COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF COLUMBIA GAS) OF KENTUCKY, INC. FOR AN) ADJUSTMENT OF GAS RATES)

CASE NO. 2007-00008

RESPONSE OF THE ATTORNEY GENERAL TO THE REQUEST OF COMMISSION STAFF

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PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF COLUMBIA GAS OF KENTUCKY, INC. FOR AN ADJUSTMENT OF GAS RATES

Case No. 2007-00008

ATTORNEY GENERAL'S RESPONSES TO DISCOVERY REQUESTS OF PUBLIC SERVICE COMMISSION

Comes now the Attorney General of the Commonwealth of Kentucky, by

and through his Office of Rate Intervention, and states as follows for his

responses to the discovery requests of the Public Service Commission.

Respectfully submitted,

GREGORY D. STUMBO ATTORNEY GENERAL

1 Cat 1110

DENNIS G. HOWARD, II LAWRENCE W. COOK ASSISTANT ATTORNEYS GENERAL 1024 CAPITAL CENTER DRIVE, SUITE 200 FRANKFORT KY 40601-8204 (502) 696-5453 FAX: (502) 573-8315

Certificate of Service and Filing

Counsel certifies that the responses attached hereto are true and accurate to the best of his knowledge, information, and belief formed after a reasonable inquiry. Counsel further certifies that an original and ten photocopies of the foregoing were served and filed by hand delivery to Beth O'Donnell, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; furthermore, it was served by mailing a true and correct copy of the same, first class postage prepaid, to:

Hon. David Jeffrey Barberie Corporate Counsel Lexington-Fayette Urban County Government Department Of Law 200 E. Main St. Lexington, KY 40507

Hon. David F. Boehm Attorney at Law Boehm, Kurtz & Lowry 36 E. 7th St. Ste. 1510 Cincinnati, Ohio 45202

Hon. Richard S. Taylor Attorney at Law Capital Link Consultants 225 Capital Avenue Frankfort, KY 40601

Hon. Matthew R. Malone Attorney at Law Hurt, Crosbie & May PLLC The Equus Bldg. 127 W. Main Street Lexington, KY 40507

Hon. Vincent A. Parisi Attorney at Law Interstate Gas Supply, Inc. 5020 Bradenton Avenue Dublin, OH 43017

all on this <u>114</u> day of July, 2007.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF COLUMBIA GAS OF)KENTUCKY, INC. FOR AN ADJUSTMENT)OF RATES)2007-00008

FIRST DATA REQUEST OF COMMISSION STAFF TO THE ATTORNEY GENERAL

The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG"), pursuant to 807 KAR 5:001, is requested to file with the Commission the original and seven copies of the following information, with a copy to all parties of record. The information requested herein is due on or before July 11, 2007. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry. The AG shall make timely amendment to any prior responses if he obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any requests to which the AG fails or refuses to furnish all or part of the requested information, the AG shall provide a written explanation of the specific grounds for his failure to completely and precisely respond.

Careful attention should be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations.

Witness Responsible: Robert J. Henkes

- Question 1. Refer to the Direct Testimony of Robert J. Henkes ("Henkes Testimony"). Throughout his testimony, Mr. Henkes states the test year in this case ends September 30, 2007 and on page 3 states he was presenting the "appropriate forecasted test period" rate of return, rate base, operating income, and revenue requirement. Was Mr. Henkes aware this application was filed utilizing a historic test period, which ends on September 30, 2006?
- Response: Mr. Henkes was aware that this application was filed utilizing a historic test year ending September 30, 2006 and all of the positions reflected in his testimony are based on that fact.

Unfortunately, Mr. Henkes's testimony text and testimony schedules contain some typographical errors indicating that the test year ended September 30, 2007 rather than September 30, 2006. These typographical errors are contained on page 40, line 21 and page 41, line 47 of Mr. Henkes' testimony. The dates of September 30, 2007 mentioned there should be changed to September 30, 2006. Additionally, all of the RJH testimony schedules show in the left upper corner "Test Period Ending 9/30/07." This date should be changed to 9/30/06. Also, on Schedule RJH-14, the references to the plant in service and CWIP balances at 9/30/07 should be changed to 9/30/06.

Finally, on page 3, line 10, the words "forecasted test period" should be changed to "test period's pro forma adjusted."

Witness Responsible: Robert J. Henkes PAGE 1 of 3

Question 2: Refer to the Henkes Testimony, pages 11 through 13.

- (a) Was Mr. Henkes aware that the capital structure proposed by Columbia Gas of Kentucky, Inc. ("Columbia") was initially based upon a hypothetical capital structure of 45 percent long-term debt and 55 percent common equity?
- (b) Does Mr. Henkes agree with Columbia that a hypothetical capital structure should be the basis for the capital ratios utilized in this case? Explain the response.
- (c) Was Mr. Henkes aware that the amount of short-term debt included in the proposed capital structure reflected Columbia's actual 13-month average of short-term debt?
- (d) Exclusive of his recommendation concerning the level of short-term debt that should be reflected in the capital structure, does Mr. Henkes agree with Columbia's proposal to utilize the actual 13-month average of short-term debt? Explain the response, and address the appropriateness of using a 13-month average in a case filed using a historic test period.
- (e) On page 12 Mr. Henkes states, "I believe this is a more reasonable (and certainly a more conservative) ratemaking approach then basing the operating income requirement on a reduced rate base level of \$152 million." Explain why Mr. Henkes' proposal is more reasonable.

Response:

a. Mr. Henkes is aware that the capital structure proposed by Columbia is based upon a hypothetical capitalization totaling \$152,032,872, consisting of ST debt of \$8,052,333, LT debt of \$64,791,243 and Common Equity of \$79,189,296. The LT debt makes up 45% and the Common Equity makes up 55% of the \$143,980,539 capitalization exclusive of ST debt. The LT debt of \$64,791,243 and Common Equity of \$79,189,296 respectively make up 42.617% and 52.087% of the \$152,032,872 capitalization including ST debt.

PAGE 2 of 3

- b. To the extent that Mr. Henkes has recommended a hypothetical ST debt balance of \$27,123,732 in the capital structure, for the reasons discussed by him on pages 8-12 of his testimony, Mr. Henkes agrees that a hypothetical capital structure should be used as the basis for the capital ratios utilized in this case.
- c. Yes.
- d. Yes. As shown in the response to AG-1-5, the Company's monthly short term debt balances experience very significant fluctuations during any particular year, including the test year. For example, if the Company's proposed test year had ended one month prior to the end of the test year, i.e., on August 31, 2006, the short term debt balance would be \$0. However, if the Company's proposed test year had ended 12/31/05, the short term debt balance would be \$32,171,746. Considering these monthly fluctuations, it would be inappropriate and potentially very inaccurate to reflect a singlepoint in time short term debt balance for inclusion in the capital structure in a rate case. The reflection of a 13-month average debt balance would smooth out the monthly fluctuations and would represent a more representative short term debt level to be experienced on an average annual basis. This is the very reason the Commission for rate making purposes always reflects 13-month average balances for materials and supplies, prepayments and gas stored underground.

In addition, gas utilities generally fund the very significant monthly fluctuations in their gas stored underground balances with short term debt. This is confirmed by Company witness Moul on page 20 of his testimony where he states that the Company's short term debt balances fluctuate substantially during the year "related to seasonal working capital needs associated with customer accounts receivable, which peak during the heating season, and to <u>the financing of stored gas inventory</u>." [emphasis supplied] Since the gas stored underground account has been reflected on a 13-month average basis in this case (as in all previous rate cases), it would be consistent to similarly reflect the supporting short term debt balance in the capital structure on a 13-month average basis.

e. Mr. Henkes could have recommended a rate base of approximately \$152 million rather than the proposed rate base of approximately

PAGE 3 of 3

\$171 million under the argument that approximately \$19 million of the proposed rate base was financed with temporary zero cost non-investor supplied funds in the form of GCR and CHOICE program over-collections. However, since the Company has confirmed that the \$19 million difference would have been additional short term debt if the non-investor supplied funds would not have been available, Mr. Henkes is of the opinion that, based on these facts, it would be reasonable to impute the \$19 million into the capital structure as additional short term debt.

Witness Responsible: Robert J. Henkes

Question 3: Refer to the Henkes Testimony, page 21.

- a. Did Mr. Henkes consider using a 5-year average of the actual uncollectible accrual rates?
- b. Provide the 5-year average of the actual uncollectible accrual rates for the period 2001 through 2005 and 2002 through the test period.
- c. Explain why Mr. Henkes decided a 4-year average ratio was more appropriate than either a 5-year or 6-year average ratio.
- d. Does Mr. Henkes believe it is appropriate to include the testyear accrual rate in the calculation of the average rate, since the test-year-end in this case is September 30, 2006? Explain the response.

Response:

- a. No, for the reasons explained in the response to part c below.
- b. <u>0.9538454%</u> for the 5-year average 2001 through 2005 and <u>0.932734</u> for the 5-year average 2002 through the test year.
- c. As explained on page 21 of Mr. Henkes' testimony, Mr. Henkes chose a conservative approach with regard to this issue by considering the ratios for the 6-year period for which these uncollectible ratios were available and eliminating the highest and lowest ratios. Notwithstanding this recommended approach, Mr. Henkes believes that using a 5-year average or 6-year average approach would also be appropriate.
- d. Whenever the Commission uses historic averages, whether for storm damage expenses, I&D expenses, or other expenses, the Commission has always insisted on including the test year data in such historic average calculations even if such test year data did not represent a full year's expense experience when compared to the prior calendar year expense experience. Mr. Henkes has followed this Commission precedent in his historic average uncollectible accrual determination in this case.

Witness Responsible: Robert J. Henkes PAGE 1 of 3

Question 4: Refer to the Henkes Testimony, pages 33 and 34, and Schedule RJH-12.

- a. Provide all workpapers and assumptions utilized to develop the calculations shown on Schedule RJH-12.
- b. Mr. Henkes notes that Columbia has stated its test-year professional services expense was higher than previous years due to engineering charges in excess of \$7 million being incurred in conjunction with a 12-inch pipeline project. The engineering charges were spread over 2005 and 2006.
 - 1. Since the reason for the significant increase in expense has been identified, explain in detail why Mr. Henkes did not propose an adjustment to remove the testyear-level of engineering charges from the professional services expense.
 - 2. Explain in detail why the proposal to adjust the professional services expense to reflect a 5-year, inflation-adjusted average level of expense is reasonable, given the knowledge about the engineering charges.
 - 3. Does Mr. Henkes believe it is appropriate to expense engineering charges associated with a specific construction project, instead of capitalizing the charges as part of the total cost of the project? Explain the response.

Response:

a. The total and broken out professional services expenses of \$11,802,944 for the test year come from both the responses to AG-2-15, Attachment 1 and PSC-1-28 Attachment Format 28. The total and broken out professional services expenses for 2002, 2003, 2004 and 2005 come from the response to AG-2-14 Format 28, pages 1 of 5 through 4 of 5.

The CPI inflator factors for the years 2002 through the test year come from the Consumer Price Index (CPI) Conversion Factors that can be found on the internet. Mr. Henkes has attached a copy of the relevant page used in the calculation of his CPI inflator factors.

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The "Adjusted Total" amounts for 2002 through the test year were derived by multiplying the CPI inflator factors for each year with the total actual professional services expenses for each corresponding year.

Mr. Henkes than calculated the 5-yr average by adding the Adjusted Total amounts for each of the 5 years and dividing the sum by 5.

The actual 2006 total and broken out professional services expense amount of "approximately \$9.7 million" referenced on page 33, lines 10-11 of Mr. Henkes' testimony comes from both the responses to AG-2-15 Attachment 1 and AG-2-14 Attachment 1, Format 28.

b.1 Mr. Henkes chose to use the 5-year inflated average approach shown on Schedule RJH-12 because he believed this approach to be reasonable particularly because this approach includes the normalization of <u>all</u> professional services components which can fluctuate significantly from year to year, as evident from Schedule RJH-12.

During recent discussions between the AG and the Company, Columbia informed the AG that most of the engineering charges shown on Mr. Henkes' Schedule RJH-12 do not represent expenses¹ but, rather, represent engineering expenditures that were capitalized. Upon the request of the AG, the Company subsequently determined and provided to the AG the portions of the engineering charges shown on Schedule RJH-12 that represent engineering O&M expenses. This information was provided to Mr. Henkes by Ms. Kelly Humrichouse by email on July 2, 2007. Based on this revised information, Mr. Henkes has revised his proposed professional services expense adjustment on Schedule RJH-12. The revised adjustment indicates that a professional services expense normalization adjustment of \$197,267 (reduction) would be in order rather than Mr. Henkes' originally proposed professional

¹ The responses to PSC-1-28, AG-2-14 and AG-2-15 (upon which Mr. Henkes relied in his preparation of Schedule RJH-12) showed all engineering charges to be *expenses*, not capitalized expenditures.

PAGE 3 of 3

normalization adjustment \$2,585,496 services expense of This revision changes Mr. Henkes' originally (reduction). recommended rate increase amount of \$1,307,116 to a revised recommended rate increase amount of \$3,792,977. Mr. Henkes has attached a new set of his testimony schedules showing this information. The specific RJH schedules that have been revised from Mr. Henkes' original RJH schedules have the caption "Revised 7/02/07" in the upper right hand corner. The only real revision is on Schedule RJH-12. All of the other RJH schedules with the caption "Revised 7/02/07" are revised merely as the "flow-through" result of the RJH-12 revision.

b.2 See the response to b.1 above.

b.3 See the response to b.1 above.

Consumer Price Index (CPI) Conversion Factors 1800 to estimated 2016 to Convert to Dollars of 2006

To convert dollars of any year to dollars of the year 2006, DIVIDE the dollar amoun from that year by the conversion factor (CF) for that year For example, \$1000 dollars of 1925 = \$11,494 dollars of 2006 (\$1000 / 0.087)

Data series since 1912 have changed periodically, so numbers are not all precisely comparable. Therefore, it is recommended that numbers be rounded to no more than three decimal places. For example, \$11,494 in the example above becomes \$11,500 For years prior to 1913, rounding to two decimal places is recommended, e.g. \$11,494 becomes \$11,000 (two decimals)

Note: To reverse the process, that is, to determine what a 2006-dollar amount would be in dollars of another year, simply multiply the year 2006 amount by the conversion factor for that year. For example, \$1000 dollars of 2005 would be about \$69 in 1940 (\$1000 x 0 069 = \$69), again rounded to 3 or 2 decimal places.

Year	CF	Year	CF	Year	CF	Year	CF	Year	CF	Year	CF	
1800	0 065	1840	0 045	1880	0 053	1920	0.099	1960	0 147	2000	0 854	
1801	0 066	1841	0 045	1861	0 053	1921	0 089	1961	0.148	2001	0 878	,
1802	0.056	1842	0.042	1882	0.053	1922	0 083	1962	0.150	2002	0 892	1.121076
1803	0 059	1843	0 038	1883	0 052	1923	0.085	1963	0.152	2003	0.913	IMERAD
1804	0.061	1844	0.039	1884	0.051	1924	0.085	1964	0.154	2004	0.937	1.067235
1805	0 061	1845	0 039	1885	0.050	1925	0.087	1965	0 156	2005	0 969	1.031991
1806	0 063	1846	0 040	1886	0 049	1926	0 088	1966	0.161	2006	1.000	
1807	0 060	1847	0 043	1887	0 049	1927	0 086	1967	0.166	2007	1 021	
1808	0.065	1848	0 041	1888	0 049	1928	0 085	1968	0.173	2008	1.043	
1809	0.063	1849	0.040	1889	0.048	1929	0.085	1969	0.182	2009	1.066	
1810	0 063	1850	0 040	1890	0 047	1930	0 083	1970	0 192	2010	1 090	
1811	0 068	1851	0.040	1891	0.047	1931	0.075	1971	0.201	2011	1 1 1 1 4	
1812	0 069	1852	0 040	1892	0 047	1932	0 068	1972	0 207	2012	1 138	
1813	0 082	1853	0 040	1893	0 047	1933	0 064	1973	0 220	2013	1 163	
1814	0.091	1854	0.044	1894	0.044	1934	0.066	1974	0.245	2014	1,189	
1815	0 079	1855	0 045	1895	0 044	1935	0 068	1975	0 267	2015	1 215	
1816	0 072	1856	0 044	1896	0 044	1936	0 069	1976	0 282	2016	1 242	
1817	0 069	1857	0 045	1897	0 043	1937	0 071	1977	0 301			
1818	0.066	1858	0 043	1898	0.043	1938	0.070	1978	0.323			
1819	0.066	1859	0.043	1899	0.043	1939	0.069	1979	0.360			
1820	0 061	1860	0.043	1900	0 044	1940	0 069	1980	0 409			
1821	0 059	1861	0 046	1901	0 044	1941	0 073	1981	0.451			
1822	0 061	1862	0.052	1902	0 044	1942	0 081	1982	0.479			
1823	0.054	1863	0 065	1903	0 0 4 6	1943	0 086	1983	0 494			
1824	0.050	1864	0.081	1904	0.046	1944	0.087	1984	0.515			
1825	0 051	1865	0 084	1905	0 046	1945	0 089	1985	0 534			
1826	0.051	1866	0 082	1906	0 047	1946	0 097	1986	0 544			
1827	0 052	1867	0 076		0 049	1947	0 111	1	0.563			
1828	0 049	1	0.073	1908	0.048	1948	0.120	1	0.587			
1829	0.048	1869	0.070	1909	0.047	1949	0.118	1989	0.615			
1830	0.048	1870	0 067	1910	0 049	1950	0.120	1990	0.648			
1831	0 045		0.063	1	0.049	1	0 129	1	0 676			
1832	0 044	1	0 063	1912	0 050		0 131		0.696			
1833	0.044	ļ	0.062		0 049	1	0.132	1	0 717			
1834	0.044	1874	0.059	1914	0.050	1954	0.133	1994	0.735			
1835	0.046		0 057	1915	0 050	1955	0.133	1995	0.756			
1836	0 048	1	0.056		0.054	2	0.135	}	0 778)		
1837	0.050	1	0 054	1	0.063	1	0.139	1	0.796			
1838	0.048	1	0.052	1	0 075	1	0.143	1	0 809			
1839	0.048	1879	0.052	1919	0.086	1959	0.144	1999	0.826	l	1	

Revised January 18, 2007, using final 2006 CPI (CPI = 2 016) and early 2006 average of OMB and CBO estimates for 2006-2017 inflation Estimates for 2007 to 2017 will be revised in February 2007, using updated OMB and CBO inflation estimates for those years.

Conversion factors for years prior to 1913 are re-based from data in John J. McCusker, "How Much Is That in Real Money?," Proceedings of the American Antiquarian Society (2001), Table A-1, Column 6.

Real Money?," Proceedings of the American Antiquanan Society (2001), Table A-1, Column 6. (Note: These conversion factors are calculated from McCusker data, not supplied in his original source.)

CPI is CPI-U, the broader measure for all urban consumers, year-to-year average (not December to December)

Inflation assumptions: Inflation conversion factors for 2007 and later years, assume, as of early 2006, 2-1 percent in 2007; 2-2 percent in 2008 through 2016; 2006-2011 are the average of OMB and CBO inflation estimates for each year as of early 2006; 2012-2016 are only from CBO because OMB did not project past 2011 in its 2007 Budget proposals. These will be revised in February 2007 through estimated 2017, using updated OMB and CBO inflation estimates. Note that early 2006 inflation estimates differed insignificantly from final 2006 inflation, so minimal change from early 2006 inflation conversion factor estimates.

CF in Excel format starting 1665 are available at http://oregonstate.edu/cla/polisci/faculty/sahr/infcf16652007 xls CF in pdf (Adobe Acrobat) format starting 1665 are available at http://oregonstate.edu/cla/polisci/faculty/sahr/infcf16652007.pdf

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(c) 2007 Robert C. Sahr, Political Science Department, Oregon State University, Corvallis, OR 97331-6206 e-mail: Robert-Sahr@oregonstate.edu; WWW: http://www.oregonstate.edu/Dept/pol_sci/fac/sahr/sahrhome.html .

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Witness Responsible: Robert J. Henkes

Question 5: Refer to the Henkes Testimony, pages 34 and 35.

- a. Explain in detail why a 6-year average of moving expenses is reasonable. Include in this response a discussion of why the average was not adjusted for inflation, as Mr. Henkes proposed in his adjustment for professional services expense.
- b. Provide the 5-year average of the total moving expenses for the period 2001 through 2005 and 2002 through the test period.

Response:

- a. Mr. Henkes used a 6-year average because he had 6 years worth of moving expenses available, as per the response to AG-2-21. Mr. Henkes has calculated that if his 6-year average were inflated with the same CPI inflation factors as used for the professional services expense, his recommended normalized moving expense amount of \$42,639 would be approximately \$45,000.
- b. The 5-year average for the 5-year period 2001 through 2005 is \$35,896 and the 5-year average for the 5-year period 2002 through the test year is \$46,364.

Witness Responsible: Robert J. Henkes PAGE 1 of 2

- Question 6: Refer to the Henkes Testimony, pages 40 through 42, and Schedule RJH-14.
 - a. Refer to Schedule RJH-14. Explain in detail why Mr. Henkes has included depreciation expense on construction work in progress ("CWIP").
 - b. Was Mr. Henkes aware that in Case No. 2004-00067,² the Commission specifically rejected the inclusion of depreciation expense on test-year CWIP for rate-making purposes? Explain the response.
 - c. Explain in detail the basis for Mr. Henkes' rejection of the new depreciation study and proposed depreciation rates.
 - d. Mr. Henkes states on page 41, lines 4 through 7,

No. Mr. Spanos' depreciation study and the resulting new depreciation rates proposed by the Company have not been reviewed by me as these issue areas are beyond the scope of my consulting contract in this case. I therefore am not in a position to express an opinion on the appropriateness of the Company's proposed new depreciation rates.

Since Mr. Henkes has not reviewed the depreciation study and the proposed new depreciation rates and is unable to express an opinion on the appropriateness of the proposed new rates, explain in detail how Mr. Henkes can recommend the rejection of the proposed depreciation rates.

² Case No. 2004-00067, Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates, final Order dated November 10, 2004 at 31.

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e. Provide a revised Schedule RJH-1 that reflects the acceptance of the new depreciation rates proposed by Columbia. Include the corresponding adjustment to the rate base reflecting the additional depreciation expense.

Response:

- a. Mr. Henkes relied on the Company's response to PSC-2-65(a) regarding pro forma depreciation expenses on CWIP in service.
- b. No. Mr. Henkes notes, though, that both the Company and he only reflected depreciation on the \$416,315 portion of the Company's total CWIP balance of \$3,021,930 that was in service as of 9/30/06.
- c. Mr. Henkes has not rejected the new depreciation study. As explained on page 41 of his testimony, Mr. Henkes is not an expert in technical depreciation related studies and was not hired by the AG to address this issue. For those reasons, and because of the fact that the Commission has not at this point approved the Company's newly proposed rates, Mr. Henkes has simply restated the Company's proposed depreciation expenses using the currently approved depreciation rates for presentation purposes in his testimony. Furthermore, Mr. Henkes testified on pages 41 and 42 of his testimony that his currently reflected depreciation expenses should be replaced by the depreciation expenses calculated based on the Commission-authorized depreciation rates in this case.
- d. See the response to question c above.
- e. As noted in the response to Question 4(b) and in the RJH schedules attached to the response to Question 4(b), Mr. Henkes' revised recommended rate increase now amounts to \$3,792,977 as a result of the required revision related to his professional services expense adjustment. As shown on the attached Schedules RJH-1, RJH-3, RJH-6, RJH-14 and RJH-15, this revised rate increase amount of \$3,792,977 would change to \$5,653,265 under the assumption that the Commission will approve 100% of the Company's proposed new depreciation rates.

Response to PSC Q. 6(e)

Test Period Ending 9/30/07 Case No. 2007-00008 Sch. RJH-1

COLUMBIA GAS OF KENTUCKY REVENUE DEFICIENCY

	Columbia (1)	Adjustment	AG	
1. Rate Base	\$171,447,599	\$ (2,342,345)	\$ 169,105,254	Sch. RJH-3
2. Rate of Return	8.71%		7.09%	Sch. RJH-2
3. Operating Income Requirement	14,933,086		11,983,075	
4. Pro Forma Operating Income	7,311,266	2,711,890	10,023,156	Sch. RJH-6
5. Operating Income Deficiency	7,621,820		1,959,918	
6. Gross Revenue Conversion Factor	1.659121		1.657319	(2)
7. Revenue Deficiency	\$ 12,645,522	\$ (9,397,313)	\$ 3,248,209	:

(1) Schedule A

(2) Operating revenue	100.000000	100.000000
Less: Uncollectible accounts	(1.163918)	(1.082147) Sch. RJH-9
Less: PSC fees	(0.189800)	(0.164300) Sch. RJH-9
Net revenues	98.646282	98.753553
State income taxes @ 6.00%	5.918777	5.925213
Income before federal income tax	92.727505	92.828340
Federal income tax @ 35%	32.454627	32.489919
Operating income percentage	60.272878	60.338421
Gross revenue conversion factor	1.659121	1.657319

Sch. RJH-3

COLUMBIA GAS OF KENTUCKY RATE BASE

	Columbia	Adjustment	AG	
	(1)			
1. Plant In Service	\$249,594,250		\$ 249,594,250	
2. Accum. Depreciation & Amort.	(112,159,509)	(2,079,946)	(114,239,455)	Sch. RJH-14
3. Construction Work in Progress	416,315		416,315	
4. Cash Working Capital Allowance	3,473,737	(502,549)	2,971,188	Sch. RJH-4
5. Other Working Capital Allowances	48,222,713		48,222,713	
6. Customer Advances	(163,698)		(163,698)	
7. ADIT & ADITC	(17,936,208)	240,149	(17,696,059)	Sch. RJH-5
8. Net Rate Base	\$171,447,599	\$ (2,342,345)	\$ 169,105,254	

.

(1) Schedule B-1

Sch. RJH-6

COLUMBIA GAS OF KENTUCKY OPERATING INCOME

	Columbia (1)	Adjustment	AG	
1. Operating Revenues	\$158,276,796	\$ 61,607	\$158,338,403	Sch. RJH-7
Operating Expenses:				
2. Gas Supply Expenses	\$112,218,147		\$112,218,147	
3. Other Operating Expenses	27,764,144	(4,020,389)	23,743,755	Sch. RJH-8
4. Depreciation Expenses	7,396,787	-	7,396,787	Sch. RJH-14
5. Taxes Other Than Income Tax	2,324,860	(24,434) (2)	2,300,426	
6. Operating Exp. Before Income Tax	149,703,938	(4,044,823)	145,659,115	
7. Operating Income Before Income Tax	8,572,858	4,106,430	12,679,288	
8. Income Taxes	1,261,592	1,394,540	2,656,132	Sch. RJH-15
9. Operating Income	\$ 7,311,266	\$ 2,711,890	\$ 10,023,156	

(1) Schedule C-1

(2) 8% x labor expense and incentive compensation expense adjustments on Schedule RJH-8, lines 3 and 4

COLUMBIA GAS OF KENTUCKY RECOMMENDED DEPRECIATION EXPENSES

Expenses:

Annualized Depreciation Expenses at Current Rates:

a. Depreciation of Plant in Service at 9/30/06	\$ 7,386,524	(1)
b. Depreciation on CWIP in Service at 9/30/06	 10,263	(1)
c. Total Annualized Depreciation	\$ 7,396,787	

Depreciation Reserve Impact:

а	. An	nualize	ed D	epre	ecia	tion	Expen	ses a	t Current R	Rates:	\$ 7,	396	3,7
			-	-		-							

b. Test Year Per Books Depreciation Expenses c. Pro Forma Increase in Depreciation Reserve

\$ 7,396,787	
 5,316,841	(2)
\$ 2,079,946	

(1) Schedule D-2.6

(2) Schedule C-2, line 10

COLUMBIA GAS OF KENTUCKY INCOME TAXES

	Columbia	Adjustment	AG	
	(1)			
1. Operating Income Before Income Tax	\$ 8,572,858		\$ 12,679,288	Sch. RJH-6, L7
2. Less: Pro Forma Interest Expenses	(4,663,375)		(5,093,606)	(2)
3. Less: Statutary Adjustments	(67,379)		(67,379)	(-)
4. State Taxable Income	3,842,104		\$ 7,518,303	
5. State Income Taxes @ 5.961%	229,026		448,166	
Amortization of Excess State ADIT	(334)		(334)	
7. Net State Income Taxes	228,692	219,140	447,832	
8. Federal Taxable Income [L4-L5]	3,613,078		7,070,137	
9. Federal Income Taxes @ 34%	1,228,446		2,403,847	
10. Amortization of Excess Federal ADIT	(107,843)		(107,843)	
11. Amortization of Investment Tax Credit	(87,704)		(87,704)	
12. Net Federal Income Taxes	1,032,899	1,175,401	2,208,300	
13. Total Income Taxes [L7 + L12]	\$ 1,261,592	\$ 1,394,541	\$ 2,656,132	

(1) Schedule E-1, Sheet 1 of 2

	Columbia	AG
(2) Rate Base	\$ 171,447,599	\$ 169,105,254 Sch. RJH-3
Weighted Cost of Debt	2.72%	3.01% Sch. RJH-2
Pro Forma Interest	\$ 4,663,375	\$ 5,093,606

Witness Responsible: Robert J. Henkes

Question 7: Refer to the Henkes Testimony, page 43, and Schedule RJH-15. Explain in detail why Mr. Henkes calculated the federal income taxes using a 34 percent rate instead of a 35 percent rate, considering his testimony on pages 17 and 18.

Response:

Both Mr. Henkes and the Company have used a 34% income tax rate in the calculation of the pro forma test year income taxes (without the rate increase) because the pro forma test year federal taxable income amounts under the Company's proposed positions and under the AG's recommended positions are \$3,613,078 and \$8,844,721, respectively. Since both of these taxable income amounts are below \$10 million, the 34% federal income tax rate should apply. This is shown on Schedule RJH-15, lines 8 and 9.

Including the Company's requested and the AG's recommended rate increase amounts, the federal taxable income amounts would exceed \$10 million. For that reason both the Company and Mr. Henkes used a federal income tax rate of 35% in the derivation of the Gross revenue conversion factor.

Witness Responsible: Robert J. Henkes PAGE 1 of 2

Question 8: Refer to the Henkes Testimony, pages 48 through 50.

- a. When preparing his testimony and recommendations concerning Columbia's proposed Accelerated Mains Replacement Program ("AMRP"), did Mr. Henkes review and consider the provisions of KRS 278.509? Explain the response.
- b. Concerning Mr. Henkes' proposal for an annual earnings test in conjunction with the Columbia AMRP:
 - Did the Commission establish an annual earnings test when it approved the AMRP for Duke Energy Kentucky, Inc. ("Duke Kentucky")?³
 - (2) Explain in detail why the Commission should require Columbia to submit to an earnings test with its AMRP when a similar test was not required of Duke Kentucky.
- c. Concerning Mr. Henkes' proposal for rate increase caps for the Columbia AMRP:
 - (1) Did the Commission establish rate increase caps in the Duke Kentucky AMRP?
 - (2) Explain in detail why the Commission should require the Columbia AMRP to be subject to rate increase caps when a similar provision was not required of Duke Kentucky.
- d. Would Mr. Henkes agree that the Duke Kentucky AMRP is a 10year program?
- e. Given that Columbia's AMRP is proposed to cover a 20-year period, would it be reasonable to authorize this AMRP for a 5-year period, and require the general rate case, provide for the roll-in of the AMRP to base rates, and require justification for the continuation of the AMRP at the end of that 5-year period? Explain the response.

³ At the time the AMRP was originally approved and renewed, Duke Kentucky was known as The Union Light, Heat and Power Company.

PAGE 2 of 2

Response:

- a. Yes. Notwithstanding the provisions in KRS 278.509, which state that "the commission may allow recovery of costs for investment in natural gas pipeline replacement programs which are not recovered in the existing rates of a regulated utility," Mr. Henkes recommends that the proposed AMRP mechanism be rejected for the reasons expressed on page 48 of his testimony.
- b.1 No.
- b.2 Mr. Henkes has recommended an earnings test for Columbia's proposed AMRP mechanism for the reasons explained on page 48 of his testimony and does not believe that this easily administered reasonability check should be dismissed in this AMRP proceeding just because the Commission did not apply this check in the ULH&P proceeding.
- c.1 No.
- c.2 Mr. Henkes has recommended AMRP rate increase caps for Columbia's proposed AMRP mechanism because these caps would present an equitable balancing of the interest of the Company and the captive ratepayers. Mr. Henkes does not believe that this easily administered cap implementation should be dismissed in this AMRP proceeding just because the Commission did not apply this check in the ULH&P proceeding.
- d. Yes.
- e. No. Mr. Henkes does not believe that the authorized experimental AMRP period should be a function of the length of the proposed AMRP period. The Commission authorized an initial AMRP period of 3 years for ULH&P's AMRP and, if it were to allow Columbia's requested AMRP, it should similarly authorize an initial AMRP period of 3 years. Mr. Henkes believes that if the Commission were to deviate from the treatment given to ULH&P regarding the length of the experimental AMRP period because Columbia's requested AMRP period of 20 years is longer than ULH&P's AMRP period of 10 years, the Commission should also deviate with respect to earnings tests and AMRP rate caps. In other words, if the Commission were to implement Columbia's AMRP for a substantially longer initial 5-year period instead of an initial 3-year period, this would provide all the more justification to implement annual AMRP related earnings tests and rate caps to protect the ratepayer interests during this much longer period.



Witness Responsible: Dr. J. Randall Woolridge

Question 9: Refer to the Direct Testimony of Dr. J. Randall Woolridge ("Woolridge Testimony"), pages 9 and 10. Explain why investors, as a result of the 2003 tax law change, would willingly give up that incremental increase in investment returns and give it to ratepayers vis-à-vis lower equity returns awarded to utilities.

Response:

It is Dr. Woolridge's contention that the lowering of tax rates on dividend and capital gains income reduced investors' pre-tax return requirement relative to the pre-2003 years. If investors require lower returns due to a reduction in taxes, there is no reason to compensate them with a return for taxes which they do not have to pay.
Witness Responsible: Dr. J. Randall Woolridge

Question 10: Refer to the Woolridge Testimony, pages 12 and 13.

- 1. Does Dr. Woolridge agree with Columbia that a hypothetical capital structure should be the basis for the capital ratios utilized in this case? Explain the response.
- 2. Does Dr. Woolridge agree with the approach followed by Columbia in determining the 5.69 percent interest rate for long-term debt? Explain the response, and specifically address the reasonableness of applying the cost rate for a November 2006 debt issue to an additional \$6.7 million Columbia included in its long-term debt.

Response:

- 1. No. The Company's proposed capital structure includes an excessive amount of equity compared to the proxy group of gas companies.
- 2. It is Dr. Woolridge's opinion that the Company's proposed long-term debt cost rate was reasonable.

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Witness Responsible: Dr. J. Randall Woolridge

Question 11: Refer to the Woolridge Testimony, Exhibit JRW-2.

- a. New Jersey Resources derives only 34 percent of its revenues from natural gas distribution and Atmos Energy, Laclede Group, and WGL Holdings derive less than 60 percent of their revenue from natural gas distribution. Explain why each of these companies is a reasonable candidate for inclusion in the proxy group.
- b. Which, if any, of the companies in the proxy group are involved in current merger activity?

Response:

- a. While each of the gas companies noted in the question do have significant non-regulated revenues, they are still classified as natural gas distribution companies by major investor information sources such as Value Line. Therefore, investors are likely to view them as such.
- b. None.

Witness Responsible: Dr. J. Randall Woolridge

Question 12. Refer to the Woolridge Testimony, Exhibit JRW-3. Explain why Vectren Corp. appears in the two tables.

Response:

The reference to Vectren at is a typographical error.



Witness Responsible: Dr. J. Randall Woolridge

- Question 13: Refer to the Woolridge Testimony, pages 33 through 35 and Exhibit JRW-6, pages 3 through 5 of 5.
 - a. Explain why blending the mean and median values of 10 and 5 year averages produces a meaningful estimate of growth rates.
 - b. Explain how blending projected estimates of earnings, dividends, and book value growth rates into a single number provides a meaningful estimate of growth rates.

Response:

- a. Dr. Woolridge's objective is to find the central tendency for the figures shown. Means and medians are measures of central tendency for an array of numbers. Due to the presence of outliers, Dr. Woolridge is using both the means and medians. Growth over five- and ten- year periods are commonly provided to investors by Value Line and other investor information sources as indicators of historic growth.
- b. According to the DCF model, DPS, EPS, and BVPS should all have the same rate of growth. Over short-term periods of time, these growth rates may differ, Dr. Woolridge is attempting to gauge an overall long-term rate of growth for all three.

Witness Responsible: Dr. J. Randall Woolridge

Question 14: Refer to the Woolridge Testimony, Exhibit JRW-7, page 1 of 5. Should the footnotes for the Table reference Exhibit JRW-7, rather than Exhibit JRW-8? If not, explain how the latter Exhibit provides the information contained in the Table.

Response:

That is correct.

Witness Responsible: Dr. J. Randall Woolridge PAGE 1 of 3

- Question 15: Refer to the Woolridge Testimony, pages 56 through 58, and Exhibit JRW-7, page 3 of 5. The Exhibit references a large number of studies. It is not clear that the purpose and results of the studies were intended to be directly comparable to one another or to be used as they have been in the context of a regulated utility rate case.
 - a. The McKinsey & Company reference is from autumn 2002. Provide a copy of the McKinsey study and an update to reflect what risk premium this particular consulting firm is using currently.
 - b. Under the Exhibit heading "Puzzle Research," there is wide disparity between the various risk premium entries. Explain "Puzzle Research" and each of the studies under this heading.
 - c. Provide a copy of the March 2007 CFO Duke University CFO survey report from which the Exhibit entry is taken.
 - d. If the Ibbotson SBBI Yearbook 2007 contains any discussion of estimating and using the ex ante approaches and/or a discussion comparing the ex ante and historical approached to calculating risk premiums, then provide those discussions.
 - e. Provide the historical data from the Ibbotson SBBI Yearbook 2007 which is used to derive the historical entries 6.50 percent and 5.00 percent.
 - f. The Exhibit does not contain references for all of the entries. Provide the missing references.
 - g. Presumably all the Exhibit entries, other than the Ibbotson SBBI Yearbook historical entry, are based upon a forecast or an expectation of a forward looking risk premium. For each entry, other than the Ibbotson Yearbook historic entry, provide each entry's corresponding forward looking period.
 - h. For each Exhibit entry, explain how each risk premium was derived including which specific variables were used to make the calculations and the time period for the study.
 - i. Explain whether any of the Exhibit entries have been adjusted for inflation in any way. If so, further explain which entries and how the adjustment was performed.
 - j. A few of the Exhibit entries are almost 6 years old, which means that the actual work may have been conducted more than 6 years ago. For those Exhibit entries that were published prior to 2006, explain why they are still valid for use in current risk premium analysis.

PAGE 2 of 3

Response:

- a. The McKinsey study is provided on the CD provided by Dr. Woolridge the the Company in the 'Articles' folder. McKinsey has provided no update to this study. However, McKinsey claims in its study that the 3.5-4.0 percent equity risk premium, as determined in their study, has been consistent over time.
- b. "Puzzle Research" refers to studies that have been performed whose objective to explain or solve the "Equity Risk Premium Puzzle" as postulated by Mehra and Prescott in their 1985 study. Mehra and Prescott Mehra and Prescott questioned the magnitude of historical equity risk premiums relative to fundamentals. For the most part, the studies have use historic fundamental data such as dividend yields, and growth rates, to estimate returns, and compare these returns to contemporaneous interest rates over long periods of time to assess the magnitude of the equity risk premiums. The disparity in the equity risk premium estimates results primarily from the alternative approaches used. Copies of the studies are provided on the CD provided by Dr. Woolridge the the Company in the 'Articles' folder.
- c. The study is provided on the CD provided by Dr. Woolridge the the Company in the 'Articles' folder.
- d. The SBBI Yearbook provides no such discussion
- e. The requested information is included in the 'Ibbotson 2007 report' which is provided on the CD provided by Dr. Woolridge the the Company in the 'Articles' folder.
- f. The requested references are listed below:

SHOVEN, JOHN B. 2001. "What Are Reasonable Long-Run Rates of Return to Expect on Equities?" *Estimating the Real Rate of Return on Stocks over the Long Term*, presented to the Social Security Advisory Board, August.

John Campbell, 2001. "Valuation Ratios and the Long-Run Stock Market Outlook: An Update." Working paper #8221, National Bureau of Economic Research. Forthcoming in *Advances in Behavioral Finance, Vol. II*, edited by Nicholas Barberis and Richard Thaler, Russell Sage Foundation, 2003.

Peter Diamond. 2001. "What Stock Market Returns to Expect for the Future: An Update," in *Estimating the Real Rate of Return on Stocks over the Long Term*, presented to the Social Security Advisory Board, August.

SOCIAL SECURITY ADVISORY BOARD. 2002. "Fiscal Year Annual Report."

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Robert Harris and Felicia Marston. 2001. "The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," *Journal of Applied Finance* 11(1): 6–16.

SIEGEL, JEREMY J. 1999. "The Shrinking Equity Premium," Journal of Portfolio Management 26(1): 10–17.

ARNOTT, ROBERT D., AND PETER L. BERNSTEIN. 2002. "What Risk Premium Is 'Normal'?" *Financial Analysts Journal* 58(2): 64–85.

CORNELL, BRADFORD. 1999. *The Equity Risk Premium: The Long-Run Future of the Stock Market*. New York: John Wiley & Sons.

CONSTANTINIDES, GEORGE M. 2002. "Rational Asset Prices," *Journal of Finance* 57(4): 1567–91.

- g. The requested information is provided in the article by Derrig and Orr which is on the CD provided by Dr. Woolridge to the Company in the 'Articles' folder. Otherwise, the CFO survey and the Survey of Financial Forecasters use a ten year horizon.
- h. The requested information is provided in the article by Derrig and Orr which is on the CD provided by Dr. Woolridge to the Company in the 'Articles' folder.
- i. To the best of Dr. Woolridge's knowledge, the equity risk premiums are nominal and not inflation adjusted.
- j. The risk premium studies were performed using decades of data. Therefore, the studies reflect information over long periods of time. Those which use the Compustat and CRSP databases typically to back to 1926. Other cover lesser time periods. Nonetheless, these studies do not measure risk premiums as of the year 200 or so, but over many decades.

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Witness Responsible: Dr. J. Randall Woolridge

Question 16: Refer to the Woolridge Testimony, Exhibit JRW-7, page 5 of 5. Explain the purpose of this Exhibit page and how is it used by Dr. Woolridge.

Response:

This Exhibit shows the historic real growth rate in EPS for the S&P 500. It is used in justifying an expected real EPS growth rate in Dr. Woolridge's building blocks equity risk premium approach.

Witness Responsible: Charles W. King

Question 17: Refer to the Direct Testimony of Charles W. King ("King Testimony"), page 13. Mr. King discusses Columbia's proposed calculation of the revenue collected from its charge for the 1st Mcf of usage. Columbia's 1st Mcf charge operates as a minimum bill, charging the customer for 1 Mcf regardless of the usage between 0 and 1. Since all customers consuming 1 Mcf or less are charged as if they use 1 Mcf, the proper revenue calculation is number of customers at the 1st Mcf charge. Does this allay Mr. King's concerns regarding the presentation of the revenue from this charge?

Response:

If this is the case, then Mr. King's concern shifts from one relating to the revenue calculation to one relating to the wording of the tariff. The tariff says that the customer is charged for the first Mcf. According to this interpretation, the charge is not for the first Mcf, but for the rendering of the bill, so that a customer who consumes no Mcfs whatever is still charged for as though he had consumed one Mcf of gas. Mr. King submits that based on the plain wording of the tariff, such a customer should not be charged at all.

Witness Responsible: Charles W. King

Question 18: Refer to the King Testimony, page 19. Mr. King recommends increasing the reconnection charge by the same percentage as Columbia's proposed increase in the bad check charge. Does Mr. King's recommendation mean that he agrees with the increase that Columbia has proposed in its bad check charge?

Response:

Yes.

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Witness Responsible: Charles W. King

Question 19: Refer to the King Testimony, pages 19 through 22.

- a. While preparing his testimony, did Mr. King review and consider the provisions of KRS 278.509? Explain the response.
- b. While preparing his testimony, did Mr. King review the Commission's decisions concerning the Duke Kentucky AMRP? Explain the response.

Response:

a. Yes. The referenced section is as follows:

278.509 Recovery of costs for investment in natural gas pipeline replacement programs.

Notwithstanding any other provision of law to the contrary, upon application by a regulated utility, the commission may allow recovery of costs for investment in natural gas pipeline replacement programs which are not recovered in the existing rates of a regulated utility. No recovery shall be allowed unless the costs shall have been deemed by the commission to be fair, just, and reasonable.

Please note that the statute allows the Commission to implement a cost recovery mechanism. It does not require it to.

b. Yes. Mr. King is not privy to the details of the Duke Energy program, but if it resembles the program proposed by Columbia, he would oppose it.

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Witness Responsible: Charles W. King

Question 20: Refer to the King Testimony, page 22. Mr. King suggests a recovery method for the AMRP that would recover half of the cost through a per customer charge and half through a volumetric charge. Since the volumetric charge will vary with the weather and therefore may either over- or under-recover the costs that the AMRP is trying to recover, would Mr. King also suggest a true-up calculation as part of the mechanism?

Response:

Yes. Any cost recovery program must have a true-up mechanism, even one based on per-customer charges.