STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

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Joint Petition of National Grid PLC and KeySpan Corporation for Approval of Stock Acquisition and other Regulatory Authorizations	Case 06-M-0878
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of The Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery New York for Gas Service	Case 06-G-1185
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island for Gas Service	Case 06-G-1186

DIRECT TESTIMONY AND EXHIBIT OF

TARIQ N. NIAZI

Dated:January 29, 2007 Albany, New York

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MINDY BOCKSTEIN, ACTING EXECUTIVE DIRECTOR NYS CONSUMER PROTECTION BOARD 5 EMPIRE STATE PLAZA SUITE 2101 ALBANY, NEW YORK 12223-1556 http://www.nysconsumer.gov

1 Q. Please state your name, title and business address.

A. Tariq N. Niazi, Chief Economist, New York State Consumer Protection Board
("CPB"), Suite 2101, Five Empire State Plaza, Albany, New York 12223.

4

5 Q. Mr. Niazi, please summarize your background and experience.

A. I passed my candidacy examination, completed all required course work and
passed all comprehensive examinations in the Doctoral Program in Managerial
Economics at Rensselaer Polytechnic Institute. I have a Master's Degree in
Economics from the State University of New York at Albany. I also received a
Master's Degree in Public Administration from Punjab University in Pakistan
and a Bachelor's Degree in Economics and Political Science at Forman
Christian College in Pakistan.

I have been employed by the CPB since March 1981, first as an economic consultant and then as a rate analyst. Later, I was promoted to the position of Principal Economist. I was appointed to my present position in October 1990. I have worked on numerous issues in electric, gas, telephone and water proceedings. My responsibilities are in the areas of economic and financial analysis, rate design, policy analysis, cost of service, tariff analysis and cost of capital.

I serve as the CPB's representative at the New York Independent
System Operator ("NYISO"). The CPB has been designated by the NYISO as

1		the statewide consumer advocate and is a formal voting member of the
2		NYISO's decision making committees. I also represent CPB on the Natural
3		Gas Reliability Advisory Group as a consumer representative. I am also a
4		member of the New York State Energy Research and Development Authority's
5		System Benefit Advisory (SBC) Group.
6		
7	Q.	Have you previously testified before the New York State Public Service
8		Commission?
9	A.	Yes. I have testified in numerous proceedings before the Commission.
10		
11	Q.	What is the purpose of your testimony?
12		My testimony has two parts. In Part I, I demonstrate that the return on equity
13		of 12.0% requested for the gas businesses of both KeySpan Energy Delivery
14		New York and KeySpan Energy Delivery Long Island ("KeySpan" or
15		Companies) is vastly overstated and that the Companies' cost of equity is
16		currently 9.27%. I also respond to several assertions made by the
17		Companies in support of their excessive return estimate and identify several
18		errors in their presentation. When those errors are corrected, the
19		Companies' equity return is similar to my estimate.
20		In Part II, I address the Companies' rate design proposal with regard
21		to Service Classification No. 1 – Residential (SC 1).

- 1 Q. Have you prepared an exhibit?
- 2 A. Yes. I am sponsoring Exhibit ____ (TNN), consisting of two schedules.
- 3

4 PART I -- RATE OF RETURN ON EQUITY

5 Q. What return on common equity is KeySpan requesting?

6 Α. KeySpan is requesting a return on common equity of 12.0%. lts 7 recommendation is based on estimates from four different methods: 1) a range 8 of 9.0% to 10.1% based on the discounted cash flow method ("DCF"); 2) a 9 range of 11.1% to 12.6% based on the capital asset pricing model ("CAPM"); 10 3) a range of 10.0% to 10.5% based on the Risk Premium ("RP") method and 11 4) a range of 13.5% to 14.0% based on the Comparable Earnings method 12 ("CEM"). As I discuss in my testimony, the equity returns based on the DCF 13 and the CAPM methods are vastly overestimated and should be rejected, 14 while equity returns based on the Risk Premium and Comparable Earnings 15 method should be discarded as these methods have been repeatedly rejected 16 by the Commission.

17

Q. What is your recommended rate of return or capitalization rate for KeySpan?
A. I recommend a total equity return of 9.27%. My equity cost estimate is based
on applying the DCF method and CAPM to a proxy group of natural gas
distribution companies that is consistent with the Recommended Decision in

the Generic Finance Case (91-M-0509). As explained below, I have made a
 relatively minor modification that is appropriate and necessary to arrive at a
 reasonable size for the proxy group to obtain reliable results. Otherwise, my
 approach follows the Recommended Decision in the Generic Finance case.

5 The DCF approach applied to the proxy group results in a median equity cost estimate of 9.19%. The CAPM approach applied to the same 6 7 proxy group produces an equity cost of 10.47% for the traditional CAPM and 8 10.63% for the zero-beta CAPM. The average of the two CAPM methods 9 results in an equity return of 10.55%. The CAPM analysis is based on an 10 11.1% market return, a .90 proxy group beta, a risk free rate of 4.82% and a 11 risk premium of 6.28%. Applying weightings of 2/3 to the DCF result and 1/3 12 to the CAPM results, in accordance with the Recommended Decision in the Generic Finance case and the Commission's decisions in several cases,¹ 13 14 indicates an estimate for equity return of 9.64%. After applying a credit quality 15 adjustment of 37 basis points, discussed later in my testimony, I arrive at a 16 final estimate of 9.27% for KeySpan.

17

18 Q. How did you select the proxy group companies for your analysis?

19 A. I relied upon the selection criteria proposed by the Electric/Gas Group in the

¹ <u>See</u>, most recently, Cases 02-E-0198 and 02-G-0199, Rochester Gas and Electric Corporation, <u>Order Adopting Recommended Decision with Modifications</u>, March 7, 2003, p. 72.

1 Generic Finance Case with one slight modification. In the Generic Finance 2 Case the selection criteria were based on the following three conditions: 1) 3 each company must be classified by Value Line as a Natural Gas (Distribution) 4 company, 2) each company must have debt that is rated either by Moody's or 5 Standard & Poor's, and 3) over 96% of each company's total revenues must 6 be derived from gas utility operations. I relaxed the third criterion listed above 7 and included companies with at least 60% of their revenues derived from gas 8 operations in my proxy group. The business interests of gas distribution 9 companies have changed since the Generic Finance Proceeding and it would 10 be very difficult to select an appropriate sized proxy group without this 11 adjustment. After applying the other Generic Finance criteria to my initial list of 12 potential proxy group members, I was able to identify only three companies 13 that meet the 96% requirement. Consequently, I believe my lowering of the 14 threshold is an acceptable, and necessary, change to arrive at an appropriate 15 size for the proxy group.

I started with all sixteen companies listed by <u>Value Line</u> as Natural Gas
 (Distribution) companies. I discarded three companies, Cascade Natural Gas
 Corporation, KeySpan Corporation and Peoples Energy Corporation since
 these companies are involved in mergers as reported by <u>Value Line</u>. Cascade
 Natural Gas Corporation is being acquired by MDU Resources Group, Inc.,
 KeySpan is being acquired by National Grid and Peoples Energy Corporation

1		is merging with WPS Resources. In addition, I discarded two companies New
2		Jersey Resources and UGI Corporation because less than 60 percent of their
3		revenues are derived from regulated utility operations. Finally, I discarded
4		SEMCO Corporation from the proxy group because it is rated below
5		investment grade by both Moody's and Standard & Poor's. After excluding
6		these six companies, the proxy group that I have used for my analysis is
7		comprised of 10 companies as shown in Exhibit (TNN), Schedule 1.
8		
9		Discounted Cash Flow Model
10	Q.	What is your DCF equity return estimate for KeySpan?
11	A.	I applied a two-stage DCF growth model to the proxy group of 10 Natural Gas
12		(Distribution) companies that I discuss above. This is the same model that
13		was developed in the Generic Finance Proceeding and was adopted by the
14		ALJs in their Recommended Decision. As shown in Exhibit (TNN),
15		Schedule 1, page 3 of 3, this resulted in a median equity return of 9.19%.
16		
17	Q.	Could you please briefly describe the DCF method that you applied?
18	Α.	Yes. The DCF method is a market based approach that determines the return
19		on equity from the investor's perspective. The familiar DCF formula is:
20		
21		

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1	D ₁
2	P ₀ =
3 ⊿	k-g
5 6	This fundamental equation states that a rational investor equates the
7	current market price (P_0) of a stock to the expected future returns from that
8	stock. Future returns from the stock are the expected stream of dividends
9	discounted at the market required return (k) net of the effect of growth (g). D_1
10	is the first year dividend.
11	Since the capitalization rate is not directly observable, the basic idea of
12	the DCF approach is to estimate the cost of equity from the observed share
13	price and an estimate of investor expected future dividends. This is based on
14	the intuitive concept that dividends plus capital appreciation reflect the
15	investor's total expected return.
16	The DCF formula can be rewritten by solving the above equation for the
17	cost of equity (k).
18	$k = D_1/P_0 + g$
19	In terms of the rewritten DCF formula, the cost of equity (k) is equal to
20	the sum of expected dividend yield (D_1/P_0) and the expected growth rate of
21	future dividends (g).
22	

1	Q.	What is the first component of the DCF formulation $[(k = D_1/P_0 + g)]?$
2	A.	The first component of the DCF formulation is the expected dividend yield (D $_1$
3		$/P_0$). It is the quotient of the expected future dividends and the current stock
4		price. A stock's dividend yield, in comparison with the dividend yield of other
5		stocks, indicates whether it is an income or a growth asset. For example,
6		bonds generally have high yields and low growth, and are hence considered
7		income assets. Conversely, common stocks of growing firms have low yields
8		and high growth, and are generally considered growth assets.
9		
10	Q.	What is the growth term (g) in the standard DCF formula?
11	A.	The growth term in the DCF formula represents the growth in the value of the
12		firm's common stock as reflected through dividend and stock price increases.
13		The DCF approach assumes that the firm is operating in a "steady state." If
14		the steady state holds, the growth rates in earnings per share, dividends per
15		share and book value per share are the same, and is a product of the retention
16		ratio and the expected return on equity.
17		In reality, it is not possible to achieve a "true" steady state. Thus, book
18		value per share, dividends per share and earnings per share generally grow at
19		different rates that may all differ from the growth rate indicated by the retention
20		ratio and expected return on equity.

Q. How did you estimate the two-stage proxy group DCF equity returns for
 KeySpan?

3 Α. I estimated the two-stage proxy group DCF equity return, relying on the model 4 used in Case 91-M-0509 (the Generic Finance Proceeding) by the Electric and 5 Gas Industry Group. The six-month average prices for the companies in the 6 proxy group are the average of the monthly high and low closing price of each 7 stock. I used the period July 1, 2006 to December 31, 2006. The other data, 8 including dividends per share, earnings per share, book value per share and 9 the shares of common stock, are all taken from the December 15, 2006 issue 10 of the Value Line Investment Survey. As shown in Exhibit (TNN), Schedule

- 11 1, page 3 of 3, the median equity return based on this method is 9.19%.
- 12
- 13 Capital Asset Pricing Model

14 Q. Did you use any other cost of capital methodology to estimate KeySpan's15 equity return?

A. Yes. I used the CAPM which produced a required return on equity of 9.47%
for the traditional CAPM and 9.63% for the zero-beta CAPM approach. The
average of the two CAPM approaches resulted in an equity return of 9.55%.
Exhibit___ (TNN), Schedule 2 provides a detailed explanation of the
calculations used to determine the equity return under the CAPM.

21

1	Q.	Please briefly describe the CAPM approach for estimating equity returns.
2	A.	The CAPM formally describes the trade-off between risk and required return
3		for securities. The equation below illustrates that the rate of return required by
4		investors (Rc) consists of a risk-free return (Rf), plus a premium compensating
5		investors for bearing the risk commensurate with the stock's market risk (Beta)
6		and the market price of risk (Rm - Rf). The risk premium varies from stock to
7		stock. The traditional CAPM formula is stated as:
8		
9		Rc = Rf + Beta (Rm- Rf)
10		
11		A basic premise underlying the CAPM is that there is less risk
12		associated with an investment in a relatively stable stock than in the stock of a
13		small speculative venture. As a result, investors in a speculative venture stock
14		will require higher returns than investors in a stable stock for assuming
15		additional risk. The CAPM quantifies the additional return investors require for
16		accepting higher risk.
17		
18	Q.	Please describe Exhibit (TNN), Schedule 2.
19	A.	Exhibit (TNN), Schedule 2 consists of two pages. Page 1 shows the
20		traditional CAPM formula used to derive the required return for the proxy
21		group, while page 2 shows the zero-beta CAPM application. The required

1 return is the sum of the risk-free rate and the market risk-premium adjusted 2 using the proxy group average beta. To determine the risk-free rate, I used a 3 six-month average ending December 31, 2006, of 30-Year and 10-year 4 Treasury Bond Yields as reported by the Federal Reserve Board. (Federal 5 Reserve Statistical Release) That average is 4.82%. The proxy group beta of 6 0.90 used to adjust the market risk-premium is the average of the individual 7 company betas as reported by Value Line. These are the same natural gas 8 proxy group companies (10) used for the DCF analysis. I have used a market 9 return of 11.1%, based on the December, 2006 issue of Merrill Lynch 10 Quantitative Profiles - Monthly Insights for Equity Management. The 11.1% 11 estimate is the implied return for a portfolio of 1, 151 firms.

12 The risk premium was derived by subtracting the risk-free rate from the 13 market return. Subtracting the average of the 30-year and the10-year 14 Treasury bond yields of 4.82% from the market return of 11.1% results in a risk 15 premium of 6.28%.

Incorporating all variables in the respective formulas, indicates a
required return of 10.47% for the traditional CAPM approach and 10.63% for
the zero-beta CAPM approach, as shown in Exhibit__(TNN), Schedule 2, page
1 and 2 respectively. The average of the two CAPM approaches results in an
equity estimate of 10.55% ((10.47% + 10.63%)/2).

21

- 1 <u>Overall Recommendation</u>
- 2 Q. What is your estimate of equity return for KeySpan?
- A. I have estimated an equity return of 9.64%. I used the 2/3 1/3 weighting
 used by the Commission and also recommended by the Judges in the Generic
 Finance case. (Case 91-M-0509) My DCF estimate is 9.19% and my CAPM
 estimate is 10.55%. With the DCF estimate given 2/3 weight and the CAPM
 estimate given 1/3 weight, the resulting return is 9.64%.
- 8

9 Q. Do you make any adjustments to the estimated equity return for KeySpan? 10 Α. Yes. I have adjusted the estimated return of 9.64% for credit quality. The 11 median bond rating of the proxy group I have used is Baa, while KeySpan 12 Corporation is rated A by Moody's. To account for the differences in the bond 13 ratings of the proxy group and KeySpan, I have looked at the difference in A-14 rated and Baa-rated long term public utility bond yields. Over the six-month 15 period from July to December 2006, A-rated utility bond yields averaged 16 5.90%, while Baa/BBB-rated utility bond yields over the same period averaged 17 6.27%. The 37 basis points difference between A-rated and Baa/BBB-rated 18 long-term utility bond yields is the basis of my credit quality adjustment. 19 Subtracting 37 basis points from my earlier estimate of 9.64% as KeySpan's 20 equity return results in a final equity return estimate for KeySpan of 9.27%.

21

Q. Have you made an adjustment to your equity return recommendation for a
 multi-year rate plan?

3 Α. No, not at this time. I recommend that the Commission establish an equity 4 return for one year. The CPB is not willing to suggest a longer-term return 5 based on KeySpan's plan as filed, which it does not support as presented, and 6 cannot speculate about the duration and form of any plan ultimately resulting 7 from this proceeding. Should a comprehensive and balanced multi-year plan 8 be addressed in negotiations, the CPB would be willing to discuss the 9 appropriateness of an adjustment to its calculated equity return for a multi-year 10 stay out.

11

- 12 Q. Have you estimated the revenue impact of your 9.27% equity return
 13 recommendation as compared to the Companies' 12.0% allowance?
- A. Yes. My recommendation would save KeySpan Energy Delivery New York
 gas customers approximately \$54.5 million, and KeySpan Energy Delivery
 Long Island gas customers approximately \$42.5 million.
- 17

18 <u>Analysis of KeySpan's Equity Return Proposal</u>

- Q. Please briefly describe how the Companies estimated their proposed cost of
 equity of 12.0%.
- A. The Companies' witness, Mr. Rosenberg, recommends an equity return of

12.0% based on the use of four different methods. The four methods he used
 were DCF, CAPM, Risk Premium and Comparable Earnings. Mr. Rosenberg
 applied all four methods to a proxy group of six natural gas companies.

Using the DCF approach, as shown in Exhibit____(RGR-1), Schedule 3,
Mr. Rosenberg estimated three different equity returns: 10.1%, 9.0% and
9.5%. He then adjusted his 9.0% DCF estimate to 9.1% by excluding the
company with the lowest return (leaving only five companies in the proxy
group).

9 Mr. Rosenberg next performed two CAPM analyses, one using the 10 Ibbotson risk premium and one using an unpublished risk premium he has 11 calculated based on the S&P 500. The lbbotson and S&P based analyses 12 produced equity returns of 11.1% and 12.4%, respectively, for the traditional 13 method; 11.4% and 12.6% for the zero-beta approach. Mr. Rosenberg then 14 added a 100 basis points size premium to his estimates, bringing his CAPM 15 results to 12.1% and 12.4% for the traditional CAPM and 13.4% and 13.6% for 16 the zero-beta CAPM.

17 Third, Mr. Rosenberg estimated two equity returns using Risk Premium 18 analyses, resulting in estimates of 9.98% and 10.44%, and finally, he used the 19 Comparable Earnings approach to produce a range of equity returns of 13.5% 20 and 14.0% for the proxy group of six companies. Based on all the different

- methods he employed, his equity returns ranged from a low of 9.0% to a high
 of 14.0%.
- 3

4 Q. Do you agree with the Companies' approach in estimating its equity return? 5 Α. No. I will respond to the approach used by Mr. Rosenberg and show why his 6 estimates should not be relied upon. His proxy group of six companies is too 7 small for statistically reliable results. His DCF analysis is not consistent with the 8 Recommended Decision in the Generic Finance Case and results in estimates 9 that are overstated. His CAPM estimate is also overstated since it is based on 10 the use of unrealistic market returns. Finally, the two other methods he uses, 11 Risk Premium and Comparable Earnings, were rejected by the ALJs in the 12 Generic Finance Case and have been repeatedly rejected by the Commission.

13

14 Q. How did Mr. Rosenberg select his proxy group?

A. Mr. Rosenberg started with the sixteen companies listed by <u>Value Line</u> as
Natural Gas Distribution companies. He discarded 7 companies, AGL
Resources, Atmos Energy, Peoples Energy, SEMCO Energy, Southern Union,
Southwest Gas and UGI Corporation because they did not meet his bond
rating criteria. He excluded KeySpan Corporation because it is involved in a
pending merger. Finally, he excluded two companies, New Jersey Resources
and South Jersey Industries since they did not meet his criterion of regulated

- versus unregulated operations. That left Mr. Rosenberg with only six
 companies in his proxy group.
- 3
- 4 Q. Do you agree with Mr. Rosenberg's approach in selecting the proxy group?
- 5 A. No. I disagree with Mr. Rosenberg's proxy group and the criteria it is based on.
- 6 The Generic Finance Case required a group of at least ten companies to make
- 7 up the proxy group. To ensure that the proxy group has sufficient companies
- 8 to make a reliable proxy group, it suggested several measures. First, in
- 9 recognition of the fact that there were not enough A-rated gas distribution
- 10 companies to form a reliable proxy group, it relaxed the requirement it set for
- 11 the electric company proxy group that all companies must be rated in the "A"
- 12 category. The Return on Equity Consensus Document in the Generic Finance
- 13 case said the following:
- 14 As there are not a sufficient number of "pure play" gas 15 distribution companies whose debt is rated "A" to make up a reliable proxy group, the gas proxy group will be composed of 16 17 gas distribution companies meeting three criteria -(1) each 18 company must be classified by Value Line as a Natural Gas 19 (Distribution) company, (2) each company must have debt that is 20 rated either by Moody's or by Standard & Poor's, and (3) over 21 96% of each company's total revenues must be derived from gas 22 utility operations. 23
- 24 [Return of Equity Consensus Document, June 2, 1993, p. 6]
- 26

1	Next, to further ensure that at least ten companies make the proxy group, the
2	third criterion the percentage of revenues from utility gas operations was
3	also relaxed. The Return on Equity Consensus Document said the following:
4 5 6 7 8 9 10 11 12	If, at the time of any calculation of return on equity that will be applied to a gas utility, fewer than ten companies meet all three criteria, the third criterion, (<u>i.e.</u> , percentage of revenues derived from gas operations) will be relaxed to pick up one or more companies that have 96% or less of their total annual revenues derived from gas utility operations, so as to bring the number of proxy group companies up to ten. ² [Return of Equity Consensus Document, June 2, 1993, p. 7]
13 14 15	Mr. Recordera's provy group of six is too small to be statistically reliable. In
10	fact since Mr. Describerg filed his testimony. Caseda Natural Cas
10	Taci, since wir. Hosenberg med his testimony, Cascade Natural Gas
17	Corporation has agreed to be acquired by MDU Resources Group. This would
18	leave only 5 companies in Mr. Rosenberg's proxy group if the Commission
19	were to use his methodology to recalculate return on equity at the time of its
20	decisions in these cases, as it customarily does.
21	The small size of Mr. Rosenberg's proxy group is unnecessary. First,
22	he excluded seven companies based on his bond rating criterion, including
23	only those that were rated above Baa1/BBB+ by Moody's and Standard &
24	Poor's respectively. There is no apparent reason why Mr. Rosenberg inserted

² Relaxation of these criteria was subject to some other restrictions that are further discussed in the Return on Equity Consensus Document.

1		the criterion of including only companies rated above Baa1/BBB+. The
2		Generic Finance Case imposed no such condition precisely to avoid the
3		number of companies eligible to form the proxy group from falling below ten.
4		Finally, his third criterion for excluding companies from the proxy group,
5		the percentage of revenues derived from gas operations, also deviated from
6		the recommendations of the Generic Finance Case. Rather than relying on
7		percentage of revenues derived from utility operations, Mr. Rosenberg added
8		percentage of income and percentage of assets from utility operations to the
9		criterion.
10		
11	Q.	Is Mr. Rosenberg's DCF analysis consistent with that adopted in the
12		Recommended Decision in the Generic Finance Case?
13	A.	No. While Mr. Rosenberg used the two-stage DCF approach applied to a
14		proxy group, as adopted in the Recommended Decision in the Generic
15		Finance Case, he did not use Value Line data as was clearly specified in that
16		proceeding. Instead, he used an average of the Value Line projected 5-year
17		growth rates and First Call 5-year projected growth rates for the near term, and
18		three separate projected growth rates for the long-term. The three estimates
19		for long-term projected growth that Mr. Rosenberg used are the growth in the
20		Gross Domestic Product ("GDP"), projected sustainable growth and industry
21		growth. Interestingly, his estimate using retention growth that was used in the

1 Generic Finance Case and that I have used results in an equity return of 9.0% 2 that is fairly close to my DCF estimate of 9.19%. The use of the other two 3 long-term growth projections, result in estimates that are overstated. I 4 recommend that Mr. Rosenberg's estimates of long-term projected growth 5 based on growth in GDP and industry growth be discarded. These are broad 6 measures of growth while Value Line projections are analyst's forecasts of 7 companies in the proxy group. Overall, of Mr. Rosenberg's DCF estimates are 8 all overstated and should be rejected.

9

10 Q. Please comment on Mr. Rosenberg's CAPM analysis.

11 Α. Mr. Rosenberg estimates two sets of equity returns based on the traditional 12 and zero-beta CAPM approaches. First, he uses a risk premium of 7.1% based on the spread between common stock returns and returns on long-term 13 14 government bonds from data reported in Ibbotson Associates publication of 15 Risk Premia Over Time Report: 2006, to estimate CAPM equity returns of 16 11.1% and 11.4% based on the traditional and zero-beta approaches 17 respectively. Since risk premium is the difference between market return and 18 the risk free rate, Mr. Rosenberg's assumed market return is 12.0% based on 19 the risk free rate of 4.9 % he used in his CAPM analysis. This market return is 20 90 basis points above the 11.1% market return reported by Merrill Lynch for

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1,151 firms as reported in its December 2006 issue of <u>Quantitative Profiles</u> –
 <u>Monthly Insight for Equity Management</u>.

3 Second, Mr. Rosenberg estimates CAPM equity returns of 12.4% and 4 12.6% for the traditional and zero-beta approaches, respectively, based on the 5 use of S&P 500 data to estimate expected risk premium. Mr. Rosenberg 6 calculates a required market return of 13.4% for the S&P 500 and then 7 subtracts the 4.9% risk-free rate that he has used in his CAPM analysis to 8 arrive at a risk premium of 8.5%. The implied -market return for the S&P 500 9 as reported in the March 2006 issue of Quantitative Profiles – Monthly Insight 10 for Equity Management, is 11.3%. In other words, Mr. Rosenberg's estimate 11 of the S&P 500 required market return is 210 basis points higher the estimate 12 provided by Merrill Lynch. The inputs to the CAPM formula are clearly 13 excessive resulting in equity returns that are also excessive and unrealistic.

14 Mr. Rosenberg estimates equity returns based on the CAPM ranging 15 from 11.1% to 12.6% and then increases the range to 12.1% and 13.6% by 16 adding a 100 basis point size premium. Smaller companies, he says, require 17 higher returns, and the adjustment is necessary "to reflect the relatively small 18 size of companies in [his] proxy group." This Commission has never adopted 19 such an adjustment, nor, to the best of my knowledge, was this factor 20 discussed or adopted in the Generic Finance Case where many different 21 approaches were considered.

1	Q.	What would Mr. Rosenberg's CAPM estimate of the equity return be if he used
2		the correct implied market return of 11.3% for the S&P 500, as reported by
3		Merrill Lynch, in his CAPM analysis?
4	A.	Mr. Rosenberg's CAPM estimate would be 10.53% and 10.72% for the
5		traditional and zero-beta approaches, respectively, or an average CAPM return
6		of 10.63%. The risk premium would be 6.4%, instead of 7.1% and 8.5% used
7		by Mr. Rosenberg. Mr. Rosenberg's 10.63% average CAPM equity return
8		would be 8 basis points higher than my average CAPM estimate of 10.55%,
9		although we use different risk free rates and betas. Mr. Rosenberg uses a risk
10		free rate of 4.9% while I use 4.82%. Similarly, Mr. Rosenberg has used a beta
11		of 0.88 while my beta estimate is 0.90.

- 13 Q. Please comment on the Risk Premium and the Comparable Earnings14 approaches used by Mr. Rosenberg.
- A. The Commission has repeatedly rejected the use of the Risk Premium and the
 Comparable Earnings approaches as used by Mr. Rosenberg. In Cases 94-G0885 and 93-G-0765, the Commission referenced the Recommended
 Decision and rejected the risk premium approach:

1 2 3 4 5 6		the Judge rejected two additional methods: the company's risk premium approach (whose results he deemed too volatile), and comparable earnings (presented by staff because it was included in the generic finance case consensus proposal).
7 8 9		<u>Opinion No. 95-16</u> , National Fuel Gas Distribution Corporation, issued September 15, 1995, page 44.
10		The Comparable Earnings approach was also rejected by Judges Ansaldo and
11		Deixler in the Generic Finance Case. The Recommended Decision said the
12		following:
13 14 15 16 17		A comparable earnings approach is not appropriate for development of the cost of equity and should not be included in the method adopted for that purpose by the Commission.
18 19 20		<u>Recommended Decision</u> , Case 91-M-0509, issued July 19, 1994, page 48.
21	Q.	What would be KeySpan's equity return estimate, based on the 2/3-1/3
22		weighting for the DCF and the CAPM approaches, with appropriate corrections
23		for some of the flaws you have noted above?
24	A.	Combining Mr. Rosenberg's median DCF estimate based on long-term
25		sustainable retention growth that was used in the Generic Finance Case, as
26		shown in Exhibit (RGR_1), Schedule 3, Page 2 of 3 and his corrected
27		CAPM estimates based on the 11.3% S&P 500 market return that I discuss
28		above, would result in equity return of 9.54% for the proxy group of six
29		companies. Mr. Rosenberg estimated a median DCF equity return of 9.0%

1	using the long-term sustainable growth method relied upon in the Generic
2	Finance Case. As discussed above, his average of the traditional and zero-
3	beta CAPM returns based on the S&P 500 market return of 11.3% as reported
4	by Merrill Lynch would be 10.63%. Assigning 2/3 weight to the DCF estimates,
5	and 1/3 to the CAPM return consistent with the methodology approved in the
6	Generic Finance Case, results in equity return of 9.54% that is relatively close
7	to my estimate of 9.64% before applying the credit quality adjustment. Thus,
8	when adjusted for errors, Mr. Rosenberg's return generally agrees with my
9	analysis.

10

11 PART II -- RATE DESIGN

Q. Please briefly describe the rate design changes proposed by KeySpan Energy
 Delivery Long Island ("KEDLI") and KeySpan Energy Delivery New York
 ("KEDNY") for Service Classification (SC) 1A – Residential Non-Heating and
 SC 1B – Residential Heating customers.

A. Both KEDLI and KEDNY are proposing to drastically increase the minimum
 charge for both residential non-heating and residential heating customers while
 reducing tail block rates to bring them close to \$1/dth. They propose to realign
 rates over a three year period. KEDLI has proposed to increase the monthly
 minimum charge of SC 1A from the current rate of \$8.20 to a proposed rate of
 \$18.58 resulting in an increase of \$10.38 or approximately 127%. Similarly,

KEDLI is proposing to increase the monthly minimum charge for SC 1B from
 the current rate of \$8.20 to a proposed rate of \$20.15 resulting in an increase
 of \$11.95 or approximately 146%.

KEDNY is proposing similar changes in the rate design for residential
customers. It is proposing to increase the bi-monthly minimum charge for SC
1 A (Residential Non-Heating) from the current rate of \$21.16 to \$27.71
resulting in an increase of \$6.55 or approximately 31%. KEDNY is also
proposing to increase the bi-monthly minimum charge for SC 1B (Residential
Heating) form the current rate of \$22.40 to \$35.36 resulting in an increase of
\$12.96 or approximately 58%.

11

12 Q. Do you agree with these proposals?

13 Α. Although the Companies' cost studies indicate that the minimum charges for 14 KEDLI and KEDNY's residential customers should be increased, the proposals 15 put forward by the two companies are far too drastic. KEDLI is proposing to 16 more than double the monthly minimum charge for both residential non-17 heating and residential heating customers in a single year. In fact, both KEDLI 18 and KEDNY have proposed to increase minimum charges over a three-year 19 period with the proposed rate year increase being one-third of the total 20 increase. KEDLI is proposing to increase the monthly minimum charges for 21 SC 1A and SC 1B over three years to the full monthly minimum costs to serve

computed by its witness of \$39.33 and \$44.04 respectively. Based on KEDLI's
 proposal, at the end of three years, the monthly minimum charge for SC 1A
 customers would increase by 380% from current levels. Similarly, under
 KEDLI's proposal, the monthly minimum charge for SC 1B customers would
 increase by 437% from current levels.

6 KEDNY is also proposing to increase the minimum charges for 7 residential customers to the full monthly minimum costs to serve computed by 8 their witness in three years. KEDNY is proposing to increase the bi-monthly 9 minimum charge for SC 1A customers over three years to \$38.88 or an 10 increase of approximately 84% from current levels. It is also proposing to 11 increase the bi-monthly minimum charge for SC 1B customers to \$61.28 or an 12 increase of approximately 174% form current levels.

13

14 Q. What do you recommend?

A. While minimum charges need to be better aligned with costs, the movement
towards cost should occur at a much more gradual pace than proposed by
KEDLI and KEDNY. The current rate designs used by the KEDLI and KEDNY
have been in place for a long period of time. To suddenly double minimum
charges over one year and raise them by 3 to 4 fold over three years could
severely impact low-usage customers. I recommend that the minimum charge
for both residential non-heating and residential heating customers for both

1		Companies be increased by one-third the increase proposed by KEDLI and
2		KEDNY for the rate year. For instance, KEDLI proposes to increase the
3		monthly minimum charge for SC 1A by \$10.38 for the rate year. I propose that
4		the rate year increase should be only one-third, or \$3.46, and I would make
5		similar adjustments to the other residential minimum charge increases
6		proposed by the Companies.
7		
8	Q.	Under your proposal will the minimum charge increase just for the rate year or
9		will it apply for the two subsequent years also?
10	A.	I am recommending that minimum charges increase for three years so that at
11		the end of the three-year period, minimum charges will be the same under my
12		proposal as the increase proposed by the Companies for the rate year.
13		
14	Q.	Does this conclude your testimony?
15	A.	Yes.

Exhibit