Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

61. Please provide a copy of the documents cited in footnotes 1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 of Mr. Woolridge's testimony and a copy of the current edition of the same publication, if applicable.

Response:

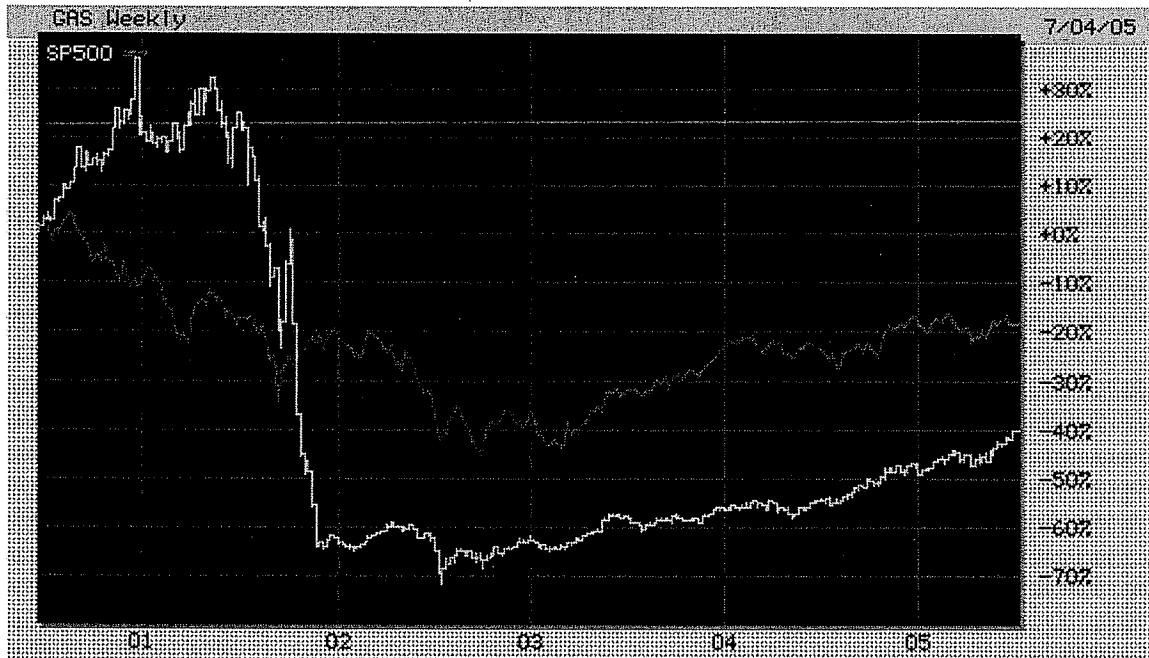The documents are provided on the CD provided with these responses.

**Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042**

Witness Responding: Dr. J. Randall Woolridge

62 a) Is it Mr. Woolridge's opinion that natural gas utility stocks have outperformed or underperformed the overall equity market in the last five years. If so, please provide any supporting evidence.

Response:

The graph below shows the DJ Gas Distribution stocks versus the S&P 500. These gas stocks underperformed the market as measured by the S&P 500.
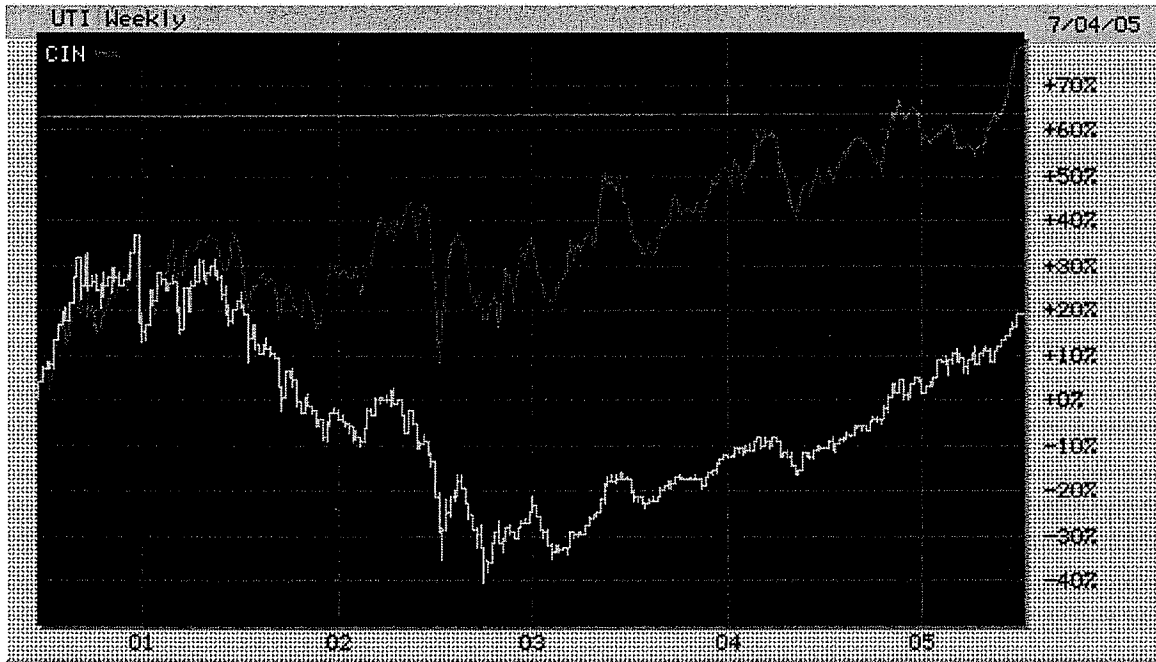

Source: www.bigcharts.com

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

63 b) Is it Mr. Woolridge's opinion that ULHP's parent company Cinergy has outperformed or underperformed utility stocks in the last five years. If so, please provide any supporting evidence.

Response

The graph below shows Cinergy versus DJ utility Index over the past 5 years. Cinergy outperformed this Index of Utility stocks.

Source: www.bigcharts.com

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

64 .a) In light of his discussion of market-to-book ratios contained on pages 11-12, does Mr. Woolridge advocate a regulatory process which produces a market-to-book ratio of 1.00?   If so, please reconcile this statement with the statement on page 13 lines 1-5 that *"market-to-book ratios for this group....have increased to the 150-180 percent range in recent years."*

b) Does Mr. Woolridge believe that his cost of equity recommendation will maintain, increase, or decrease ULHP's parent company's market-to-book ratio?

c) Please provide the market-to-book ratios of each company in Mr. Woolridge's sample of 11 natural gas companies for the past 10 years.

d) Does Mr. Woolridge subscribe to the assumption in the standard DCF model that the price/earnings and price/book ratios remain constant?

Response:

a) Dr. Woolridge's discussion on pages 11 and 12 focuses on the relationship between a firm's return on equity, cost of equity, and market-to-book ratio. He is making an assessment of the earned returns versus the equity cost rates for utility stocks, and he is not making any assessment of the regulatory process.
b) Dr. Woolridge has not made any such evaluation
c) Dr. Woolridge has not performed any such study.
d) Under the normative development of the DCF model, it is presumed that P/E and P/B ratios remain constant. All economic models such as the DCF are derived using fairly restrictive assumptions.   These assumptions make the model internally consistent.   Criticisms of the assumptions of the model are valid if it can be demonstrated that the model is not robust with respect to obvious real world conditions that deviate from these assumptions. The fact that the DCF model is used almost universally in the investment community and in utility ratemaking is indicative of the robustness of the methodology.

**Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042**

Witness Responding: Dr. J. Randall Woolridge

65. Please provide a list of college-level finance (corporate finance, investments, banking, etc.) courses Mr. Woolridge has taught in the last three years or is currently teaching, the syllabus for these courses, and a list of textbooks/readings used in these courses.

Response:

Dr. Woolridge has taught the following courses:

BA 301	Finance
FIN 550	Financial Analysis and Valuation
Finance 587-588	Investment Management

The textbooks and readings are provided in the syllabus for each course. These are provided on the CD.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

66. Does Mr. Woolridge's recommended cost of common equity assume the maintenance of the company's existing capital structure or does it assume some other capital structure? If so, please state Mr. Woolridge's recommended ROE under both the company's existing capital structure and his recommended capital structure.

Response:

Dr. Woolridge has made no recommended adjustments to the Company's proposed capital structure and, as such, he has not assumed another capital structure.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

67.   Is it Mr. Woolridge's contention that natural gas utility stocks have become more risky, less risky, or as risky as in the past?

Response:

It is Dr. Woolridge's contention that the riskiness of natural gas utility stocks has not changed significantly from the past.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

68.   Please provide copies or summaries of any book, monograph, or article published in academic journals and subject to peer review in the last five years dealing with the subject of finance and/or regulation.

<u>Response:</u>

Copies of Dr. Woolridge's books and published articles are attached.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

69. Please restate the common equity ratios cited on Page 9, Page 48, Exhibit JRW-4, and Exhibit JRW-9 of Mr. Woolridge's testimony excluding short-term debt.

Response:

Totals	2005 1st Quarter	2004 3rd Quarter	2004 2nd Quarter	2004 1st Quarter	2003 3rd Quarter	2003 2nd Quarter	2003 1st Quarter
Current portion of long-term debt	93,010	167,983	154,161	112,607	81,265	449,513	301,587
Long-term debt	11,387,042	9,896,313	10,808,874	11,194,180	9,487,564	8,686,318	8,516,072
Common shareholder's equity	11,594,927	10,454,359	10,680,394	10,335,031	9,589,235	8,781,351	8,597,524
Total Capital	23,074,979	20,518,655	21,643,429	21,641,818	19,158,064	17,917,182	17,415,183

Average Totals	1st Quarter	3rd Quarter	2nd Quarter	1st Quarter	3rd Quarter	2nd Quarter	1st Quarter
Current portion of long-term debt	8,455	15,271	14,015	10,237	7,388	40,865	27,417
Long-term debt	1,035,186	899,665	982,625	1,017,653	862,506	789,665	774,188
Common shareholder's equity	1,054,084	950,396	970,945	939,548	871,749	798,305	781,593
Total Average Capital	2,097,725	1,865,332	1,967,584	1,967,438	1,741,642	1,628,835	1,583,198

Ratios	1st Quarter	3rd Quarter	2nd Quarter	1st Quarter	3rd Quarter	2nd Quarter	1st Quarter
Current portion of long-term debt	0.4%	0.8%	0.7%	0.5%	0.4%	2.5%	1.7%
Long-term debt	49.3%	48.2%	49.9%	51.7%	49.5%	48.5%	48.9%
Common shareholder's equity	50.2%	51.0%	49.3%	47.8%	50.1%	49.0%	49.4%
Total Capital	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Average	
Current portion of long-term debt	1.0%
Long-term debt	49.4%
Common shareholder's equity	49.5%
Total Capital	100.0%

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

70.   Given his discussion on the widespread application of multi-stage DCF models on pages 17-18 of his testimony, on what basis did Mr. Woolridge decide not to apply the multi-stage version of the DCF model to his sample of natural gas companies?

Response:

This issue is discussed between pages 17 and 19 of Dr. Woolridge's testimony.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

71. a) Please quantify the overstatement of the equity cost rate estimate derived from the DCF model discussed on page 21 lines 6-12 of Mr. Woolridge's testimony.

b) Did Mr. Woolridge's adjust his recommended ROE downward in light of this overstatement? If so, by how much?

c) Is the converse proposition true as well, that is, does the DCF model understate the cost of equity when the overall cost of capital is applied to a historical rate base?

Response:

a) Dr. Woolridge has not quantified the overstatement in this particular case. The nature of the overstatement is demonstrated below.

When applying an DCF derived equity cost rate to a forward-looking rate base, it is not appropriate to use a forecasted dividend or to otherwise adjust the current dividend yield by a full year of growth.

The propriety of the unadjusted DCF model can be demonstrated using a simple numerical example. Consider a firm with no debt and a market-to-book ratio of 1.0. This hypothetical firm has a book value and market price equal to $20 per share. The firm's most recent quarterly dividend was $.50 which results in a spot dividend yield of 10%. The shareholders anticipate that book value, market value, earnings per share, and dividends per share are to grow at 5% per year. Thus, over the next year investors anticipate receiving:

$$E(R) = D_1 + D_2 + D_3 + D_4 + 5\% * (\$20) \text{ where:}$$

$E(R)$ = shareholders' expected return
D_N = quarterly dividends which are expected to grow quarterly and at an annual rate of 5%. Therefore,

$$D_t = \$.50(1+G)^t/4$$

where:

$$D_0 = \$.50, D_1 = \$.506, D_2 = \$.512, D_3 = \$.519, \text{ and } D_4 = \$.525.$$

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

Thus, shareholders expect to receive four quarterly dividends (all of which are greater than the recent $.50 dividend) and an increase in market value from $20 to $21 (which reflects 5% annual growth). If the firm is able to increase book value by $1 and meet all four dividend payments, then the shareholders will earn the expected rate of return. The key question is what rate of return, k, must the firm earn on year-end book value to meet the shareholders' expectations. This value of k, detailed below, is the correct cost of common equity to be employed in the case.

Firm's earnings = shareholders' expectations

k (year-end book value) = dividends + growth

k ($21.00) = $.506 + $.512 + $.519 + $.525 +5% * ($20.00)

k = (($.506 + $.512 + $.519 + $.525)/$21.00) + ($1.00/$21.00)

k = $2.062/$21 + $1.00/$21.00 k

= 9.82% + 4.76% = 14.58%

The dividend yield on the left, 9.82%, is less than 10% which is the spot dividend yield. In addition, the growth rate of 4.76% works out to be less than the 5% expected growth rate which is employed in the DCF model.

To summarize, both the spot dividend yield and the expected growth rate in the DCF model are overstated, with a resulting overstated cost of equity capital estimate, when the cost rate of equity capital is applied to the end-of-test-year rate base of a utility. Therefore, when the overall fair rate of return is applied to an end-of-test year rate base, there is no need to adjust the spot dividend yield to reflect expected or forecasted growth.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

Page 3 of 3

b) Dr. Woolridge did not adjust his equity cost rate recommendation downward to reflect the overstatement.

c) Only if the end-point of the historical rate base is in the past.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

72. Please provide copies of all studies, workpapers or analyses that Mr. Woolridge conducted or relied upon in making the statement on page 22 lines 1-3 that investors rely on a combination of historic and/or projected growth rates for earnings and dividends per share and for internal or book value growth to assess long-term potential.

Response:

The statement reflects Dr. Woolridge's opinion, especially given that (1) investment information sources like Yahoo and Value Line provide historic financial information, and (2) the well-known bias in analysts' growth rate forecasts.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

73. a)   In light of Mr. Woolridge's discussion of income taxes on Page 7 lines 7-14 of his testimony, to what extent, does Mr. Woolridge believe that non-taxable investors (pension funds, mutual funds, etc....) dominate stock trading?   What is the relative importance of common stock trading conducted by taxable vs. non-taxable investors in Mr. Woolridge's opinion?

b) To what extent, if any, does Mr. Woolridge believe that non-taxable investors (pension funds, mutual funds, etc....) dominate common stock ownership?   What is the relative importance of common stock ownership held by taxable vs. non-taxable investors in Mr. Woolridge's opinion?

Response:

a)   Whereas institutions do tend to dominate stock trading and ownership, it is well known that the taxation of interest, dividends, and capital gains do affect security prices. A good example is the municipal bond market.   Furthermore, utility stocks have traditionally had a relative high percentage ownership by individuals.

b) See response to 73 a).

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

74. Are the analysts' growth forecasts by Zacks, First Call, and Reuters discussed on Page 24 lines 9-17 upwardly biased in light of Mr. Woolridge's severe criticism of such forecasts on pages 74-78 of his testimony?

<u>**Response:**</u>

Yes.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

75. Refer to the discussion of market risk premium on page 30, line 19 of his Direct Testimony:

   a) Are Mr. Woolridge's estimate of the market risk premium of 5%-7% cited on page 30 line 19 of his testimony based on arithmetic or geometric mean returns? If based on the latter, please restate these estimates on the basis of arithmetic mean returns.

   b) Is Mr. Woolridge's estimate of the market risk premium of 4% cited on page 34 line 9 and line 12 of his testimony based on arithmetic or geometric mean returns? If based on the latter, please restate these estimates on the basis of arithmetic mean returns?

   c) Is Mr. Woolridge's estimate of the market risk premium of 3.7% cited on page 42 line 16 of his testimony based on arithmetic or geometric mean returns? If based on the latter, please restate these estimates on the basis of arithmetic mean returns?

Response:

a) It is a range, based on both arithmetic and geometric means.

b) The 3.7% is an expected equity risk premium. Since it is presumed to be a compounded annual return, it is a geometric mean return. Furthermore, since it is not estimated using historic data, there is not an arithmetic mean return.

c) The 4% is an expected equity risk premium. Since it is presumed to be a compounded annual return, it is a geometric mean return. Furthermore, since it is not estimated using historic data, there is not an arithmetic mean return.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

76.   In light of his criticism on page 50 lines 6-7 of his testimony, please provide the workpapers, studies, and supporting documentation Mr. Woolridge has performed in assessing ULHP's business risk relative to the industry.

Response:

Dr. Woolridge has not performed a study of the relative business risk of ULHP.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

77. Please provide the workpapers, supporting documentation, relevant literature and empirical studies which support the statement on Page 50 lines 18-19 that *relying on credit ratings is not likely to provide much insight into the riskiness of the operations of the Company.*

Response:

As discussed in the testimony, the credit reports on ULHP indicate that the primary driver of ULHP's credit rating is the fact ULHP is a subsidiary of CG&E. Hence, the ratings are unlikely to provide much insight into ULHP's riskiness.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

78. Please provide the workpapers, supporting documentation, relevant literature and empirical studies which support your statement on Page 57 lines 2-3 that services like Consensus Economics are always forecasting interest rates to go up.

Response:

The statement reflects Dr. Woolridge's opinion based on over twenty-five years of research and consulting activities.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

79. Given the statement on page 59 lines 16-17 that bond returns are biased downward because of capital losses suffered by bondholders in the past, does Mr. Woolridge believe that stock returns are also downward biased because of similar unexpected capital losses? If not, why not?

Response:

No. The returns to bond holders are fixed, whereas the returns to stock holders are not. As cited in the testimony by Jeremy Siegel, in his study entitled "The Shrinking Equity Risk Premium."[1]

> The degree of the equity risk premium calculated from data estimated from 1926 is unlikely to persist in the future. The real return on fixed-income assets is likely to be significantly higher than estimated on earlier data. This is confirmed by the yields available on Treasury index-linked securities, which currently exceed 4%. Furthermore, despite the acceleration in earnings growth, the return on equities is likely to fall from its historical level due to the very high level of equity prices relative to fundamentals.

Likewise. The McKinsey study cited in the testimony includes the following statement regarding the higher real returns demanded by bond holders:

> We attribute this decline not to equities becoming less risky (the inflation-adjusted cost of equity has not changed) but to investors demanding higher returns in real terms on government bonds after the inflation shocks of the late 1970s and early 1980s. We believe that using an equity risk premium of 3.5 to 4 percent in the current environment better reflects the true long-term opportunity cost of equity capital and hence will yield more accurate valuations for companies.[2]

---

[1] Jeremy J. Siegel, "The Shrinking Equity Risk Premium," *The Journal of Portfolio Management* (Fall, 1999), p.15. The full article is provided on CC in response to PSC-1-24.

[2] Marc H. Goedhart, Timothy M. Koller, and Zane D. Williams, "The Real Cost of Equity," *McKinsey on Finance* (Autumn 2002), p.15. Available at http://www.corporatefinance.mckinsey.com/.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

80. Please provide the complete study of analyst's growth forecasts discussed on pages 75-78 of Mr. Woolridge's testimony.

<u>Response:</u>

The study is not yet published. The data used in the study is provided on the CD.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney
General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responding: Dr. J. Randall Woolridge

81. Can Mr. Woolridge explain how his cost of equity recommendation can differ from the long-term expected return (ROE) forecast in Value Line for each company in his Exhibit JRW-7.3 Panel B for his sample of gas utilities?

Response:

The Value Line ROEs reflect the projected returns for the publicly-traded utilities. Dr. Woolridge has provided his estimate of the require rate of return or equity cost rate. These are not the same figures.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

82. Please provide all work papers, calculations, and assumptions used by Mr. Kinloch to correct the gas volumes and demands using a 30-year normal of 5,133 as stated on page 8 of his Direct Testimony.

ANSWER:

All requested calculations are contained in Exhibit DHBK-10, attached to my testimony. There are no additional workpapers.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

83. On page 7 of his Direct Testimony, Mr. Kinloch states that "Dr. Karl, NOAA, and NCDC have never endorsed the use of a 10-year normalization period." Please provide citations for all publication(s) authored by Dr. Karl, NOAA, or NCDC to that supports Mr. Kinloch's statement on page 7, lines 20-21.

ANSWER:

With respect to Dr. Karl, please see Attachments JAR-6 and JAR-9, attached to Mr. Riddle's testimony. With respect to NOAA and NCDC, please see the NOAA/NCDC publication, "CLIMATOGRAPHY OF THE UNITED STATES NO. 81 - Monthly Station Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1971 – 2000". In working with NOAA data over the last 25 years, I have never seen any normal data published by NOAA for any period other than a 30 year normal.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch   Page 1 of 2

84. On lines 10 and 11 of page 10 of his Direct Testimony, "Mr. Kinloch indicates that "our nation was in a recession" in 2002.

    a. please provide Mr. Kinloch's definition of "recession;"

ANSWER:

    Economists define a recession as a period of reduced economic activity. More specifically, a recession is the period of the peak of economic expansion to the trough of an economic decline.

    b. please provide Mr. Kinloch's estimate of when the recession began and when it ended. Include any references used by Mr. Kinloch in making this determination; and

ANSWER:

    According to economists, by the definition in part (a) above, the national recession began in March 2001 and lasted through November 2001. While economic activity began to increase again in December 2001, recovery was very slow in 2002 and didn't really pick up until 2003. This steady growth has continued through 2005.

c. was the Northern Kentucky region in a recession during 2002? If so, please provide all references relied upon by Mr. Kinloch to make this determination and provide Mr. Kinloch's estimate of when the Northern Kentucky recession began and when it ended. Include any references used by Mr. Kinloch in making this determination.

ANSWER:

Many economic sectors and regions failed to recover quickly from the recession. This recovery was slowed by the fallout of the September 11, 2001 attacks, which impacted many business sectors. From ULH&P FT class sales figures, it would appear that these customers as a class fell into this category, as it wasn't until 2003 that gas volumes for these customers snapped-back with an increase of 15.32% over 2002 volumes.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch   Page 1 of 5

85. In Exhibit DHBK-6, Mr. Kinloch's provides a summary of historical sales for firm transportation opinion and compares this to historical gas prices at Henry Hub.

    a. is Mr. Kinloch aware that the price of spot-market gas at Henry Hub can differ substantially from the commodity prices for natural gas that is delivered to ULH&P's firm transportation customers due to contract provisions and transportation costs?

ANSWER:

    Yes, but Henry Hub prices are a good indication of gas prices in general, and are commonly used as a reference point for the calculation for prices in contracts.

    b. would Mr. Kinloch agree that the price of gas that should be used in any analysis of price elasticity should be the price of the gas that customers actually purchase the gas?

ANSWER:

    While actual purchase prices would be useful in a detailed analysis of price elasticity, my reference was to the general trend of gas prices through the last 5 years, for which the Henry Hub prices are a good indicator of the general level of prices being paid for natural gas on a wholesale level.

    c. are the average Henry Hub gas prices based on an average daily spot price, an average monthly index, or some other method?

ANSWER:

    The data used was monthly data. See part (d) below.

d. please provide the daily or monthly detail used to calculate the average Henry Hub gas prices; and

ANSWER:

Monthly Henry Hub gas prices were used. The data used is attached.

e. please provide a copy of the source documents for these average Henry Hub gas prices.

ANSWER:

The source was the Wall Street Journal / Haver Analytics. This data can be downloaded from the Federal Reserve Bank of St. Louis website. See the attachment to part (d) for the actual document.

```
                              GASPRICE.txt
Title:                  Natural Gas Price: Henry Hub, LA
Series ID:              GASPRICE
Source:                 Wall Street Journal / Haver Analytics
Release:                Not Applicable
Seasonal Adjustment:    Not Applicable
Frequency:              Monthly
Units:                  Dollars Per Million BTU
Date Range:             1993-11-01 to 2005-04-01
Last Updated:           2005-05-02 10:06 AM CT
Notes:

DATE          VALUE
1993-11-01    2.32
1993-12-01    2.09
1994-01-01    2.41
1994-02-01    2.59
1994-03-01    2.08
1994-04-01    2.04
1994-05-01    1.87
1994-06-01    1.96
1994-07-01    1.88
1994-08-01    1.59
1994-09-01    1.47
1994-10-01    1.54
1994-11-01    1.53
1994-12-01    1.69
1995-01-01    1.52
1995-02-01    1.59
1995-03-01    1.54
1995-04-01    1.63
1995-05-01    1.64
1995-06-01    1.62
1995-07-01    1.44
1995-08-01    1.56
1995-09-01    1.64
1995-10-01    1.77
1995-11-01    2.04
1995-12-01    2.71
1996-01-01    2.96
1996-02-01    4.56
1996-03-01    2.95
1996-04-01    2.23
1996-05-01    2.24
1996-06-01    2.49
1996-07-01    2.50
1996-08-01    2.04
1996-09-01    1.84
1996-10-01    2.37
1996-11-01    3.03
1996-12-01    3.82
1997-01-01    3.32
1997-02-01    2.22
1997-03-01    1.89
1997-04-01    2.03
1997-05-01    2.24
1997-06-01    2.20
1997-07-01    2.19
1997-08-01    2.48
1997-09-01    2.85
1997-10-01    3.04
1997-11-01    3.02
1997-12-01    2.33
1998-01-01    2.10
```

GASPRICE.txt

```
1998-02-01   2.22
1998-03-01   2.24
1998-04-01   2.43
1998-05-01   2.15
1998-06-01   2.17
1998-07-01   2.17
1998-08-01   1.85
1998-09-01   2.02
1998-10-01   1.89
1998-11-01   2.11
1998-12-01   1.73
1999-01-01   1.85
1999-02-01   1.78
1999-03-01   1.79
1999-04-01   2.15
1999-05-01   2.26
1999-06-01   2.31
1999-07-01   2.31
1999-08-01   2.79
1999-09-01   2.54
1999-10-01   2.73
1999-11-01   2.36
1999-12-01   2.36
2000-01-01   2.42
2000-02-01   2.66
2000-03-01   2.79
2000-04-01   3.04
2000-05-01   3.58
2000-06-01   4.29
2000-07-01   3.96
2000-08-01   4.41
2000-09-01   5.06
2000-10-01   5.02
2000-11-01   5.54
2000-12-01   8.95
2001-01-01   8.18
2001-02-01   5.62
2001-03-01   5.16
2001-04-01   5.17
2001-05-01   4.21
2001-06-01   3.71
2001-07-01   3.11
2001-08-01   2.96
2001-09-01   2.15
2001-10-01   2.45
2001-11-01   2.37
2001-12-01   2.42
2002-01-01   2.26
2002-02-01   2.31
2002-03-01   3.03
2002-04-01   3.43
2002-05-01   3.50
2002-06-01   3.23
2002-07-01   2.98
2002-08-01   3.09
2002-09-01   3.55
2002-10-01   4.12
2002-11-01   4.03
2002-12-01   4.75
2003-01-01   5.44
2003-02-01   7.78
2003-03-01   5.95
2003-04-01   5.28
```

GASPRICE.txt

```
2003-05-01  5.82
2003-06-01  5.82
2003-07-01  5.03
2003-08-01  4.97
2003-09-01  4.62
2003-10-01  4.65
2003-11-01  4.47
2003-12-01  6.15
2004-01-01  6.15
2004-02-01  5.39
2004-03-01  5.38
2004-04-01  5.71
2004-05-01  6.29
2004-06-01  6.30
2004-07-01  5.93
2004-08-01  5.44
2004-09-01  5.11
2004-10-01  6.39
2004-11-01  6.16
2004-12-01  6.61
2005-01-01  6.13
2005-02-01  6.13
2005-03-01  6.92
2005-04-01  7.20
```

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

86. On page 10, lines 21 and 22, of his Direct Testimony, Mr. Kinloch states that "the economy is growing now and is projected to continue growing as *(sic)* least in the near future." What is the projected growth rate for the national economy and for the Northern Kentucky regional economy for the years 2005 and 2006? What were the year-over-year growth rates for each year 2001-2004?

ANSWER:

The National Association for Business Economics, a national association of leading economists, currently projects a 2005 growth in the Gross Domestic Product of 3.4% (projection was updated May 23, 2005). The Association also projects a growth rate in the Gross Domestic Product for 2006 of 3.4%.

The year-over-year growth rates for 2001-2004 in Gross Domestic Product are listed below:

2001 - 0.2%
2002 - 2.3%
2003 - 4.4%
2004 - 3.9%

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch   Page 1 of 2

87. In Exhibits DHBK-7 and DHBK-8, Mr. Kinloch develops a weather normalization factor and applies it to his projection of firm transportation sales.

    a. is the figure of 983,689 MCF for the historic test year (Nov-03 through Oct-04) exclusively a function of the 4,786 HDDs that year or are there other factors that contribute to a level of sales (*e.g.*, economic conditions, customer count, gas cost, *etc.*)?

ANSWER:

    The 983,689 MCF is an intermediate calculation figure used to remove the ULH&P weather normalization impact, before including the revised weather normalization using 5133 HDD. Since it represents historic volumes, it would include all factors that affect gas volumes.

    b. since Mr. Kinloch is assuming approximately the same number of FT customers to exist in the forecast test period that existed in 2004 (55 vs. 54), his projected increase in sales implies that usage per customer is increasing by about 9% per year. Is it Mr. Kinloch's position that existing customers are expected to increase consumption at 9% per year? If so, please provide all studies, references, or other source material that supports this level of growth in sales and indicate why this level of growth is not expected to be matched by other customer classes served by ULH&P's gas business.

ANSWER:

    No. The year-to-year increases in gas volumes shown in ULH&P Schedule I-5, page 1, and used in Exhibit DHBK-6, include all factors that changed gas volumes from year to year, which would include the change in the number of customers. To have then made a separate adjustment for number of customers would have resulted in making this adjustment twice (this is one of the problems with the methodology employed by the Company in the response to AG-1-130, page 1 of 2). Since the overall growth already would include growth in number of customer, and the future number of customers is thus

not quantified separately, the current customer level of 55 was assumed for calculation of the impact on revenues in Exhibit DHBK-9.

    c. explain why Mr. Kinloch believes it is acceptable to project sales for any class of customers using two years worth of data when he also argues that even 10 years of data is not enough to develop a rigorous weather normalization adjustment.

ANSWER:

    Please see the Attorney General's Response to The Commission's Staff Information Request, Question 42 (a).

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

88.   Does Mr. Kinloch believe the cost of ULH&P's mains vary month-to-month or volumentrically? If so, please explain.

ANSWER:

The cost of ULH&P's mains varies due to a large number of factors including, but not limited to, the size or diameter, the length, the type of material, the terrain or infrastructure (under city streets or through rock), the year installed and how much the main has been depreciated.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

89. At pages 18 and 19 of his Direct Testimony, Mr. Kinloch discusses the residential and customer charges for various utilities:

    a. please provide copies of the source documents Mr. Kinloch relied on for this information;

ANSWER:

      Please see ULH&P's response to the Attorney General's First Information Request, Question 110.

    b. does Mr. Kinloch know the cost of service methods used to derive such customer charges?

ANSWER:

      As stated in ULH&P's response to the Attorney General's First Information Request, Question 110, the source of this data is the Commission's website. This website lists tariffs, and not the cost of service methodologies used in the cases where these tariffs were established.

    c. does Mr. Kinloch know whether the actual customer charges varied from the cost of service studies used to calculate the customer charges? If so, please explain the variation.

ANSWER:

      As stated in ULH&P's response to the Attorney General's First Information Request, Question 110, the source of this data is the Commission's website. This website lists tariffs, and not the "actual" customer charges calculated by the respective Companies or interveners in the cases where these tariffs were established.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

90. At page 21 of his Direct Testimony, Mr. Kinloch states that a higher reconnection fee "reduces the motivation to pay the past due balances...[and] can increase uncollectibles." Please provide any studies which support this conclusion, and explain the basis for this conclusion.

ANSWER:

Please see the Attorney General's Response to The Commission's Staff Information Request, Question 46 (b).

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

91.   Please provide in electronic format with formulas left intact, copies of Exhibits DHBK 4 through DHBK 21. Also include in electronic format all supporting work papers and documents used to make your calculations.

ANSWER:

The requested Exhibits are provided in an electronic format on the attached CD.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

92.   Please provide in the specific cite in the NARUC Gas Distribution Manual where it specifically identifies uncollectible expense as one expense that is likely to vary with amount of gas sold as opposed to one that will vary with the number of customers.

ANSWER:

Please see the Attorney General's Response to The Commission's Staff Information Request, Question 45.

c

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

93.   Please provide a specific reference in the NARUC Gas Distribution Manual where it indicates that the customer component of mains should never be considered in the customer charge calculation.

ANSWER:

On page 12 of the NARUC Gas Distribution Manual, under the "Customer Charge" heading, the manual states:

"The basis for the customer charge is that there are certain fixed costs that each customer should bear whether any gas is used at all. Examples of such costs are those associated with a service line, a regulator and a meter, recurring meter reading expenses and administrative costs of servicing the account."

It should be noted that while the manual specifically lists meters, regulators and services as physical assets that should be included in the customer charge, distribution mains are not listed by the NARUC manual as a specific fixed cost that each customer bears and thus should not a part of the customer charge.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

94.   In the Direct testimony of D. Brown Kinloch, beginning on line 22 of page 14 and continuing on page 15 lines 1 & 2, he states that if 100% of the calculated subsidy was assigned to Rate RS, the residential customers would absorb 120% of the increase. Using the Company's methodology please provide the calculation to support that claim in electronic format.

ANSWER:

The requested calculation is contained on CD supplied in Attorney General's response to ULH&P Question 91, and is labeled "Response to ULHP Question 94." Please note that this calculation shows that the correct figure is 108%, instead of 120%.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

95. Do you believe that a Commission should have a goal of moving all rate classes closer to the average rate of return in a rate case with a proposed rate increase? Please explain why or why not.

ANSWER:

Yes. In my testimony, like the Company, I have proposed moving rate classes closer to the average rate of return. Please see Exhibit DHBK-15. There are two principles that should guide this movement closer to the average. First, the Commission should employ the principle of continuity and gradualism. Second, no class should be given a rate reduction while other classes are bearing a rate increase, that would cause the rate increase to be even higher to that class.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch   Page 1 of 2

96.   In the Direct Testimony of D. Brown Kinloch, page 15, lines 11-13, he states that he is proposing "to move the two classes with returns below the overall return one-third of the way from an allocation to the present revenues."

a.   Please identify which two classes have returns below the overall return.

ANSWER:

There was an error in the calculations in Exhibit DHBK-15. Thus there is a single class with returns below the average return, the residential class. A corrected version of Exhibit DHBK-15 is attached and is included in the Attorney General's response to ULH&P Question 91.

b.   Please identify the overall return he is comparing to the class returns.

ANSWER:

Please see the response to part (a) of this question above.

c.   If Rate IT is one of the two classes please explain why it is included when the Present ROR is higher than the average ROR. See Exhibit DHBK-15, Page 1 of 1, Column (D), lines 4 and 5.

ANSWER:

Please see the response to part (a) of this question above.

**Exhibit DHBK – 15
(Revised)**

OFFICE OF THE ATTORNEY GENERAL
COMPUTATION OF THE RATE INCREASE AMOUNT BY RATE CLASS
AG REVENUE ALLOCATION METHODOLOGY
TWELVE MONTHS ENDING SEPTEMBER 30, 2006
GAS CASE NO: 2005-00042

Line No.	Rate Class	Capitalization (A)	Present Revenues (B)	Net Operating Income (C)	Present ROR (D) (C)/(A)	Rate Increase on Revenues (E)	Present Revenue Percent (F)	Increase to Classes Under ROR (G)	Below ROR Percent (H)	Proposed Rate Increase (I) 2(E)/3 + (G)/3	Percent of Total Increase (J)	Proposed Revenues (K) (B)+(I)	Proposed Percent Increase (L)	ROR At Proposed Rates (M)
1	Rate RS	119,715,545	87,044,527	4,340,298	0.036255000	6,246,743	65.0%	9,496,590	100.0%	7,330,025	77.19%	94,374,553	8.421%	7.27700%
2	Rate GS	33,916,090	42,740,480	3,200,179	0.094356000	3,067,268	31.9%	0	0.0%	1,976,809	20.82%	44,717,289	4.625%	12.91160%
3	Rate FT-L	8,832,833	3,065,707	1,014,917	0.114903000	220,015	2.3%	0	0.0%	141,796	1.49%	3,207,503	4.625%	12.44770%
4	Rate IT	3,254,725	1,002,421	277,600	0.085291000	71,939	0.7%	0	0.0%	47,959	0.51%	1,050,380	4.784%	9.40790%
5	Total	165,719,193	133,853,135	8,832,994	0.053300974	9,605,955	100.0%	9,496,590	98.9%	9,496,590	100.00%	143,349,726	7.095%	8.74760%

Avg. Present Rate of Return   5.33009744%

Tax Complement   0.596375

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

97.   Exhibit DHBK-16 does not include the entire study that supports the Summary of Results pages. Please supply the entire study for Residential Service including the detailed rate base, administrative and general expense and depreciation pages.

ANSWER:

The entire study has been supplied in an electronic format as part of the Attorney General's response to the ULH&P's Information Request, Question 91.

Response of the Attorney General to
Initial Data Request of Union Light Heat & Power Company to the Attorney General
Union Light Heat & Power Company
Case No. 2005-00042

Witness Responsible: David H. Brown Kinloch

98.   In Mr. Kinloch's development of the Residential Service customer charge, Exhibit DHBK-17, Page 1 of 1, does he include the following in his calculation?

      a. General and Intangible plant

ANSWER:

      Yes. Please see Exhibit DHBK-16.

      b. Common and Other plant

ANSWER:

      Yes. Please see Exhibit DHBK-16.

      c. Administrative and General expenses

ANSWER:

      Yes. Please see Exhibit DHBK-16.