Exh. DCP-4 Dockets UE-190334, UG-190335, and UE-190222 Witness: David C. Parcell

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION, d/b/a AVISTA UTILITIES,

Respondent.

DOCKETS UE-190334, UG-190335, and **UE-190222** (*Consolidated*)

EXHIBIT TO TESTIMONY OF

David C. Parcell

ON BEHALF OF STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Economic Indicators

October 3, 2019

ECONOMIC INDICATORS

Year	Real GDP* Growth	Industrial Production Growth	Unemploy- ment Rate	Consumer Price Index				
1975 - 1982 Cycle								
1975	-0.2%	-8.9%	8.5%	7.0%				
1976	5.4%	7.9%	7.7%	4.8%				
1977	4.6%	7.6%	7.1%	6.8%				
1978	5.6%	5.5%	6.1%	9.0%				
1979	3.2%	3.0%	5.8%	13.3%				
1980	-0.2%	-2.6%	7.1%	12.4%				
1981	2.6%	1.3%	7.6%	8.9%				
1982	-1.9%	-5.2%	9.7%	3.8%				
		1983 - 1991 (Cycle					
1983	4.6%	2.7%	9.6%	3.8%				
1984	7.3%	8.9%	7.5%	3.9%				
1985	4.2%	1.2%	7.5% 7.2%	3.8%				
1986 1987	3.5%	1.0% 5.2%	7.0% 6.2%	1.1% 4.4%				
	3.5% 4.2%	5.2%		4.4%				
1988	4.2% 3.7%	5.2% 0.9%	5.5%	4.4%				
1989 1990	3.7% 1.9%	1.0%	5.3% 5.6%	4.6% 6.1%				
1990	-0.1%	-1.5%	6.8%	3.1%				
1991	-0.1%	-1.5%	0.0%	3.176				
		1992 - 2001 (-					
1992	3.6%	2.9%	7.5%	2.9%				
1993	2.7%	3.3%	6.9%	2.7%				
1994	4.0%	5.2%	6.1%	2.7%				
1995	2.7%	4.7%	5.6%	2.5%				
1996	3.8%	4.5%	5.4%	3.3%				
1997	4.5%	7.2%	4.9%	1.7%				
1998	4.5%	5.8%	4.5%	1.6%				
1999	4.7%	4.4%	4.2%	2.7%				
2000	4.1%	3.9%	4.0%	3.4%				
2001	1.0%	-3.1%	4.7%	1.6%				
2002 - 2009 Cycle								
2002	1.8%	0.3%	5.8%	2.4%				
2003	2.8%	1.2%	6.0%	1.9%				
2004	3.8%	2.6%	5.5%	3.3%				
2005	3.3%	3.3%	5.1%	3.4%				
2006	2.7%	2.2%	4.6%	2.5%				
2007	1.8%	2.5%	4.6%	4.1%				
2008	-0.3%	-3.5%	5.8%	0.1%				
2009	-2.5%	-11.5%	9.3%	2.7%				
Current Cycle								
2010	2.6%	5.5%	9.6%	1.5%				
2011	1.6%	3.1%	8.9%	3.0%				
2012	2.2%	3.0%	8.1%	1.7%				
2013	1.8%	2.0%	7.4%	1.5%				
2014	2.5%	3.1%	6.2%	0.8%				
2015	2.9%	-1.0%	5.3%	0.7%				
2016	1.6%	-2.0%	4.9%	2.1%				
2017	2.4%	2.3%	4.4%	2.1%				
2018	2.9%	3.9%	3.9%	1.9%				
2019								
Q1	3.1%	2.9%	3.9%	2.4%				
Q2	2.0%	1.2%	3.6%	2.0%				

^{*}GDP=Gross Domestic Product

Note that certain series of data are periodically revised.

Source: Council of Economic Advisors, Economic Indicators, various issues, certain earlier year data retrived from sources used by this publication.

INTEREST RATES

1976	Year	Prime Rate	US Treasury T Bills 3 Month	US Treasury T Bonds 10 Year	Utility Bonds Aa	Utility Bonds A	Utility Bonds Baa			
1975		1975 - 1982 Cucla								
1976	1975	7.86%	5.84%	•	9.44%	10.09%	10.96%			
1977							9.82%			
1978							9.06%			
1979							9.62%			
1980							10.96%			
1981 18.89% 14.03% 13.93% 15.30% 15.95% 16. 1982 14.86% 10.69% 13.00% 14.79% 15.86% 16.							13.95%			
1982							16.60%			
1983 10.79% 8.63% 11.10% 12.83% 13.66% 14. 1984 12.04% 9.58% 12.44% 13.66% 14.03% 14. 1985 9.93% 7.48% 10.62% 12.06% 12.47% 12. 1986 8.33% 5.98% 7.68% 9.30% 9.58% 10. 1987 8.21% 5.82% 8.39% 9.77% 10.10% 10. 1988 9.32% 6.69% 8.85% 10.26% 10.26% 10.49% 11. 1989 10.87% 8.12% 8.49% 9.56% 9.77% 9.9. 1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 - 2001 Cycle 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.55% 7.57% 7.75% 8.4 1997 8.44% 5.07% 6.35% 7.54% 7.60% 7.5 1998 8.35% 4.81% 5.26% 6.91% 7.04% 7.5 1999 8.00% 4.66% 5.65% 7.51% 7.59% 7.59% 7.89% 8.2 2001 6.91% 3.44% 5.02% 7.59% 7.59% 7.78% 8.6 2001 6.91% 3.44% 5.02% 7.59% 5.44% 5.65% 6.8 2004 4.34% 1.38% 4.27% 6.04% 6.48% 6.2 2005 6.19% 3.16% 4.29% 5.54% 5.46% 6.07% 6.3 2007 8.05% 4.41% 4.63% 5.94% 6.07% 6.3 2008 5.09% 1.48% 3.66% 5.84% 6.07% 6.3 2009 3.25% 0.14% 3.22% 5.24% 5.46% 5.5 2010 3.25% 0.06% 2.35% 4.24% 4.47% 4.8 2011 3.25% 0.06% 2.35% 4.24% 4.47% 4.5 2012 3.25% 0.09% 1.80% 3.83% 4.13% 4.8 2013 3.25% 0.06% 2.35% 4.24% 4.47% 4.5 2014 3.25% 0.08% 2.35% 4.49% 4.00% 4.12% 5.6	1982	14.86%	10.69%	13.00%	14.79%	15.86%	16.45%			
1984 12.04% 9.58% 12.44% 13.66% 14.03% 14. 1985 9.93% 7.48% 10.62% 12.06% 12.47% 12. 1986 8.33% 5.98% 7.68% 9.30% 9.58% 10. 1987 8.21% 5.82% 8.39% 9.77% 10.10% 10. 1988 9.32% 6.69% 8.85% 10.26% 10.49% 11. 1989 10.87% 8.12% 8.49% 9.56% 9.86% 10. 1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 -2001 Cycle 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.55% 7.54% 7.60% 7.5 1997 8.44% 5.07% 6.35% 7.54% 7.60% 7.5 1998 8.35% 4.81% 5.26% 6.91% 7.04% 7.2 1999 8.00% 4.66% 5.65% 7.51% 7.62% 7.8 2000 9.23% 5.85% 6.03% 8.06% 8.24% 8.3 2001 6.91% 3.44% 5.02% 7.59% 7.78% 8.0 2002 2009 Cycle 2002 4.67% 1.62% 4.61% 7.19% 7.37% 8.0 2003 4.12% 1.01% 4.01% 6.40% 6.58% 6.8 2004 4.34% 1.38% 4.27% 6.04% 6.16% 6.4 2005 6.19% 3.16% 4.29% 5.44% 5.65% 5.5 2006 7.96% 4.73% 4.80% 5.84% 6.07% 6.3 2007 8.05% 4.41% 4.63% 5.94% 6.07% 6.3 2008 5.09% 1.48% 3.66% 6.18% 6.53% 7.2 2010 3.25% 0.06% 2.78% 4.78% 5.04% 5.5 2011 3.25% 0.06% 2.78% 4.24% 4.47% 4.5 2012 3.25% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5 2015 3.26% 0.06% 2.35% 4.24% 4.47% 4.5				1983 - 1991 Cycle						
1985 9.93% 7.48% 10.62% 12.06% 12.47% 12. 1986 8.33% 5.98% 7.68% 9.30% 9.58% 10. 1987 8.21% 5.82% 8.39% 9.77% 10.10% 10. 1988 9.32% 6.69% 8.85% 10.26% 10.49% 11. 1989 10.87% 8.12% 8.49% 9.56% 9.77% 9.9 1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 -2001 Cycle 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.55% 7.57% 7.75% 8.3 1997 8.44% 5.07% 6.35% 7.54% 7.60% 7.5 1998 8.35% 4.81% 5.26% 6.91% 7.04% 7.2 1999 8.00% 4.66% 5.65% 7.51% 7.62% 7.8 2000 9.23% 5.85% 6.03% 8.06% 8.24% 8.3 2001 6.91% 3.44% 5.02% 7.59% 7.59% 7.78% 8.0 2002 4.67% 1.62% 4.61% 7.19% 7.37% 8.0 2003 4.12% 1.01% 4.01% 6.40% 6.58% 6.8 2004 4.34% 1.38% 4.27% 6.04% 6.16% 6.2 2005 6.19% 3.16% 4.29% 5.44% 5.65% 5.2 2006 7.96% 4.73% 4.80% 5.84% 6.07% 6.3 2007 8.05% 4.41% 4.63% 5.94% 6.07% 6.3 2008 5.09% 1.48% 3.66% 6.18% 6.53% 7.5 2009 3.25% 0.16% 3.26% 5.75% 4.78% 5.04% 5.5 2011 3.25% 0.06% 2.78% 4.78% 5.04% 5.5 2012 3.25% 0.06% 2.25% 4.24% 4.47% 4.8 2013 3.25% 0.06% 2.35% 4.24% 4.47% 4.8 2014 3.25% 0.03% 2.54% 4.19% 4.28% 4.8 2015 3.26% 0.06% 2.35% 4.24% 4.40% 4.19% 4.28% 4.8 2015 3.26% 0.06% 2.25% 4.19% 4.00% 4.12% 5.0	1983	10.79%	8.63%	11.10%	12.83%	13.66%	14.20%			
1986 8.33% 5.98% 7.68% 9.30% 9.58% 10. 1987 8.21% 5.82% 8.39% 9.77% 10.10% 10. 1988 9.32% 6.69% 8.85% 10.26% 10.49% 11. 1989 10.87% 8.12% 8.49% 9.56% 9.77% 9.5 1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.57% 7.55% 8.7 1997 8.434% 5.07%	1984	12.04%	9.58%	12.44%	13.66%	14.03%	14.53%			
1987 8.21% 5.82% 8.39% 9.77% 10.10% 10.	1985	9.93%	7.48%	10.62%	12.06%	12.47%	12.96%			
1988 9.32% 6.69% 8.85% 10.26% 10.49% 11. 1989 10.87% 8.12% 8.49% 9.56% 9.77% 9.5 1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 - 2001 Cycle 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.57% 7.75% 8.2 1997 8.44% 5.07% 7.57% 7.75% 7.5 9.6 4.9 7.5 7.60% 7.2 1998 8.35% 4.81% 5.26% 6.91% 7.04	1986		5.98%	7.68%	9.30%	9.58%	10.00%			
1989 10.87% 8.12% 8.49% 9.56% 9.77% 9.5 1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 - 2001 Cycle 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.311% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.57% 7.75% 8.5 1997 8.44% 5.07% 6.35% 7.54% 7.60% 7.2 1998 8.00% 4.66% 5.65% 7.51% 7.62% 7.2 2000 9.23% 5.85% 6.03% 8.06% 8.24% 8.3 2001 6.91% 1.01% 4.01% 6.40% 6.58% 6.8	1987	8.21%	5.82%	8.39%	9.77%	10.10%	10.53%			
1990 10.01% 7.51% 8.55% 9.65% 9.86% 10. 1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 - 2001 Cycle 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.57% 7.75% 8.5 1997 8.44% 5.07% 6.35% 7.54% 7.60% 7.5 1998 8.35% 4.81% 5.26% 6.91% 7.04% 7.2 1999 8.00% 4.66% 5.65% 7.51% 7.62% 7.5 2000 9.23% 5.85% 6.03% 8.06% 8.24% 8.3 2001 6.91% 3.44% 5.02% 7.59% 7.78% 8.6 2002							11.00%			
1991 8.46% 5.42% 7.86% 9.09% 9.36% 9.5 1992 - 2001 Cycle 1992 6.25% 3.45% 7.01% 8.55% 8.69% 8.8 1993 6.00% 3.02% 5.87% 7.44% 7.59% 7.5 1994 7.15% 4.29% 7.09% 8.21% 8.31% 8.6 1995 8.83% 5.51% 6.57% 7.77% 7.89% 8.2 1996 8.27% 5.02% 6.44% 7.57% 7.75% 8.7 1997 8.44% 5.07% 6.35% 7.54% 7.60% 7.5 1998 8.35% 4.81% 5.26% 6.91% 7.04% 7.2 1999 8.00% 4.66% 5.65% 7.51% 7.62% 7.6 2000 9.23% 5.85% 6.03% 8.06% 8.24% 8.3 2001 6.91% 3.44% 5.02% 7.59% 7.78% 8.6										

Sources: Council of Economic Advisors, Economic Indicators; Mergent Bond Record.

STOCK PRICE INDICATORS

	S&P Composite [1]	NASDAQ Composite [1]	DJIA	S&P E/P				
1975 - 1982 Cycle								
1975		70 1002 0,010	802.49	9.15%				
1976			974.92	8.90%				
1977			894.63	10.79%				
1978			820.23	12.03%				
1979			844.40	13.46%				
1980			891.41	12.66%				
1981			932.92	11.96%				
1982			884.36	11.60%				
	19	83 - 1991 Cycle						
1983			1,190.34	8.03%				
1984			1,178.48	10.02%				
1985			1,328.23	8.12%				
1986			1,792.76	6.09%				
1987			2,275.99	5.48%				
1988 1989	222.04		2,060.82	8.01%				
1990	322.84 334.59		2,508.91 2,678.94	7.42% 6.47%				
1991	376.18	491.69	2,929.33	4.79%				
	40							
4000		92 - 2001 Cycle	0.004.00	4.000/				
1992	415.74	\$599.26	3,284.29	4.22%				
1993	451.41 460.33	715.16 751.65	3,522.06	4.46%				
1994 1995	541.64	925.19	3,793.77 4,493.76	5.83% 6.09%				
1996	670.83	1,164.96	5,742.89	5.24%				
1997	872.72	1,469.49	7,441.15	4.57%				
1998	1.085.50	1,794.91	8,625.52	3.46%				
1999	1,327.33	2,728.15	10,464.88	3.17%				
2000	1,427.22	2,783.67	10,734.90	3.63%				
2001	1,194.18	2,035.00	10,189.13	2.95%				
	20	02 - 2009 Cycle						
2002	993.94	1,539.73	9,226.43	2.92%				
2003	965.23	1,647.17	8,993.59	3.84%				
2004	1,130.65	1,986.53	10,317.39	4.89%				
2005	1,207.23	2,099.32	10,547.67	5.36%				
2006	1,310.46	2,263.41	11,408.67	5.78%				
2007	1,476.66	2,577.12	13,169.98	5.29%				
2008	1,220.89	2,162.46	11,252.61	3.54%				
2009	946.73	1,841.03	8,876.15	1.86%				
Current Cycle								
2010	1,139.31	2,347.70	10,662.80	6.04%				
2011	1,268.89	2,680.42	11,966.36	6.77%				
2012	1,379.56	2,965.77	12,967.08	6.20%				
2013	1,462.51	3,537.69	14,999.67	5.57%				
2014	1,930.67	4,374.31	16,773.99	5.25%				
2015	2,061.20	4,943.49	17,590.61	4.59%				
2016	2,092.39	4,982.49 6 231 28	17,908.08 21,741.91	4.17%				
2017 2018	2,448.22 2,744.68	6,231.28 7,419.27	25,045.75	4.22% 4.66%				
2019	2,174.00	1,713.41	20,040.70	7.00/0				
Q1	2,722.08	7,346.37	25,161.98	4.74%				
Q2	2,882.89	7,874.48	26,102.16	4.60%				

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAC Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.