b>34.64</b>	<b>13,521.18</b>
Spokane	17,084.65	9,482.81	601.79	27,169.24	17,968.29	9,839.00	615.36	28,422.65
Spokane NWP	7,321.99	4,064.06	257.91	11,643.96	7,700.69	4,216.72	263.73	12,181.14
<b>WA/ID Sub-total</b>	<b>24,406.64</b>	<b>13,546.87</b>	<b>859.69</b>	<b>38,813.21</b>	<b>25,668.98</b>	<b>14,055.72</b>	<b>879.09</b>	<b>40,603.79</b>
<b>Case #7 Total</b>	<b>32,677.78</b>	<b>18,202.27</b>	<b>894.32</b>	<b>51,774.38</b>	<b>34,327.10</b>	<b>18,884.14</b>	<b>913.73</b>	<b>54,124.97</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2014/2015				2015/2016			
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
Klam Falls	1,096.91	636.76	-	1,733.67	1,121.52	654.35	-	1,775.87
La Grande	636.27	357.81	21.18	1,015.26	648.84	364.08	21.24	1,034.15
Medford	3,285.20	1,825.81	-	5,111.01	3,409.76	1,887.90	-	5,297.66
Medford NWP	1,095.07	608.60	-	1,703.67	1,136.59	629.30	-	1,765.89
Roseburg	1,336.04	909.10	13.30	2,258.43	1,397.93	940.27	13.33	2,351.52
<b>OR Sub-total</b>	<b>7,449.48</b>	<b>4,338.08</b>	<b>34.48</b>	<b>11,822.05</b>	<b>7,714.64</b>	<b>4,475.89</b>	<b>34.57</b>	<b>12,225.09</b>
Spokane	15,402.83	8,585.02	572.40	24,560.25	15,937.50	8,813.45	583.04	25,333.99
Spokane NWP	6,597.33	3,679.30	245.32	10,521.94	6,826.03	3,777.19	249.87	10,853.10
<b>WA/ID Sub-total</b>	<b>22,000.16</b>	<b>12,264.32</b>	<b>817.72</b>	<b>35,082.20</b>	<b>22,763.52</b>	<b>12,590.65</b>	<b>832.91</b>	<b>36,187.08</b>
<b>Case #2 Total</b>	<b>29,449.64</b>	<b>16,602.40</b>	<b>852.20</b>	<b>46,904.25</b>	<b>30,478.16</b>	<b>17,066.53</b>	<b>867.48</b>	<b>48,412.18</b>
<b>Case #6</b>								
Klam Falls	909.37	553.50	-	1,462.86	915.60	560.92	-	1,476.52
La Grande	536.27	316.33	21.18	873.78	539.11	318.55	21.24	878.91
Medford	2,596.74	1,533.53	-	4,130.26	2,644.90	1,560.95	-	4,205.86
Medford NWP	865.58	511.18	-	1,376.75	881.63	520.32	-	1,401.95
Roseburg	1,045.31	770.97	13.13	1,829.42	1,070.78	785.06	13.16	1,869.00
<b>OR Sub-total</b>	<b>5,953.27</b>	<b>3,685.50</b>	<b>34.32</b>	<b>9,673.08</b>	<b>6,052.04</b>	<b>3,745.81</b>	<b>34.39</b>	<b>9,832.24</b>
Spokane	12,351.18	7,081.30	518.86	19,951.33	12,558.70	7,164.00	523.73	20,246.43
Spokane NWP	5,293.36	3,034.84	222.37	8,550.57	5,382.30	3,070.29	224.46	8,677.04
<b>WA/ID Sub-total</b>	<b>17,644.54</b>	<b>10,116.14</b>	<b>741.22</b>	<b>28,501.90</b>	<b>17,941.00</b>	<b>10,234.29</b>	<b>748.18</b>	<b>28,923.48</b>
<b>Case #6 Total</b>	<b>23,597.81</b>	<b>13,801.63</b>	<b>775.54</b>	<b>38,174.98</b>	<b>23,993.04</b>	<b>13,980.09</b>	<b>782.58</b>	<b>38,755.71</b>
<b>Case #7</b>								
Klam Falls	1,305.45	724.08	-	2,029.53	1,351.31	752.64	-	2,103.95
La Grande	742.98	401.51	21.18	1,165.68	765.76	412.14	21.24	1,199.14
Medford	4,015.95	2,134.74	-	6,150.69	4,223.54	2,234.02	-	6,457.56
Medford NWP	1,338.65	711.58	-	2,050.23	1,407.85	744.67	-	2,152.52
Roseburg	1,645.09	1,053.84	13.46	2,712.39	1,745.68	1,103.30	13.51	2,862.49
<b>OR Sub-total</b>	<b>9,048.13</b>	<b>5,025.75</b>	<b>34.65</b>	<b>14,108.52</b>	<b>9,494.14</b>	<b>5,246.78</b>	<b>34.74</b>	<b>14,775.66</b>
Spokane	18,806.71	10,186.58	627.99	29,621.29	19,701.75	10,574.27	644.15	30,920.17
Spokane NWP	8,060.02	4,365.68	269.14	12,694.84	8,443.61	4,531.83	276.07	13,251.50
<b>WA/ID Sub-total</b>	<b>26,866.73</b>	<b>14,552.26</b>	<b>897.13</b>	<b>42,316.12</b>	<b>28,145.35</b>	<b>15,106.10</b>	<b>920.22</b>	<b>44,171.67</b>
<b>Case #7 Total</b>	<b>35,914.86</b>	<b>19,578.01</b>	<b>931.78</b>	<b>56,424.64</b>	<b>37,639.49</b>	<b>20,352.88</b>	<b>954.96</b>	<b>58,947.34</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2016/2017				2017/2018			
	Residential	Commercial	Firm Industrial	Total	Residential	Commercial	Firm Industrial	Total
	Klam Falls	1,140.88	666.35	-	1,807.23	1,164.43	680.14	-
La Grande	654.72	367.17	21.18	1,043.07	663.84	370.91	21.18	1,055.94
Medford	3,478.32	1,926.70	-	5,405.02	3,574.67	1,974.16	-	5,548.82
Medford NWP	1,159.44	642.23	-	1,801.67	1,191.56	658.05	-	1,849.61
Roseburg	1,444.06	961.85	13.28	2,419.19	1,499.47	984.99	13.26	2,497.71
<b>OR Sub-total</b>	<b>7,877.41</b>	<b>4,564.30</b>	<b>34.46</b>	<b>12,476.18</b>	<b>8,093.96</b>	<b>4,668.25</b>	<b>34.44</b>	<b>12,796.65</b>
Spokane	16,177.72	8,946.73	584.40	25,708.85	16,540.43	9,109.83	589.02	26,239.28
Spokane NWP	6,933.31	3,834.31	250.46	11,018.08	7,088.76	3,904.21	252.44	11,245.41
<b>WA/ID Sub-total</b>	<b>23,111.04</b>	<b>12,781.04</b>	<b>834.85</b>	<b>36,726.93</b>	<b>23,629.19</b>	<b>13,014.04</b>	<b>841.46</b>	<b>37,484.69</b>
<b>Case #2 Total</b>	<b>30,988.44</b>	<b>17,345.35</b>	<b>869.32</b>	<b>49,203.11</b>	<b>31,723.15</b>	<b>17,682.28</b>	<b>875.90</b>	<b>50,281.33</b>
<b>Case #6</b>								
Klam Falls	922.98	566.00	-	1,488.98	934.62	573.44	-	1,508.05
La Grande	541.87	319.55	21.18	882.60	546.92	321.79	21.18	889.90
Medford	2,669.15	1,576.79	-	4,245.94	2,718.86	1,601.85	-	4,320.71
Medford NWP	889.72	525.60	-	1,415.31	906.43	533.95	-	1,440.38
Roseburg	1,088.84	794.49	13.11	1,896.44	1,117.00	806.69	13.10	1,936.80
<b>OR Sub-total</b>	<b>6,112.55</b>	<b>3,782.42</b>	<b>34.30</b>	<b>9,929.26</b>	<b>6,223.83</b>	<b>3,837.72</b>	<b>34.29</b>	<b>10,095.83</b>
Spokane	12,685.82	7,215.02	523.67	20,424.52	12,880.91	7,301.54	526.18	20,708.62
Spokane NWP	5,436.78	3,092.15	224.43	8,753.36	5,520.39	3,129.23	225.50	8,875.12
<b>WA/ID Sub-total</b>	<b>18,122.60</b>	<b>10,307.18</b>	<b>748.10</b>	<b>29,177.88</b>	<b>18,401.29</b>	<b>10,430.77</b>	<b>751.68</b>	<b>29,583.75</b>
<b>Case #6 Total</b>	<b>24,235.15</b>	<b>14,089.59</b>	<b>782.40</b>	<b>39,107.14</b>	<b>24,625.12</b>	<b>14,268.49</b>	<b>785.97</b>	<b>39,679.58</b>
<b>Case #7</b>								
Klam Falls	1,380.23	774.70	-	2,154.92	1,425.41	800.17	-	2,225.57
La Grande	779.14	419.37	21.18	1,219.69	799.72	428.25	21.18	1,249.16
Medford	4,366.72	2,305.95	-	6,672.67	4,547.71	2,392.57	-	6,940.28
Medford NWP	1,455.57	768.65	-	2,224.22	1,515.91	797.52	-	2,313.43
Roseburg	1,829.79	1,141.10	13.46	2,984.36	1,927.58	1,182.27	13.46	3,123.31
<b>OR Sub-total</b>	<b>9,811.45</b>	<b>5,409.76</b>	<b>34.65</b>	<b>15,255.86</b>	<b>10,216.33</b>	<b>5,600.78</b>	<b>34.64</b>	<b>15,851.75</b>
Spokane	20,013.22	10,838.62	649.04	31,500.88	20,737.10	11,165.54	659.09	32,561.73
Spokane NWP	8,577.10	4,645.12	278.16	13,500.38	8,887.33	4,785.23	282.47	13,955.03
<b>WA/ID Sub-total</b>	<b>28,590.32</b>	<b>15,483.74</b>	<b>927.20</b>	<b>45,001.25</b>	<b>29,624.43</b>	<b>15,950.77</b>	<b>941.56</b>	<b>46,516.76</b>
<b>Case #7 Total</b>	<b>38,401.77</b>	<b>20,893.50</b>	<b>961.84</b>	<b>60,257.11</b>	<b>39,840.76</b>	<b>21,551.54</b>	<b>976.20</b>	<b>62,368.51</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2018/2019			2019/2020			Total	Residential	Commercial	Firm Industrial	Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial					
<b>Case #2</b>											
Klam Falls	1,190.19	696.29	-	1,886.48	1,220.21	717.11	1,937.32				1,937.32
La Grande	675.02	375.77	21.18	1,071.98	688.81	381.96	1,092.01		21.24		1,092.01
Medford	3,681.00	2,028.78	-	5,709.77	3,806.05	2,098.10	5,904.15		-		5,904.15
Medford NWP	1,227.00	676.26	-	1,903.26	1,268.68	699.37	1,968.05		-		1,968.05
Roseburg	1,559.41	1,010.03	13.24	2,582.68	1,625.35	1,040.44	2,679.06		13.27		2,679.06
<b>OR Sub-total</b>	<b>8,332.61</b>	<b>4,787.13</b>	<b>34.43</b>	<b>13,154.17</b>	<b>8,609.10</b>	<b>4,936.98</b>	<b>13,580.58</b>		<b>34.50</b>		<b>13,580.58</b>
Spokane	16,935.02	9,283.32	595.16	26,813.50	17,391.01	9,470.72	27,462.23		600.51		27,462.23
Spokane NWP	7,257.43	3,978.57	255.07	11,491.07	7,452.42	4,058.88	11,768.66		257.36		11,768.66
<b>WA/ID Sub-total</b>	<b>24,192.45</b>	<b>13,261.89</b>	<b>850.22</b>	<b>38,304.56</b>	<b>24,843.43</b>	<b>13,529.60</b>	<b>39,230.90</b>		<b>857.87</b>		<b>39,230.90</b>
<b>Case #2 Total</b>	<b>32,525.06</b>	<b>18,049.02</b>	<b>884.65</b>	<b>51,458.73</b>	<b>33,452.53</b>	<b>18,466.58</b>	<b>52,811.48</b>		<b>892.38</b>		<b>52,811.48</b>
<b>Case #6</b>											
Klam Falls	946.41	581.26	-	1,527.67	962.46	592.37	1,554.82		-		1,554.82
La Grande	551.74	324.03	21.18	896.95	558.67	327.44	907.34		21.24		907.34
Medford	2,768.46	1,628.29	-	4,396.74	2,832.41	1,665.37	4,497.77		-		4,497.77
Medford NWP	922.82	542.76	-	1,465.58	944.14	555.12	1,499.26		-		1,499.26
Roseburg	1,145.60	818.79	13.09	1,977.48	1,178.26	834.73	2,026.12		13.12		2,026.12
<b>OR Sub-total</b>	<b>6,335.02</b>	<b>3,895.13</b>	<b>34.28</b>	<b>10,264.43</b>	<b>6,475.93</b>	<b>3,975.03</b>	<b>10,485.31</b>		<b>34.36</b>		<b>10,485.31</b>
Spokane	13,063.58	7,382.03	528.95	20,974.56	13,289.37	7,479.86	21,301.31		532.08		21,301.31
Spokane NWP	5,598.24	3,163.73	226.69	8,988.66	5,694.58	3,205.65	9,128.27		228.04		9,128.27
<b>WA/ID Sub-total</b>	<b>18,661.82</b>	<b>10,545.76</b>	<b>755.64</b>	<b>29,963.22</b>	<b>18,983.95</b>	<b>10,685.51</b>	<b>30,429.58</b>		<b>760.12</b>		<b>30,429.58</b>
<b>Case #6 Total</b>	<b>24,996.84</b>	<b>14,440.88</b>	<b>789.92</b>	<b>40,227.65</b>	<b>25,459.88</b>	<b>14,660.54</b>	<b>40,914.89</b>		<b>794.48</b>		<b>40,914.89</b>
<b>Case #7</b>											
Klam Falls	1,471.98	826.98	-	2,298.96	1,522.98	859.98	2,382.96		-		2,382.96
La Grande	820.75	437.22	21.18	1,279.16	844.37	447.60	1,313.20		21.24		1,313.20
Medford	4,731.43	2,484.34	-	7,215.77	4,937.78	2,594.54	7,532.32		-		7,532.32
Medford NWP	1,577.14	828.11	-	2,405.26	1,645.93	864.85	2,510.77		-		2,510.77
Roseburg	2,027.59	1,223.66	13.45	3,264.71	2,134.03	1,271.95	3,419.47		13.49		3,419.47
<b>OR Sub-total</b>	<b>10,628.91</b>	<b>5,800.31</b>	<b>34.64</b>	<b>16,463.85</b>	<b>11,085.09</b>	<b>6,038.92</b>	<b>17,158.73</b>		<b>34.72</b>		<b>17,158.73</b>
Spokane	21,425.80	11,473.88	669.97	33,569.65	22,194.42	11,790.54	34,663.53		678.57		34,663.53
Spokane NWP	9,182.05	4,917.38	287.13	14,386.56	9,511.03	5,053.09	14,854.93		290.82		14,854.93
<b>WA/ID Sub-total</b>	<b>30,607.85</b>	<b>16,391.26</b>	<b>957.10</b>	<b>47,956.21</b>	<b>31,705.44</b>	<b>16,843.63</b>	<b>49,518.46</b>		<b>969.39</b>		<b>49,518.46</b>
<b>Case #7 Total</b>	<b>41,236.76</b>	<b>22,191.57</b>	<b>991.74</b>	<b>64,420.07</b>	<b>42,790.53</b>	<b>22,882.55</b>	<b>66,677.19</b>		<b>1,004.11</b>		<b>66,677.19</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2020/2021			2021/2022			Total	Residential	Commercial	Firm Industrial	Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial					
<b>Case #2</b>											
Klam Falls	1,239.71	729.70	-	1,969.41	1,266.72	745.86	1,969.41	1,266.72	745.86	-	2,012.58
La Grande	697.86	385.13	21.18	1,104.17	709.45	389.74	1,104.17	709.45	389.74	21.18	1,120.38
Medford	3,886.50	2,143.98	-	6,030.48	3,994.59	2,201.31	6,030.48	3,994.59	2,201.31	-	6,195.90
Medford NWP	1,295.50	714.66	-	2,010.16	1,331.53	733.77	2,010.16	1,331.53	733.77	-	2,065.30
Roseburg	1,679.07	1,059.15	13.22	2,751.44	1,741.62	1,083.01	2,751.44	1,741.62	1,083.01	13.21	2,837.84
<b>OR Sub-total</b>	<b>8,798.64</b>	<b>5,032.62</b>	<b>34.40</b>	<b>13,865.66</b>	<b>9,043.91</b>	<b>5,153.70</b>	<b>13,865.66</b>	<b>9,043.91</b>	<b>5,153.70</b>	<b>34.39</b>	<b>14,232.01</b>
Spokane	17,711.18	9,576.42	602.43	27,890.04	18,064.62	9,723.32	27,890.04	18,064.62	9,723.32	606.87	28,394.82
Spokane NWP	7,589.21	4,104.18	258.19	11,951.58	7,740.26	4,167.14	11,951.58	7,740.26	4,167.14	260.09	12,167.48
<b>WA/ID Sub-total</b>	<b>25,300.39</b>	<b>13,680.61</b>	<b>860.62</b>	<b>39,841.62</b>	<b>25,804.88</b>	<b>13,890.46</b>	<b>39,841.62</b>	<b>25,804.88</b>	<b>13,890.46</b>	<b>866.96</b>	<b>40,562.30</b>
<b>Case #2 Total</b>	<b>34,099.03</b>	<b>18,713.23</b>	<b>895.02</b>	<b>53,707.28</b>	<b>34,848.79</b>	<b>19,044.17</b>	<b>53,707.28</b>	<b>34,848.79</b>	<b>19,044.17</b>	<b>901.35</b>	<b>54,794.31</b>
<b>Case #6</b>											
Klam Falls	969.83	597.82	-	1,567.65	982.43	605.88	1,567.65	982.43	605.88	-	1,588.31
La Grande	561.66	328.51	21.18	911.35	566.90	330.70	911.35	566.90	330.70	21.18	918.79
Medford	2,864.08	1,684.89	-	4,548.97	2,916.19	1,712.87	4,548.97	2,916.19	1,712.87	-	4,629.06
Medford NWP	954.69	561.63	-	1,516.32	972.06	570.96	1,516.32	972.06	570.96	-	1,543.02
Roseburg	1,202.57	842.83	13.07	2,058.48	1,232.91	854.50	2,058.48	1,232.91	854.50	13.07	2,100.48
<b>OR Sub-total</b>	<b>6,552.84</b>	<b>4,015.67</b>	<b>34.26</b>	<b>10,602.77</b>	<b>6,670.50</b>	<b>4,074.91</b>	<b>10,602.77</b>	<b>6,670.50</b>	<b>4,074.91</b>	<b>34.25</b>	<b>10,779.66</b>
Spokane	13,420.90	7,517.13	532.31	21,470.34	13,586.80	7,585.49	21,470.34	13,586.80	7,585.49	533.94	21,706.23
Spokane NWP	5,750.52	3,221.63	228.13	9,200.28	5,821.19	3,250.92	9,200.28	5,821.19	3,250.92	228.83	9,300.95
<b>WA/ID Sub-total</b>	<b>19,171.43</b>	<b>10,738.75</b>	<b>760.45</b>	<b>30,670.62</b>	<b>19,407.99</b>	<b>10,836.42</b>	<b>30,670.62</b>	<b>19,407.99</b>	<b>10,836.42</b>	<b>762.77</b>	<b>31,007.18</b>
<b>Case #6 Total</b>	<b>25,724.27</b>	<b>14,754.42</b>	<b>794.70</b>	<b>41,273.39</b>	<b>26,078.49</b>	<b>14,911.33</b>	<b>41,273.39</b>	<b>26,078.49</b>	<b>14,911.33</b>	<b>797.02</b>	<b>41,786.84</b>
<b>Case #7</b>											
Klam Falls	1,561.35	882.32	-	2,443.67	1,607.39	909.16	2,443.67	1,607.39	909.16	-	2,516.55
La Grande	862.92	454.34	21.18	1,338.45	883.88	462.89	1,338.45	883.88	462.89	21.18	1,367.95
Medford	5,087.39	2,676.11	-	7,763.50	5,269.40	2,771.71	7,763.50	5,269.40	2,771.71	-	8,041.11
Medford NWP	1,695.80	892.04	-	2,587.83	1,756.47	923.90	2,587.83	1,756.47	923.90	-	2,680.37
Roseburg	2,225.72	1,304.76	13.44	3,543.93	2,329.50	1,344.17	3,543.93	2,329.50	1,344.17	13.44	3,687.11
<b>OR Sub-total</b>	<b>11,433.19</b>	<b>6,209.57</b>	<b>34.63</b>	<b>17,677.39</b>	<b>11,846.64</b>	<b>6,411.83</b>	<b>17,677.39</b>	<b>11,846.64</b>	<b>6,411.83</b>	<b>34.62</b>	<b>18,293.09</b>
Spokane	22,780.61	12,003.92	684.01	35,468.54	23,429.82	12,267.20	35,468.54	23,429.82	12,267.20	691.85	36,388.88
Spokane NWP	9,761.83	5,144.54	293.15	15,199.51	10,039.63	5,257.37	15,199.51	10,039.63	5,257.37	296.51	15,593.51
<b>WA/ID Sub-total</b>	<b>32,542.44</b>	<b>17,148.46</b>	<b>977.15</b>	<b>50,668.05</b>	<b>33,469.45</b>	<b>17,524.57</b>	<b>50,668.05</b>	<b>33,469.45</b>	<b>17,524.57</b>	<b>988.36</b>	<b>51,982.38</b>
<b>Case #7 Total</b>	<b>43,975.62</b>	<b>23,358.03</b>	<b>1,011.78</b>	<b>68,345.43</b>	<b>45,316.09</b>	<b>23,936.41</b>	<b>68,345.43</b>	<b>45,316.09</b>	<b>23,936.41</b>	<b>1,022.98</b>	<b>70,275.48</b>



**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area	2022/2023			2023/2024			Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial	
<b>Case #2</b>							
Klam Falls	1,294.32	763.48	-	1,328.66	783.76	-	2,112.42
La Grande	721.24	394.54	21.18	735.74	400.31	21.24	1,157.29
Medford	4,100.10	2,260.40	-	4,228.12	2,329.62	-	6,557.74
Medford NWP	1,366.70	753.47	-	1,409.37	776.54	-	2,185.91
Roseburg	1,806.81	1,107.90	13.20	1,880.25	1,135.75	13.23	3,029.23
<b>OR Sub-total</b>	<b>9,289.18</b>	<b>5,279.79</b>	<b>34.38</b>	<b>9,582.15</b>	<b>5,425.98</b>	<b>34.46</b>	<b>15,042.59</b>
Spokane	18,434.17	9,859.76	611.48	18,859.84	10,030.21	616.68	29,506.73
Spokane NWP	7,898.20	4,225.61	262.06	8,080.19	4,298.66	264.29	12,643.14
<b>WA/ID Sub-total</b>	<b>26,332.37</b>	<b>14,085.37</b>	<b>873.55</b>	<b>26,940.04</b>	<b>14,328.87</b>	<b>880.97</b>	<b>42,149.87</b>
<b>Case #2 Total</b>	<b>35,621.55</b>	<b>19,365.16</b>	<b>907.93</b>	<b>36,522.18</b>	<b>19,754.85</b>	<b>915.43</b>	<b>57,192.46</b>
<b>Case #6</b>							
Klam Falls	996.02	614.56	-	1,013.37	625.29	-	1,638.67
La Grande	571.99	332.88	21.18	579.26	336.08	21.24	936.57
Medford	2,966.86	1,741.42	-	3,033.42	1,778.04	-	4,811.45
Medford NWP	988.95	580.47	-	1,011.14	592.68	-	1,603.82
Roseburg	1,264.63	866.56	13.06	1,301.22	881.03	13.08	2,195.34
<b>OR Sub-total</b>	<b>6,788.46</b>	<b>4,135.90</b>	<b>34.24</b>	<b>6,938.41</b>	<b>4,213.12</b>	<b>34.32</b>	<b>11,185.85</b>
Spokane	13,750.72	7,646.01	536.18	13,968.38	7,733.61	539.13	22,241.13
Spokane NWP	5,891.01	3,276.86	229.79	5,983.85	3,314.41	231.06	9,529.32
<b>WA/ID Sub-total</b>	<b>19,641.73</b>	<b>10,922.87</b>	<b>765.97</b>	<b>19,952.24</b>	<b>11,048.02</b>	<b>770.19</b>	<b>31,770.45</b>
<b>Case #6 Total</b>	<b>26,430.19</b>	<b>15,058.77</b>	<b>800.21</b>	<b>26,890.65</b>	<b>15,261.13</b>	<b>804.51</b>	<b>42,956.29</b>
<b>Case #7</b>							
Klam Falls	1,654.53	938.06	-	1,709.90	969.96	-	2,679.86
La Grande	905.51	471.35	21.18	930.35	481.01	21.24	1,432.59
Medford	5,448.80	2,868.94	-	5,657.37	2,979.48	-	8,636.85
Medford NWP	1,816.27	956.31	-	1,885.79	993.16	-	2,878.95
Roseburg	2,436.70	1,384.89	13.44	2,555.12	1,429.06	13.47	3,997.65
<b>OR Sub-total</b>	<b>12,261.81</b>	<b>6,619.55</b>	<b>34.62</b>	<b>12,738.54</b>	<b>6,852.66</b>	<b>34.71</b>	<b>19,625.91</b>
Spokane	24,064.85	12,511.14	700.04	24,790.89	12,796.22	708.57	38,295.68
Spokane NWP	10,311.35	5,361.92	300.02	10,622.07	5,484.10	303.67	16,409.84
<b>WA/ID Sub-total</b>	<b>34,376.21</b>	<b>17,873.06</b>	<b>1,000.05</b>	<b>35,412.97</b>	<b>18,280.32</b>	<b>1,012.24</b>	<b>54,705.52</b>
<b>Case #7 Total</b>	<b>46,638.02</b>	<b>24,492.61</b>	<b>1,034.67</b>	<b>48,151.50</b>	<b>25,132.98</b>	<b>1,046.94</b>	<b>74,331.43</b>

**Appendix 2.4 - C**  
**Annual Demand Total (MDth)**  
 By Class (Net of DSM Savings)

Area Case #2	2024/2025			2025/2026			Total
	Residential	Commercial	Firm Industrial	Residential	Commercial	Firm Industrial	
Klam Falls	1,353.27	797.59	-	1,368.53	802.78	-	2,171.31
La Grande	746.25	403.06	21.18	752.70	404.77	21.18	1,178.65
Medford	4,314.93	2,372.99	-	4,365.16	2,391.71	-	6,756.87
Medford NWP	1,438.31	791.00	-	1,455.05	797.24	-	2,252.29
Roseburg	1,944.59	1,154.17	13.18	1,969.50	1,160.90	13.18	3,143.58
<b>OR Sub-total</b>	<b>9,797.35</b>	<b>5,518.81</b>	<b>34.36</b>	<b>9,910.95</b>	<b>5,557.39</b>	<b>34.36</b>	<b>15,502.70</b>
Spokane	19,162.93	10,125.19	618.85	19,287.69	10,169.53	620.11	30,077.33
Spokane NWP	8,210.10	4,339.37	265.22	8,263.57	4,358.37	265.76	12,887.70
<b>WA/ID Sub-total</b>	<b>27,373.03</b>	<b>14,464.56</b>	<b>884.07</b>	<b>27,551.26</b>	<b>14,527.90</b>	<b>885.87</b>	<b>42,965.02</b>
<b>Case #2 Total</b>	<b>37,170.37</b>	<b>19,983.37</b>	<b>918.44</b>	<b>37,462.21</b>	<b>20,085.29</b>	<b>920.23</b>	<b>58,467.73</b>
<b>Case #6</b>							
Klam Falls	1,024.22	631.30	-	1,034.99	634.33	-	1,669.32
La Grande	582.57	336.76	21.18	586.84	337.80	21.18	945.83
Medford	3,069.59	1,795.85	-	3,100.52	1,806.05	-	4,906.57
Medford NWP	1,023.20	598.62	-	1,033.51	602.02	-	1,635.52
Roseburg	1,330.59	888.84	13.04	1,344.74	892.48	13.04	2,250.26
<b>OR Sub-total</b>	<b>7,030.15</b>	<b>4,251.37</b>	<b>34.22</b>	<b>7,100.61</b>	<b>4,272.68</b>	<b>34.22</b>	<b>11,407.51</b>
Spokane	14,079.64	7,763.55	538.86	14,144.86	7,786.28	539.49	22,470.63
Spokane NWP	6,031.55	3,327.24	230.94	6,059.50	3,336.98	231.21	9,627.68
<b>WA/ID Sub-total</b>	<b>20,111.19</b>	<b>11,090.79</b>	<b>769.80</b>	<b>20,204.36</b>	<b>11,123.25</b>	<b>770.71</b>	<b>32,098.32</b>
<b>Case #6 Total</b>	<b>27,141.35</b>	<b>15,342.16</b>	<b>804.02</b>	<b>27,304.96</b>	<b>15,395.93</b>	<b>804.93</b>	<b>43,505.82</b>
<b>Case #7</b>							
Klam Falls	1,753.81	993.85	-	1,774.37	1,001.55	-	2,775.91
La Grande	949.97	486.78	21.18	959.02	489.21	21.18	1,469.41
Medford	5,809.78	3,055.36	-	5,882.88	3,083.97	-	8,966.86
Medford NWP	1,936.59	1,018.45	-	1,960.96	1,027.99	-	2,988.95
Roseburg	2,661.64	1,460.75	13.43	2,699.09	1,470.99	13.43	4,183.51
<b>OR Sub-total</b>	<b>13,111.80</b>	<b>7,015.20</b>	<b>34.62</b>	<b>13,276.32</b>	<b>7,073.71</b>	<b>34.62</b>	<b>20,384.64</b>
Spokane	25,349.16	12,985.69	713.78	25,544.55	13,055.44	715.52	39,315.52
Spokane NWP	10,861.34	5,565.30	305.91	10,945.08	5,595.19	306.65	16,846.92
<b>WA/ID Sub-total</b>	<b>36,210.50</b>	<b>18,550.99</b>	<b>1,019.68</b>	<b>36,489.63</b>	<b>18,650.63</b>	<b>1,022.18</b>	<b>56,162.44</b>
<b>Case #7 Total</b>	<b>49,322.30</b>	<b>25,566.19</b>	<b>1,054.30</b>	<b>49,765.95</b>	<b>25,724.34</b>	<b>1,056.79</b>	<b>76,547.08</b>

**Appendix 2.4 D**  
**Peak Day Demand - 11/2006 - 10/2026 (Net of DSM Savings)**  
Peak Day = February 15

Gas Year Case #2	Klam Falls	La Grande	Medford	Medford NWP	Rosburg	Oregon	Spokane	Spokane NWP	WA/ID	Total
2006-2007	11.65	8.39	22.38	7.46	13.96	63.84	191.88	82.23	274.11	337.95
2007-2008	12.41	8.91	24.14	8.05	15.09	68.60	207.24	88.81	296.04	364.64
2008-2009	12.86	9.19	25.32	8.44	15.88	71.69	217.17	93.06	310.23	381.92
2009-2010	13.36	9.51	26.57	8.86	16.74	75.05	228.88	98.07	326.96	402.00
2010-2011	13.73	9.76	27.65	9.22	17.49	77.86	239.12	102.46	341.58	419.44
2011-2012	14.02	9.97	28.62	9.54	18.19	80.35	248.49	106.47	354.96	435.31
2012-2013	14.29	10.14	29.49	9.83	18.86	82.61	256.69	109.97	366.66	449.27
2013-2014	14.55	10.31	30.39	10.13	19.54	84.92	264.43	113.29	377.72	462.63
2014-2015	14.85	10.46	31.34	10.45	20.28	87.37	271.82	116.45	388.26	475.63
2015-2016	15.16	10.62	32.31	10.77	21.05	89.91	279.49	119.73	399.22	489.13
2016-2017	15.46	10.74	33.08	11.03	21.68	91.99	284.98	122.14	407.12	499.11
2017-2018	15.74	10.85	33.90	11.30	22.32	94.12	289.85	124.22	414.07	508.19
2018-2019	16.08	11.01	34.85	11.62	23.06	96.61	295.75	126.74	422.49	519.10
2019-2020	16.42	11.16	35.80	11.93	23.81	99.12	301.44	129.18	430.62	529.74
2020-2021	16.72	11.32	36.69	12.23	24.48	101.43	306.82	131.48	438.30	539.73
2021-2022	17.06	11.47	37.65	12.55	25.22	103.95	311.92	133.66	445.58	549.53
2022-2023	17.41	11.63	38.59	12.86	25.99	106.48	317.22	135.92	453.14	559.62
2023-2024	17.78	11.80	39.52	13.17	26.76	109.03	322.30	138.10	460.39	569.42
2024-2025	18.14	11.96	40.46	13.49	27.57	111.62	327.62	140.38	468.00	579.62
2025-2026	18.20	11.99	40.53	13.51	27.61	111.84	327.74	140.43	468.18	580.01

**Appendix 2.4 D**  
**Peak Day Demand - 11/2006 - 10/2026 (Net of DSM Savings)**  
Peak Day = February 15

Gas Year Case #6	Klam Falls	La Grande	Medford	Medford NWP	Rosburg	Oregon	Spokane	Spokane NWP	WA/ID	Total
2006-2007	11.09	8.04	21.20	7.07	13.22	60.61	182.77	78.33	261.10	321.71
2007-2008	11.37	8.24	21.92	7.31	13.69	62.52	189.10	81.04	270.14	332.66
2008-2009	11.67	8.44	22.66	7.55	14.18	64.51	195.73	83.88	279.61	344.12
2009-2010	11.95	8.63	23.34	7.78	14.66	66.35	202.25	86.68	288.93	355.28
2010-2011	12.10	8.73	23.83	7.94	15.01	67.62	207.16	88.78	295.94	363.56
2011-2012	12.16	8.78	24.16	8.05	15.26	68.41	210.53	90.23	300.75	369.17
2012-2013	12.21	8.82	24.47	8.16	15.52	69.17	213.62	91.55	305.17	374.34
2013-2014	12.27	8.85	24.78	8.26	15.78	69.95	216.48	92.78	309.26	379.21
2014-2015	12.33	8.87	25.11	8.37	16.06	70.74	219.10	93.90	313.01	383.75
2015-2016	12.40	8.89	25.43	8.48	16.34	71.55	221.53	94.94	316.48	388.02
2016-2017	12.53	8.95	25.79	8.60	16.61	72.48	224.16	96.07	320.23	392.71
2017-2018	12.68	9.02	26.21	8.74	16.94	73.59	226.93	97.26	324.19	397.78
2018-2019	12.83	9.09	26.65	8.88	17.28	74.73	229.53	98.37	327.90	402.62
2019-2020	12.99	9.16	27.08	9.03	17.63	75.89	231.95	99.40	331.35	407.23
2020-2021	13.13	9.22	27.50	9.17	17.94	76.95	234.47	100.47	334.95	411.90
2021-2022	13.28	9.28	27.94	9.31	18.29	78.10	236.70	101.42	338.13	416.23
2022-2023	13.44	9.35	28.36	9.45	18.65	79.26	238.97	102.39	341.36	420.63
2023-2024	13.60	9.42	28.80	9.60	19.01	80.42	241.23	103.35	344.58	425.00
2024-2025	13.77	9.48	29.23	9.74	19.37	81.59	243.40	104.28	347.68	429.28
2025-2026	13.82	9.51	29.31	9.77	19.41	81.81	243.52	104.34	347.86	429.67

**Appendix 2.4 D**  
**Peak Day Demand - 11/2006 - 10/2026 (Net of DSM Savings)**  
Peak Day = February 15

Gas Year Case #7	Klam Falls	La Grande	Medford	Medford NWP	Rosburg	Oregon	Spokane	Spokane NWP	WA/ID	Total
2006-2007	12.78	9.17	24.62	8.21	15.36	70.14	211.04	90.45	301.49	371.63
2007-2008	13.46	9.58	26.36	8.79	16.50	74.68	225.76	96.75	322.51	397.20
2008-2009	14.16	9.99	28.15	9.38	17.69	79.37	240.96	103.27	344.23	423.60
2009-2010	14.85	10.40	29.86	9.95	18.89	83.96	257.13	110.20	367.33	451.29
2010-2011	15.46	10.82	31.63	10.54	20.09	88.56	273.74	117.32	391.06	479.62
2011-2012	15.97	11.16	33.16	11.05	21.18	92.52	288.53	123.66	412.19	504.71
2012-2013	16.49	11.50	34.72	11.57	22.35	96.64	303.28	129.98	433.25	529.89
2013-2014	17.04	11.84	36.31	12.10	23.55	100.85	317.38	136.02	453.39	554.24
2014-2015	17.63	12.15	38.01	12.67	24.83	105.29	330.83	141.79	472.62	577.91
2015-2016	18.23	12.48	39.71	13.24	26.13	109.79	344.33	147.57	491.90	601.69
2016-2017	18.72	12.72	41.20	13.73	27.31	113.70	352.71	151.16	503.87	617.56
2017-2018	19.32	13.03	42.84	14.28	28.57	118.03	363.75	155.89	519.64	637.66
2018-2019	19.94	13.33	44.51	14.84	29.84	122.46	374.68	160.57	535.26	657.71
2019-2020	20.56	13.64	46.17	15.39	31.12	126.88	385.01	164.99	550.00	676.88
2020-2021	21.13	13.94	47.78	15.93	32.33	131.10	395.19	169.35	564.55	695.65
2021-2022	21.75	14.24	49.44	16.48	33.63	135.54	405.15	173.62	578.77	714.31
2022-2023	22.38	14.55	51.08	17.03	34.97	140.02	414.80	177.75	592.55	732.57
2023-2024	23.02	14.86	52.73	17.58	36.30	144.49	424.43	181.87	606.30	750.79
2024-2025	23.67	15.17	54.36	18.12	37.67	149.00	434.16	186.04	620.20	769.19
2025-2026	23.73	15.20	54.43	18.14	37.71	149.22	434.28	186.09	620.37	769.59

**Appendix 2.4 D**  
**Peak Day Demand - 11/2006 - 10/2026 (Net of DSM Savings)**  
Peak Day = December 20

Gas Year Case #2	Klam Falls	La Grande	Medford	Medford NWP	Roseburg	Oregon	Spokane	Spokane NWP	WA/ID	Total
2006-2007	12.82	7.56	43.06	14.35	15.80	93.60	145.23	62.24	207.47	301.07
2007-2008	13.66	8.00	46.67	15.56	17.03	100.91	156.36	67.00	223.36	324.27
2008-2009	14.18	8.25	49.21	16.40	17.93	105.99	163.71	70.15	233.86	339.84
2009-2010	14.77	8.55	51.93	17.31	18.96	111.53	172.44	73.89	246.33	357.86
2010-2011	15.25	8.78	54.16	18.05	19.86	116.11	180.22	77.22	257.43	373.54
2011-2012	15.59	8.98	56.16	18.72	20.67	120.12	187.53	80.35	267.87	388.00
2012-2013	15.88	9.13	57.92	19.31	21.40	123.64	194.02	83.13	277.15	400.79
2013-2014	16.16	9.29	59.71	19.90	22.20	127.26	200.44	85.87	286.31	413.58
2014-2015	16.48	9.44	61.53	20.51	23.01	130.98	206.51	88.47	294.97	425.95
2015-2016	16.83	9.60	63.52	21.17	23.91	135.04	212.60	91.08	303.68	438.72
2016-2017	17.18	9.71	65.15	21.72	24.68	138.42	217.56	93.24	310.79	449.22
2017-2018	17.49	9.82	66.73	22.24	25.43	141.72	221.45	94.91	316.35	458.07
2018-2019	17.86	9.96	68.60	22.87	26.29	145.57	226.16	96.92	323.09	468.65
2019-2020	18.25	10.10	70.51	23.50	27.16	149.52	230.96	98.97	329.93	479.45
2020-2021	18.63	10.25	72.35	24.12	28.02	153.37	235.26	100.81	336.07	489.44
2021-2022	18.99	10.39	74.22	24.74	28.84	157.19	239.55	102.65	342.21	499.39
2022-2023	19.37	10.54	76.14	25.38	29.73	161.17	243.86	104.49	348.36	509.52
2023-2024	19.79	10.69	78.00	26.00	30.64	165.13	247.89	106.21	354.10	519.23
2024-2025	20.20	10.85	79.86	26.62	31.57	169.09	252.08	108.01	360.09	529.18
2025-2026	20.72	11.05	82.09	27.36	32.63	173.87	256.97	110.11	367.07	540.94

**Appendix 2.4 D**  
**Peak Day Demand - 11/2006 - 10/2026 (Net of DSM Savings)**  
Peak Day = December 20

Gas Year Case #6	Klam Falls	La Grande	Medford	Medford NWP	Roseburg	Oregon	Spokane	Spokane NWP	WA/ID	Total
2006-2007	12.25	7.27	40.90	13.63	15.05	89.10	138.86	59.51	198.38	287.48
2007-2008	12.57	7.44	42.38	14.13	15.56	92.07	143.42	61.47	204.89	296.96
2008-2009	12.91	7.62	43.98	14.66	16.13	95.30	148.30	63.56	211.86	307.17
2009-2010	13.23	7.79	45.46	15.15	16.69	98.33	153.15	65.64	218.79	317.12
2010-2011	13.44	7.89	46.48	15.49	17.11	100.42	156.86	67.23	224.09	324.51
2011-2012	13.51	7.94	47.15	15.72	17.41	101.73	159.52	68.37	227.89	329.61
2012-2013	13.57	7.97	47.78	15.93	17.69	102.92	162.00	69.43	231.43	334.35
2013-2014	13.63	8.00	48.41	16.14	17.99	104.17	164.42	70.47	234.89	339.05
2014-2015	13.68	8.03	49.02	16.34	18.30	105.37	166.63	71.41	238.05	343.42
2015-2016	13.76	8.05	49.68	16.56	18.63	106.68	168.62	72.26	240.88	347.55
2016-2017	13.92	8.11	50.42	16.81	18.95	108.19	171.00	73.29	244.29	352.49
2017-2018	14.08	8.17	50.82	17.08	19.34	109.49	173.20	74.23	247.43	356.92
2018-2019	14.24	8.23	52.09	17.36	19.73	111.66	175.30	75.12	250.42	362.08
2019-2020	14.43	8.30	52.96	17.65	20.14	113.47	177.37	76.01	253.37	366.84
2020-2021	14.60	8.36	53.82	17.94	20.54	115.25	179.38	76.87	256.25	371.51
2021-2022	14.75	8.42	54.66	18.22	20.92	116.97	181.29	77.68	258.97	375.94
2022-2023	14.94	8.48	55.52	18.51	21.34	118.78	183.15	78.48	261.63	380.41
2023-2024	15.11	8.54	56.37	18.79	21.75	120.57	184.95	79.24	264.19	384.76
2024-2025	15.30	8.60	57.21	19.07	22.17	122.35	186.68	79.98	266.67	389.02
2025-2026	15.59	8.71	58.34	19.45	22.70	124.79	189.07	81.01	270.07	394.86

**Appendix 2.4 D**  
**Peak Day Demand - 11/2006 - 10/2026 (Net of DSM Savings)**  
Peak Day = December 20

Gas Year Case #7	Klam Falls	La Grande	Medford	Medford NWP	Roseburg	Oregon	Spokane	Spokane NWP	WA/ID	Total
2006-2007	14.02	8.22	47.43	15.81	17.31	102.79	158.98	68.14	227.12	329.91
2007-2008	14.76	8.54	50.95	16.98	18.49	109.73	169.53	72.66	242.19	351.92
2008-2009	15.58	8.93	54.80	18.27	19.86	117.43	180.78	77.48	258.26	375.69
2009-2010	16.39	9.32	58.45	19.51	21.29	124.95	192.87	82.66	275.52	400.47
2010-2011	17.18	9.70	62.18	20.73	22.73	132.52	205.47	88.06	293.52	426.05
2011-2012	17.77	10.02	65.33	21.78	23.99	138.88	217.01	93.01	310.02	448.90
2012-2013	18.34	10.32	68.48	22.83	25.29	145.27	228.60	97.97	326.57	471.84
2013-2014	18.94	10.64	71.70	23.90	26.68	151.86	240.12	102.91	343.03	494.90
2014-2015	19.57	10.96	74.99	25.00	28.11	158.63	251.04	107.59	358.63	517.26
2015-2016	20.25	11.25	78.49	26.16	29.63	165.78	261.70	112.16	373.86	539.64
2016-2017	20.82	11.49	81.64	27.21	31.04	172.20	269.31	115.42	384.72	556.92
2017-2018	21.48	11.77	84.89	28.30	32.52	178.95	277.95	119.12	397.07	576.02
2018-2019	22.17	12.05	88.21	29.40	34.00	185.82	286.61	122.83	409.44	595.26
2019-2020	22.87	12.33	91.59	30.53	35.50	192.82	295.18	126.50	421.67	614.49
2020-2021	23.59	12.62	94.96	31.65	37.03	199.85	303.23	129.94	433.17	633.03
2021-2022	24.24	12.89	98.25	32.75	38.48	206.62	311.44	133.46	444.89	651.51
2022-2023	24.94	13.18	101.66	33.89	40.03	213.69	319.22	136.79	456.01	669.70
2023-2024	25.67	13.46	104.98	34.99	41.59	220.70	326.78	140.03	466.81	687.51
2024-2025	26.39	13.75	108.25	36.08	43.19	227.67	334.38	143.28	477.66	705.33
2025-2026	27.21	14.07	111.80	37.27	44.89	235.23	342.27	146.66	488.93	724.16



# **Demand-Side Management Measures Evaluated**

## **Appendix 3.1**

## Appendix 3.1: Measures Evaluated

### Residential

#### Multifamily Home Replacement (replace-on-burnout) measures

- Domestic hot water measures
  - Condensing boiler
  - High-efficiency boiler
  - High-efficiency water heater
  - Tankless water heater
- HVAC measures
  - Condensing boiler
  - Direct vent gas unit heater
  - Gas pool heater
  - Gas spa heater
  - High-efficiency boiler
  - High-efficiency furnace
  - Programmable thermostat
- Shell measures
  - Air sealing weather stripping

#### Multifamily Home Retrofit (replace-before-burnout) measures

- Domestic hot water
  - Combo boiler (air)
  - Distribution controls
  - Faucet aerators
  - High-efficiency water heater
  - Low-flow showerheads
  - Passive solar water heating
  - Pipe insulation
  - Tankless water heater
- HVAC measures
  - Boiler tune-up
  - Direct vent gas unit heater
  - Duct insulation retrofit
  - Duct sealing
  - Furnace retrofit
  - Gas pool heater
  - Gas spa heater
  - Power burner
  - Programmable thermostat
  - Vent damper
  - Zone and loop controls
- Shell measures
  - Attic insulation
  - Exterior doors
  - Floor insulation
  - Walls insulation

Window retrofit (pre-1974 windows)

New Multifamily Construction measures

- Domestic hot water measures
  - Condensing boiler
  - High-efficiency boiler
  - Passive solar water heating
  - Pool blanket
- HVAC measures
  - Condensing boiler
  - Gas pool heater
  - Gas spa heater
  - High-efficiency boiler
  - High-efficiency furnace
  - Programmable thermostat

Single-Family Home Replacement (replace-on-burnout) measures

- Domestic hot water measures
  - High-efficiency water heater
  - Tankless water heater
- HVAC measures
  - Direct vent gas unit heater
  - Gas pool heater
  - Gas spa heater
  - High-efficiency furnace
  - Programmable thermostat
- Shell measures
  - Air sealing weather stripping

Single-Family Home Retrofit (replace-before-burnout) measures

- Domestic hot water
  - High-efficiency water heater
  - Tankless water heater
- HVAC measures
  - Direct vent gas unit heater
  - Gas pool heater
  - Gas spa heater
  - High-efficiency furnace
  - Programmable thermostat
- Shell measures
  - Air sealing weather stripping

Single-Family Home New Construction measures

- Appliances
  - Horizontal-axis clothes washer
- Domestic hot water
  - Combo boiler (air)

- Combo boiler (hydronic)
- Passive solar water heating
- Pool blanket
- HVAC measures
  - Duct commissioning
  - Gas pool heater
  - Gas spa heater
  - High-efficiency furnace
  - Programmable thermostat
- Shell measures
  - Exterior doors
- Whole home measures
  - Energy Star home

### **Non-Residential**

- Cooking replacement measures
  - BBQ/Rotisserie oven
  - Charbroiler
  - Cheesemelter
  - Combination oven
  - Convection oven
  - Conveyer broiler
  - Energy Star pressure cooker
  - Infrared general purpose fryer
  - Open burner
  - Oven conveyer
  - Pizza/Deck oven
  - Rack/Tray oven
  - Revolving oven
  - Salamander
- Cooking retrofit measures
  - BBQ/Rotisserie oven
  - Charbroiler
  - Cheesemelter
  - Combination oven
  - Convection oven
  - Conveyer broiler
  - Energy Star pressure cooker
  - Infrared fryer griddle
  - Infrared general purpose fryer
  - Open burner
  - Oven conveyer
  - Pizza/Deck oven
  - Rack/Tray oven
  - Revolving oven
  - Salamander

- Envelope retrofit
  - Roof insulation
  - Wall insulation
  - Window retrofit
- Miscellaneous retrofit
  - Coin-op gas clothes dryer
  - Commercial Gas clothes dryer
  - Crematoria
  - Gas pool heater
  - Gas spa heater
  - Kiln
- Miscellaneous replacement
  - Coin-op gas clothes dryer
  - Commercial Gas clothes dryer
  - Crematoria
  - Gas pool heater
  - Gas spa heater
  - Kiln
- Space heating replacement
  - Programmable thermostat
  - Radiant heat
- Space heating retrofit
  - Boiler tune-up
  - Power burner
  - Programmable thermostat
  - Rooftop maintenance
  - Vent damper
  - Warm-up control
- Water heating replacement
  - Boiler
  - Coin-op clothes washer
  - Commercial Clothes washer
  - Condensing boiler
  - Condensing storage water heater
  - Pool blanket
  - Pre-rinse sprayer
  - Tankless water heater
- Water heating retrofit
  - Coin-op clothes washer
  - Commercial clothes washer
  - Condensing tank water heater
  - Low-flow showerheads
  - Pre-rinse sprayers
  - Recirculation controls
- Solar water heating

# **Demand-Side Management Programs Evaluated**

## **Appendix 3.2**

## **Appendix 3.2: Programs Evaluated**

### **OREGON**

#### **Mandated programs - Residential**

MFH shell program (wall, attic, floor, duct, pipe insulation and weather stripping)

SFH shell program (wall, attic, floor, duct, pipe insulation and weather stripping)

#### **Residential measures deemed cost-effective in preliminary evaluation**

Residential hot water heating program (SFH and MFH high-efficiency water heaters)

Residential low-flow showerhead program (SFH and MFH low-flow showerhead and two aerator package targeted for homes with pre-code showerheads)

MFH boiler program (new and replacement high-efficiency boilers for hot water and/or space heating purposes)

MFH duct insulation program (retrofit duct sealing)

MFH space heat program (vent dampers)

SFH space heat program (high-efficiency natural gas furnaces in new and replacement applications)

Residential pool/spa program (pool blankets for SFH and MFH home applications)

SFH duct insulation program (duct sealing and duct commissioning)

Residential programmable thermostat program (SFH and MFH retrofit applications only)

Residential tankless water heater program (SFH and MFH retrofit applications only)

Residential resource-efficiency washing machine program (SFH and MFH non-common area applications)

#### **Non-residential measures deemed cost-effective in preliminary evaluation**

Commercial dryer program (coin-operated and commercial clothes dryers)

Energy Star cooking program (Energy Star pressure steamers)

Commercial kiln program (replacement)

Non-residential low-flow showerhead program

Non-residential pool program (pool blanket)

Commercial shell program (roof and wall insulation)

Commercial space heat program (programmable thermostats, radiant heat, rooftop maintenance, warm-up controls, vent dampers, boiler tune-ups, power burner retrofits)

Commercial pre-rinse sprayer program (replacement and retrofit)

Commercial water heating program (tankless water heaters, condensing storage water heater, condensing tank water heater, high-efficiency boilers, recirculation controls, condensing boilers)

#### **Residential measures individually tested within SENDOUT®**

SFH space heat program (replacement market, direct vent gas space heater units)

MFH space heat program (retrofit zone and loop controls, replacement power burners, boiler tune-up, replacement direct vent space heating units, replacement and new HVAC condensing boilers)

MFH water heating program (new and replacement water heating condensing boilers)  
Energy Star residential package (whole home adoption of multiple Energy Star technologies)  
Residential pool program (new and replacement high-efficiency pool heaters in SFH and MFH applications)  
Residential passive solar water heating program (new and retrofit solar water pre-heating in SFH and MFH applications)

**Non-residential measures individually tested within SENDOUT®**

Crematory program  
Commercial prescriptive cooking program (pizza/deck oven replacement, conveyer broiler replacement and retrofit, cheesemelter replacement, salamander replacement, charbroiler replacement, BBQ/roisserie replacement, convection oven replacement, rack/tray oven replacement, infrared fryer griddle replacement, combination oven replacement, infrared general purpose fryer replacement).

**Residential measures deemed cost-ineffective during preliminary evaluation**

Residential water heating program  
Residential door program (new and retrofit insulated doors in SFH and MFH applications)  
MFH water heating program (MFH water heating distribution controls)  
MFH window program (high-efficiency windows to replace pre-'74 vintage windows)  
Residential spa program (high-efficiency gas spa heaters in new and replacement SFH and MFH home applications)  
SFH water heating program (combo boilers, both air and hydronic, in new construction applications)  
SFH window program (high-efficiency windows to replace pre-'74 and '74 to '92 vintage windows)

**Non-residential measures deemed cost-ineffective in preliminary evaluation**

Commercial cooking program (retrofit and replacement revolving ovens, retrofit and replacement oven conveyers, retrofit convection ovens, retrofit salamanders, retrofit cheesemelters, retrofit infrared general purpose fryer, retrofit and replacement open burners, retrofit infrared fryer griddle, retrofit pizza/deck oven, retrofit BBQ/roisserie, retrofit charbroiler, retrofit rack/tray oven, retrofit combination oven)  
Commercial dryer program (retrofit coin-operated and commercial clothes dryers)  
Commercial kiln program (retrofit)  
Non-residential pool/spa program (replacement and retrofit natural gas pool and spa heaters)  
Non-residential passive solar water heating program (passive solar pre-heating of water)  
Commercial washing machine program (coin-operated and commercial, replacement and retrofit clothes washers)  
Non-residential windows (retrofit)



## **WASHINGTON/IDAHO**

### **Residential measures deemed cost-effective in preliminary evaluation**

- Residential pool program (pool blankets for SFH and MFH applications)
- SFH space heat program (high-efficiency furnace, new and replacement)
- Programmable thermostat program “1” (new and replacement SFH and MFH applications)
- Programmable thermostat program “2” (retrofit SFH and MFH applications)

### **Non-residential measures deemed cost-effective in preliminary evaluation**

- Commercial dryer program (coin-operated and commercial clothes dryers)
- Commercial Energy Star cooking program (replacement and retrofit Energy Star pressure steamers)
- Commercial kiln program (replacement market only)
- Commercial low-flow showerhead program (replacement of pre-code units only)
- Commercial pool/spa program (replacement pool blankets)
- Commercial shell program (roof and wall insulation)
- Commercial space heat program (replacement radiant heat units, replacement and retrofit programmable thermostats, retrofit vent dampers, power burners, rooftop maintenance, warm-up controls and boiler tune-ups)
- Commercial pre-rinse sprayer program (replacement and retrofit)

### **Residential measures individually tested within SENDOUT®**

- Residential water heating program (high-efficiency water heaters for SFH and MFH applications)
- MFH boiler program (high-efficiency boilers for new and replacement applications for both domestic hot water and space heating)
- MFH duct program (duct insulation and duct sealing)
- MFH shell program (wall, attic and floor insulation as well as weather stripping)
- MFH window program
- SFH duct program (duct sealing, insulation and duct commissioning)
- SFH shell program (wall, attic and floor insulation as well as weather stripping)
- SFH windows program
- MFH furnace program (new and replacement high-efficiency furnaces)
- MFH space heating program (vent dampers, replacement direct vent gas unit heaters, new and replacement condensing boilers, retrofit power burners, boiler tune-up, zone and loop controls)
- Residential low-flow showerhead program (aerators and replacement of pre-code showerheads)
- MFH water heating program (new and replacement condensing boilers)
- Residential pool program (new and replacement high-efficiency pool heaters for SFH and MFH applications)
- Residential tankless water heater program (SFH and MFH, replacement and retrofit units)
- Residential resource-efficient washing machine program (horizontal-axis washing machines) evaluated as a replace-on-burnout appliance measure independent for all residential applications.

### **Non-residential measures individually tested within SENDOUT®**

Commercial water heating program (replacement tankless water heaters, high-efficiency boilers, condensing storage water heaters, condensing boilers and retrofit recirculation controls and condensing tank water heaters)

Crematory program

Commercial prescriptive cooking program (retrofit conveyer broilers, replacement pizza/deck ovens, conveyer broilers, cheesemelters, salamanders, charbroiler, BBQ/roisserie, conveyer oven, rack/tray oven, infrared fryer griddle, infrared general purpose fryer and combination ovens)

### **Residential measures deemed cost-ineffective in preliminary evaluation**

Residential water heating program

Residential door program (SFH and MFH for new and retrofit applications)

Residential Energy Star package program (Energy Star package of measures)

MFH water heating program (distribution controls)

MFH pipe insulation program

Residential spa program (new and replacement high-efficiency spa heaters for SFH and MFH applications)

SFH water heating program (combo boilers, both air and hydronic)

SFH space heating program (retrofit and replacement direct vent unit heaters, retrofit high-efficiency furnaces)

SFH pipe insulation program

Residential passive solar water heating program (new and retrofit in SFH and MFH applications)

### **Non-residential measures deemed cost-ineffective in preliminary evaluation**

Commercial cooking program (replacement revolving oven, oven conveyer and open burners as well as retrofit convection ovens, salamanders, cheesemelters, infrared fryer griddles, infrared general purpose fryer, pizza/deck ovens, BBQ/roisserie, charbroiler, rack/tray oven, combination oven, revolving oven, oven conveyer and open burner measures)

Commercial dryer program (coin-operated and commercial dryers)

Commercial kiln program (retrofit applications only)

Commercial pool/spa program (retrofit and replacement high-efficiency pool and spa heaters)

Commercial passive solar water heating program (passive solar water pre-heating)

Commercial washing machine program (retrofit and replacement coin-operated and commercial washing machines)

Commercial window program (window retrofits)

# **General Assumptions**

## **Appendix 6.1**

## Appendix 6.1 - General Assumptions

### GDP/Inflation Rates

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1.7%	1.9%	2.1%	2.1%	2.2%	2.4%	2.5%	2.4%	2.3%	2.4%
2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2.4%	2.4%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%

**Discount rate** = 7.41%

**Unserved Core Rate** = \$2,000/MDth

### AECO, Sumas, Rockies Prices

Attached

### Non-AECO, Sumas and Rockies Basis Pricing

Station 2 = Sumas minus \$.10

Malin = AECO plus \$.80

Spokane = AECO plus \$1.00

Coos Bay LNG \* = AECO plus \$1.50

### Heating Degree Days

Attached

\*Assumes proposed facility operational by November 2011. This option is only included in case numbers 7 - 9

Appendix 6.1  
 Klamath Falls Heating Degree Days  
 Source: NOAA with added peak days

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December	
1	33	25	24	24	23	9	2	0	6	8	28	26	
2	41	23	29	23	20	12	3	0	2	7	35	22	
3	39	38	32	29	21	17	1	1	3	6	36	16	
4	42	32	31	22	25	21	5	2	3	12	33	20	
5	44	24	25	25	22	21	6	0	1	15	30	24	
6	47	30	26	27	21	18	2	1	8	17	32	26	
7	45	29	22	28	15	13	3	1	5	18	30	30	
8	40	30	21	23	10	6	4	0	7	21	30	32	
9	32	30	18	22	13	4	5	0	6	15	28	25	
10	37	18	22	23	15	3	2	0	4	13	21	25	
11	51	20	27	15	9	2	1	2	10	16	27	38	
12	43	22	29	12	11	5	2	0	11	20	28	39	
13	25	52	31	29	10	5	1	0	4	17	27	42	
14	25	61	27	26	23	1	1	0	7	13	33	40	
15	24	64	37	19	25	2	2	3	5	11	35	37	
16	33	63	34	18	21	6	9	0	5	15	29	36	
17	40	57	31	15	11	3	7	0	3	12	31	36	
18	32	36	34	23	9	2	6	1	2	14	25	48	
19	24	40	24	19	11	5	2	2	2	19	27	63	
20	27	34	21	18	12	6	3	2	9	18	21	72	
21	21	36	16	11	15	7	5	3	17	15	20	62	
22	26	33	18	11	13	4	2	6	17	15	24	53	
23	27	33	22	20	9	3	3	9	21	25	28	33	
24	28	26	29	30	14	3	2	8	23	24	24	43	
25	29	37	24	28	13	3	4	6	19	22	31	42	
26	41	43	21	23	9	4	2	6	14	26	29	45	
27	44	39	24	16	5	2	1	4	8	23	32	47	
28	41	42	26	11	6	7	1	3	7	27	31	33	
29	34	23	28	21	7	8	2	4	10	23	29	36	
30	33	0	24	22	5	5	0	10	12	28	32	40	
31	33	0	23	0	6	0	0	9	0	27	0	49	
	1081	1040	800	633	429	207	89	83	251	542	866	1180	7201

Appendix 6.1  
 La Grande Heating Degree Days  
 Source: NOAA with added peak days

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	41	45	18	22	9	18	0	0	1	1	24	28
2	42	55	21	22	5	17	6	0	0	0	23	32
3	42	46	17	23	9	12	10	0	0	8	29	25
4	37	38	26	18	6	7	5	0	0	16	29	25
5	44	36	24	14	4	5	0	0	3	15	17	31
6	59	31	27	18	6	1	0	0	2	9	19	28
7	57	26	32	11	11	1	0	0	0	11	21	33
8	45	27	25	11	14	1	0	0	0	13	31	37
9	42	32	20	10	18	8	1	0	0	12	24	34
10	42	34	29	15	16	3	3	0	6	11	20	39
11	38	31	30	21	10	7	4	0	13	7	21	35
12	31	30	33	23	9	0	3	0	10	2	19	34
13	29	58	31	24	8	0	2	0	14	8	20	30
14	27	65	23	27	8	0	0	0	17	9	23	33
15	25	74	25	13	14	0	0	1	16	12	22	26
16	29	61	27	19	15	10	1	0	13	5	27	22
17	28	40	28	18	9	7	1	0	7	12	34	23
18	30	22	22	23	8	6	0	0	1	27	37	56
19	35	21	18	21	5	5	1	0	0	20	41	63
20	27	29	13	13	2	4	1	0	9	14	45	67
21	45	23	14	7	1	3	0	0	10	13	41	63
22	41	23	24	5	11	10	0	0	7	14	36	59
23	28	31	23	23	19	12	0	16	3	21	35	32
24	25	33	27	25	20	11	1	13	0	27	33	34
25	27	30	26	19	20	1	1	11	2	25	27	41
26	23	26	21	24	22	0	0	5	15	22	23	37
27	29	17	19	18	18	0	0	0	12	25	27	46
28	28	14	33	20	15	0	1	0	15	29	20	49
29	28	20	27	23	16	0	1	4	20	33	23	50
30	24	0	29	28	9	0	0	3	17	39	29	53
31	30	0	30	0	7	0	0	0	0	36	0	53
	1078	1018	762	558	344	149	42	53	213	496	820	1218
												6751

Appendix 6.1  
 Medford Heating Degree Days  
 Source: NOAA with added peak days

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December	
1	21	25	28	18	18	2	3	0	0	7	11	32	
2	23	26	23	21	15	0	2	0	0	8	13	33	
3	23	24	20	17	13	1	0	0	0	12	11	31	
4	25	26	20	15	12	0	0	1	0	13	16	19	
5	25	21	21	10	9	0	0	2	0	11	17	20	
6	29	22	11	8	6	0	0	0	0	6	21	22	
7	32	21	17	7	1	5	0	0	0	6	22	29	
8	36	20	19	8	1	7	0	0	0	4	22	32	
9	26	18	21	10	14	7	1	0	0	1	19	32	
10	25	17	19	11	21	3	0	0	0	0	19	30	
11	27	17	17	18	19	4	0	0	0	1	18	32	
12	28	15	13	20	14	9	0	0	0	4	20	32	
13	26	23	11	15	12	12	0	0	0	8	28	23	
14	29	25	13	14	6	7	0	0	0	8	24	27	
15	34	29	15	13	1	0	0	0	0	13	22	28	
16	37	28	14	18	0	3	0	0	0	12	23	31	
17	34	25	21	15	0	5	0	0	0	8	26	32	
18	32	25	21	15	0	2	0	0	0	8	22	50	
19	32	23	19	7	0	0	0	0	3	7	19	59	
20	27	21	17	5	0	0	0	0	5	9	14	61	
21	30	20	18	5	0	0	0	0	9	9	17	56	
22	30	22	18	13	0	0	0	0	9	7	25	55	
23	22	24	14	19	2	0	0	0	9	15	33	24	
24	23	19	13	21	7	1	0	3	11	18	29	24	
25	20	19	15	18	5	2	0	2	12	19	19	28	
26	15	17	19	20	3	1	0	1	7	18	19	23	
27	12	17	16	9	6	0	0	0	4	18	25	27	
28	21	27	19	13	3	0	0	2	8	21	29	31	
29	18	24	19	14	7	0	0	1	11	19	35	22	
30	21	0	19	9	11	0	0	0	10	22	24	35	
31	21	0	20	0	15	0	3	0	0	19	0	22	
	804	640	550	406	221	71	9	12	98	331	642	1002	4786

Appendix 6.1  
 Roseburg Heating Degree Days  
 Source: NOAA with added peak days

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	20	20	11	8	6	5	0	2	0	3	9	26
2	24	19	17	11	12	5	3	3	0	5	10	26
3	22	21	15	10	14	8	3	1	0	7	16	25
4	20	24	15	10	11	12	7	0	0	8	17	25
5	20	22	17	8	15	9	0	0	1	7	18	23
6	14	21	18	17	13	7	0	0	0	5	18	10
7	18	19	21	18	9	8	3	0	0	2	22	16
8	16	18	20	16	9	3	0	0	0	3	19	20
9	22	15	17	19	10	0	0	0	0	2	21	22
10	25	21	20	18	12	0	0	2	0	2	24	20
11	23	19	15	20	9	6	0	1	0	3	18	21
12	20	16	21	18	8	9	0	0	0	6	12	25
13	23	32	19	13	5	3	0	0	0	7	9	23
14	21	48	18	9	12	2	0	0	1	6	7	25
15	21	47	16	7	14	0	4	0	0	11	12	21
16	21	48	18	16	11	0	1	0	0	14	16	15
17	25	31	14	13	12	0	0	0	0	9	15	24
18	26	19	12	10	7	0	0	0	0	6	15	41
19	29	16	9	10	6	0	0	0	0	8	14	53
20	31	19	7	7	4	0	0	0	0	3	12	55
21	30	16	10	7	5	0	0	0	0	4	15	46
22	32	22	14	10	4	0	0	0	0	8	27	49
23	30	21	12	5	0	0	0	0	0	7	25	24
24	23	19	17	7	1	0	0	1	0	13	26	28
25	22	23	15	16	2	0	0	3	0	16	27	27
26	22	21	8	17	4	0	0	1	1	13	26	33
27	22	16	19	17	3	0	0	0	1	14	20	30
28	23	15	21	14	0	5	0	0	2	20	21	24
29	15	14	20	12	0	2	1	0	4	19	19	22
30	15	0	21	10	1	1	0	2	1	20	10	20
31	24	0	19	0	3	0	0	3	0	18	0	19
	699	662	496	373	222	85	22	19	11	269	520	838
												4216



Appendix 6.1  
 WA/ID Heating Degree Days  
 Source: NOAA with added peak days

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1	32	38	37	17	20	0	1	4	3	14	24	33
2	37	31	39	21	18	0	11	0	9	10	31	27
3	45	29	39	20	13	0	12	0	7	5	30	26
4	52	33	37	19	12	0	6	0	1	4	33	26
5	52	34	32	14	24	6	0	0	3	5	33	30
6	58	31	29	13	20	16	0	0	3	0	33	34
7	59	31	26	12	16	14	0	0	0	0	31	34
8	54	30	27	8	13	8	0	0	0	7	25	36
9	51	30	22	13	9	0	0	0	0	20	23	31
10	52	32	26	14	8	0	0	0	2	12	22	23
11	44	32	25	17	9	0	0	0	0	14	28	33
12	36	35	21	28	10	0	0	3	0	15	25	42
13	27	69	20	24	8	9	0	9	0	20	20	46
14	20	80	21	15	14	12	0	6	0	21	20	50
15	19	82	24	11	15	9	0	4	0	19	21	46
16	25	68	26	20	8	11	0	5	0	21	26	49
17	29	57	30	25	4	16	0	6	0	20	28	44
18	32	25	30	30	2	6	0	2	0	18	29	60
19	33	21	28	33	3	11	0	0	6	20	28	66
20	36	26	29	24	7	9	1	1	10	18	32	61
21	36	27	36	19	10	6	0	3	12	25	36	62
22	43	30	36	20	12	5	0	1	16	28	29	53
23	34	33	28	13	9	2	0	0	17	26	33	26
24	27	32	25	14	12	0	0	0	17	24	28	25
25	33	24	17	17	13	0	4	2	20	25	39	28
26	39	22	17	24	10	0	0	0	19	29	43	31
27	40	16	15	23	9	0	0	0	14	32	42	29
28	35	22	13	20	6	0	0	0	12	30	37	33
29	37	24	10	19	10	0	0	0	14	25	33	35
30	33	0	12	13	13	5	0	0	15	25	35	37
31	36	0	14	0	9	0	0	0	0	24	0	35
	1186	1044	791	560	346	145	35	45	201	556	897	1191
												6997

**Appendix 6.1  
Mid Price Case**

	Nymex		AECO		Sumas		Rockies		85.5%		86.4%		85.7%		
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	
	9.91	7.20	8.47	6.16	8.56	6.22	8.49	6.17	Seasonal Shape						111%
									January						
									February						
									March						
									April						
									May						
									June						
									July						
									August						
									September						
									October						
									November						
									December						
	8.50	7.27	7.35	7.29											
	8.90	7.61	7.69	7.63											
	9.10	7.78	7.86	7.80											
	9.30	7.95	8.04	7.97											
	9.50	8.13	8.21	8.15											
	9.71	8.31	8.39	8.32											
	9.92	8.48	8.57	8.50											
AECO															
	8.47														
	6.16	6.81	6.81	6.70	6.70	5.89	5.79	5.82	5.86	5.88	5.87	5.89	6.16	6.41	6.41
	5.82	6.43	6.43	6.33	6.33	5.56	5.47	5.50	5.53	5.56	5.55	5.57	5.82	6.06	6.06
	5.30	5.86	5.86	5.77	5.77	5.07	4.98	5.01	5.04	5.07	5.06	5.08	5.31	5.52	5.52
	5.13	5.67	5.67	5.59	5.59	4.91	4.82	4.85	4.88	4.90	4.89	4.91	5.14	5.35	5.35
	5.13	5.67	5.67	5.59	5.59	4.91	4.82	4.85	4.88	4.90	4.89	4.91	5.14	5.35	5.35
	5.30	5.86	5.86	5.77	5.77	5.07	4.98	5.01	5.04	5.07	5.06	5.08	5.31	5.52	5.52
	5.47	6.05	6.05	5.96	5.96	5.23	5.14	5.17	5.20	5.23	5.22	5.24	5.48	5.70	5.70
	5.65	6.24	6.24	6.15	6.15	5.40	5.31	5.34	5.37	5.39	5.38	5.40	5.65	5.88	5.88
	5.77	6.38	6.38	6.29	6.29	5.52	5.43	5.46	5.49	5.51	5.50	5.53	5.78	6.01	6.01
	6.12	6.76	6.76	6.66	6.66	5.85	5.75	5.78	5.81	5.84	5.83	5.85	6.12	6.37	6.37
	6.59	7.28	7.28	7.17	7.17	6.30	6.19	6.23	6.26	6.29	6.28	6.30	6.59	6.86	6.86
	6.93	7.66	7.66	7.54	7.54	6.62	6.51	6.55	6.59	6.62	6.61	6.63	6.93	7.22	7.22
	7.27	8.04	8.04	7.92	7.92	6.95	6.83	6.87	6.91	6.94	6.93	6.96	7.27	7.57	7.57
	7.61	8.41	8.41	8.29	8.29	7.28	7.15	7.20	7.24	7.27	7.26	7.29	7.62	7.93	7.93
	7.78	8.60	8.61	8.47	8.47	7.44	7.31	7.36	7.40	7.43	7.42	7.45	7.79	8.11	8.11
	7.95	8.79	8.80	8.66	8.66	7.61	7.48	7.52	7.56	7.60	7.58	7.61	7.96	8.28	8.28
	8.13	8.99	8.99	8.85	8.85	7.77	7.64	7.68	7.73	7.76	7.75	7.78	8.13	8.47	8.47
	8.31	9.18	9.18	9.04	9.04	7.94	7.81	7.85	7.90	7.93	7.92	7.95	8.31	8.65	8.65
	8.48	9.38	9.38	9.24	9.24	8.11	7.97	8.02	8.07	8.10	8.09	8.12			

**Appendix 6.1  
Mid Price Case**

Sumas	111% January	111% February	109% March	109% April	96% May	94% June	95% July	95% August	96% September	95% October	96% November	100% December	104% December
2006	8.56												
2007	6.22	6.88	6.78	5.95	5.85	5.88	5.92	5.94	5.93	5.96	6.23	6.48	
2008	5.88	6.50	6.40	5.62	5.52	5.56	5.59	5.61	5.60	5.63	5.88	6.12	
2009	5.36	5.92	5.83	5.12	5.04	5.07	5.09	5.12	5.11	5.13	5.36	5.58	
2010	5.19	5.73	5.65	4.96	4.87	4.90	4.93	4.95	4.94	4.96	5.19	5.40	
2011	5.19	5.73	5.65	4.96	4.87	4.90	4.93	4.95	4.94	4.96	5.19	5.40	
2012	5.36	5.92	5.83	5.12	5.04	5.07	5.09	5.12	5.11	5.13	5.36	5.58	
2013	5.53	6.11	6.02	5.29	5.20	5.23	5.26	5.28	5.27	5.29	5.53	5.76	
2014	5.70	6.31	6.21	5.45	5.36	5.39	5.42	5.45	5.44	5.46	5.71	5.94	
2015	5.83	6.45	6.35	5.58	5.48	5.51	5.55	5.57	5.56	5.58	5.84	6.08	
2016	6.18	6.83	6.73	5.91	5.81	5.84	5.88	5.90	5.89	5.92	6.18	6.44	
2017	6.66	7.36	7.25	6.36	6.26	6.29	6.33	6.36	6.35	6.37	6.66	6.93	
2018	7.00	7.74	7.62	6.69	6.58	6.62	6.66	6.69	6.67	6.70	7.01	7.29	
2019	7.35	8.12	8.00	7.02	6.90	6.94	6.99	7.02	7.00	7.03	7.35	7.65	
2020	7.69	8.50	8.38	7.36	7.23	7.27	7.31	7.35	7.33	7.36	7.70	8.01	
2021	7.86	8.69	8.56	7.52	7.39	7.43	7.48	7.51	7.50	7.53	7.87	8.19	
2022	8.04	8.88	8.75	7.69	7.55	7.60	7.64	7.68	7.66	7.69	8.04	8.37	
2023	8.21	9.08	8.94	7.85	7.72	7.76	7.81	7.85	7.83	7.86	8.22	8.56	
2024	8.39	9.28	9.14	8.03	7.89	7.93	7.98	8.02	8.00	8.03	8.40	8.74	
2025	8.57	9.48	9.33	8.20	8.06	8.10	8.15	8.19	8.17	8.21			
Rockies													
2006	8.49												
2007	6.17	6.82	6.72	5.90	5.80	5.83	5.87	5.90	5.88	5.91	6.18	6.43	
2008	5.83	6.44	6.35	5.57	5.48	5.51	5.54	5.57	5.56	5.58	5.83	6.07	
2009	5.31	5.87	5.79	5.08	5.00	5.02	5.05	5.08	5.07	5.09	5.32	5.54	
2010	5.14	5.69	5.60	4.92	4.83	4.86	4.89	4.91	4.90	4.92	5.15	5.36	
2011	5.14	5.69	5.60	4.92	4.83	4.86	4.89	4.91	4.90	4.92	5.15	5.36	
2012	5.31	5.87	5.88	5.08	5.00	5.02	5.05	5.08	5.07	5.09	5.32	5.54	
2013	5.49	6.06	5.97	5.25	5.16	5.19	5.22	5.24	5.23	5.25	5.49	5.71	
2014	5.66	6.25	6.16	5.41	5.32	5.35	5.38	5.40	5.39	5.42	5.66	5.89	
2015	5.79	6.40	6.30	5.53	5.44	5.47	5.50	5.53	5.52	5.54	5.79	6.03	
2016	6.13	6.77	6.67	5.86	5.76	5.79	5.83	5.85	5.84	5.87	6.13	6.38	
2017	6.60	7.30	7.19	6.31	6.20	6.24	6.28	6.30	6.29	6.32	6.60	6.88	
2018	6.94	7.67	7.56	6.64	6.53	6.56	6.60	6.63	6.62	6.65	6.95	7.23	
2019	7.29	8.05	7.93	6.97	6.85	6.89	6.93	6.96	6.95	6.97	7.29	7.59	
2020	7.63	8.43	8.44	7.29	7.17	7.21	7.25	7.29	7.27	7.30	7.63	7.95	
2021	7.80	8.62	8.49	7.46	7.33	7.37	7.42	7.45	7.44	7.47	7.80	8.12	
2022	7.97	8.81	8.68	7.62	7.49	7.53	7.58	7.61	7.60	7.63	7.98	8.30	
2023	8.15	9.00	8.87	7.79	7.66	7.70	7.75	7.78	7.77	7.80	8.15	8.49	
2024	8.32	9.20	9.06	7.96	7.82	7.87	7.91	7.95	7.94	7.97	8.33	8.67	
2025	8.50	9.40	9.26	8.13	7.99	8.04	8.08	8.12	8.11	8.14			

**Appendix 6.1  
Low Price Case**

	Nymex		AECO		Sumas		Rockies		Seasonal Shape	
	85.5%	86.4%	85.7%	85.7%	111%	109%	109%	109%	94%	95%
2006	5.08	4.35	4.10	4.36	4.39	4.36	4.36	4.36	January	111%
2007	4.80	4.10	4.15	4.11	4.15	4.11	4.11	4.11	February	111%
2008	4.53	3.88	3.92	3.88	3.70	3.67	3.67	3.67	March	109%
2009	4.28	3.66	3.70	3.67	3.49	3.46	3.46	3.46	April	96%
2010	4.04	3.45	3.49	3.46	3.52	3.49	3.49	3.49	May	94%
2011	4.07	3.48	3.52	3.49	3.54	3.51	3.51	3.51	June	95%
2012	4.10	3.50	3.54	3.51	3.57	3.54	3.54	3.54	July	95%
2013	4.13	3.53	3.57	3.54	3.59	3.56	3.56	3.56	August	96%
2014	4.15	3.55	3.59	3.56	3.62	3.59	3.59	3.59	September	95%
2015	4.18	3.58	3.62	3.59	3.71	3.75	3.72	3.72	October	96%
2016	4.33	3.71	3.75	3.72	3.84	3.88	3.85	3.85	November	100%
2017	4.49	3.84	3.88	3.85	4.02	4.02	3.99	3.99	December	104%
2018	4.65	3.98	4.02	3.99	4.12	4.17	4.13	4.13		
2019	4.82	4.12	4.17	4.13	4.27	4.32	4.28	4.28		
2020	5.00	4.27	4.32	4.28	4.41	4.46	4.42	4.42		
2021	5.16	4.41	4.46	4.42	4.55	4.60	4.56	4.56		
2022	5.32	4.55	4.60	4.56	4.70	4.75	4.71	4.71		
2023	5.49	4.70	4.75	4.71	4.85	4.90	4.86	4.86		
2024	5.67	4.85	4.90	4.86	5.00	5.06	5.01	5.01		
2025	5.85	5.00	5.06	5.01						

	AECO		111%		111%		109%		96%		95%		95%		96%		96%		100%		104%			
	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
2006	4.35	4.10	4.54	4.47	3.92	3.86	3.88	3.90	3.92	3.91	3.93	3.91	3.92	3.91	3.93	3.91	3.92	3.91	3.92	3.91	3.93	4.35	4.11	4.27
2007	3.88	4.28	4.29	4.22	3.71	3.64	3.66	3.68	3.70	3.69	3.71	3.69	3.70	3.69	3.71	3.69	3.70	3.68	3.71	3.69	3.71	3.88	4.04	4.04
2008	3.66	4.04	4.05	3.98	3.50	3.44	3.46	3.48	3.49	3.49	3.50	3.49	3.49	3.49	3.50	3.49	3.49	3.48	3.49	3.49	3.50	3.66	3.81	3.81
2009	3.45	3.82	3.82	3.76	3.30	3.25	3.27	3.28	3.30	3.29	3.31	3.29	3.30	3.29	3.31	3.29	3.30	3.28	3.30	3.29	3.31	3.46	3.60	3.60
2010	3.48	3.85	3.85	3.79	3.33	3.27	3.29	3.31	3.32	3.32	3.33	3.32	3.32	3.32	3.33	3.32	3.32	3.31	3.32	3.32	3.33	3.48	3.62	3.62
2011	3.50	3.87	3.87	3.81	3.35	3.29	3.31	3.33	3.35	3.34	3.35	3.34	3.35	3.34	3.35	3.34	3.35	3.33	3.35	3.34	3.35	3.51	3.65	3.65
2012	3.53	3.90	3.90	3.84	3.37	3.32	3.33	3.35	3.37	3.36	3.38	3.36	3.37	3.36	3.38	3.36	3.37	3.35	3.37	3.36	3.38	3.53	3.67	3.67
2013	3.55	3.93	3.93	3.87	3.40	3.34	3.36	3.38	3.39	3.39	3.40	3.39	3.39	3.39	3.40	3.39	3.39	3.38	3.40	3.39	3.40	3.56	3.70	3.70
2014	3.58	3.96	3.96	3.90	3.42	3.36	3.38	3.40	3.42	3.41	3.43	3.42	3.42	3.41	3.43	3.42	3.42	3.40	3.42	3.41	3.43	3.58	3.73	3.73
2015	3.71	4.10	4.10	4.04	3.54	3.48	3.50	3.52	3.54	3.53	3.55	3.53	3.54	3.53	3.55	3.53	3.54	3.52	3.54	3.53	3.55	3.71	3.86	3.86
2016	3.84	4.25	4.25	4.18	3.67	3.61	3.63	3.65	3.67	3.66	3.68	3.66	3.67	3.66	3.68	3.66	3.67	3.65	3.67	3.66	3.68	3.84	4.00	4.00
2017	3.98	4.40	4.40	4.33	3.81	3.74	3.76	3.78	3.80	3.79	3.81	3.79	3.80	3.79	3.81	3.79	3.80	3.78	3.80	3.79	3.81	3.98	4.15	4.15
2018	4.12	4.56	4.56	4.49	3.94	3.88	3.90	3.92	3.94	3.93	3.95	3.93	3.94	3.93	3.95	3.93	3.94	3.92	3.94	3.93	3.95	4.13	4.30	4.30
2019	4.27	4.72	4.72	4.65	4.09	4.02	4.04	4.06	4.08	4.07	4.09	4.07	4.08	4.07	4.09	4.07	4.08	4.06	4.08	4.07	4.09	4.28	4.45	4.45
2020	4.41	4.87	4.88	4.80	4.22	4.14	4.17	4.19	4.21	4.20	4.22	4.20	4.21	4.20	4.22	4.20	4.21	4.19	4.21	4.20	4.22	4.41	4.59	4.59
2021	4.55	5.03	5.03	4.96	4.35	4.28	4.30	4.33	4.35	4.34	4.36	4.33	4.35	4.34	4.36	4.33	4.35	4.32	4.35	4.34	4.36	4.55	4.74	4.74
2022	4.70	5.19	5.19	5.11	4.49	4.41	4.44	4.47	4.49	4.48	4.50	4.47	4.49	4.48	4.50	4.47	4.49	4.46	4.49	4.48	4.50	4.70	4.89	4.89
2023	4.85	5.36	5.36	5.28	4.64	4.56	4.58	4.61	4.63	4.62	4.64	4.61	4.63	4.62	4.64	4.61	4.63	4.60	4.63	4.62	4.64	4.85	5.05	5.05
2024	4.85	5.36	5.36	5.28	4.64	4.56	4.58	4.61	4.63	4.62	4.64	4.61	4.63	4.62	4.64	4.61	4.63	4.60	4.63	4.62	4.64	4.85	5.05	5.05
2025	5.00	5.53	5.53	5.45	4.78	4.70	4.73	4.76	4.78	4.77	4.79	4.76	4.78	4.77	4.79	4.76	4.78	4.75	4.78	4.77	4.79	5.05	5.24	5.24

**Appendix 6.1  
Low Price Case**

Sumas	111% January	111% February	109% March	109% April	96% May	94% June	95% July	95% August	96% September	95% October	96% November	100% December	104% December
2006	4.39												
2007	4.15	4.58	4.59	4.52	3.97	3.90	3.92	3.94	3.96	3.95	3.97	4.15	4.32
2008	3.92	4.33	4.33	4.26	3.74	3.68	3.70	3.72	3.74	3.73	3.75	3.92	4.08
2009	3.70	4.09	4.09	4.03	3.54	3.48	3.49	3.52	3.53	3.53	3.54	3.70	3.85
2010	3.49	3.86	3.86	3.80	3.34	3.28	3.30	3.32	3.33	3.33	3.34	3.49	3.64
2011	3.52	3.89	3.89	3.83	3.36	3.30	3.32	3.34	3.36	3.35	3.37	3.52	3.66
2012	3.54	3.91	3.91	3.85	3.39	3.33	3.35	3.37	3.38	3.38	3.39	3.54	3.69
2013	3.57	3.94	3.94	3.88	3.41	3.35	3.37	3.39	3.41	3.40	3.41	3.57	3.71
2014	3.59	3.97	3.97	3.91	3.43	3.37	3.39	3.41	3.43	3.42	3.44	3.59	3.74
2015	3.62	4.00	4.00	3.94	3.46	3.40	3.42	3.44	3.45	3.45	3.46	3.62	3.77
2016	3.75	4.14	4.14	4.08	3.58	3.52	3.54	3.56	3.58	3.57	3.59	3.75	3.90
2017	3.88	4.29	4.29	4.23	3.71	3.65	3.67	3.69	3.71	3.70	3.72	3.88	4.04
2018	4.02	4.45	4.45	4.38	3.85	3.78	3.80	3.82	3.84	3.83	3.85	4.02	4.19
2019	4.17	4.61	4.61	4.54	3.98	3.92	3.94	3.96	3.98	3.97	3.99	4.17	4.34
2020	4.32	4.77	4.77	4.70	4.13	4.06	4.08	4.10	4.12	4.12	4.13	4.32	4.50
2021	4.46	4.93	4.93	4.85	4.26	4.19	4.21	4.24	4.26	4.25	4.27	4.46	4.64
2022	4.60	5.08	5.09	5.01	4.40	4.32	4.35	4.37	4.39	4.38	4.40	4.60	4.79
2023	4.75	5.25	5.25	5.17	4.54	4.46	4.49	4.51	4.53	4.53	4.54	4.75	4.94
2024	4.90	5.41	5.42	5.33	4.68	4.60	4.63	4.66	4.68	4.67	4.69	4.90	5.10
2025	5.06	5.59	5.59	5.50	4.83	4.75	4.78	4.81	4.83	4.82	4.84		
<b>Rockies</b>													
2006	4.36												
2007	4.11	4.55	4.55	4.48	3.93	3.87	3.89	3.91	3.93	3.92	3.94	4.12	4.28
2008	3.88	4.29	4.29	4.23	3.71	3.65	3.67	3.69	3.71	3.70	3.72	3.89	4.05
2009	3.67	4.05	4.05	3.99	3.51	3.45	3.47	3.49	3.50	3.50	3.51	3.67	3.82
2010	3.46	3.83	3.83	3.77	3.31	3.25	3.27	3.29	3.31	3.30	3.31	3.46	3.61
2011	3.49	3.85	3.86	3.80	3.33	3.28	3.30	3.31	3.33	3.32	3.34	3.49	3.63
2012	3.51	3.88	3.88	3.82	3.36	3.30	3.32	3.34	3.35	3.35	3.36	3.51	3.66
2013	3.54	3.91	3.91	3.85	3.38	3.32	3.34	3.36	3.38	3.37	3.38	3.54	3.68
2014	3.56	3.94	3.94	3.88	3.40	3.35	3.37	3.39	3.40	3.40	3.41	3.56	3.71
2015	3.59	3.96	3.97	3.90	3.43	3.37	3.39	3.41	3.43	3.42	3.43	3.59	3.74
2016	3.72	4.11	4.11	4.05	3.55	3.49	3.51	3.53	3.55	3.54	3.56	3.72	3.87
2017	3.85	4.26	4.26	4.19	3.68	3.62	3.64	3.66	3.68	3.67	3.68	3.85	4.01
2018	3.99	4.41	4.41	4.34	3.81	3.75	3.77	3.79	3.81	3.80	3.82	3.99	4.15
2019	4.13	4.57	4.57	4.50	3.95	3.88	3.91	3.93	3.95	3.94	3.96	4.14	4.30
2020	4.28	4.73	4.73	4.66	4.09	4.02	4.05	4.07	4.09	4.08	4.10	4.28	4.46
2021	4.42	4.88	4.89	4.81	4.23	4.15	4.18	4.20	4.22	4.21	4.23	4.42	4.60
2022	4.56	5.04	5.04	4.97	4.36	4.29	4.31	4.34	4.36	4.35	4.37	4.56	4.75
2023	4.71	5.20	5.21	5.13	4.50	4.42	4.45	4.48	4.50	4.49	4.51	4.71	4.90
2024	4.86	5.37	5.37	5.29	4.65	4.57	4.59	4.62	4.64	4.63	4.65	4.86	5.06
2025	5.01	5.54	5.54	5.46	4.79	4.71	4.74	4.77	4.79	4.78	4.80		

**Appendix 6.1  
High Price Case**

	Nymex		AECO		Sumas		Rockies		Seasonal Shape												
	11.00	9.41	85.5%	86.4%	85.7%	111%	109%	111%	109%	April	May	June	July	August	September	October	November	December	100%	104%	
2006	11.00	9.41	85.5%	86.4%	85.7%	111%	109%	111%	109%	April	May	June	July	August	September	October	November	December	100%	104%	
2007	9.65	8.26	8.34	8.28	8.28	9.51	9.43	8.28	8.28	January	February	March	April	May	June	July	August	September	October	November	December
2008	8.49	7.26	7.34	7.28	7.28	6.60	6.55	6.55	6.55	January	February	March	April	May	June	July	August	September	October	November	December
2009	7.64	6.53	6.60	6.55	6.55	6.29	6.31	6.31	6.31	January	February	March	April	May	June	July	August	September	October	November	December
2010	7.36	6.29	6.36	6.31	6.31	6.40	6.42	6.42	6.42	January	February	March	April	May	June	July	August	September	October	November	December
2011	7.48	6.40	6.47	6.42	6.42	6.56	6.57	6.57	6.57	January	February	March	April	May	June	July	August	September	October	November	December
2012	7.66	6.56	6.62	6.57	6.57	6.79	6.74	6.74	6.74	January	February	March	April	May	June	July	August	September	October	November	December
2013	7.86	6.72	6.79	6.74	6.74	6.91	6.93	6.93	6.93	January	February	March	April	May	June	July	August	September	October	November	December
2014	8.08	6.91	6.99	6.93	6.93	7.10	7.12	7.12	7.12	January	February	March	April	May	June	July	August	September	October	November	December
2015	8.30	7.10	7.18	7.12	7.12	7.28	7.30	7.30	7.30	January	February	March	April	May	June	July	August	September	October	November	December
2016	8.52	7.28	7.36	7.30	7.30	7.46	7.48	7.48	7.48	January	February	March	April	May	June	July	August	September	October	November	December
2017	8.72	7.46	7.54	7.48	7.48	7.64	7.66	7.66	7.66	January	February	March	April	May	June	July	August	September	October	November	December
2018	8.93	7.64	7.72	7.66	7.66	7.82	7.90	7.84	7.84	January	February	March	April	May	June	July	August	September	October	November	December
2019	9.14	7.82	7.90	7.84	7.84	8.08	8.08	8.01	8.01	January	February	March	April	May	June	July	August	September	October	November	December
2020	9.35	7.99	8.08	8.01	8.01	8.17	8.26	8.19	8.19	January	February	March	April	May	June	July	August	September	October	November	December
2021	9.56	8.17	8.26	8.19	8.19	8.35	8.44	8.37	8.37	January	February	March	April	May	June	July	August	September	October	November	December
2022	9.77	8.35	8.44	8.37	8.37	8.54	8.63	8.56	8.56	January	February	March	April	May	June	July	August	September	October	November	December
2023	9.98	8.54	8.63	8.56	8.56	8.72	8.82	8.74	8.74	January	February	March	April	May	June	July	August	September	October	November	December
2024	10.20	8.72	8.82	8.74	8.74	8.91	9.00	8.93	8.93	January	February	March	April	May	June	July	August	September	October	November	December
2025	10.42	8.91	9.00	8.93	8.93	9.13	9.22	9.15	9.15	January	February	March	April	May	June	July	August	September	October	November	December
AECO	9.41	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90
2006	9.41	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90
2007	8.26	9.13	9.13	8.99	8.99	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03
2008	7.26	8.03	8.03	7.91	7.91	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23
2009	6.53	7.22	7.23	7.12	7.12	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96
2010	6.29	6.96	6.96	6.85	6.85	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29
2011	6.40	7.08	7.08	6.97	6.97	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
2012	6.56	7.25	7.25	7.14	7.14	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56
2013	6.72	7.43	7.43	7.32	7.32	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72
2014	6.91	7.64	7.64	7.53	7.53	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91	6.91
2015	7.10	7.85	7.85	7.73	7.73	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
2016	7.28	8.05	8.05	7.93	7.93	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28
2017	7.46	8.25	8.25	8.12	8.12	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46
2018	7.64	8.45	8.45	8.32	8.32	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64	7.64
2019	7.82	8.64	8.64	8.51	8.51	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82	7.82
2020	7.99	8.84	8.84	8.70	8.70	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99
2021	8.17	9.03	9.03	8.90	8.90	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17	8.17
2022	8.35	9.23	9.23	9.09	9.09	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35
2023	8.54	9.44	9.44	9.29	9.29	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54	8.54
2024	8.72	9.64	9.64	9.50	9.50	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72	8.72
2025	8.91	9.85	9.85	9.70	9.70	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91	8.91

**Appendix 6.1  
High Price Case**

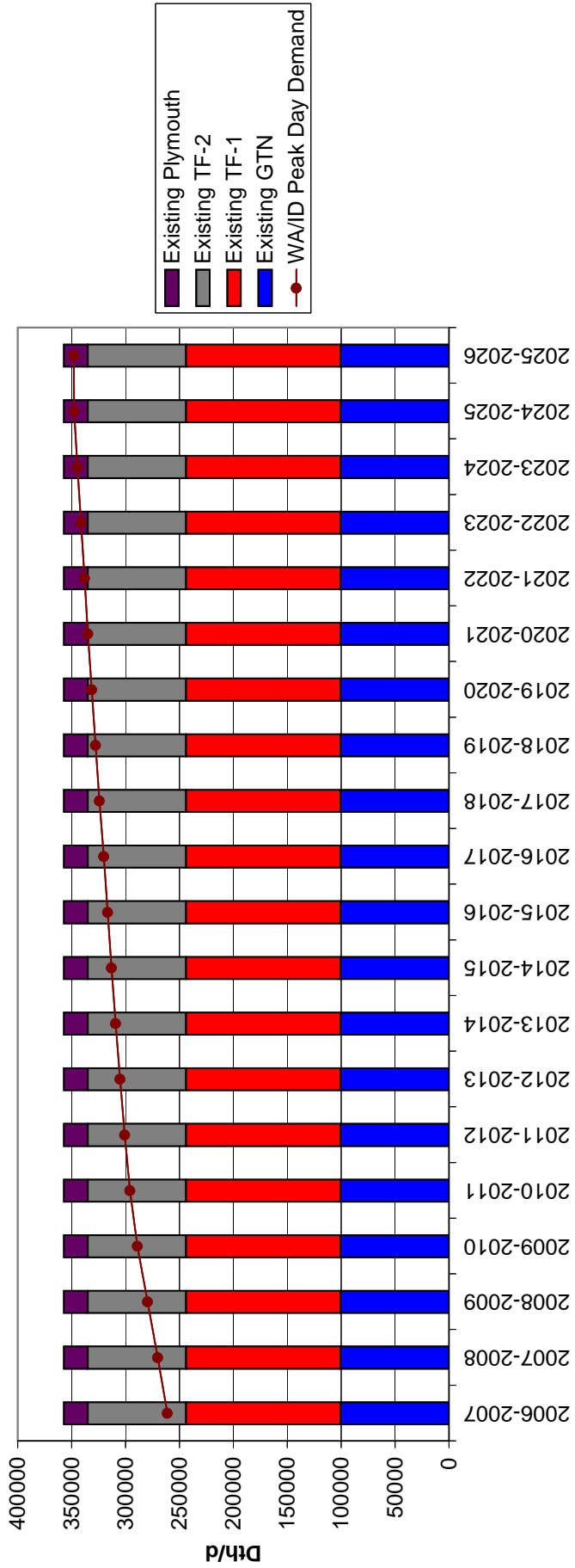
Sumas	111% January	111% February	109% March	109% April	96% May	94% June	95% July	95% August	96% September	95% October	96% November	100% December	104% December
2006	9.51												
2007	8.34	9.22	9.23	9.08	7.98	7.84	7.89	7.93	7.97	7.96	7.99	8.35	8.69
2008	7.34	8.11	8.12	7.99	7.02	6.90	6.94	6.98	7.01	7.00	7.03	7.35	7.65
2009	6.60	7.30	7.30	7.19	6.31	6.21	6.24	6.28	6.31	6.30	6.32	6.61	6.88
2010	6.36	7.03	7.03	6.92	6.08	5.98	6.01	6.05	6.07	6.06	6.09	6.36	6.62
2011	6.47	7.15	7.15	7.04	6.19	6.08	6.11	6.15	6.18	6.17	6.19	6.47	6.74
2012	6.62	7.32	7.33	7.21	6.33	6.23	6.26	6.30	6.33	6.32	6.34	6.63	6.90
2013	6.79	7.51	7.51	7.40	6.49	6.38	6.42	6.46	6.49	6.48	6.50	6.80	7.07
2014	6.99	7.72	7.73	7.61	6.68	6.57	6.60	6.64	6.67	6.66	6.69	6.99	7.28
2015	7.18	7.93	7.93	7.81	6.86	6.74	6.78	6.82	6.85	6.84	6.87	7.18	7.47
2016	7.36	8.14	8.14	8.01	7.04	6.92	6.96	7.00	7.03	7.02	7.04	7.36	7.67
2017	7.54	8.33	8.34	8.21	7.21	7.08	7.12	7.17	7.20	7.19	7.22	7.54	7.85
2018	7.72	8.53	8.54	8.41	7.38	7.26	7.30	7.34	7.37	7.36	7.39	7.73	8.04
2019	7.90	8.73	8.74	8.60	7.56	7.43	7.47	7.51	7.55	7.53	7.56	7.91	8.23
2020	8.08	8.93	8.93	8.80	7.72	7.59	7.64	7.68	7.72	7.70	7.73	8.08	8.41
2021	8.26	9.13	9.13	8.99	7.90	7.76	7.81	7.85	7.89	7.87	7.91	8.26	8.60
2022	8.44	9.33	9.33	9.19	8.07	7.93	7.98	8.03	8.06	8.05	8.08	8.45	8.79
2023	8.63	9.54	9.54	9.39	8.25	8.11	8.15	8.20	8.24	8.23	8.26	8.63	8.99
2024	8.82	9.74	9.75	9.60	8.43	8.29	8.33	8.38	8.42	8.40	8.44	8.82	9.18
2025	9.00	9.95	9.96	9.80	8.61	8.46	8.51	8.56	8.60	8.59	8.62		
Rockies													
2006	9.43												
2007	8.28	9.15	9.15	9.01	7.91	7.78	7.82	7.87	7.90	7.89	7.92	8.28	8.62
2008	7.28	8.05	8.05	7.93	6.96	6.84	6.88	6.92	6.95	6.94	6.97	7.28	7.58
2009	6.55	7.24	7.24	7.13	6.26	6.16	6.19	6.23	6.26	6.24	6.27	6.55	6.82
2010	6.31	6.97	6.97	6.87	6.03	5.93	5.96	6.00	6.02	6.01	6.04	6.31	6.57
2011	6.42	7.09	7.09	6.99	6.14	6.03	6.06	6.10	6.13	6.12	6.14	6.42	6.68
2012	6.57	7.26	7.27	7.15	6.28	6.18	6.21	6.25	6.28	6.26	6.29	6.57	6.84
2013	6.74	7.45	7.45	7.33	6.44	6.33	6.37	6.40	6.43	6.42	6.45	6.74	7.02
2014	6.93	7.66	7.66	7.54	6.63	6.51	6.55	6.59	6.62	6.61	6.63	6.93	7.22
2015	7.12	7.87	7.87	7.75	6.80	6.69	6.73	6.77	6.80	6.78	6.81	7.12	7.41
2016	7.30	8.07	8.07	7.95	6.98	6.86	6.90	6.94	6.97	6.96	6.99	7.30	7.60
2017	7.48	8.26	8.27	8.14	7.15	7.03	7.07	7.11	7.14	7.13	7.16	7.48	7.79
2018	7.66	8.46	8.47	8.34	7.32	7.20	7.24	7.28	7.31	7.30	7.33	7.66	7.98
2019	7.84	8.66	8.67	8.53	7.49	7.37	7.41	7.45	7.49	7.47	7.50	7.84	8.16
2020	8.01	8.86	8.86	8.72	7.66	7.53	7.57	7.62	7.65	7.64	7.67	8.02	8.35
2021	8.19	9.05	9.06	8.92	7.83	7.70	7.74	7.79	7.82	7.81	7.84	8.20	8.53
2022	8.37	9.25	9.26	9.11	8.01	7.87	7.91	7.96	8.00	7.98	8.01	8.38	8.72
2023	8.56	9.46	9.46	9.32	8.18	8.04	8.09	8.13	8.17	8.16	8.19	8.56	8.91
2024	8.74	9.66	9.67	9.52	8.36	8.22	8.26	8.31	8.35	8.34	8.37	8.75	9.11
2025	8.93	9.87	9.88	9.72	8.54	8.39	8.44	8.49	8.53	8.51	8.55		

# **Existing Resource Comparisons**

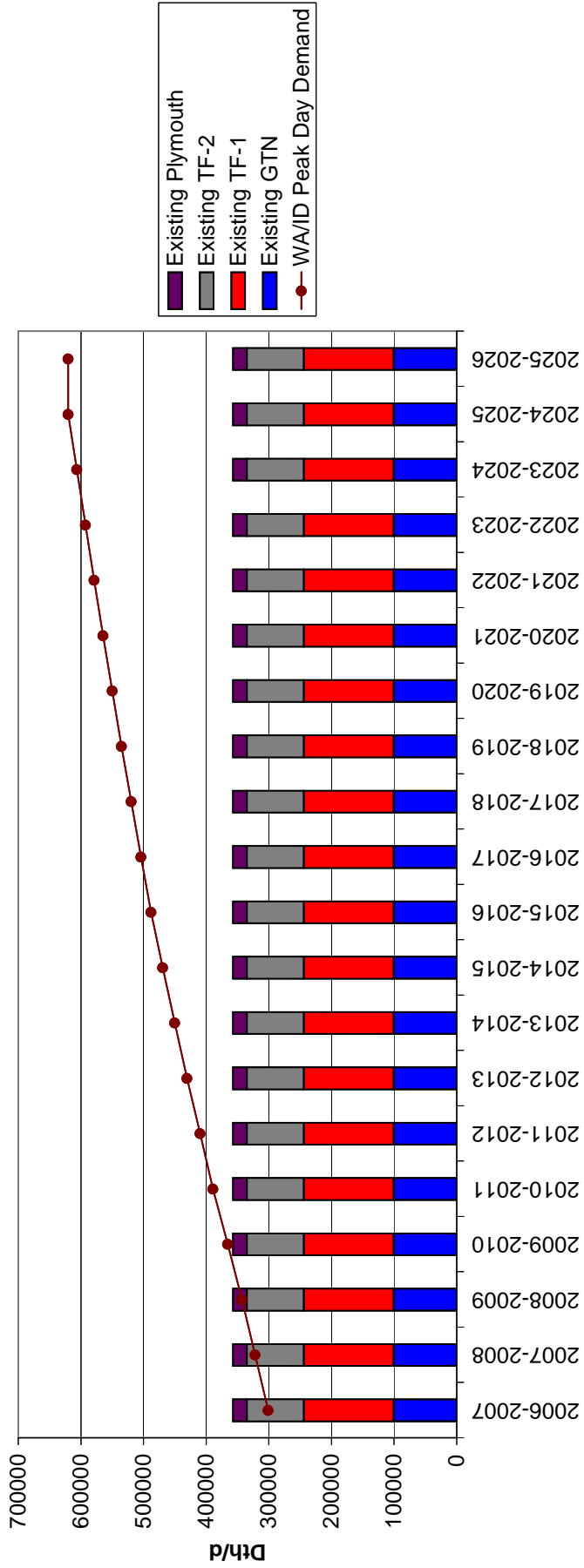
## **Appendix 6.2**



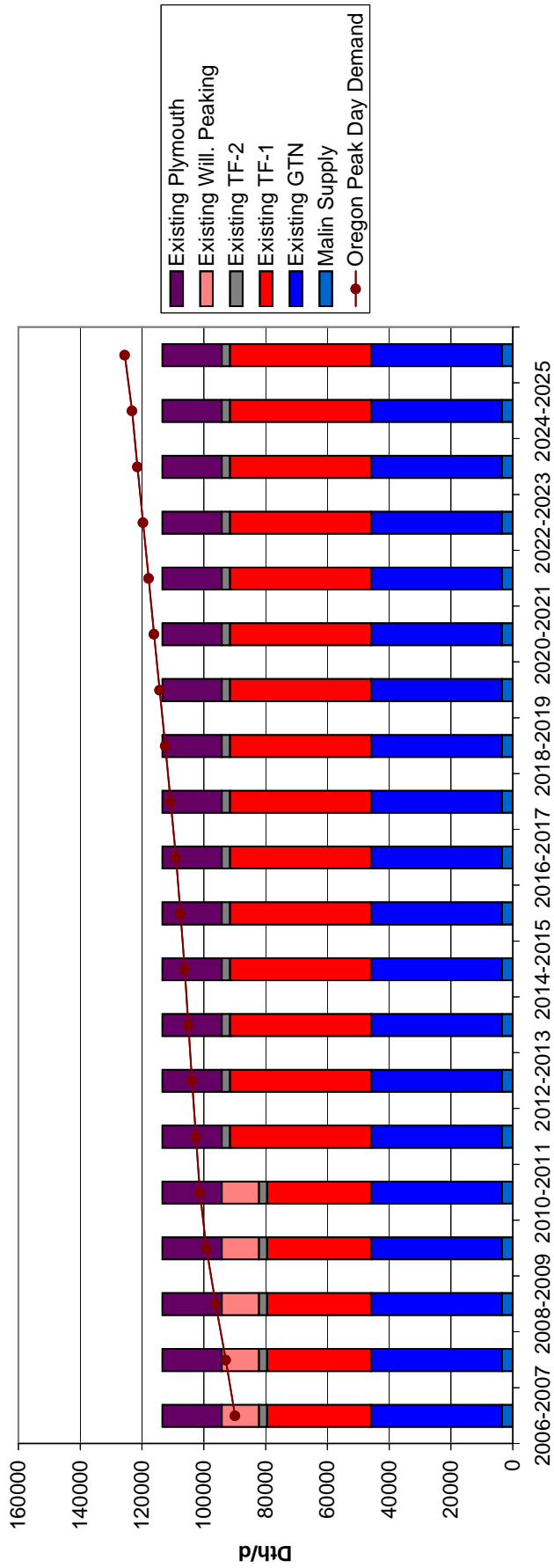
**Appendix 6.2 - WA/ID Existing Resources vs.  
Peak Day Demand (Net of DSM Savings)  
Low Demand Case**



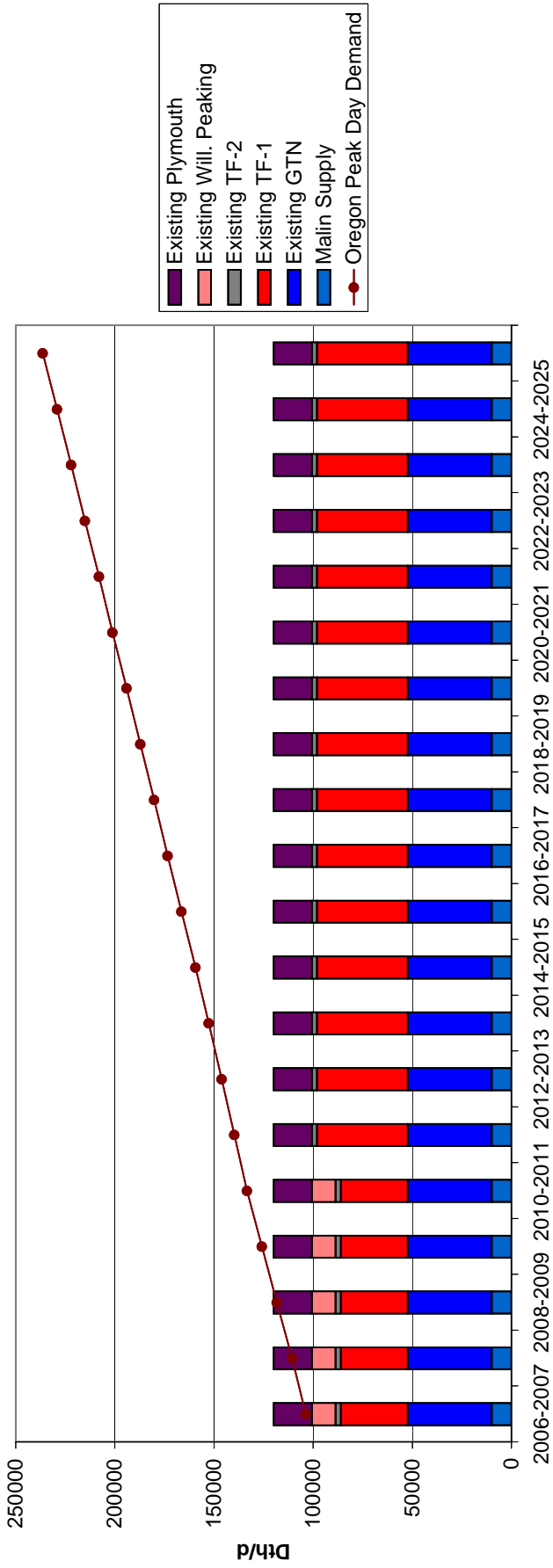
Appendix 6.2 - WA/ID Existing Resources vs.  
 Peak Day Demand (Net of DSM Savings)  
 High Demand Case



Appendix 6.2 - Oregon Existing Resources vs. Peak Day Demand (Net of DSM Savings)  
Low Demand Case



**Appendix 6.2 - Oregon Existing Resources vs.  
Peak Day Demand (Net of DSM Savings)  
High Demand Case**



# **Served and Unserved Demand**

## **Appendix 6.3**

**Appendix 6.3 - Peak Day Demand - Served and Unserved (MDth/d)  
Before Resource Additions & Net of DSM Savings**

Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
2	2006-2007	8.39	-	8.39	274.06	-	274.06
2	2007-2008	8.91	-	8.91	295.96	-	295.96
2	2008-2009	9.18	-	9.18	310.11	-	310.11
2	2009-2010	9.50	-	9.50	326.79	-	326.79
2	2010-2011	9.75	-	9.75	341.37	-	341.37
2	2011-2012	9.96	-	9.96	354.71	-	354.71
2	2012-2013	10.12	-	10.12	357.29	9.07	366.37
2	2013-2014	10.25	0.03	10.28	373.80	3.58	377.38
2	2014-2015	10.25	0.18	10.43	373.05	14.83	387.88
2	2015-2016	10.25	0.34	10.60	386.99	11.80	398.80
2	2016-2017	10.25	0.49	10.74	387.37	19.75	407.12
2	2017-2018	10.25	0.60	10.85	386.46	27.61	414.07
2	2018-2019	10.25	0.76	11.01	385.41	37.08	422.49
2	2019-2020	10.25	0.91	11.16	384.34	46.28	430.62
2	2020-2021	10.25	1.06	11.32	383.37	54.93	438.30
2	2021-2022	10.25	1.22	11.47	382.84	62.74	445.58
2	2022-2023	10.25	1.38	11.63	382.84	70.30	453.14
2	2023-2024	10.25	1.54	11.80	382.84	77.55	460.39
2	2024-2025	10.25	1.71	11.96	382.84	85.16	468.00
2	2025-2026	10.25	1.74	11.99	382.84	85.33	468.18

Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
6	2006-2007	8.04	-	8.04	261.10	-	261.10
6	2007-2008	8.24	-	8.24	270.14	-	270.14
6	2008-2009	8.44	-	8.44	279.61	-	279.61
6	2009-2010	8.63	-	8.63	288.93	-	288.93
6	2010-2011	8.73	-	8.73	295.94	-	295.94
6	2011-2012	8.78	-	8.78	300.75	-	300.75
6	2012-2013	8.82	-	8.82	305.17	-	305.17
6	2013-2014	8.85	-	8.85	309.26	-	309.26
6	2014-2015	8.87	-	8.87	313.01	-	313.01
6	2015-2016	8.89	-	8.89	316.48	-	316.48
6	2016-2017	8.95	-	8.95	320.23	-	320.23
6	2017-2018	9.02	-	9.02	324.19	-	324.19
6	2018-2019	9.09	-	9.09	327.90	-	327.90
6	2019-2020	9.16	-	9.16	331.35	-	331.35
6	2020-2021	9.22	-	9.22	334.95	-	334.95
6	2021-2022	9.28	-	9.28	338.13	-	338.13
6	2022-2023	9.35	-	9.35	341.36	-	341.36
6	2023-2024	9.42	-	9.42	344.58	-	344.58
6	2024-2025	9.48	-	9.48	347.68	-	347.68
6	2025-2026	9.51	-	9.51	347.86	-	347.86

**Appendix 6.3 - Peak Day Demand - Served and Unserved (MDth/d)  
Before Resource Additions & Net of DSM Savings**

<u>Case</u>	<u>Gas Year</u>	<u>La Grande Served</u>	<u>La Grande Unserved</u>	<u>La Grande Total</u>	<u>WA/ID Served</u>	<u>WA/ID Unserved</u>	<u>WA/ID Total</u>
7	2006-2007	9.17	-	9.17	301.11	-	301.11
7	2007-2008	9.57	-	9.57	321.75	-	321.75
7	2008-2009	9.97	-	9.97	343.08	-	343.08
7	2009-2010	10.25	0.12	10.38	365.80	-	365.80
7	2010-2011	10.25	0.54	10.79	386.30	2.84	389.14
7	2011-2012	10.25	0.87	11.12	385.77	24.12	409.89
7	2012-2013	10.25	1.21	11.47	399.44	31.12	430.57
7	2013-2014	10.25	1.54	11.79	397.72	52.61	450.33
7	2014-2015	10.25	1.85	12.10	396.06	73.11	469.17
7	2015-2016	10.25	2.17	12.43	396.06	92.01	488.07
7	2016-2017	10.25	2.47	12.72	413.98	89.89	503.87
7	2017-2018	10.25	2.78	13.03	395.12	124.52	519.64
7	2018-2019	10.25	3.08	13.33	373.12	162.14	535.26
7	2019-2020	10.25	3.39	13.64	373.12	176.88	550.00
7	2020-2021	10.25	3.69	13.94	355.20	209.35	564.55
7	2021-2022	10.25	3.99	14.24	339.83	238.93	578.77
7	2022-2023	10.25	4.30	14.55	338.79	253.76	592.55
7	2023-2024	10.25	4.61	14.86	321.23	285.07	606.30
7	2024-2025	10.25	4.92	15.17	321.23	298.96	620.20
7	2025-2026	10.25	4.94	15.20	321.23	299.14	620.37

**Appendix 6.3 - Peak Day Demand - Served and Unserved (MDth/d)  
Before Resource Additions & Net of DSM Savings**

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/Roseburg Served	Medford/Roseburg Unserved	Medford/Roseburg Total
2	2006-2007	12.82	-	12.82	73.18	-	73.18
2	2007-2008	13.66	-	13.66	79.19	-	79.19
2	2008-2009	14.18	-	14.18	83.43	-	83.43
2	2009-2010	14.77	-	14.77	88.05	-	88.05
2	2010-2011	15.03	0.22	15.25	87.24	4.64	91.88
2	2011-2012	15.03	0.56	15.59	87.24	8.08	95.32
2	2012-2013	15.03	0.84	15.87	87.24	11.13	98.37
2	2013-2014	15.03	1.13	16.16	87.24	14.27	101.51
2	2014-2015	15.03	1.45	16.48	87.24	17.47	104.71
2	2015-2016	15.03	1.79	16.82	87.24	21.00	108.24
2	2016-2017	15.03	2.14	17.18	87.24	24.30	111.54
2	2017-2018	15.03	2.46	17.49	87.24	27.17	114.41
2	2018-2019	15.03	2.83	17.86	87.24	30.51	117.75
2	2019-2020	15.03	3.21	18.25	87.24	33.93	121.17
2	2020-2021	15.03	3.60	18.63	87.24	37.25	124.49
2	2021-2022	15.03	3.96	18.99	87.24	40.57	127.81
2	2022-2023	15.03	4.34	19.37	87.24	44.01	131.25
2	2023-2024	15.03	4.76	19.79	87.24	47.40	134.64
2	2024-2025	15.03	5.16	20.20	87.24	50.81	138.05
2	2025-2026	15.03	5.69	20.72	87.24	54.85	142.09

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/Roseburg Served	Medford/Roseburg Unserved	Medford/Roseburg Total
6	2006-2007	12.25	-	12.25	69.58	-	69.58
6	2007-2008	12.57	-	12.57	72.07	-	72.07
6	2008-2009	12.91	-	12.91	74.77	-	74.77
6	2009-2010	13.23	-	13.23	77.30	-	77.30
6	2010-2011	13.44	-	13.44	79.09	-	79.09
6	2011-2012	13.51	-	13.51	80.28	-	80.28
6	2012-2013	13.56	-	13.56	81.39	-	81.39
6	2013-2014	13.62	-	13.62	82.54	-	82.54
6	2014-2015	13.68	-	13.68	83.66	-	83.66
6	2015-2016	13.76	-	13.76	84.87	-	84.87
6	2016-2017	13.92	-	13.92	86.17	-	86.17
6	2017-2018	14.08	-	14.08	87.24	0.43	87.67
6	2018-2019	14.24	-	14.24	87.24	1.94	89.18
6	2019-2020	14.43	-	14.43	87.24	3.51	90.75
6	2020-2021	14.60	-	14.60	87.24	5.06	92.30
6	2021-2022	14.75	-	14.75	87.24	6.56	93.80
6	2022-2023	14.94	-	14.94	87.24	8.12	95.36
6	2023-2024	15.03	0.08	15.11	87.24	9.68	96.92
6	2024-2025	15.03	0.27	15.30	87.24	11.21	98.45
6	2025-2026	15.03	0.55	15.59	87.24	13.25	100.49



**Appendix 6.3 - Peak Day Demand - Served and Unserved (MDth/d)  
Before Resource Additions & Net of DSM Savings**

<u>Case</u>	<u>Gas Year</u>	<u>Klamath Falls Served</u>	<u>Klamath Falls Unserved</u>	<u>Klamath Falls Total</u>	<u>Medford/Roseburg Served</u>	<u>Medford/Roseburg Unserved</u>	<u>Medford/Roseburg Total</u>
7	2006-2007	14.01	-	14.01	80.50	-	80.50
7	2007-2008	14.74	-	14.74	86.35	-	86.35
7	2008-2009	15.03	0.51	15.55	92.81	-	92.81
7	2009-2010	15.03	1.31	16.35	99.16	-	99.16
7	2010-2011	15.03	2.10	17.13	87.24	18.21	105.45
7	2011-2012	15.03	2.67	17.70	87.24	23.63	110.87
7	2012-2013	15.03	3.23	18.26	87.24	29.10	116.34
7	2013-2014	15.03	3.82	18.85	87.24	34.74	121.98
7	2014-2015	15.03	4.44	19.47	87.24	40.52	127.76
7	2015-2016	15.03	5.10	20.14	87.24	46.67	133.91
7	2016-2017	15.03	5.79	20.82	87.24	52.65	139.89
7	2017-2018	15.03	6.45	21.48	87.24	58.46	145.70
7	2018-2019	15.03	7.14	22.17	87.24	64.37	151.61
7	2019-2020	15.03	7.84	22.87	87.24	70.38	157.62
7	2020-2021	15.03	8.55	23.59	87.24	76.41	163.65
7	2021-2022	15.03	9.21	24.24	87.24	82.24	169.48
7	2022-2023	15.03	9.91	24.94	87.24	88.33	175.57
7	2023-2024	15.03	10.63	25.67	87.24	94.33	181.57
7	2024-2025	15.03	11.36	26.39	87.24	100.29	187.53
7	2025-2026	15.03	12.17	27.21	87.24	106.71	193.95

# **Supply-Side Resources**

## **Appendix 6.4**

Appendix 6.4 - Supply-Side Resources  
Potential Additional Supply Resources

Facility/Location	Annual (Dth)	Daily (Dth) Delivery	Year Avail. 3/	Lead Time	Investment Cost \$ (000's)	Variable Cost \$ (000's)	Notes
<b>WA/ID</b>							
AECO Supply	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
Sumas/Station 2	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
Rockies	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
GTN/Stamfild	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
JP Storage Recall 1/	2,268,000	63,000	2	2 year notice	n/a	Commodity	JP release to Terasen. Does not include transport and therefore does not meet peak-day needs
JP - Avista Energy 1/	2,589,578	104,000	3	1 year notice	Cost-based figure	Commodity	Acquisition of JP capacity held by Avista Energy. Does not include transport and therefore does not meet peak-day needs
JP Expansion 1/	n/a	100,000	3	<2 year	8,000	none	Expansion of JP facility delivery capability. Does not include transport and therefore does not meet peak-day needs
WA/ID Satellite LNG #1	90,000	15,000	5	4 years	10,000	Commodity + \$1.5MM/yr	Variable costs equal the liquefaction charges and transportation of the LNG
WA/ID Satellite LNG #2	90,000	15,000	10	4 years	10,000	Commodity + \$1.5MM/yr	Variable costs equal the liquefaction charges and transportation of the LNG
Spokane Company Owned LNG	n/a	n/a	n/a	n/a	n/a	n/a	Option is economically unfeasible given load size vs. facility requirements
<b>Oregon</b>							
AECO Supply	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
Sumas/Station 2 Supply	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
Rockies Supply	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via firm transportation
Malin Supply	Varies	Varies	1	<1 year	n/a	Commodity	Additional supply via backhaul transportation
KFalls Lateral Purchase 2/	0	0	1	<1 year	3,000	none	Purchase of lateral at book value subject to additional terms and conditions
KFalls Lateral Enhancement 2/	2,190,000	6,000	1	<1 year	0	Commodity	In conjunction with Klamath item above. By operating the lateral as a transmission system, capacity would be added
La Grande Dist. Enhance. #1	1,095,000	3,000	2	2 years	3,000	Commodity	High-pressure distribution system looping. Would allow additional NWP deliveries
La Grande Dist. Enhance. #2	365,000	1,000	5	3 years	1,000	Commodity	High-pressure distribution system looping. Would allow additional NWP deliveries
La Grande Dist. Enhance. #3	365,000	1,000	8	4 years	1,000	Commodity	High-pressure distribution system looping. Would allow additional NWP deliveries
Medford Satellite LNG #1	90,000	15,000	5	4 years	10,000	Commodity + \$1.5MM/yr	Would enable existing Medford capacity to be redirected to Roseburg
Medford Satellite LNG #2	90,000	15,000	10	5 years	10,000	Commodity + \$1.5MM/yr	Would enable existing Medford capacity to be redirected to Roseburg
Roseburg Satellite LNG	90,000	15,000	5	6 years	10,000	Commodity + \$1.5MM/yr	Would enable existing Roseburg capacity to be redirected to Medford
Klamath Falls Satellite LNG	25,000	5,000	5	7 years	8,000	Commodity + \$1.0MM/yr	Peak day facility located in Klamath Falls
JP - Avista Energy 1/	n/a	n/a	n/a	n/a	n/a	n/a	Option is economically unfeasible given load size vs. facility requirements
JP Expansion 1/	2,589,578	104,000	3	1 year notice	Cost-based figure	Commodity	Acquisition of JP capacity held by Avista Energy. Does not include transport and therefore does not meet peak-day needs
JP Expansion 1/	n/a	100,000	3	<2 year	8,000	none	Expansion of JP facility delivery capability. Does not include transport and therefore does not meet peak-day needs
Oregon LNG Facility/Coos Bay	n/a	Varies	5	3 years	none	Commodity	Option unlikely in PNW. Assumed to only occur in the very robust market/low price scenario. Spot purchases into GP Lateral

1/ Requires transportation for peak day needs

2/ Utilizes Malin supply

3/ This column is intended to indicate the first year in which the resource is available. The resource is assumed to be available in each subsequent year until/if utilized

**Appendix 6.4 - Supply-Side Resources**  
**Potential Contract Demand Expansions/Additions**

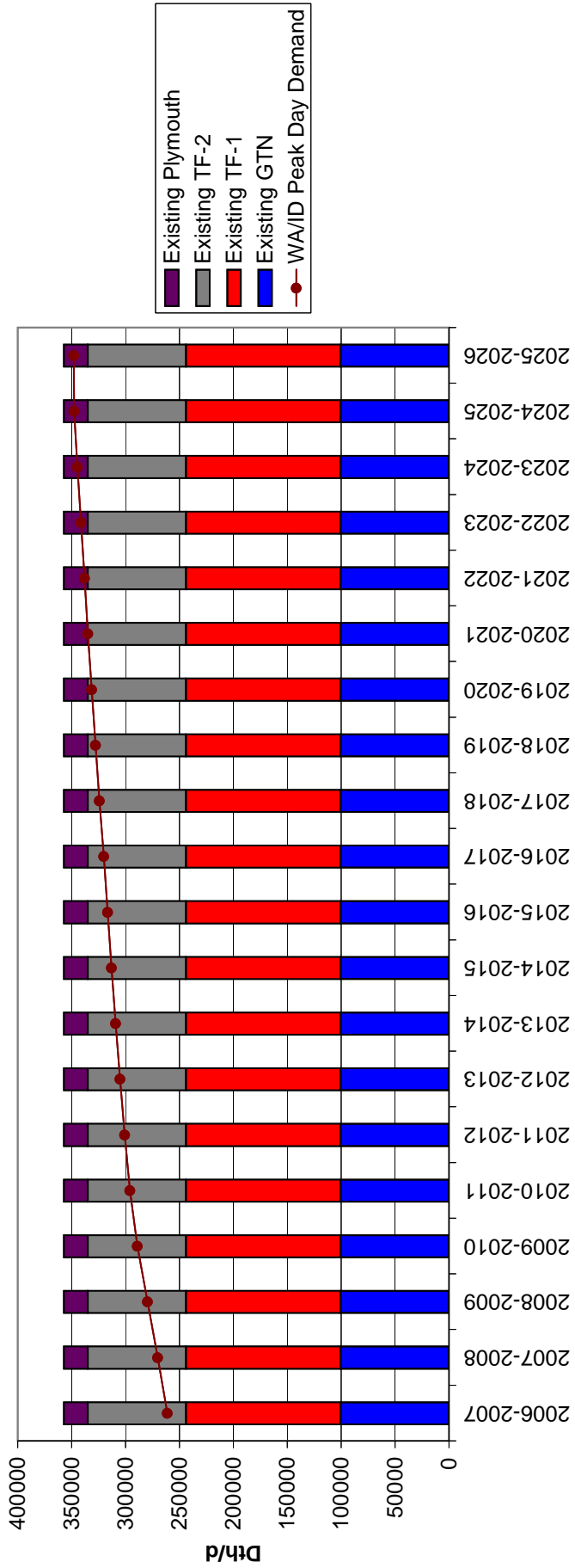
Location	Pipeline/ Facility	Identification	Daily (Dth) Capacity	Year 3/ Available	Lead Time	Capital Cost \$ (000's)	Cost Dth 4/	Notes
<b>WA/ID</b>								
NWP Zone 20 Spokane Area	NWP	NWP from GTN #1	22,000	2	2 years	4,700	NWP Rate	Expansion to facilitate additional GTN deliveries
NWP Zone 20 Spokane Area	NWP	NWP from GTN #2	25,000	5	2 years	5,000	NWP Rate	Expansion to facilitate additional GTN deliveries
NWP Zone 20 Spokane Area	NWP	NWP from GTN #3	25,000	8	2 years	5,000	NWP Rate	Expansion to facilitate additional GTN deliveries
NWP Zone 20 Spokane Area	NWP	NWP from GTN #1	40,000	2	2 years	10,000	NWP Rate	Expansion to facilitate additional GTN deliveries
NWP Zone 20 Spokane Area	NWP	NWP from GTN #2	40,000	5	2 years	10,000	NWP Rate	Expansion to facilitate additional GTN deliveries
NWP Zone 20 Spokane Area	NWP	NWP from GTN #3	40,000	8	2 years	10,000	NWP Rate	Expansion to facilitate additional GTN deliveries
TransCanada AECO to WA/ID	TC/GTN	AECO to Stanfield #1	22,000	2	<1 year	n/a	GTN/TC Rates	Existing available capacity from AECO to Stanfield. GTN capacity assumed to be winter only.
TransCanada AECO to WA/ID	TC/GTN	AECO to Stanfield #2	25,000	5	<1 year	n/a	GTN/TC Rates	Existing available capacity from AECO to Stanfield.
TransCanada AECO to WA/ID	TC/GTN	AECO to Stanfield #3	25,000	8	<1 year	n/a	GTN/TC Rates	Existing available capacity from AECO to Stanfield. GTN capacity assumed to be winter only.
TransCanada AECO to WA/ID	TC/GTN	AECO to Stanfield #4	60,000	2	<1 year	n/a	GTN/TC Rates	Existing available capacity from AECO to Stanfield.
TransCanada AECO to WA/ID	TC/GTN	AECO to Stanfield #5	60,000	5	<1 year	n/a	GTN/TC Rates	Existing available capacity from AECO to Stanfield.
TransCanada AECO to WA/ID	TC/GTN	AECO to Stanfield #6	60,000	8	<1 year	n/a	GTN/TC Rates	Existing available capacity from AECO to Stanfield.
NWP Zone 11 & 20 1/	NWP	NWP JP Transport Expansion #1	25,000	4	4 years	n/a	NWP Rate X 2.5	Transport Expansion for JP to WA/ID
NWP Zone 11 & 20 1/	NWP	NWP JP Transport Expansion #2	50,000	4	4 years	n/a	NWP Rate X 2.5	Transport Expansion for JP to WA/ID
NWP Zone 11 & 20 1/	NWP	NWP JP Transport Expansion #3	100,000	4	4 years	n/a	NWP Rate X 1.5	Transport Expansion for JP to WA/ID
NWP Zone 30,26,20 1/	NWP	NWP Sumas to WA/ID #1	20,000	5	4 years	n/a	NWP Rate X 3.0	Transport Expansion for Sumas to WA/ID
NWP Zone 30,26,20 1/	NWP	NWP Sumas to WA/ID #2	20,000	10	4 years	n/a	NWP Rate X 3.0	Transport Expansion for Sumas to WA/ID
NWP Zone 24 & 20 1/	NWP	NWP Rocks to WA/ID #1	20,000	5	4 years	n/a	NWP Rate X 3.0	Transport Expansion for Rocks to WA/ID
NWP Zone 24 & 20 1/	NWP	NWP Rocks to WA/ID #2	20,000	10	4 years	n/a	NWP Rate X 3.0	Transport Expansion for Rocks to WA/ID
<b>Oregon</b>								
Medford Lateral Expansion 2/ 6/	GTN	GTN Med. Lateral Expansion #1	20,000	2	2 years	n/a	Existing GTN Rate	Expansion of Medford lateral with compression. Allows NWP cap. to be redirected to Roseburg
Medford Lateral Expansion 2/ 6/	GTN	GTN Med. Lateral Expansion #2	20,000	5	2 years	n/a	Existing GTN Rate	Expansion of Medford lateral with compression. Allows NWP cap. to be redirected to Roseburg
Medford Lateral Expansion 2/ 6/	GTN	GTN Med. Lateral Expansion #3	20,000	8	2 years	n/a	Existing GTN Rate	Expansion of Medford lateral with compression. Allows NWP cap. to be redirected to Roseburg
Medford Lateral Expansion 2/ 6/	GTN	GTN Med. Lateral Expansion #4	20,000	12	2 years	n/a	Existing GTN Rate	Expansion of Medford lateral with compression. Allows NWP cap. to be redirected to Roseburg
Klamath Capacity 2/	GTN	GTN Med. Lateral Expansion #5	10,000	8	2 years	n/a	Existing GTN Rate	Expansion of Medford lateral with compression. Klamath deliveries only
Klamath Capacity 2/	GTN	GTN Med. Lateral Expansion #6	10,000	15	2 years	n/a	Existing GTN Rate	Expansion of Medford lateral with compression. Klamath deliveries only
NWP Zone 30,26,16,12,9,8 1/	NWP	NWP Sumas to Medford Exp. #1	20,000	5	4 years	n/a	NWP Rate X 4.0	Transport Expansion for Sumas to Medford
NWP Zone 24,26,16,12,9,8 1/	NWP	NWP Rocks to Medford Exp. #1	20,000	5	4 years	n/a	NWP Rate X 5.0	Transport Expansion for Rocks to Medford
NWP Zone 26,16,12,9,8 1/	NWP	NWP JP to Medford Exp. #1	20,000	4	4 years	n/a	NWP Rate X 3.5	Transport Expansion for JP to Medford
California Storage 5/	PG&E	PG&E CGT Storage Service #1	10,000	2	<1 year	n/a	\$.55 + Commodity	Assumes 1,000,000 inventory. Current contracting practices are one-year terms.
California Storage 5/	PG&E	PG&E CGT Storage Service #2	10,000	5	<1 year	n/a	\$.50 + Commodity	Assumes 1,000,000 inventory. Current contracting practices are one-year terms.
California Storage Transport	CGT/GTN	CA Storage Backhaul #1	10,000	2	<1 year	n/a	CGT, GTN Rates	Current PG&E CGT, GTN mainline and Medford rates. Combined with CA storage above
California Storage Transport	CGT/GTN	CA Storage Backhaul #2	10,000	5	<1 year	n/a	CGT, GTN Rates	Current PG&E CGT, GTN mainline and Medford rates. Combined with CA storage above

1/ Assumes additional participation in expansion by other customers  
 2/ Utilizes Malin supply  
 3/ This column is intended to indicate the first year in which the resource is available. The resource is assumed to be available in each subsequent year until utilized  
 4/ All existing rates escalated at initiation rate  
 5/ Requires redelivery service via backhauls  
 6/ Requires a distribution system enhancement in Medford area to facilitate expansion deliveries. Avista anticipates this enhancement being completed in 2007 and is driven by Integrity Management related activity in the Medford area. The approximate capital cost of this project is \$11MM and will likely be incurred whether or not a GTN Medford lateral expansion is selected by the SENDOUT model for resource additions.

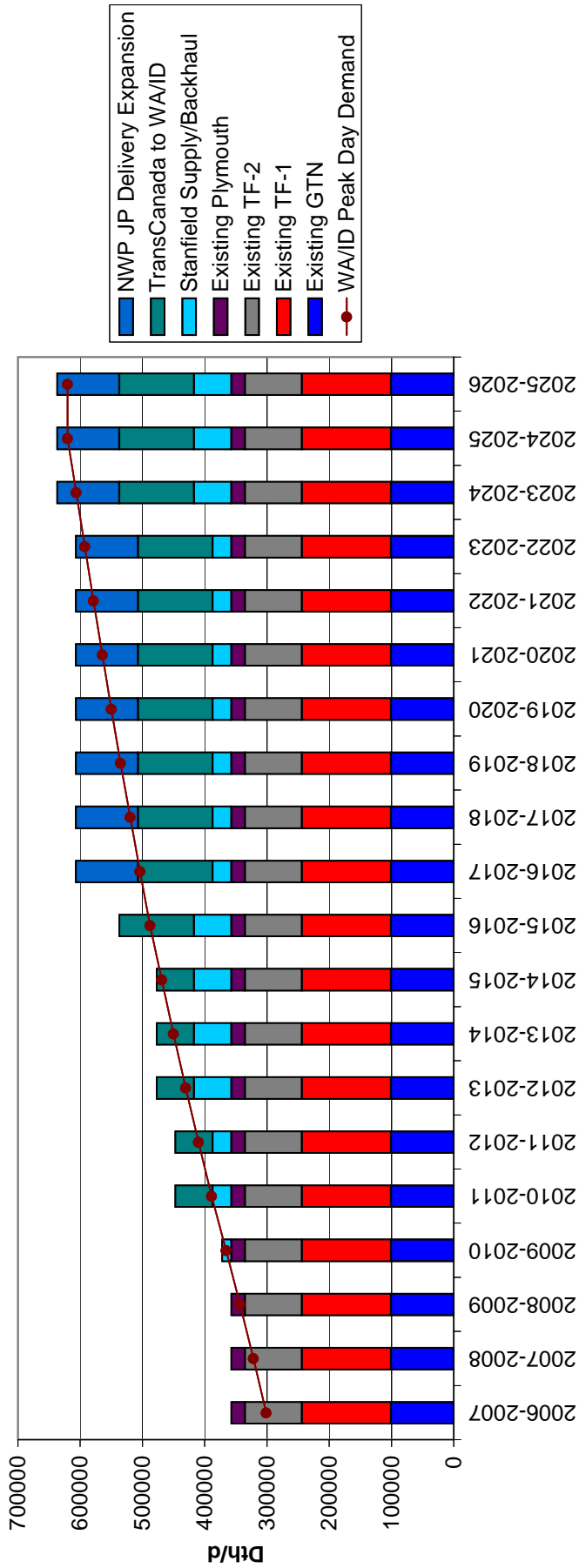
# **Future Resource Comparisons**

## **Appendix 6.5**

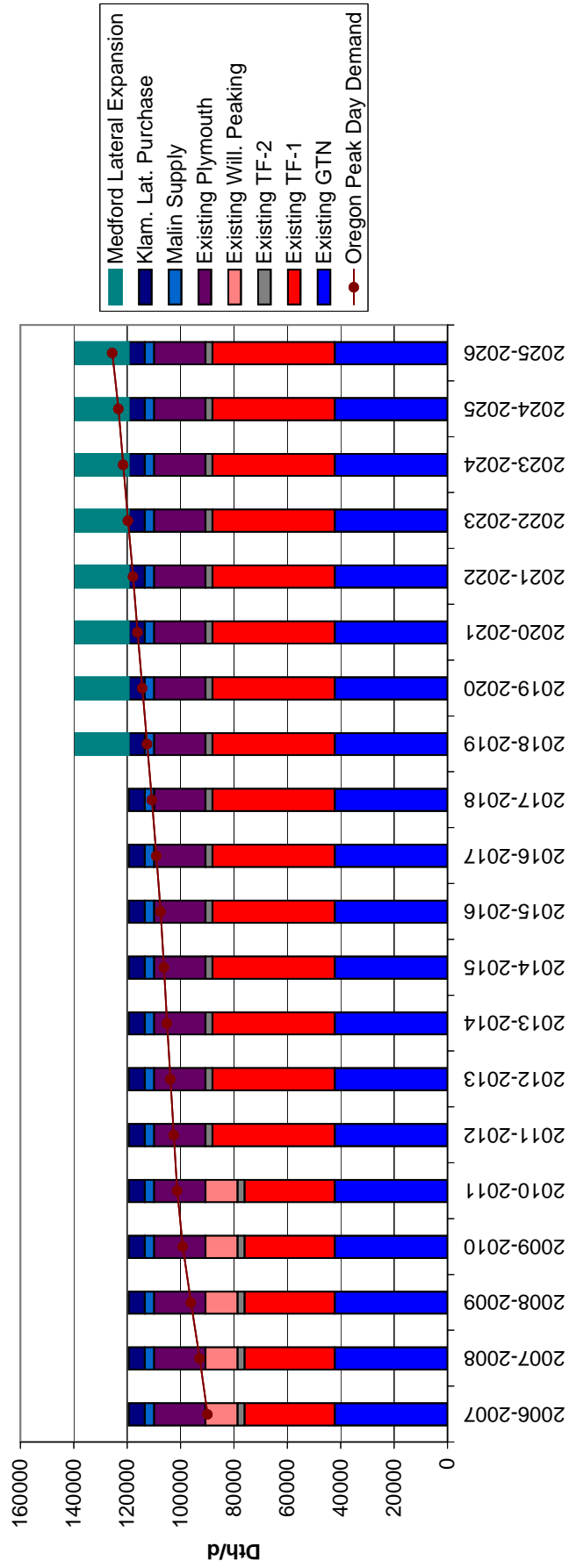
**Appendix 6.5 - WA/ID Existing Resources vs.  
Peak Day Demand (Net of DSM Savings)  
Low Demand Case**



**Appendix 6.5 - WA/ID Existing & Least  
Cost Resources vs. Peak Day  
Demand (Net of DSM Savings) - High Demand Case**

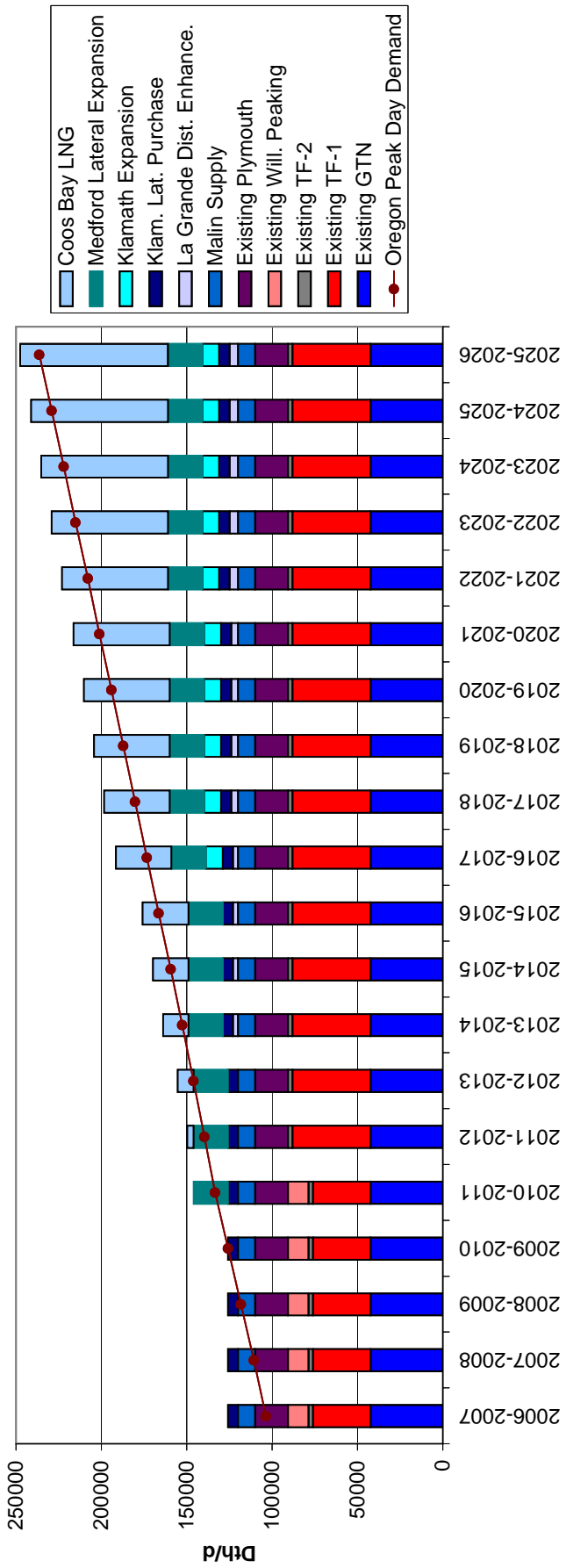


**Appendix 6.5 - Oregon Existing & Least  
Cost Resources vs. Peak Day  
Demand (Net of DSM Savings) - Low Demand Case**





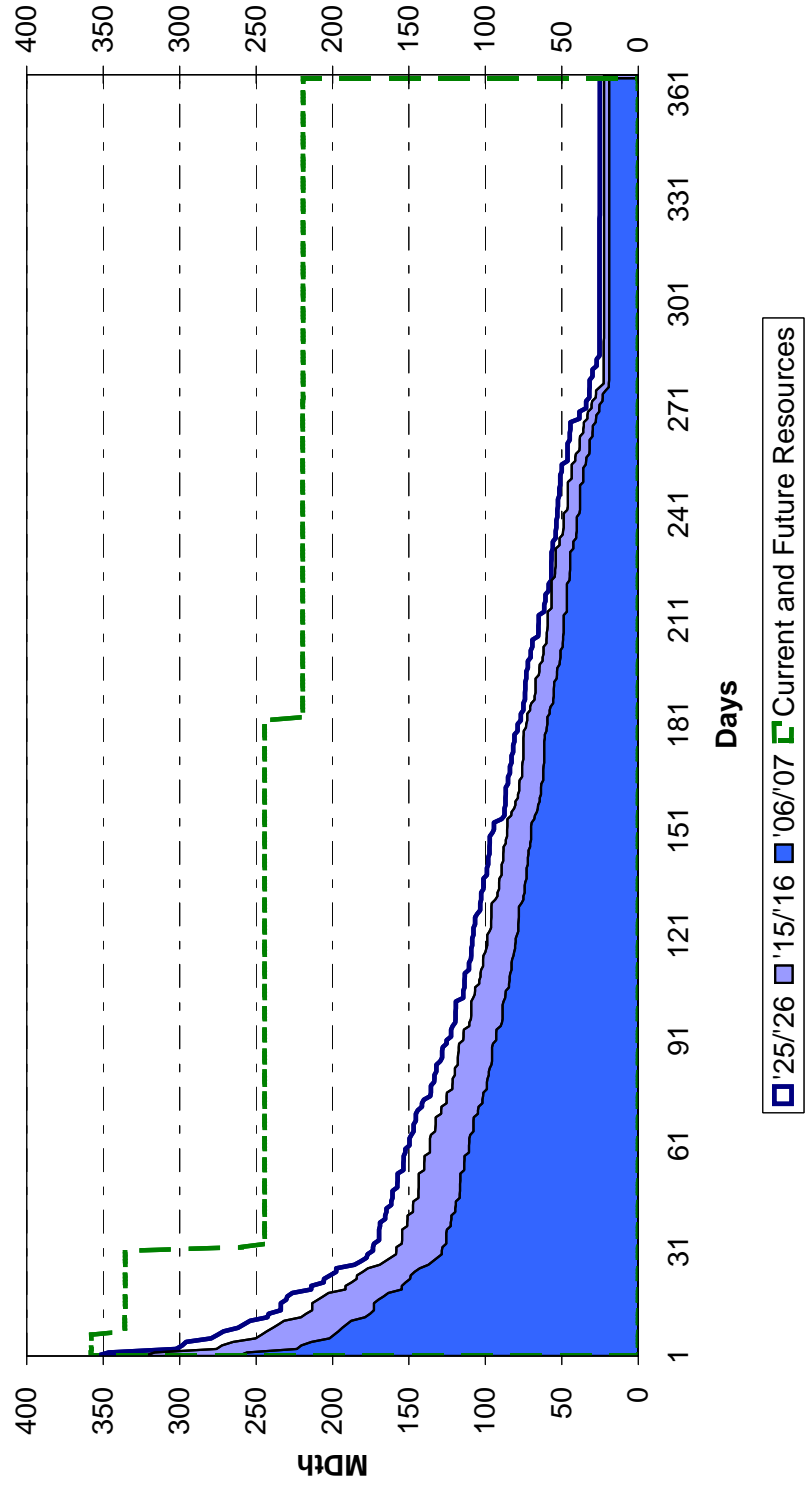
**Appendix 6.5 - Oregon Existing & Least  
Cost Resources vs. Peak Day  
Demand (Net of DSM Savings) - High Demand Case**



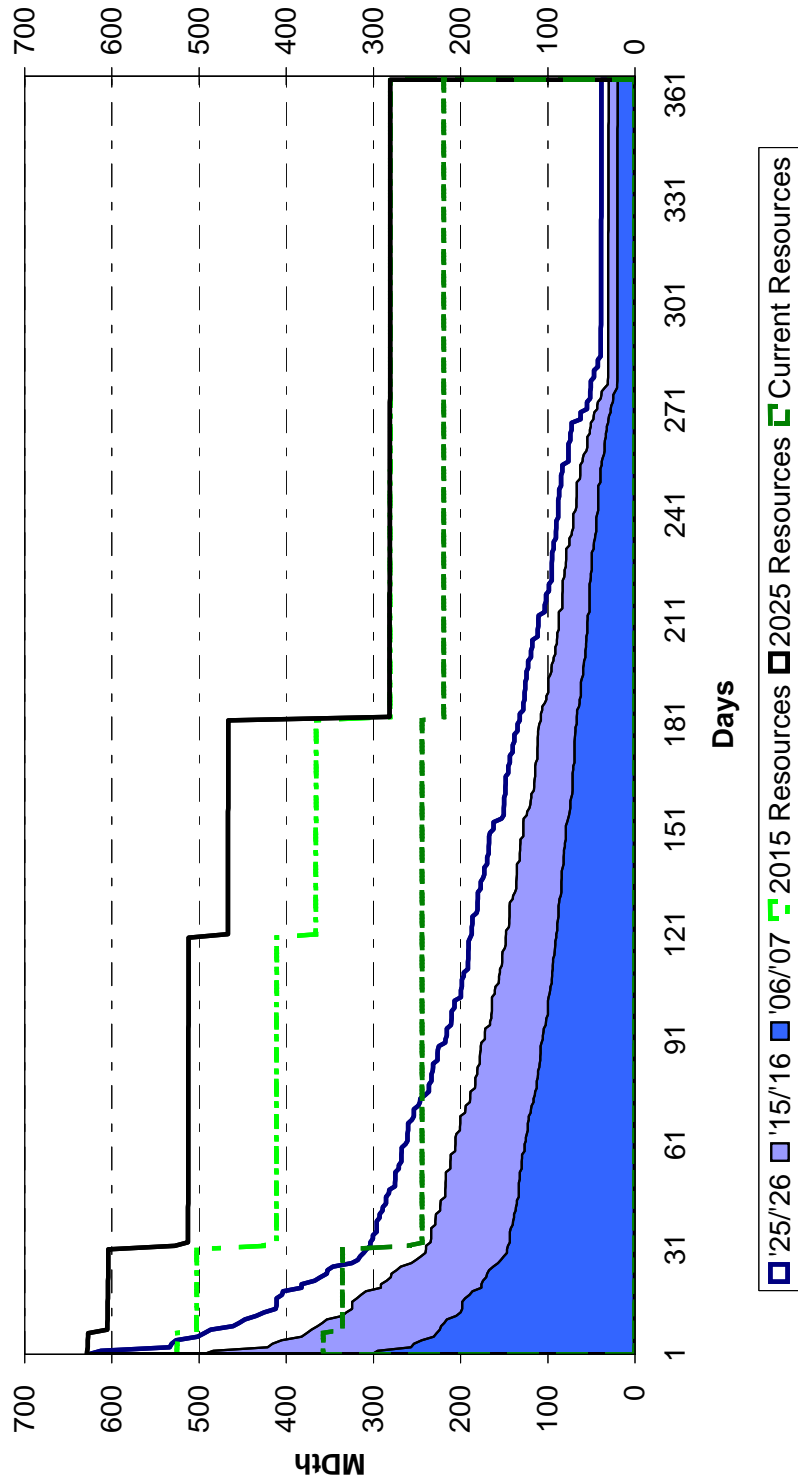
# **Load Duration Curves**

## **Appendix 6.6**

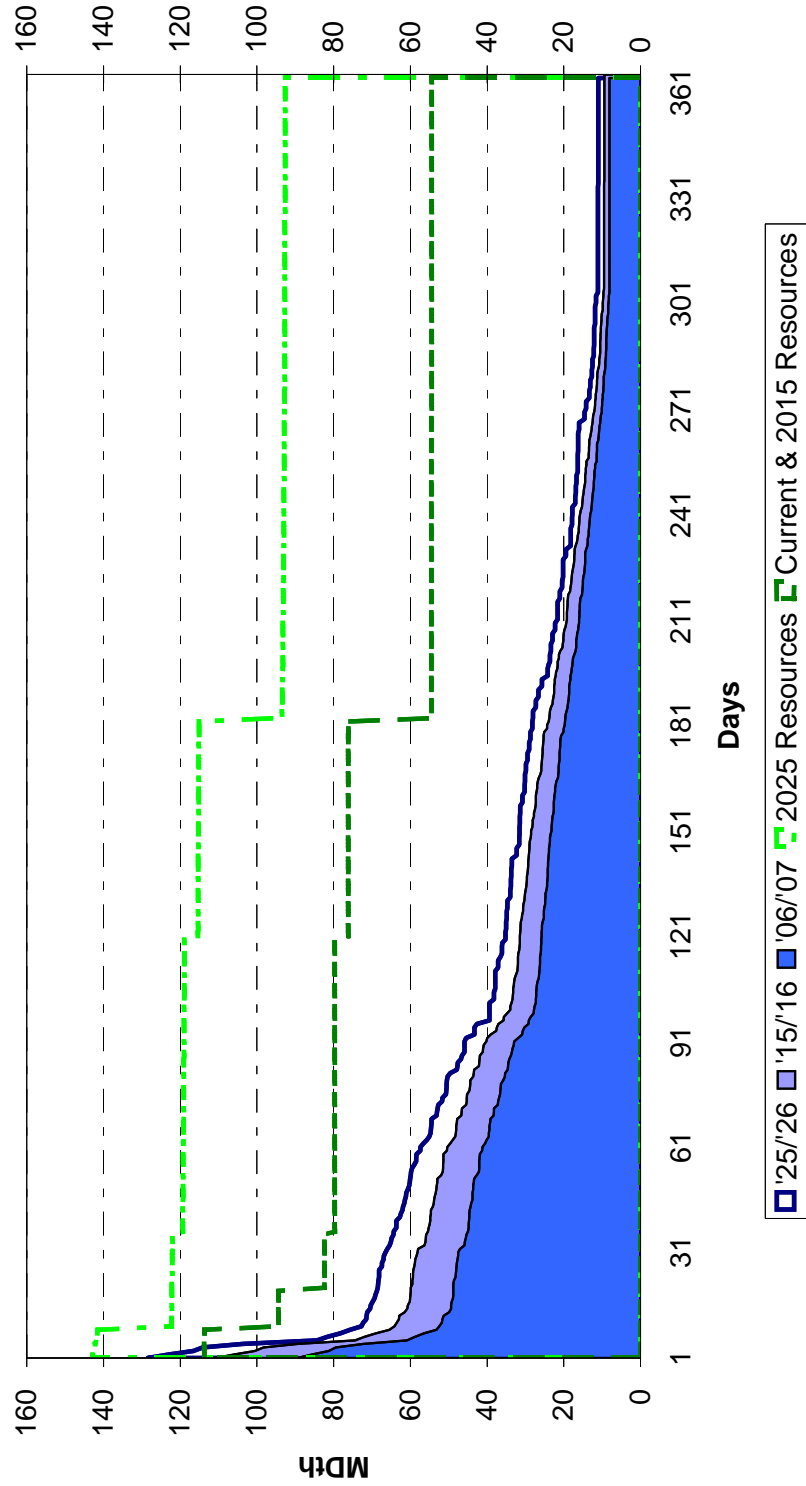
**App. 6.6 - Firm Load Duration Curve & Resource Stack (with DSM)**  
**Average/Actual Weather with Design Day**  
**Low Demand Case - Washington/Idaho**



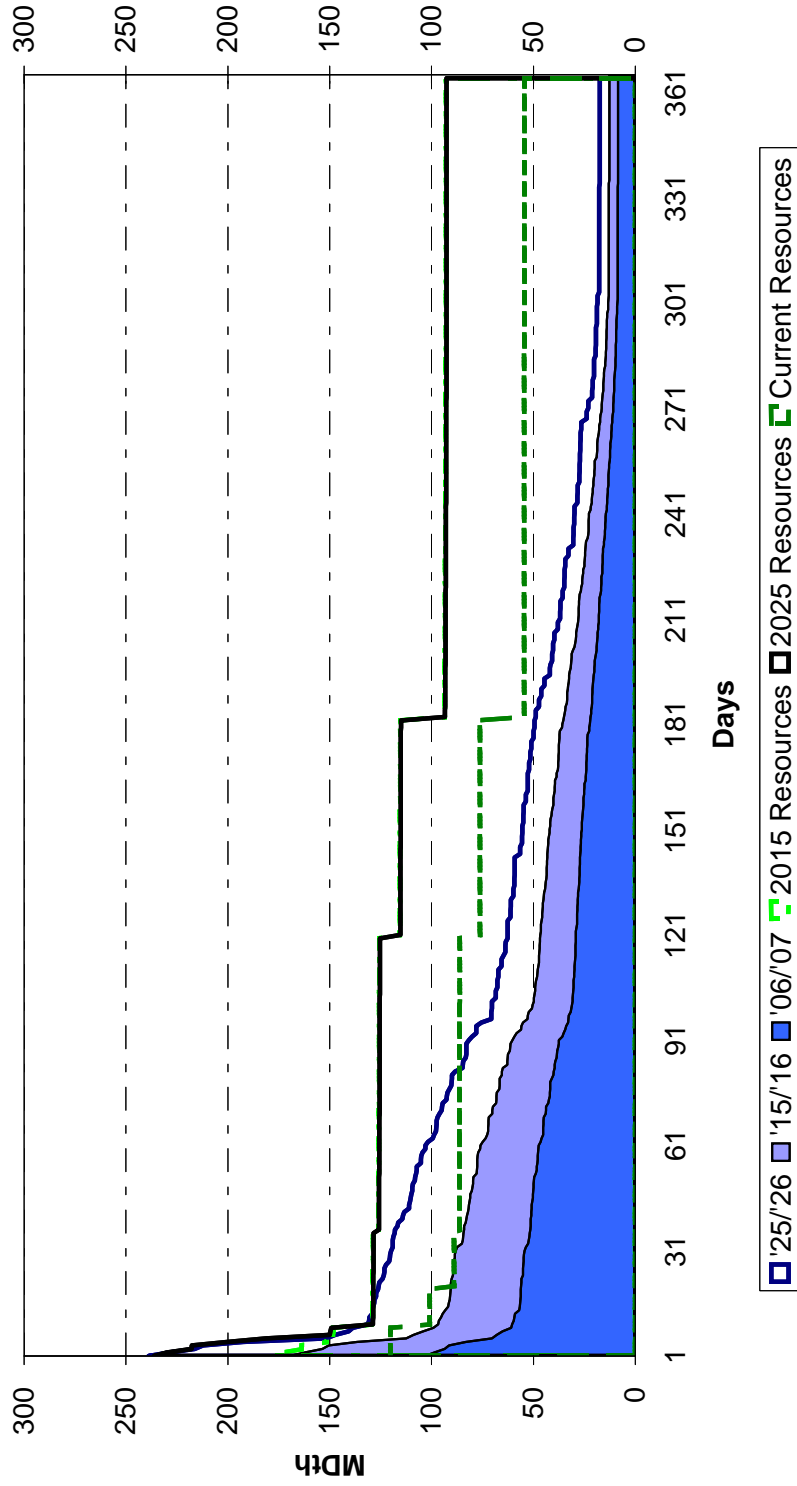
**App. 6.6 - Firm Load Duration Curve & Resource Stack (with DSM)  
 Average/Actual Weather with Design Day  
 High Demand Case - Washington/Idaho**



**App. 6.6 - Firm Load Duration Curve & Resource Stack (with DSM)  
 Average/Actual Weather with Design Day  
 Low Demand Case - Oregon**



**App. 6.6 - Firm Load Duration Curve & Resource Stack (with DSM)  
 Average/Actual Weather with Design Day  
 High Demand Case - Oregon**



# **Resource Selections**

## **Appendix 6.7**

**Appendix 6.7 - Least Cost Supply-Side Resource Additions Selected by SENDOUT®**

**Case 6 - High Price, Low Customer Growth Case**

Item #	Region	Type	Quantity Dth/d	Timing	Rates/Charges	Notes
<b>Washington/Idaho</b>						
None Required In This Case During IRP Planning Horizon						
<b>Oregon</b>						
1	Klamath Falls	Purchase	n/a	November 2006	\$3MM Capital Cost	Purchase of NWP Klamath pipeline segment. Transportation and fuel cost savings more than offset the revenue requirement and capital cost of the investment. Payoff is approximately 3 years
2	Klamath Falls	Reclassification	6,000	November 2006	No Incremental Charges	Companion to Item #1. Ownership of lateral allows Avista to operate this lateral as distribution transmission system which provides approximately 6,000 Dth/d incremental capacity
3	Medford/Roseburg	Distribution Enhancement	n/a	November 2007	\$11MM Capital Cost/\$1.3MM Annual Revenue Requirement	Companion item to Item # 4 below
4	Medford/Roseburg	Transportation	20,000	November 2019	GTN's Med. Lat. Rate	GTN expansion of the Medford Lateral. Assumed current lateral rates, escalated for inflation, for expansion. Item #3 above required to facilitate this option.



**Appendix 6.7 - Least Cost Supply-Side Resource Additions Selected by SENDOUT®**

**Case 7 - Low Price, High Customer Growth Case**

Item #	Region	Type	Quantity Dth/d	Timing	Rates/Charges	Notes
<b>Washington/Idaho</b>						
1	WA/ID	Transportation	60,000	November 2010	TransCanada and GTN Transportation Rates Plus Commodity	GTN contract is winter-only
2	WA/ID	Transportation	22,000	November 2014	\$4.7 MM Capital Cost Plus Commodity and NWP Transportation Rate	WA/ID area expansions to facilitate the delivery in and around Spokane, Lewiston, etc. from GTN into NWP
3	WA/ID	Transportation	60,000	November 2015	TransCanada and GTN Transportation Rates Plus Commodity	
4	WA/ID	Storage	63,000	November 2016	No Cost Other Than Loss of Release Revenue	2,268,000 Dth of capacity
5	WA/ID	Transportation	100,000	November 2016	NWP Transportation Rate Times 1.5	JP storage related transportation expansion
6	WA/ID	Transportation	25,000	November 2018	\$5.0 MM Capital Cost Plus Commodity and NWP Transportation Rate	WA/ID area expansions to facilitate the delivery in and around Spokane, Lewiston, etc. from GTN into NWP
7	WA/ID	Storage	104,000	November 2020	n/a	2,589,578 capacity
8	WA/ID	Transportation	25,000	November 2022	\$5.0 MM Capital Cost Plus Commodity and NWP Transportation Rate	WA/ID area expansions to facilitate the delivery in and around Spokane, Lewiston, etc. from GTN into NWP
<b>Oregon</b>						
9	Klamath Falls	Purchase	n/a	November 2006	\$3MM Capital Cost	Purchase of NWP Klamath pipeline segment. Transportation and fuel cost savings more than offset the revenue requirement and capital cost of the investment. Payoff is approximately 3 years
10	Klamath Falls	Reclassification	6,000	November 2006	No Incremental Charges	Companion to Item #9. Ownership of lateral allows Avista to operate this lateral as distribution transmission system which provides approximately 6,000 Dth/d incremental capacity
11	Medford/Roseburg	Distribution Enhancement	n/a	November 2007	\$11MM Capital Cost/\$1.3MM Annual Revenue Requirement	Companion item to Item #13 below
12	La Grande	Distribution Enhancement	4,000	November 2009	\$3MM Capital Cost/\$.360MM Annual Revenue Requirement	
13	Medford/Roseburg	Transportation	20,000	November 2010	GTN's Med. Lat. Rate	GTN expansion of the Medford Lateral. Assumed current lateral rates, escalated for inflation, for expansion. Item #11 above required to facilitate this option.
14	Medford/Roseburg	LNG	Varies	November 2011	LNG Commodity Cost	Cocos Bay LNG facility and deliveries via Pacific Connector Pipeline. Cost is assumed to be AECO plus \$1.50. Quantities vary by peak requirements and are as low as 0 Dth/day to as high as 86,000 Dth/c
15	Klamath Falls	Transportation	10,000	November 2016	GTN's Med. Lat. Rate	GTN expansion of the Medford Lateral. Assumed current lateral rates, escalated for inflation, for expansion.
16	La Grande	Distribution Enhancement	1,000	November 2017	\$1MM Capital Cost/\$.120MM Annual Revenue Requirement	
17	La Grande	Distribution Enhancement	1,000	November 2021	\$1MM Capital Cost/\$.120MM Annual Revenue Requirement	

# **Demand-Side Management Savings**

## **Appendix 6.8**



Appendix 6.8 - Annual and Annual Average Demand Served by Demand-Side Management 1/

Case	Gas Year	Annual Klamath DSM (MDth)		Daily Klamath DSM (MDth/day)		Annual La Grande DSM (MDth)		Daily La Grande DSM (MDth/day)		Annual Medford DSM (MDth)		Daily Medford DSM (MDth/day)		Annual Roseburg DSM (MDth)		Daily Roseburg DSM (MDth/day)		Annual Oregon DSM (MDth)		Daily Oregon DSM (MDth/day)		Annual WA/ID DSM (MDth)		Daily WA/ID DSM (MDth/day)		Annual Total System DSM (MDth)		Daily Total System DSM (MDth/day)	
		Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)	Annual DSM (MDth)	Daily DSM (MDth/day)
7	2006-2007	8,969	0.025	4,046	0.011	24,781	0.068	5,933	0.016	43,73	0.12	67,705	0.185	111.43	0.31														
7	2007-2008	17,992	0.049	8,116	0.022	49,768	0.136	11,903	0.033	87,78	0.24	135,804	0.372	223.58	0.61														
7	2008-2009	26,906	0.074	12,139	0.033	74,342	0.204	17,799	0.049	131.19	0.36	203,115	0.556	334.30	0.92														
7	2009-2010	35,875	0.098	16,186	0.044	99,123	0.272	23,732	0.065	174.91	0.48	270,820	0.742	445.74	1.22														
7	2010-2011	44,843	0.123	20,232	0.055	123,903	0.339	29,665	0.081	218.64	0.60	365,009	1,000	583.65	1.60														
7	2011-2012	53,977	0.148	24,349	0.067	149,304	0.409	35,708	0.098	263.34	0.72	428,674	1,174	692.01	1.90														
7	2012-2013	62,781	0.172	28,325	0.078	173,464	0.475	41,531	0.114	306.10	0.84	487,778	1,336	793.88	2.18														
7	2013-2014	71,749	0.197	32,371	0.089	198,245	0.543	47,464	0.130	349.83	0.96	548,138	1,502	897.97	2.46														
7	2014-2015	80,718	0.221	36,418	0.100	223,025	0.611	53,397	0.146	393.56	1.08	608,498	1,667	1,002.06	2.75														
7	2015-2016	89,962	0.246	40,582	0.111	248,840	0.682	59,513	0.163	438.90	1.20	670,809	1,838	1,109.71	3.04														
7	2016-2017	100,872	0.276	45,431	0.124	271,991	0.745	65,678	0.180	483.97	1.33	1,089,136	2,984	1,573.11	4.31														
7	2017-2018	100,259	0.275	45,142	0.124	269,794	0.739	65,103	0.178	480.30	1.32	1,087,087	2,978	1,567.39	4.29														
7	2018-2019	99,646	0.273	44,853	0.123	267,597	0.733	64,529	0.177	476.62	1.31	1,082,767	2,966	1,559.39	4.27														
7	2019-2020	98,970	0.271	44,530	0.122	265,653	0.728	63,951	0.175	473.10	1.30	1,077,292	2,951	1,550.40	4.25														
7	2020-2021	97,684	0.268	43,948	0.120	261,452	0.716	62,976	0.173	466.06	1.28	1,065,283	2,919	1,531.34	4.20														
7	2021-2022	95,133	0.261	43,460	0.119	252,750	0.692	60,728	0.166	452.07	1.24	1,054,580	2,889	1,506.65	4.13														
7	2022-2023	92,581	0.254	42,973	0.118	244,048	0.669	58,481	0.160	438.08	1.20	1,045,926	2,866	1,484.01	4.07														
7	2023-2024	90,289	0.247	42,599	0.117	236,314	0.647	56,391	0.154	425.59	1.17	1,040,304	2,850	1,465.90	4.02														
7	2024-2025	87,037	0.238	41,801	0.115	225,549	0.618	53,727	0.147	408.11	1.12	1,017,860	2,789	1,425.97	3.91														
7	2025-2026	79,393	0.218	39,059	0.107	204,712	0.561	48,678	0.133	371.84	1.02	998,574	2,736	1,370.42	3.75														

1/Actual peak day DSM is greater than annual average DSM

# **Avoided Cost Determination**

## **Appendix 7.1**

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Summary Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Year of Forecast	Annual						Winter					
		Klamath Falls	La Grande	Medford	Roseburg	WA/ID	Klamath Falls	La Grande	Medford	Roseburg	WA/ID		
2006/2007	1	\$6.07	\$6.05	\$6.05	\$6.05	\$5.99	\$6.90	\$6.87	\$6.87	\$6.87	\$6.82		
2007/2008	2	\$5.74	\$5.71	\$5.71	\$5.71	\$5.67	\$6.52	\$6.50	\$6.50	\$6.50	\$6.45		
2008/2009	3	\$5.24	\$5.21	\$5.21	\$5.21	\$5.17	\$5.95	\$5.93	\$5.93	\$5.93	\$5.88		
2009/2010	4	\$5.06	\$5.04	\$5.04	\$5.04	\$5.00	\$5.76	\$5.73	\$5.73	\$5.73	\$5.70		
2010/2011	5	\$5.06	\$5.04	\$5.04	\$5.04	\$5.00	\$5.76	\$5.73	\$5.73	\$5.73	\$5.70		
2011/2012	6	\$5.24	\$5.21	\$5.21	\$5.21	\$5.17	\$5.95	\$5.93	\$5.93	\$5.93	\$5.88		
2012/2013	7	\$5.40	\$5.38	\$5.38	\$5.38	\$5.33	\$6.14	\$6.11	\$6.11	\$6.11	\$6.06		
2013/2014	8	\$5.57	\$5.55	\$5.55	\$5.55	\$5.49	\$6.34	\$6.30	\$6.30	\$6.30	\$6.25		
2014/2015	9	\$5.70	\$5.67	\$5.67	\$5.67	\$5.63	\$6.48	\$6.45	\$6.45	\$6.45	\$6.40		
2015/2016	10	\$6.03	\$6.01	\$6.01	\$6.01	\$5.95	\$6.86	\$6.82	\$6.82	\$6.82	\$6.78		
2016/2017	11	\$6.49	\$6.47	\$6.47	\$6.47	\$6.40	\$7.39	\$7.35	\$7.35	\$7.35	\$7.29		
2017/2018	12	\$6.83	\$6.80	\$6.80	\$6.80	\$6.74	\$7.77	\$7.73	\$7.73	\$7.73	\$7.66		
2018/2019	13	\$7.17	\$7.13	\$7.13	\$7.13	\$7.07	\$8.16	\$8.10	\$8.10	\$8.10	\$8.05		
2019/2020	14	\$7.51	\$7.46	\$7.46	\$7.46	\$7.41	\$8.54	\$8.49	\$8.49	\$8.49	\$8.43		
2020/2021	15	\$7.67	\$7.64	\$7.64	\$7.64	\$7.57	\$8.72	\$8.67	\$8.68	\$8.67	\$8.61		
2021/2022	16	\$7.84	\$7.80	\$7.80	\$7.80	\$7.73	\$8.92	\$8.87	\$8.87	\$8.87	\$8.80		
2022/2023	17	\$8.01	\$7.97	\$7.97	\$7.97	\$7.90	\$9.11	\$9.06	\$9.06	\$9.06	\$9.00		
2023/2024	18	\$8.19	\$8.15	\$8.15	\$8.15	\$8.08	\$9.31	\$9.26	\$9.26	\$9.26	\$9.19		
2024/2025	19	\$8.37	\$8.32	\$8.32	\$8.32	\$8.25	\$9.51	\$9.46	\$9.46	\$9.46	\$9.39		
2025/2026	20	\$8.37	\$8.32	\$8.32	\$8.32	\$8.25	\$9.51	\$9.46	\$9.47	\$9.47	\$9.39		

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Annual Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2006	Nov	8.73	8.69	8.69	8.69	8.64
2006	Dec	9.16	9.04	9.16	9.04	9.01
2007	Jan	7.04	7.00	7.04	7.00	6.99
2007	Feb	7.05	7.00	7.04	7.00	6.98
2007	Mar	6.90	6.87	6.87	6.87	6.82
2007	Apr	6.07	6.04	6.04	6.04	5.98
2007	May	5.97	5.94	5.94	5.94	5.87
2007	Jun	6.00	5.97	5.97	5.97	5.90
2007	Jul	6.04	6.01	6.01	6.01	5.94
2007	Aug	6.06	6.04	6.04	6.04	5.96
2007	Sep	6.05	6.02	6.02	6.02	5.95
2007	Oct	6.07	6.05	6.05	6.05	5.99
	Avg.	<b>6.76</b>	<b>6.72</b>	<b>6.74</b>	<b>6.72</b>	<b>6.67</b>
2007	Nov	6.35	6.32	6.33	6.32	6.29
2007	Dec	6.70	6.58	6.70	6.58	6.56
2008	Jan	6.64	6.59	6.64	6.59	6.58
2008	Feb	6.88	6.83	6.87	6.83	6.82
2008	Mar	6.52	6.50	6.50	6.50	6.45
2008	Apr	5.73	5.70	5.70	5.70	5.65
2008	May	5.64	5.61	5.61	5.61	5.55
2008	Jun	5.67	5.64	5.64	5.64	5.58
2008	Jul	5.70	5.67	5.67	5.67	5.61
2008	Aug	5.73	5.70	5.70	5.70	5.64
2008	Sep	5.72	5.69	5.69	5.69	5.63
2008	Oct	5.74	5.71	5.71	5.71	5.67
	Avg.	<b>6.08</b>	<b>6.05</b>	<b>6.06</b>	<b>6.05</b>	<b>6.00</b>
2008	Nov	6.00	5.97	5.97	5.97	5.94
2008	Dec	6.36	6.21	6.36	6.23	6.19
2009	Jan	6.08	6.03	6.08	6.04	6.04
2009	Feb	6.09	6.05	6.09	6.05	6.03
2009	Mar	5.95	5.93	5.93	5.93	5.88
2009	Apr	5.23	5.20	5.20	5.20	5.16
2009	May	5.13	5.12	5.12	5.12	5.06
2009	Jun	5.16	5.14	5.14	5.14	5.08
2009	Jul	5.19	5.17	5.17	5.17	5.11
2009	Aug	5.23	5.20	5.20	5.20	5.14
2009	Sep	5.22	5.19	5.19	5.19	5.14
2009	Oct	5.24	5.21	5.21	5.21	5.17
	Avg.	<b>5.57</b>	<b>5.54</b>	<b>5.56</b>	<b>5.54</b>	<b>5.50</b>
2009	Nov	5.47	5.45	5.46	5.45	5.42
2009	Dec	5.84	5.71	5.87	5.78	5.70
2010	Jan	5.87	5.82	5.87	5.82	5.81
2010	Feb	5.90	5.86	5.90	5.86	5.85
2010	Mar	5.76	5.73	5.73	5.73	5.70
2010	Apr	5.06	5.04	5.04	5.04	5.00
2010	May	4.97	4.95	4.95	4.95	4.89
2010	Jun	5.00	4.98	4.98	4.98	4.92
2010	Jul	5.03	5.01	5.01	5.01	4.95
2010	Aug	5.05	5.03	5.03	5.03	4.97

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Annual Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2010	Sep	5.04	5.02	5.02	5.02	4.97
2010	Oct	5.06	5.04	5.04	5.04	5.00
	Avg.	<b>5.34</b>	<b>5.30</b>	<b>5.33</b>	<b>5.31</b>	<b>5.27</b>
2010	Nov	5.30	5.27	5.27	5.27	5.24
2010	Dec	5.65	5.55	5.65	5.65	5.56
2011	Jan	5.86	5.82	5.86	5.86	5.82
2011	Feb	5.90	5.87	5.89	5.89	5.86
2011	Mar	5.76	5.73	5.73	5.73	5.70
2011	Apr	5.06	5.04	5.04	5.04	5.00
2011	May	4.97	4.95	4.95	4.95	4.90
2011	Jun	5.00	4.98	4.98	4.98	4.92
2011	Jul	5.03	5.01	5.01	5.01	4.95
2011	Aug	5.05	5.03	5.03	5.03	4.97
2011	Sep	5.04	5.02	5.02	5.02	4.97
2011	Oct	5.06	5.04	5.04	5.04	5.00
	Avg.	<b>5.31</b>	<b>5.28</b>	<b>5.29</b>	<b>5.29</b>	<b>5.24</b>
2011	Nov	5.30	5.27	5.27	5.27	5.24
2011	Dec	5.79	5.73	5.79	5.79	5.74
2012	Jan	6.07	6.03	6.07	6.07	6.03
2012	Feb	6.31	6.28	6.30	6.30	6.28
2012	Mar	5.95	5.93	5.93	5.93	5.88
2012	Apr	5.23	5.20	5.20	5.20	5.16
2012	May	5.13	5.12	5.12	5.12	5.06
2012	Jun	5.16	5.14	5.14	5.14	5.08
2012	Jul	5.19	5.17	5.17	5.17	5.11
2012	Aug	5.23	5.20	5.20	5.20	5.14
2012	Sep	5.22	5.19	5.19	5.19	5.14
2012	Oct	5.24	5.21	5.21	5.21	5.17
	Avg.	<b>5.48</b>	<b>5.46</b>	<b>5.47</b>	<b>5.47</b>	<b>5.42</b>
2012	Nov	5.47	5.45	5.45	5.45	5.41
2012	Dec	5.84	5.73	5.84	5.84	5.72
2013	Jan	6.25	6.20	6.25	6.25	6.19
2013	Feb	6.29	6.25	6.29	6.29	6.25
2013	Mar	6.14	6.11	6.11	6.11	6.06
2013	Apr	5.39	5.38	5.38	5.38	5.32
2013	May	5.30	5.28	5.29	5.29	5.22
2013	Jun	5.33	5.32	5.32	5.32	5.25
2013	Jul	5.36	5.35	5.35	5.35	5.28
2013	Aug	5.39	5.37	5.37	5.37	5.31
2013	Sep	5.38	5.36	5.36	5.36	5.30
2013	Oct	5.40	5.38	5.38	5.38	5.33
	Avg.	<b>5.63</b>	<b>5.60</b>	<b>5.61</b>	<b>5.61</b>	<b>5.55</b>
2013	Nov	5.65	5.62	5.62	5.62	5.58
2013	Dec	6.03	5.91	6.03	6.03	5.92
2014	Jan	6.45	6.39	6.45	6.45	6.39
2014	Feb	6.49	6.45	6.49	6.49	6.45
2014	Mar	6.34	6.30	6.30	6.30	6.25
2014	Apr	5.57	5.54	5.54	5.54	5.49
2014	May	5.47	5.45	5.45	5.45	5.39



## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Annual Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2014	Jun	5.50	5.48	5.48	5.48	5.42
2014	Jul	5.53	5.51	5.51	5.51	5.45
2014	Aug	5.55	5.53	5.53	5.53	5.47
2014	Sep	5.55	5.52	5.52	5.52	5.46
2014	Oct	5.57	5.55	5.55	5.55	5.49
	Avg.	<b>5.81</b>	<b>5.77</b>	<b>5.79</b>	<b>5.79</b>	<b>5.73</b>
2014	Nov	5.82	5.79	5.80	5.80	5.75
2014	Dec	6.33	6.26	6.33	6.33	6.27
2015	Jan	6.63	6.58	6.63	6.63	6.57
2015	Feb	6.66	6.61	6.66	6.66	6.61
2015	Mar	6.48	6.45	6.45	6.45	6.40
2015	Apr	5.69	5.66	5.66	5.66	5.61
2015	May	5.60	5.57	5.57	5.57	5.52
2015	Jun	5.63	5.60	5.60	5.60	5.54
2015	Jul	5.66	5.63	5.63	5.63	5.57
2015	Aug	5.68	5.66	5.66	5.66	5.59
2015	Sep	5.67	5.65	5.65	5.65	5.59
2015	Oct	5.70	5.67	5.67	5.67	5.63
	Avg.	<b>5.96</b>	<b>5.93</b>	<b>5.94</b>	<b>5.94</b>	<b>5.89</b>
2015	Nov	5.96	5.93	5.93	5.93	5.89
2015	Dec	6.60	6.55	6.60	6.60	6.57
2016	Jan	7.04	6.98	7.04	7.04	6.97
2016	Feb	7.31	7.26	7.31	7.31	7.26
2016	Mar	6.86	6.82	6.82	6.82	6.78
2016	Apr	6.03	6.00	6.00	6.00	5.95
2016	May	5.93	5.90	5.90	5.90	5.84
2016	Jun	5.96	5.93	5.93	5.93	5.87
2016	Jul	5.99	5.97	5.97	5.97	5.89
2016	Aug	6.02	5.99	5.99	5.99	5.92
2016	Sep	6.01	5.98	5.98	5.98	5.92
2016	Oct	6.03	6.01	6.01	6.01	5.95
	Avg.	<b>6.31</b>	<b>6.27</b>	<b>6.29</b>	<b>6.29</b>	<b>6.23</b>
2016	Nov	6.31	6.27	6.28	6.28	6.23
2016	Dec	6.73	6.61	6.73	6.73	6.60
2017	Jan	7.53	7.46	7.53	7.53	7.45
2017	Feb	7.58	7.53	7.58	7.58	7.52
2017	Mar	7.39	7.35	7.35	7.35	7.29
2017	Apr	6.49	6.46	6.46	6.46	6.41
2017	May	6.38	6.35	6.35	6.35	6.28
2017	Jun	6.42	6.38	6.38	6.38	6.32
2017	Jul	6.45	6.43	6.43	6.43	6.35
2017	Aug	6.48	6.45	6.45	6.45	6.38
2017	Sep	6.47	6.44	6.44	6.44	6.38
2017	Oct	6.49	6.47	6.47	6.47	6.40
	Avg.	<b>6.73</b>	<b>6.68</b>	<b>6.70</b>	<b>6.70</b>	<b>6.63</b>
2017	Nov	6.79	6.75	6.76	6.76	6.70
2017	Dec	7.36	7.30	7.36	7.36	7.29
2018	Jan	7.91	7.84	7.91	7.91	7.83
2018	Feb	7.97	7.89	7.97	7.97	7.88

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Annual Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2018	Mar	7.77	7.73	7.73	7.73	7.66
2018	Apr	6.82	6.79	6.79	6.79	6.73
2018	May	6.71	6.68	6.68	6.68	6.61
2018	Jun	6.75	6.71	6.71	6.71	6.64
2018	Jul	6.79	6.75	6.75	6.75	6.68
2018	Aug	6.82	6.78	6.78	6.78	6.71
2018	Sep	6.81	6.77	6.77	6.77	6.71
2018	Oct	6.83	6.80	6.80	6.80	6.74
	Avg.	<b>7.11</b>	<b>7.07</b>	<b>7.09</b>	<b>7.09</b>	<b>7.02</b>
2018	Nov	7.14	7.11	7.11	7.11	7.05
2018	Dec	7.77	7.69	7.77	7.77	7.68
2019	Jan	8.33	8.25	8.33	8.33	8.25
2019	Feb	8.37	8.30	8.37	8.37	8.30
2019	Mar	8.16	8.10	8.10	8.10	8.05
2019	Apr	7.16	7.13	7.13	7.13	7.06
2019	May	7.04	7.02	7.02	7.02	6.93
2019	Jun	7.08	7.05	7.05	7.05	6.97
2019	Jul	7.12	7.09	7.09	7.09	7.01
2019	Aug	7.15	7.12	7.12	7.12	7.04
2019	Sep	7.14	7.11	7.11	7.11	7.03
2019	Oct	7.17	7.13	7.13	7.13	7.07
	Avg.	<b>7.47</b>	<b>7.42</b>	<b>7.44</b>	<b>7.44</b>	<b>7.37</b>
2019	Nov	7.49	7.45	7.46	7.46	7.40
2019	Dec	8.15	8.09	8.15	8.15	8.09
2020	Jan	8.79	8.67	8.79	8.79	8.67
2020	Feb	9.07	8.99	9.07	9.07	8.99
2020	Mar	8.54	8.49	8.49	8.49	8.43
2020	Apr	7.50	7.45	7.45	7.45	7.40
2020	May	7.36	7.34	7.34	7.34	7.26
2020	Jun	7.42	7.37	7.37	7.37	7.30
2020	Jul	7.46	7.41	7.41	7.41	7.34
2020	Aug	7.49	7.45	7.45	7.45	7.37
2020	Sep	7.48	7.44	7.44	7.44	7.37
2020	Oct	7.51	7.46	7.46	7.46	7.41
	Avg.	<b>7.85</b>	<b>7.80</b>	<b>7.83</b>	<b>7.83</b>	<b>7.75</b>
2020	Nov	7.85	7.80	7.81	7.81	7.75
2020	Dec	8.54	8.48	8.55	8.55	8.49
2021	Jan	8.96	8.87	8.96	8.96	8.86
2021	Feb	8.95	8.87	8.95	8.95	8.87
2021	Mar	8.72	8.67	8.68	8.67	8.61
2021	Apr	7.66	7.63	7.63	7.63	7.56
2021	May	7.53	7.50	7.50	7.50	7.42
2021	Jun	7.58	7.53	7.53	7.53	7.47
2021	Jul	7.62	7.59	7.59	7.59	7.51
2021	Aug	7.65	7.62	7.62	7.62	7.54
2021	Sep	7.64	7.61	7.61	7.61	7.53
2021	Oct	7.67	7.64	7.64	7.64	7.57
	Avg.	<b>8.03</b>	<b>7.98</b>	<b>8.00</b>	<b>8.00</b>	<b>7.93</b>
2021	Nov	8.02	7.97	7.98	7.98	7.93

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Annual Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2021	Dec	8.73	8.67	8.74	8.75	8.68
2022	Jan	9.16	9.06	9.16	9.16	9.05
2022	Feb	9.15	9.07	9.15	9.15	9.07
2022	Mar	8.92	8.87	8.87	8.87	8.80
2022	Apr	7.84	7.79	7.79	7.79	7.74
2022	May	7.70	7.67	7.67	7.67	7.60
2022	Jun	7.75	7.70	7.70	7.70	7.63
2022	Jul	7.79	7.75	7.75	7.75	7.67
2022	Aug	7.83	7.78	7.78	7.78	7.71
2022	Sep	7.81	7.77	7.77	7.77	7.69
2022	Oct	7.84	7.80	7.80	7.80	7.73
	Avg.	<b>8.21</b>	<b>8.16</b>	<b>8.18</b>	<b>8.18</b>	<b>8.11</b>
2022	Nov	8.20	8.16	8.17	8.17	8.10
2022	Dec	8.91	8.75	8.91	8.91	8.73
2023	Jan	9.31	9.19	9.31	9.31	9.19
2023	Feb	9.34	9.27	9.34	9.35	9.26
2023	Mar	9.11	9.06	9.06	9.06	9.00
2023	Apr	8.00	7.96	7.96	7.96	7.90
2023	May	7.87	7.84	7.84	7.84	7.76
2023	Jun	7.91	7.87	7.87	7.87	7.79
2023	Jul	7.96	7.92	7.92	7.92	7.84
2023	Aug	7.99	7.95	7.95	7.95	7.87
2023	Sep	7.98	7.94	7.94	7.94	7.87
2023	Oct	8.01	7.97	7.97	7.97	7.90
	Avg.	<b>8.38</b>	<b>8.32</b>	<b>8.36</b>	<b>8.36</b>	<b>8.27</b>
2023	Nov	8.37	8.33	8.36	8.35	8.27
2023	Dec	9.15	8.95	9.19	9.19	8.94
2024	Jan	9.66	9.44	9.66	9.66	9.43
2024	Feb	9.89	9.80	9.89	9.90	9.79
2024	Mar	9.31	9.26	9.26	9.26	9.19
2024	Apr	8.18	8.14	8.14	8.14	8.07
2024	May	8.04	8.01	8.01	8.01	7.93
2024	Jun	8.08	8.04	8.04	8.04	7.97
2024	Jul	8.14	8.08	8.08	8.08	8.01
2024	Aug	8.17	8.13	8.13	8.13	8.04
2024	Sep	8.16	8.12	8.12	8.12	8.04
2024	Oct	8.19	8.15	8.15	8.15	8.08
	Avg.	<b>8.61</b>	<b>8.54</b>	<b>8.59</b>	<b>8.59</b>	<b>8.48</b>
2024	Nov	8.56	8.51	8.54	8.54	8.45
2024	Dec	9.36	9.21	9.42	9.42	9.20
2025	Jan	9.92	9.67	9.92	9.92	9.66
2025	Feb	9.77	9.67	9.77	9.78	9.66
2025	Mar	9.51	9.46	9.46	9.46	9.39
2025	Apr	8.35	8.31	8.31	8.31	8.24
2025	May	8.21	8.19	8.19	8.19	8.09
2025	Jun	8.26	8.22	8.22	8.22	8.14
2025	Jul	8.31	8.26	8.26	8.26	8.18
2025	Aug	8.34	8.30	8.30	8.30	8.22
2025	Sep	8.33	8.29	8.29	8.29	8.21

**Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Annual Expected Case (Case #2)**

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2025	Oct	8.37	8.32	8.32	8.32	8.25
	Avg.	<b>8.77</b>	<b>8.70</b>	<b>8.75</b>	<b>8.75</b>	<b>8.64</b>
2025	Nov	8.56	8.51	8.54	8.54	8.45
2025	Dec	9.39	9.23	9.49	9.49	9.23
2026	Jan	9.92	9.67	9.92	9.92	9.66
2026	Feb	9.78	9.67	9.78	9.79	9.66
2026	Mar	9.51	9.46	9.47	9.47	9.39
2026	Apr	8.35	8.31	8.31	8.31	8.24
2026	May	8.21	8.19	8.19	8.19	8.09
2026	Jun	8.26	8.22	8.22	8.22	8.14
2026	Jul	8.31	8.26	8.26	8.26	8.18
2026	Aug	8.34	8.30	8.30	8.30	8.22
2026	Sep	8.33	8.29	8.29	8.29	8.21
2026	Oct	8.37	8.32	8.32	8.32	8.25
	Avg.	<b>8.78</b>	<b>8.70</b>	<b>8.76</b>	<b>8.76</b>	<b>8.64</b>

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Winter Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2006	Nov	8.73	8.69	8.69	8.69	8.64
2006	Dec	9.16	9.04	9.16	9.04	9.01
2007	Jan	7.04	7.00	7.04	7.00	6.99
2007	Feb	7.05	7.00	7.04	7.00	6.98
2007	Mar	6.90	6.87	6.87	6.87	6.82
	Avg.	<b>7.78</b>	<b>7.72</b>	<b>7.76</b>	<b>7.72</b>	<b>7.69</b>
2007	Nov	6.35	6.32	6.33	6.32	6.29
2007	Dec	6.70	6.58	6.70	6.58	6.56
2008	Jan	6.64	6.59	6.64	6.59	6.58
2008	Feb	6.88	6.83	6.87	6.83	6.82
2008	Mar	6.52	6.50	6.50	6.50	6.45
	Avg.	<b>6.62</b>	<b>6.56</b>	<b>6.61</b>	<b>6.56</b>	<b>6.54</b>
2008	Nov	6.00	5.97	5.97	5.97	5.94
2008	Dec	6.36	6.21	6.36	6.23	6.19
2009	Jan	6.08	6.03	6.08	6.04	6.04
2009	Feb	6.09	6.05	6.09	6.05	6.03
2009	Mar	5.95	5.93	5.93	5.93	5.88
	Avg.	<b>6.09</b>	<b>6.04</b>	<b>6.09</b>	<b>6.04</b>	<b>6.02</b>
2009	Nov	5.47	5.45	5.46	5.45	5.42
2009	Dec	5.84	5.71	5.87	5.78	5.70
2010	Jan	5.87	5.82	5.87	5.82	5.81
2010	Feb	5.90	5.86	5.90	5.86	5.85
2010	Mar	5.76	5.73	5.73	5.73	5.70
	Avg.	<b>5.77</b>	<b>5.72</b>	<b>5.77</b>	<b>5.73</b>	<b>5.70</b>
2010	Nov	5.30	5.27	5.27	5.27	5.24
2010	Dec	5.65	5.55	5.65	5.65	5.56
2011	Jan	5.86	5.82	5.86	5.86	5.82
2011	Feb	5.90	5.87	5.89	5.89	5.86
2011	Mar	5.76	5.73	5.73	5.73	5.70
	Avg.	<b>5.70</b>	<b>5.65</b>	<b>5.68</b>	<b>5.68</b>	<b>5.63</b>
2011	Nov	5.30	5.27	5.27	5.27	5.24
2011	Dec	5.79	5.73	5.79	5.79	5.74
2012	Jan	6.07	6.03	6.07	6.07	6.03
2012	Feb	6.31	6.28	6.30	6.30	6.28
2012	Mar	5.95	5.93	5.93	5.93	5.88
	Avg.	<b>5.88</b>	<b>5.85</b>	<b>5.87</b>	<b>5.87</b>	<b>5.83</b>
2012	Nov	5.47	5.45	5.45	5.45	5.41
2012	Dec	5.84	5.73	5.84	5.84	5.72
2013	Jan	6.25	6.20	6.25	6.25	6.19
2013	Feb	6.29	6.25	6.29	6.29	6.25
2013	Mar	6.14	6.11	6.11	6.11	6.06
	Avg.	<b>6.00</b>	<b>5.95</b>	<b>5.99</b>	<b>5.99</b>	<b>5.93</b>
2013	Nov	5.65	5.62	5.62	5.62	5.58
2013	Dec	6.03	5.91	6.03	6.03	5.92
2014	Jan	6.45	6.39	6.45	6.45	6.39
2014	Feb	6.49	6.45	6.49	6.49	6.45
2014	Mar	6.34	6.30	6.30	6.30	6.25
	Avg.	<b>6.19</b>	<b>6.13</b>	<b>6.18</b>	<b>6.18</b>	<b>6.12</b>
2014	Nov	5.82	5.79	5.80	5.80	5.75

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Winter Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2014	Dec	6.33	6.26	6.33	6.33	6.27
2015	Jan	6.63	6.58	6.63	6.63	6.57
2015	Feb	6.66	6.61	6.66	6.66	6.61
2015	Mar	6.48	6.45	6.45	6.45	6.40
	Avg.	<b>6.38</b>	<b>6.34</b>	<b>6.37</b>	<b>6.37</b>	<b>6.32</b>
2015	Nov	5.96	5.93	5.93	5.93	5.89
2015	Dec	6.60	6.55	6.60	6.60	6.57
2016	Jan	7.04	6.98	7.04	7.04	6.97
2016	Feb	7.31	7.26	7.31	7.31	7.26
2016	Mar	6.86	6.82	6.82	6.82	6.78
	Avg.	<b>6.75</b>	<b>6.71</b>	<b>6.74</b>	<b>6.74</b>	<b>6.69</b>
2016	Nov	6.31	6.27	6.28	6.28	6.23
2016	Dec	6.73	6.61	6.73	6.73	6.60
2017	Jan	7.53	7.46	7.53	7.53	7.45
2017	Feb	7.58	7.53	7.58	7.58	7.52
2017	Mar	7.39	7.35	7.35	7.35	7.29
	Avg.	<b>7.11</b>	<b>7.04</b>	<b>7.09</b>	<b>7.09</b>	<b>7.02</b>
2017	Nov	6.79	6.75	6.76	6.76	6.70
2017	Dec	7.36	7.30	7.36	7.36	7.29
2018	Jan	7.91	7.84	7.91	7.91	7.83
2018	Feb	7.97	7.89	7.97	7.97	7.88
2018	Mar	7.77	7.73	7.73	7.73	7.66
	Avg.	<b>7.56</b>	<b>7.50</b>	<b>7.55</b>	<b>7.55</b>	<b>7.47</b>
2018	Nov	7.14	7.11	7.11	7.11	7.05
2018	Dec	7.77	7.69	7.77	7.77	7.68
2019	Jan	8.33	8.25	8.33	8.33	8.25
2019	Feb	8.37	8.30	8.37	8.37	8.30
2019	Mar	8.16	8.10	8.10	8.10	8.05
	Avg.	<b>7.95</b>	<b>7.89</b>	<b>7.94</b>	<b>7.94</b>	<b>7.87</b>
2019	Nov	7.49	7.45	7.46	7.46	7.40
2019	Dec	8.15	8.09	8.15	8.15	8.09
2020	Jan	8.79	8.67	8.79	8.79	8.67
2020	Feb	9.07	8.99	9.07	9.07	8.99
2020	Mar	8.54	8.49	8.49	8.49	8.43
	Avg.	<b>8.41</b>	<b>8.34</b>	<b>8.39</b>	<b>8.39</b>	<b>8.31</b>
2020	Nov	7.85	7.80	7.81	7.81	7.75
2020	Dec	8.54	8.48	8.55	8.55	8.49
2021	Jan	8.96	8.87	8.96	8.96	8.86
2021	Feb	8.95	8.87	8.95	8.95	8.87
2021	Mar	8.72	8.67	8.68	8.67	8.61
	Avg.	<b>8.60</b>	<b>8.54</b>	<b>8.59</b>	<b>8.59</b>	<b>8.52</b>
2021	Nov	8.02	7.97	7.98	7.98	7.93
2021	Dec	8.73	8.67	8.74	8.75	8.68
2022	Jan	9.16	9.06	9.16	9.16	9.05
2022	Feb	9.15	9.07	9.15	9.15	9.07
2022	Mar	8.92	8.87	8.87	8.87	8.80
	Avg.	<b>8.80</b>	<b>8.73</b>	<b>8.78</b>	<b>8.78</b>	<b>8.71</b>
2022	Nov	8.20	8.16	8.17	8.17	8.10
2022	Dec	8.91	8.75	8.91	8.91	8.73

## Appendix 7.1 - SENDOUT® Marginal Cost Determination by Region - Winter Expected Case (Case #2)

Figures Include Transportation and Storage, Excludes Environmental Externalities - Nominal \$/Dth

Year	Month	Klam Falls	La Grande	Medford	Roseburg	WA/ID
2023	Jan	9.31	9.19	9.31	9.31	9.19
2023	Feb	9.34	9.27	9.34	9.35	9.26
2023	Mar	9.11	9.06	9.06	9.06	9.00
	Avg.	<b>8.97</b>	<b>8.89</b>	<b>8.96</b>	<b>8.96</b>	<b>8.85</b>
2023	Nov	8.37	8.33	8.36	8.35	8.27
2023	Dec	9.15	8.95	9.19	9.19	8.94
2024	Jan	9.66	9.44	9.66	9.66	9.43
2024	Feb	9.89	9.80	9.89	9.90	9.79
2024	Mar	9.31	9.26	9.26	9.26	9.19
	Avg.	<b>9.28</b>	<b>9.16</b>	<b>9.27</b>	<b>9.28</b>	<b>9.12</b>
2024	Nov	8.56	8.51	8.54	8.54	8.45
2024	Dec	9.36	9.21	9.42	9.42	9.20
2025	Jan	9.92	9.67	9.92	9.92	9.66
2025	Feb	9.77	9.67	9.77	9.78	9.66
2025	Mar	9.51	9.46	9.46	9.46	9.39
	Avg.	<b>9.42</b>	<b>9.30</b>	<b>9.42</b>	<b>9.42</b>	<b>9.27</b>
2025	Nov	8.56	8.51	8.54	8.54	8.45
2025	Dec	9.39	9.23	9.49	9.49	9.23
2026	Jan	9.92	9.67	9.92	9.92	9.66
2026	Feb	9.78	9.67	9.78	9.79	9.66
2026	Mar	9.51	9.46	9.47	9.47	9.39
	Avg.	<b>9.43</b>	<b>9.31</b>	<b>9.44</b>	<b>9.44</b>	<b>9.28</b>