

BEFORE THE
NEW YORK STATE
PUBLIC SERVICE COMMISSION

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Proceeding on Motion of the Commission as to the
Rates, Charges, Rules and Regulations of
Corning Natural Gas Corporation

Case 16-G-0369

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**REBUTTAL TESTIMONY OF
ANN E. BULKLEY

(VICE PRESIDENT OF
CONCENTRIC ENERGY ADVISORS, INC.)**

November 15, 2016

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Case 16-G-0369 Rebuttal Testimony of Ann E. Bulkley

I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME, AFFILIATION, AND BUSINESS ADDRESS.**

2 A. My name is Ann E. Bulkley. I am a Vice President of Concentric Energy Advisors,
3 Inc. (“Concentric”), located at 293 Boston Post Road West, Suite 500, Marlborough,
4 Massachusetts 01752.

5 **Q. DID YOU ALSO SUBMIT DIRECT TESTIMONY IN THIS PROCEEDING?**

6 A. Yes, I submitted Direct Testimony on behalf of Corning Natural Gas Corporation
7 (“Corning Gas”, “Corning”, or the “Company”), which is a wholly-owned subsidiary
8 of Corning Natural Gas Holding Corporation (“Holding Company”).

9 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

10 A. The purpose of my Rebuttal Testimony is to respond to the Prepared Testimony of
11 the Department of Public Service Staff (“Staff”) Finance Panel witnesses regarding
12 the appropriate return on equity (“ROE”) and capital structure for the Company.
13 My analysis is supported by the data presented in Exhibits__ (AEB-R-1) through
14 (AEB-R-11).

II. SUMMARY AND OVERVIEW

1 **Q. PLEASE SUMMARIZE FOR THE COMMISSION THE PRIMARY CONSIDERATIONS IN**
2 **ESTABLISHING THE COST OF CAPITAL IN THIS PROCEEDING.**

3 A. As established by the Supreme Court in the Hope and Bluefield decisions, the cost
4 of capital set in this proceeding should be adequate to attract capital on reasonable
5 terms and commensurate with the returns available to investors on risk-comparable
6 investments. In Hope, the Supreme Court found that it is not the methodology
7 employed, but the result reached that determines whether the ROE is just and
8 reasonable. Therefore, while the Staff Panel and I employ several ROE estimation
9 models in this process, it is important to consider whether the results of these
10 analyses provide a reasonable return to investors. My Rebuttal Testimony
11 demonstrates that Staff has failed to consider this element of Hope.

12 **Q. PLEASE SUMMARIZE THE ROE RECOMMENDATIONS PROVIDED BY THE**
13 **WITNESSES IN THIS PROCEEDING.**

14 A. As shown in my Direct Testimony, I present the results of a Multi-Stage DCF
15 analysis and two CAPM analyses, a traditional projected CAPM and a Zero-Beta
16 CAPM, consistent with the methodology that has been relied on by the New York
17 Public Service Commission (“Commission”) since the Generic Finance Proceeding
18 (“GFP”). My analysis was prepared using two proxy groups, a Combined Utility
19 Proxy Group (“CUPG”) and a Natural Gas Proxy Group (“NGPG”). In my Direct
20 Testimony, I discussed the effect of capital market conditions on the assumptions

1 that are used to develop both of these ROE estimation methodologies. I also
2 reviewed the foundation for the GFP and recommendations that resulted from that
3 analysis of the appropriate ROE estimation models. Based on the effect that capital
4 market conditions have had on the DCF model, I concluded that it is reasonable to
5 consider an alternative weighting of the DCF and CAPM results, as was provided for
6 in the Recommended Decision (“RD”) in the GFP.¹ Based on an equal weighting of
7 the results of those models, and taking into consideration the extremely small size of
8 Corning Gas relative to the proxy group companies, I established a range between
9 10.20 percent and 10.74 percent, and I supported the Company’s request of a 10.20
10 percent ROE.

11 Based on the 1991 RD in the GFP and other Commission discussions of the ROE
12 estimation methodology, the Staff Panel applies a two-thirds weighting to the results
13 of the DCF analysis and a one-third weighting to the CAPM analysis. Staff’s
14 prescriptive approach fails to recognize that the Commission’s methodology has
15 evolved over time, and that the Commission is open to considering departures from
16 past precedent, particularly when the influence of prevailing market conditions on
17 ROE estimation analyses leads to distorted and unreasonable results.

18 The Staff Panel has acknowledged that current conditions in capital markets are
19 causing the DCF model to understate the return requirements of equity investors.²

20 Staff provides several options for the Commission to consider in terms of adjusting

¹ Direct Testimony of Ann E. Bulkley, at 70-75.

² Prepared Testimony of Staff Finance Panel, at 54-55.

1 the results of the DCF model to account for current market conditions:³

2 1) change the measure of central tendency relied on from the median to the
3 mean result of the models;

4 2) do not update the analysis from the March 2016 data, due to recent market
5 distortions;

6 3) adjust the averaging period to rely on a longer period of historical data;
7 and

8 4) rely on a construct similar to that used by the Federal Energy Regulatory
9 Commission (“FERC”) methodology for estimating the ROE.

10 In an effort to take into consideration the effect of low interest rates on the results
11 of the DCF model, Staff ultimately chooses the first option (i.e., adjusting its
12 methodology to rely on the mean DCF results rather than the median results).⁴

13 While I agree with Staff that the DCF model is not producing reasonable results
14 under current market conditions, I do not believe that Staff has adequately
15 accounted for the magnitude of the understatement through its proposed
16 adjustment. Stated simply, even though Staff readily admits that its DCF model is
17 not producing reasonable results, it continues to rely on those results as the primary
18 component of its ROE estimate.

³ *Ibid.*, at 55-59.

⁴ *Ibid.*, at 55.

1 Q. WHAT WAS STAFF'S POSITION IN THE GFP REGARDING THE REASONABLENESS
2 OF THE TRADITIONAL DCF ANALYSIS?

3 A. In the GFP, Staff recognized that the volatility in the Commission's returns was
4 related to reliance on the DCF model and that the DCF analysis produced lower
5 returns when stocks are selling above book value. Staff notes that the average
6 market-to-book ratio of Staff's proxy group was 1.3X in September 2011 compared
7 to 1.95X as of September 2016.⁵ As discussed in my Direct and Rebuttal Testimony,
8 currently utility stock valuations are high, which reduces the dividend yield and, as
9 Staff noted in the GFP, results in low returns from the DCF model. Therefore, it is
10 reasonable to equally weight the results of the CAPM and the DCF models so as not
11 to bias the results downward due to the effect of market conditions on the DCF
12 model.

13 Staff, too, contends that the volatility of the Commission's returns
14 over past periods justifies relying on a multi-method approach. Staff
15 argues that reliance on traditional DCF analysis produces reasonable
16 results over time, *but that at any specific time it could produce (and in the past*
17 *has produced) inconsistent results.* Further, staff says that the DCF
18 approach tends to produce returns higher than necessary when stocks
19 are selling below book, and lower than necessary when stocks are
20 selling above book. *In staff's view, DCF-based results are in no way superior*
21 *to those obtained using other methods, even though the DCF, on average, has been*
22 *unbiased over time.*⁶

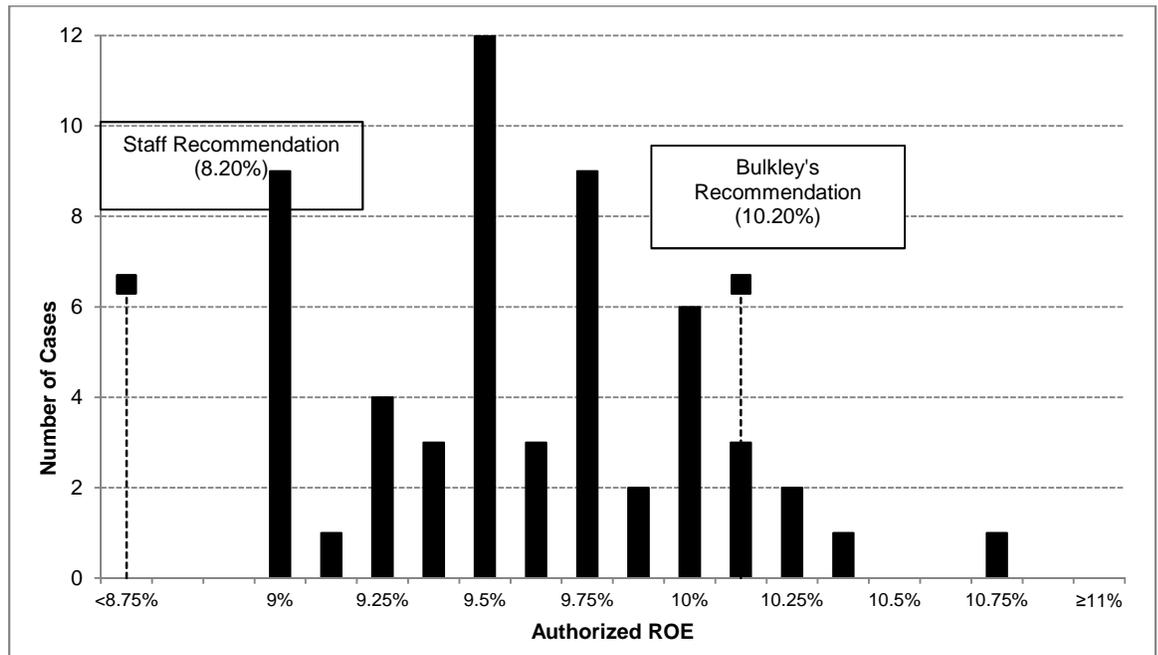
⁵ *Ibid.*

⁶ Case 91-M-0509, Proceeding on Motion of the Commission to Consider Financial and Regulatory Policies for New York State Utilities, Recommended Decision, (issued July 19, 1994) ("Generic Finance RD"), at 25. (Emphasis added.)

1 Q. HOW DOES THE STAFF PANEL'S ROE RECOMMENDATION COMPARE TO
 2 RECENTLY AUTHORIZED ROES FOR GAS DISTRIBUTION COMPANIES ACROSS
 3 THE NATION?

4 A. Chart 1 presents authorized ROEs for gas distribution companies from January 2014
 5 through October 2016. As shown in Chart 1, Staff's ROE recommendation of 8.20
 6 percent is well below the lowest authorized ROE for a gas distributor during this
 7 period.

8 **Chart 1: Authorized ROE for Natural Gas Distribution Companies**
 9 **January 2014 through October 2016⁷**



10

⁷ Source: Regulatory Research Associates.

1 **Q. WHY SHOULD THE COMMISSION CONSIDER AUTHORIZED ROES IN OTHER**
2 **JURISDICTIONS AS A PRACTICAL BENCHMARK FOR ASSESSING COST OF CAPITAL**
3 **RECOMMENDATIONS?**

4 A. The ROE that is authorized in other jurisdictions provides a useful benchmark to
5 assist the Commission in assessing the overall reasonableness of ROE estimates and
6 sends an important signal to investors regarding whether there is regulatory support
7 for financial integrity, dividends, and financial growth, and fair compensation for
8 business and financial risk. The cost of capital represents an opportunity cost to
9 investors. If higher overall returns are available for other investments of comparable
10 risk, investors have the incentive to direct their capital to those investments. Thus,
11 an authorized ROE significantly below returns available in other jurisdictions can
12 inhibit the Company's ability to attract capital for investment in New York. This
13 approach is also consistent with Opinion No. 531-B where the FERC departed from
14 its long-standing position and determined that it was reasonable to consider state-
15 level returns when estimating the cost of equity.⁸

16 **Q. HAS THE STAFF PROVIDED ANY RATIONALE FOR RECOMMENDING AN ROE**
17 **THAT IS WELL BELOW THE NATIONAL AVERAGE ROE?**

18 A. In response to CNG/DPS-051, Staff acknowledges that their recommended ROE is
19 below the national average but suggests that it is not surprising that investors would
20 require a lower return for New York state utilities because of the ratemaking

⁸ Federal Energy Regulatory Commission, Opinion No. 531-B, March 3, 2015, at paragraphs 80 and 84.

1 mechanisms that have been implemented in New York State.

2 **Q. DO YOU AGREE WITH STAFF'S CONCLUSION REGARDING INVESTORS'**
3 **EXPECTATIONS?**

4 A. No, I do not. Staff's analysis does not include a proxy group that is comprised
5 entirely of New York regulated companies, therefore the results of Staff's ROE
6 estimation methodology are not at all New York specific and do not reflect the
7 return that investors would expect for investments in New York companies. The fact
8 that the ROEs that result from Staff's ROE estimation model are so markedly below
9 the national averages, when they are relying on market data for a proxy group of
10 companies that are regulated across many regulatory jurisdictions that have
11 contributed to the national average ROE should be a signal to Staff that the
12 formulaic approach they are relying on is not producing reasonable results at this
13 time. It cannot be interpreted that the results of these models somehow reflect
14 investors' perception about the relative risk of New York utility companies.

15 **Q. HOW DOES STAFF'S PROPOSED EQUITY RATIO COMPARE TO THE EQUITY RATIOS**
16 **OF THE PROXY COMPANIES?**

17 A. As discussed in my Direct Testimony, the average actual equity ratio of the utility
18 subsidiaries of the proxy companies over the last four years is 54.02 percent for the
19 CUPG and 56.27 percent for the NGPG. As shown in Schedules AEB-15 and
20 AEB-16 to my Direct Testimony, the average authorized equity ratio of the utility
21 subsidiaries of the proxy companies is 50.98 percent for the CUPG and 52.42

1 percent for the NGPG. Staff's proposed equity ratio of 48.0 percent is
2 approximately 300-440 basis points below the average authorized equity ratios of my
3 proxy group companies.

4 **Q. WHAT ARE THE PRIMARY DIFFERENCES BETWEEN YOUR ANALYSIS AND ROE**
5 **RECOMMENDATIONS AND THE ANALYSIS AND ROE RECOMMENDATIONS**
6 **OFFERED BY THE STAFF PANEL IN THIS PROCEEDING?**

7 A. While there are several technical differences in the specification of the DCF and
8 CAPM models, all of which I will address in my Rebuttal Testimony, the most
9 significant difference lies in how each party proposes to resolve what we both
10 acknowledge is a major concern: how to adjust and interpret the results of ROE
11 estimation models given current conditions in capital markets. As discussed in my
12 Direct Testimony, the participants in the GFP recognized that the weightings that
13 were relied on in 1991 could be revisited at some future point, and offered that the
14 weightings were open for reconsideration for good cause.⁹ As also discussed in my
15 Direct Testimony, market conditions since the start of the Great Recession have
16 demonstrated that there are compelling reasons to reconsider the weightings that
17 resulted from the GFP.¹⁰

18 While I agree with the Staff Panel that the DCF model is not producing reasonable
19 results under current market conditions, I do not believe that Staff has adequately
20 accounted for the magnitude of the understatement through its proposal to rely on

⁹ Direct Testimony of Ann E. Bulkley, at 8-10.

¹⁰ *Ibid.*, at 72-75.

1 the mean rather than the median DCF results. Staff explains that recent market
2 conditions such as Britain's exit from the European Union as well as longer-term
3 market conditions, such as the Federal Reserve's decision to "go slow" in raising
4 interest rates have resulted in an increase in the price of utility stocks, as investors
5 search for safe investments.¹¹ While Staff recognizes that these conditions have
6 affected the ROE estimation models, their proposed adjustment does nothing to
7 better reflect the projected market conditions during the period that the rates
8 established in this case will be in effect because it continues to rely on the same
9 weighting of the results from a DCF approach that Staff readily admits may be
10 broken, and does not account for investors' expectations of rising interest rates in
11 the CAPM analysis.

12 **Q. DO YOU AGREE WITH STAFF'S ALTERNATIVE PROPOSALS FOR ESTIMATING THE**
13 **ROE?**

14 A. No, because the Staff's proposals do not address the underlying issue. Current
15 market conditions are similar to the market conditions that led to the GFP; interest
16 rates were considered low at the time, utility stock valuations were considered high,
17 and the DCF model was underestimating the required ROE. Rather than correcting
18 for the anomalous conditions in the analysis, or minimizing the effect of these
19 conditions on their recommended ROE, the Staff Panel's solution in this proceeding
20 is simply to change the measure of central tendency (i.e., to move from relying on

¹¹ Prepared Testimony of Staff Finance Panel, at 54-55.

1 the midpoint result of the DCF analysis to the average DCF result). This change
2 does not address the fact that the ROE results for each of the individual proxy
3 companies to which the measure of central tendency is applied are understated as a
4 result of the significant decline in dividend yields for utility holding companies.

5 As noted previously, Staff offered the Commission three additional approaches for
6 estimating the ROE:¹² 1) do not update the analysis from the March 2016 data, due
7 to current market distortions; 2) adjust the averaging period to rely on a longer
8 period of historical data, and 3) rely on a construct similar to the FERC methodology
9 for estimating the ROE. The first two options rely on different historical time
10 periods, both of which have been influenced by the market conditions that Staff
11 acknowledges have impacted the results of its models. The Federal Reserve's
12 extraordinary intervention in capital markets, along with market volatility and
13 uncertainty, and investors' flight to safety and search for yield have been ongoing
14 through the Great Recession and the subsequent economic recovery. As shown later
15 in Chart 2, throughout this period Treasury bond yields have been suppressed and
16 the price of utility stocks has increased, as shown by the S&P utilities index, resulting
17 in declining dividend yields as investors sought higher yields through alternative
18 dividend-paying stocks, including utility stocks. As discussed in more detail in my
19 Rebuttal Testimony, equity analysts have warned investors about high valuations and
20 low dividend yields for utility stocks. With dividend yields near historically low

¹² *Ibid.*, at 55-59.

1 levels, the DCF model has underestimated the prospective ROE for utility stocks for
2 more than the six-month period that Staff proposes as an alternative to the three
3 months of data that has been traditionally used by the Commission. Furthermore,
4 since the ROE is intended to reflect the return that investors expect over some
5 projected period, it is counterintuitive to rely on a longer historical time period. In
6 fact, the Commission recently changed its policy on stock prices to rely on a shorter
7 3-month period instead of six months to avoid the use of “stale” data. This is
8 especially important when the historical data differ significantly from investors’
9 expectations, as is the case in the current market.

10 Finally, while I agree that the FERC methodology could be relied on, I note that
11 simply changing the measure of central tendency without considering how the results
12 of the DCF model have been affected is likely to continue to understate investors’
13 return requirements.

14 **Q. HOW DO YOU PROPOSE TO ADDRESS THE EFFECTS OF CURRENT MARKET**
15 **CONDITIONS ON THE ROE ESTIMATION MODELS?**

16 A. As discussed in my Direct Testimony, recognizing that market conditions are
17 affecting the models used to estimate the cost of equity for public utilities, it is
18 appropriate to afford more weight to risk premium approaches, which allow the
19 ability to adjust for differences between current and projected market conditions.
20 Moreover, it is critical for the Commission to recognize the limitations of the DCF
21 model because the assumptions used in this model, in particular the dividend yield,

1 cannot be reasonably adjusted to reflect projected market conditions. Due to this
2 limitation, it is reasonable to afford the DCF model less weight in the final
3 recommended ROE. As discussed in my Direct Testimony, given the effect of
4 market conditions on the ROE estimation models, it is reasonable and appropriate to
5 apply equal weighting to the DCF and CAPM results.¹³ As shown in Table 7 of my
6 Direct Testimony, the results of that analysis suggest a range of returns from 10.20
7 percent to 10.74 percent.

8 **Q. PLEASE SUMMARIZE YOUR POSITION ON STAFF'S PROPOSED COMMON EQUITY**
9 **RATIO FOR CORNING GAS.**

10 A. Staff's proposed equity ratio of 48.0 percent is well below the actual and authorized
11 equity ratios of the utility subsidiaries of the proxy companies. My disagreement
12 with Staff's capital structure recommendation centers around three primary
13 considerations. First, Staff's rationale for the change in the Company's capital
14 structure is inconsistent with its recommendation in Case 16-G-0257 for National
15 Fuel Gas Distribution Company. Staff's approach to the appropriate equity ratio
16 appears to be the lesser of a 48.0 percent equity ratio or the equity ratio of the parent
17 company. Second, Staff's proposal suggests that the financing of a corporation the
18 size of Corning Gas would be similar to the financing for Consolidated Edison, a
19 utility company with a market capitalization more than 500 times that of Corning
20 Gas. Third, Staff's recommended capital structure, combined with its recommended

¹³ Direct Testimony of Ann E. Bulkley, at 74-75.

1 ROE of 8.20 percent, results in a weighted equity cost rate for Corning well below
2 the equity cost rates that have been authorized for the other New York utilities, all of
3 which are at least 100 times the market capitalization of Corning Gas. Staff's
4 recommendation is punitive to Corning Gas and fails to satisfy the comparability
5 requirement of the fair return standard.

6 **Q. PLEASE SUMMARIZE THE TECHNICAL DIFFERENCES BETWEEN THE ROE**
7 **ANALYSIS PRESENTED IN YOUR DIRECT TESTIMONY AND THE ANALYSIS**
8 **PRESENTED BY THE STAFF PANEL.**

9 A. Section IV of my Rebuttal Testimony addresses the technical differences between
10 the analysis presented by Staff and my analysis and recommendations. Those
11 differences include: 1) the weighting of the ROE estimation methodologies; 2) the
12 composition of the proxy group; 3) the application of the DCF model, specifically
13 the selection of growth rates; and 4) the application of the CAPM. In addition, Staff
14 and I disagree as to the additional risk factors faced by the Company, especially as it
15 relates to the small size of Corning Gas relative to the proxy group companies. As
16 discussed in Section IV, reasonable modifications to Staff's proposed assumptions
17 result in significant changes in the resulting ROE. Table 1 below summarizes the
18 effects of these modifications.

1 **Table 1: Summary of Adjustments to Staff's DCF and CAPM Analyses**

Adjustment	ROE Result	Change from Staff Recommendation (in basis points)	Reference
Staff DCF result	8.07%		
Apply 375 basis point equity risk premium	9.39%	+132	AEB-19
Use of GDP growth rate	8.80%	+73	AEB-20
FERC estimate of the ROE result within DCF range	10.55%	+248	
Staff CAPM result	8.43%		
Use of projected risk-free rate	9.06%	+63	AEB-21
Use of S&P 500 to estimate the MRP	10.08%	+265	AEB-22

2

III. CAPITAL MARKET CONDITIONS AND THEIR EFFECT ON THE COST OF EQUITY

3 **Q. PLEASE SUMMARIZE THE STAFF PANEL'S VIEW OF CAPITAL MARKET**
 4 **CONDITIONS AND THEIR EFFECT ON THE COST OF EQUITY FOR CORNING GAS.**

5 A. The Staff Panel notes that yields on 30-year Treasury bonds have declined by 83
 6 basis points from April 2012 to September 2016, while yields on Moody's A-rated
 7 utility debt have declined by 81 basis points over this same time period.¹⁴ Staff
 8 suggests that the currently low interest rate environment provides support for its
 9 ROE recommendation of 8.20 percent. In addition, Staff testifies that "current rates
 10 are the best indicator of future rates as they are based on the latest information

¹⁴ Prepared Testimony of Staff Finance Panel, at 75.

1 available to investors.”¹⁵ For that reason, Staff rejects the use of projected Treasury
2 bond yields in the CAPM and Risk Premium analyses. In doing so, Staff effectively
3 takes an untenable position: that investors do not consider analysts’ forecasts of
4 inflation, interest rates, and earnings growth when assessing investments.

5 **Q. HOW DOES YOUR VIEW OF CAPITAL MARKET CONDITIONS DIFFER FROM THE**
6 **VIEW PRESENTED BY THE STAFF PANEL?**

7 A. Since the ROE authorized in this proceeding is intended to provide a reasonable
8 return to investors over the period during which rates will be in effect, it is important
9 to consider the future prospects for financial markets. I disagree with Staff’s
10 recommendation that the Commission rely solely on current and recent historical
11 market data for interest rates. In addition, it is important to understand how market
12 conditions are affecting the results of the traditional ROE estimation models, and to
13 use additional benchmarks to inform the decision on the appropriate ROE for
14 Corning Gas in this case. The evidence demonstrates that interest rates are near
15 historically low levels and that dividend yields for utility stocks have declined. It is
16 important to understand not only how these market conditions developed, but also
17 what changes in market conditions are expected in the future and how those changes
18 affect a forward-looking estimate of the cost of capital. If analysts and investors are
19 expecting higher interest rates, the Commission should consider the market’s

¹⁵ *Ibid.*, at 96.

1 expectation for higher interest rates and how those higher interest rates would affect
2 the assumptions of the DCF model.

3 Each model used to estimate the cost of equity has been developed using specific
4 economic assumptions. Consequently, sound and reasonable judgment is required in
5 selecting appropriate financial valuation models to estimate a firm's cost of common
6 equity capital, in determining the inputs for these models, and in interpreting the
7 results. In other words, estimating the appropriate ROE is not just about
8 mechanically applying the traditional ROE models and relying on the results
9 generated. In order to meet the standards established in *Hope* and *Bluefield*, it is
10 necessary to set the return at a level that is adequate to attract capital on reasonable
11 terms. *Hope* instructs that it is not the methodology employed, but the result reached
12 that determines whether an ROE is just and reasonable. Therefore, it is important to
13 review the results of the ROE estimation models against other market indicators of
14 the expected cost of equity to determine where, within the range of analytical results,
15 the ROE is appropriately placed.

16 **Q. PLEASE DISCUSS HOW THE FEDERAL RESERVE'S MONETARY POLICY HAS**
17 **AFFECTED CAPITAL MARKETS.**

18 A. The Federal Reserve's highly accommodative monetary policy has influenced capital
19 markets by maintaining short-term interest rates at zero or, as of the December 2015
20 meeting, 25 basis points. Extraordinary and ongoing federal intervention in capital
21 markets has artificially lowered government bond yields since the Great Recession of

1 2008-09, as the Federal Reserve has used monetary policy (both reductions in short-
2 term interest rates and purchases of Treasury bonds and mortgage backed securities)
3 to stimulate the U.S. economy. This highly accommodative monetary policy has
4 resulted in artificially suppressed government bond yields. The result of very low or
5 zero returns on short-term government bonds has been that yield-seeking investors
6 have been forced into longer-term instruments, bidding up prices and reducing yields
7 on those investments. As investors have moved along the risk spectrum in search of
8 higher yields that meet their return requirements, there has been an increase in the
9 demand for dividend-paying equities, such as utility stocks. As a result, as shown
10 later in Chart 2, there has been a decline in the dividend yields for utilities over the
11 past decade. As Staff notes, recent uncertainty in the international financial markets
12 has exacerbated this phenomenon.¹⁶

13 **Q. DO YOU BELIEVE THAT CURRENT MARKET CONDITIONS ARE A “NEW NORMAL”?**

14 A. No, the Federal Reserve has indicated on several occasions that it intends to
15 withdraw its extraordinary support for financial markets and extricate itself from the
16 market over time, by gradually selling the Treasury bonds and mortgage-backed
17 securities that it purchased during the Quantitative Easing programs that followed
18 the financial crisis. At the September 2014 Federal Open Market Committee
19 (“FOMC”) meeting, the FOMC published its “Policy Normalization Principles”,

¹⁶ Prepared Testimony of Staff Finance Panel, at 54.

1 which outlined the policy tools that would be implemented to return to normalcy.¹⁷
2 In a speech to the New York Economics Club, the Vice Chairman of the Board of
3 Governors of the Federal Reserve, Stanley Fischer, again reiterated the Federal
4 Reserve’s Policy Normalization Principles, recognizing that interest rate increases
5 would occur in response to market conditions and the Federal Reserve’s policy
6 objectives.¹⁸ As the Federal Reserve gradually unwinds the Quantitative Easing
7 program by selling Treasury bonds and mortgage-backed securities into the market,
8 the large supply of bonds will undoubtedly place upward pressure on interest rates.
9 Speaking at the Federal Reserve’s annual conference in Jackson Hole, Wyoming, in
10 August 2016, Federal Reserve Chair Janet Yellen indicated that the case for hiking
11 interest rates has strengthened recently. Ms. Yellen stated: “In light of the continued
12 solid performance of the labor market and our outlook for economic activity and
13 inflation, I believe the case for an increase in the federal funds rate has strengthened
14 in recent months.”¹⁹ In a speech in September 2016, the President of the Boston
15 Federal Reserve, Eric Rosengren, warned that waiting too long to raise interest rates
16 threatened to overheat the U.S. economy. Investors are also commenting on the
17 importance of normalizing monetary policy so that central banks do not cause
18 instability in financial markets or encourage excessive risk-taking. Mohamed El-

¹⁷ Federal Reserve Board, Policy Normalization Principles and Plans, as adopted effective September 16, 2014.

¹⁸ Remarks by Stanley Fischer, Vice Chairman of the Board of Governors of the Federal Reserve at the Economics Club of New York, March 23, 2015.

¹⁹ “Fed’s Yellen says case for interest rate hike has strengthened,” Reuters Business News, August 26, 2016.

1 Erian, chief economist for Allianz, recently warned that the Federal Reserve should
2 not overlook the costs that come with their policy of maintaining historically low
3 interest rates. In particular, he stated: “There is also the risk of financial instability
4 down the road” because of extraordinary monetary policy. “And, I think that is the
5 strongest argument for trying to slowly normalize rates, because otherwise you
6 contribute to excessive risk taking. The last thing you want is for your central bank
7 to be ineffective. The Fed doesn’t want to get there, the ECB doesn’t want to get
8 there, the bank of England doesn’t want to get there. And they (the ECB) have that
9 at the back of their mind.”²⁰

10 **Q. WHAT IS THE FINANCIAL MARKET’S PERSPECTIVE ON THE TIMING OF FUTURE**
11 **INCREASES IN INTEREST RATES?**

12 A. The November 2016 issue of the Blue Chip Financial Forecasts (“Blue Chip”)
13 surveyed 50 leading economists and market participants concerning their views
14 regarding the timing of future increases in short-term interest rates by the Federal
15 Reserve. Blue Chip reports that more than 93 percent of market participants
16 surveyed expect the Federal Reserve to raise short-term interest rates again before
17 the end of 2016, most likely at the December FOMC meeting.²¹ In terms of
18 magnitude, more than 93 percent of those surveyed expect the Federal Reserve will

²⁰ “El-Erian: Low Rate Lead to Excessive Risk-Taking,” Investopedia, August 26, 2016.

²¹ Blue Chip Financial Forecasts, Volume 35, No. 11, November 1, 2016, at 14.

1 raise the Federal Funds rate by 25 basis points in 2016, and approximately 82 percent
2 expect an additional increase in 2017 of between 50 and 100 basis points.²²

3 According to Blue Chip, yields on 30-year Treasury bonds are forecasted to increase
4 from the current level of 2.40 percent to 4.30 percent between 2018 and 2022.²³ If
5 yields on Treasury bonds rise as the market expects, the current dividend yields for
6 electric and gas utility stocks will not be competitive with higher yields on
7 government and corporate bonds. Consequently, the results of Staff's DCF analysis
8 are understated because the current dividend yield component does not adequately
9 reflect the higher interest rate environment expected by investors.

10 **Q. WHAT INDICATIONS ARE THERE THAT INVESTOR RISK SENTIMENT IS**
11 **INCREASING?**

12 A. As discussed in my Direct Testimony, the evidence of increased risk sentiment
13 among investors is compelling.²⁴ Even as Treasury bond yields have declined again in
14 2016, the spread between yields on corporate and utility bonds and government
15 bonds has increased to levels not seen since the 2008-09 credit and financial crisis.
16 As shown in Table 2 of my Direct Testimony, the spread between Baa-rated utility
17 debt and 30-year Treasury bonds was 247 basis points, or 99 basis points higher than
18 the spread in August 2011 when Corning Gas's ROE of 9.50 percent was approved.
19 As discussed in my Direct Testimony, higher credit spreads are an indication that

²² *Ibid.*

²³ Blue Chip Financial Forecasts, Volume 35, No. 6, June 1, 2016, at 14.

²⁴ Direct Testimony of Ann E. Bulkley, at 17-21.

1 bond investors are becoming more concerned about future economic conditions and
2 the ability of corporations to withstand any economic downturn that may occur.²⁵

3 **Q. ARE EXPECTATIONS FOR HIGHER INTEREST RATES, WIDER CREDIT SPREADS,**
4 **LOWER DIVIDEND YIELDS, AND HIGH STOCK VALUATIONS FOR UTILITY**
5 **COMPANIES ALREADY REFLECTED IN THE COST OF EQUITY PRODUCED BY THE**
6 **DCF MODEL?**

7 A. In theory, and during times of general economic and capital market stability, I
8 believe that the DCF model reflects market conditions and investor expectations.
9 However, in the current market environment, the DCF model results are being
10 distorted by the uncommonly low level of interest rates and the corresponding effect
11 on dividend yields. The Staff Panel comments on this trend, noting “that investors
12 have fled to less risky investments including utility stocks, which pushed the S&P
13 500 Utilities Index to a record high of 258.15 in the month of June.”²⁶ Value Line
14 recently observed that dividend yields for electric utilities are currently well below the
15 historical average, that many of these stocks trade at a premium to the market, which
16 is unusual for utilities, and that high valuations on utility shares are not expected to
17 be sustained over the three-to-five year period.²⁷ In order to assess how low interest
18 rates are affecting the dividend yields for utility stocks, I compared the S&P utilities
19 index to the yield on the 30-year Treasury bond since 2007. As shown in Chart 2,

²⁵ *Ibid.*, at 20-21.

²⁶ Prepared Testimony of Staff Finance Panel, at 54.

²⁷ Value Line Investment Survey, Electric Utility (East) Industry, August 19, 2016, at 140.

1 the S&P utilities index has increased steadily as yields on 30-year Treasury bonds
2 have declined in response to accommodative federal monetary policy.

3 **Chart 2: S&P Utilities Index and U.S. Treasury Bond Yields 2007 – 2016**



4

5

6 **Q. HAVE ANY OTHER REGULATORY COMMISSIONS RECOGNIZED THE EFFECT OF**
7 **ANOMALOUS CAPITAL MARKET CONDITIONS ON THE DCF MODEL?**

8 A. Yes. As discussed in my Direct Testimony, both the FERC and the Surface
9 Transportation Board have recognized that anomalous conditions in capital markets
10 have affected the results of the DCF model. In another more recent decision, the
11 FERC found that 10-year Treasury bond yields are evidence of anomalous

1 conditions in capital markets, and that the low interest rate environment is reducing
2 the dividend yield component of the DCF model, stating:

3 As is discussed, *infra*, the level of the dividend yield affects the
4 reliability of the DCF process when that level is lower than the level
5 acceptable to investors that value utility stocks based on their
6 estimated long-term dividend growth. The record creates cause for
7 concern that during a period including the Study Period, investors
8 valuing utility stocks based solely or primarily on their current yield
9 bid the prices of the proxy group stocks up to levels that rendered
10 their Total Returns unacceptable to investors that valued such stocks
11 based on their estimated long-term dividend growth. For reasons set
12 out below, this record evidence creates further cause for concern that
13 placement of the MISO TOs' Base ROE at the Midpoint may not
14 meet the requirements of *Hope*.²⁸

15 The FERC also observed that due to anomalous conditions in capital markets (i.e.,
16 low Treasury bond yields) the midpoint results of the DCF model are not a
17 reasonable estimate of the cost of equity at this time, stating:

18 The yields of 10-year Treasury Bonds during the Study Period
19 continue to reflect economic conditions that could render inputs to
20 the DCF analysis unrepresentative. During the study period, the
21 yields of 10-year Treasury Bonds averaged 2.21 percent. That yield
22 was 38 basis points higher than the average yield of those bonds
23 during the Opinion No. 531 study period, but 79 basis points below
24 the 3.0 percent level that so concerned the Commission in Opinion
25 No. 531. If the average 10-year Treasury-Bond yields for the
26 Opinion No. 531 study period reflected economic conditions that
27 could serve to render financial inputs into the DCF model
28 unrepresentative, the average bond yields for the study period in this
29 proceeding are close enough to the earlier yields to reflect the same
30 conditions. Accordingly, the level of 10-year Treasury Bond yields
31 during the Study Period create sufficient doubt regarding the

²⁸ 155 FERC ¶ 63,030 (June 30, 2016), at para. 128.

1 representativeness of DCF inputs to warrant an examination of
2 alternative metrics prior to making a final determination as to the
3 level of the MISO TOs' Base ROE.²⁹

4 Consequently, the FERC determined that it is necessary to consider the results of
5 other Risk Premium models (such as a forward-looking CAPM analysis and a Bond
6 Yield Plus Risk Premium methodology) and returns in other jurisdictions in order to
7 assess the reasonableness of the DCF results and to determine where to set the
8 appropriate return on equity within the range of results.

9 **Q. HAS THE FERC ISSUED ANY MORE RECENT DECISIONS INDICATING WHETHER**
10 **THEY CONTINUE TO BELIEVE THAT CAPITAL MARKET CONDITIONS ARE**
11 **ANOMALOUS, AND THEREFORE THAT THE DCF MODEL IS CONTINUING TO**
12 **PRODUCE UNRELIABLE RESULTS?**

13 A. Yes. The FERC recently issued Opinion No. 551, in which it reiterated that capital
14 market conditions are anomalous and that the DCF model is producing less than
15 reliable results. Specifically, the September 2016 order states:

16 The record in this proceeding raises the same concerns regarding
17 capital market conditions that the Commission identified in Opinion
18 No. 531. Bond levels remained at historically low levels during the
19 study period. For example, the yield on 10-year U.S. Treasury bonds,
20 which the Commission noted in Opinion No. 531 was below two
21 percent in that case and had not been below three percent since the
22 1950s, was at 2.07 percent during the study period. Also, the yield on
23 short-term U.S. Treasury bonds was historically low, ranging from
24 zero to 0.25 percent. Additionally, we note that, while the Federal
25 Reserve has ended the Quantitative Easing program under which it
26 was purchasing unprecedented levels of U.S. Treasury bonds and
27 mortgage-backed securities, the Federal Reserve continues to hold

²⁹ *Ibid.*, at para. 126.

1 approximately \$4.25 trillion of those bonds, a level only slightly
2 below recent record highs, and is reinvesting the principal payments
3 from those holdings to purchase approximately \$16 billion of
4 mortgage-backed securities per month and rolling over the U.S.
5 Treasury bonds at auction. This record evidence is indicative of the
6 same type of unusual capital market conditions that the Commission
7 found concerning in Opinion No. 531. Parties point out that certain
8 capital market conditions have changed since Opinion No. 531,
9 including the winding down of Quantitative Easing, the slight
10 increase in Treasury bond yields, the lower unemployment rate, and
11 strong stock market performance. Though the Commission noted
12 certain economic conditions in Opinion No. 531, the principal
13 argument was based on low interest rates and bond yields, conditions
14 that persisted throughout the study period. Consequently, we find
15 that capital market conditions are still anomalous as described above,
16 and therefore, we disagree with Iowa Group's assertion that there is
17 not substantial evidence to justify a potential adjustment.³⁰
18

19 The FERC also dismissed concerns among intervenors that the DCF model is
20 reliable because it considers available information and investor expectations, stating:

21 We also disagree with arguments that the DCF methodology fully
22 incorporates available information and investor expectations such
23 that capital can be raised as inexpensively as the DCF results suggest.
24 We find that such an outcome may not be the case due to model risk
25 inherent in the DCF methodology in the presence of unusual market
26 conditions. The finding that the mechanical application of the DCF
27 methodology may produce results inconsistent with Hope and
28 Bluefield in certain circumstances is not inconsistent with the
29 efficient market theory underlying the typical application of the DCF
30 methodology in normal circumstances. Thus, consistent with the
31 rationale explicated in Opinion No. 531, we disagree with Joint
32 Customer Intervenors' assertion that the Presiding Judge erred in
33 questioning the reliability of the DCF methodology in this
34 proceeding based on the sources of information employed by this
35 methodology.³¹
36

³⁰ FERC Opinion No. 551, September 28, 2016, at para. 121.

³¹ *Ibid.*, at para. 132.

1 The FERC ultimately determined that an ROE of 10.32 percent was reasonable for
2 the MISO transmission owners in Opinion No. 551.

3 **Q. WHAT IS YOUR CONCLUSION REGARDING THE EFFECT OF CAPITAL MARKET**
4 **CONDITIONS ON THE AUTHORIZED ROE FOR CORNING GAS?**

5 A. My primary conclusion is that, under current market conditions, the DCF model
6 reflects low dividend yields and high valuations on utility shares which are not
7 considered sustainable in light of investors' expectations for higher interest rates.
8 As demonstrated by the Blue Chip forecasts, investors expect interest rates to
9 increase as the Federal Reserve withdraws the extraordinary level of monetary
10 stimulus that has been provided to the U.S. economy since the Great Recession. As
11 interest rates rise, dividend yields on utility shares become less competitive with
12 higher yields on government and corporate bonds. As discussed above, the FERC
13 was concerned that DCF results reflected anomalous market conditions when yields
14 on 10-year Treasury bonds were at 3.0 percent. In October 2016, 10-year Treasury
15 yields averaged 1.76 percent. As a result, it is necessary to place more emphasis on
16 the results of alternative risk premium based models and returns in other
17 jurisdictions in order to determine where the ROE should be set within a reasonable
18 range of results from the DCF model.

IV. RESPONSE TO STAFF FINANCE PANEL

1 **Q. WHAT IS STAFF'S ROE RECOMMENDATION IN THIS PROCEEDING?**

2 A. Staff recommends an ROE for Corning Gas of 8.2 percent, based on a two-thirds
3 weighting of the DCF model results of 8.07 percent and a one-third weighting of the
4 average CAPM results of 8.43 percent.³²

5 **Q. WHAT ARE THE PRIMARY AREAS OF DISAGREEMENT BETWEEN STAFF AND YOU**
6 **AS IT RELATES TO THE AUTHORIZED COST OF CAPITAL FOR CORNING GAS?**

7 A. The Staff Panel's methodology and analysis, as well as its criticism of my ROE
8 estimation methodologies are primarily based on the principle of consistency with
9 prior Commission methodologies rather than specific criticisms of my methodology.
10 Staff refers multiple times to Commission precedent as the basis for key assumptions
11 in its ROE estimation methodology. The foundation of Staff's criticisms of my
12 methodology is simply that the Commission has not developed the ROE estimation
13 models using the data and methods that I relied on. Staff does not provide any
14 evidence to demonstrate that my assumptions and methods are not those used by
15 investors or are not reasonable. Simply, Staff's position is that my approach is not
16 what was used in the past. While Staff cites to many instances where they have
17 followed "precedent" with respect to the development of assumptions, they fail to
18 acknowledge that there are several instances where the Commission has changed its

³² Prepared Testimony of Staff Finance Panel, at 73-74.

1 approach to be responsive to market conditions. This forms the basis of the
2 disagreement between my ROE estimation approach and Staff's methodology.

3 The specific areas of disagreement are as follows: (1) the weighting of the DCF and
4 CAPM results; (2) the composition of the proxy group and the screening criteria
5 used to develop a risk-comparable group; (3) the application of the DCF model and
6 the reasonableness of the results produced by the DCF model under current market
7 conditions; (4) the application of the CAPM and the reasonableness of making
8 adjustments to the inputs and assumptions used in that model given the current low
9 interest rate environment; (5) the business risks faced by Corning Gas relative to the
10 proxy group; and (6) the appropriate capital structure to be used for ratemaking
11 purposes. The following sections address each of these areas of disagreement.

12 **1. WEIGHTING OF DCF AND CAPM METHODOLOGIES**

13 **Q. WHY DID THE COMMISSION INITIATE THE GFP?**

14 A. As discussed in my Direct Testimony, the GFP was initiated because the
15 Commission recognized that the DCF method was particularly sensitive to interest
16 rate fluctuations and was producing returns far below the returns produced by other
17 methodologies.³³ Contrary to the consensus recommendation of the parties to the
18 GFP for an equal weighting of the DCF and CAPM methodologies³⁴, the RD
19 proposed that a two-third/one-third weighting be applied to the results of the DCF

³³ Case 91-M-0509, Proceeding on Motion of the Commission to Consider Financial and Regulatory Policies for New York State Utilities, Recommended Decision, (issued July 19, 1994) ("Generic Finance RD"), at 2.

³⁴ *Ibid.*, at 26.

1 and CAPM analyses, respectively, with less weight given to CAPM methodology
2 because it had only been used to that point as a check on the DCF model.³⁵

3 **Q. WHAT JUSTIFICATION DOES STAFF PROVIDE FOR ITS DECISION TO CONTINUE**
4 **PLACING TWO-THIRDS WEIGHT ON THE DCF MODEL RESULTS?**

5 A. Staff relies on the GFP and subsequent cases to support the weighting of DCF and
6 CAPM results.³⁶ Staff also asserts that the DCF model is superior to the CAPM
7 because the DCF model has one input of primary controversy (i.e., the growth rate),
8 while the Beta and market risk premium components of the CAPM are “less
9 observable and more dependent on estimations.”³⁷ Staff also asserts that, “The DCF
10 application of fewer subjective inputs relative to the CAPM provides a more stable
11 foundation, thus a lesser chance of error in a ROE calculation”.³⁸ While Staff relies
12 on the GFP to support its decision to place two-thirds weight on the DCF results,
13 Staff fails to acknowledge that the RD in the GFP left open the possibility that the
14 weightings and methodologies could be adjusted if necessary to ensure that the
15 results promote regulatory credibility. During the GFP, Staff’s position was that
16 “reliance on traditional DCF analysis produces reasonable results over time, but that
17 at any specific time it could produce (and in the past has produced) inconsistent

³⁵ *Ibid.*, at 27.

³⁶ Prepared Testimony of Staff Finance Panel, at 43-44.

³⁷ *Ibid.*, at 72-73.

³⁸ *Ibid.*

1 results.”³⁹ Furthermore, at that time, Staff indicated that “DCF-based results are in
2 no way superior to those obtained using other methods, even though the DCF, on
3 average, has been unbiased over time.”⁴⁰

4 **Q. DOES STAFF PROVIDE EXAMPLES OF THE COMMISSION’S THOUGHTS**
5 **REGARDING THE WEIGHTING OF THE DCF AND CAPM RESULTS?**

6 A. Staff testifies that for over 19 years, the Commission has consistently preferred cost
7 of equity determinations based on 2/3 DCF and 1/3 CAPM weightings.⁴¹ In
8 particular, Staff cites Case 08-E-0539 and Case 10-E-0362 as recent support for the
9 Commission’s view on the appropriate weighting of DCF and CAPM results. While
10 I have reviewed each of those decisions, it is important to recognize that the original
11 decision not to afford equal weight to the results of the CAPM was based simply on
12 a lack of experience with the model. That determination was made more than 20
13 years ago.

14 **Q. STAFF ALSO CITES THE DISCUSSION OF THE WEIGHTING OF THE DCF AND**
15 **CAPM RESULTS FROM CASE 06-E-1433. WHAT ARE THE IMPORTANT FACTORS**
16 **TO CONSIDER IN REVIEWING THE COMMISSION’S DECISION IN THAT CASE?**

17 A. First, it is important to note that the Commission’s decision was issued in October
18 2007, before the financial crisis of 2007-2009 and the ensuing Great Recession, as
19 well as the Federal Reserve’s extended involvement in the financial markets that

³⁹ Case 91-M-0509, Proceeding on Motion of the Commission to Consider Financial and Regulatory Policies for New York State Utilities, Recommended Decision, (issued July 19, 1994) (“Generic Finance RD”), at 25.

⁴⁰ *Ibid.*

⁴¹ Prepared Testimony of Staff Finance Panel, at 43.

1 began following those events and continues today. Therefore, the market data used
2 in Case 06-E-1433 to estimate the projected ROE were not influenced by anomalous
3 market conditions such as have been experienced in recent history and that affect the
4 market data used in the ROE estimation methodologies in this proceeding.

5 Second, the Commission notes that it changed its calculation of the market return
6 used in the estimation of the market risk premium in the CAPM. The Commission
7 recognized that the use of historical returns published by Ibbotson were stale and
8 less reliable and therefore began relying on projected returns published by Merrill
9 Lynch. In this same case, the Commission recognized that six-month average stock
10 prices could be “stale.”⁴² Currently, the Commission’s methodology relies on three-
11 month average stock prices. These types of changes demonstrate that the
12 Commission is willing to consider modifications to the ROE estimation
13 methodology to reflect current market conditions.

14 Finally, it is important to note that the Commission decision in Case 06-E-1433 did
15 not state that it would never consider changing the weights on the ROE estimation
16 methodologies. Rather, the Commission’s conclusion at that time, nearly ten years
17 ago, was that it was “not **now** inclined to deviate from our long-held view that the
18 CAPM should not be entitled to more than one-third of the weight.”⁴³ The
19 Commission explicitly left open the possibility that there could be a point in the
20 future when it would be appropriate to consider such a change. Based on the data I

⁴² State of New York Public Service Commission, Case 06-E-1433, at 11.

⁴³ *Ibid.*, at 15. (Emphasis added.)

1 have presented and the viewpoints provided by other regulatory commissions, it is
2 reasonable to conclude that current market conditions now warrant such a change.

3 **Q. WHY DO YOU BELIEVE THAT CURRENT CONDITIONS IN CAPITAL MARKETS**
4 **SUPPORT RECONSIDERATION OF THE WEIGHT PLACED ON THE DCF AND**
5 **CAPM METHODOLOGIES?**

6 A. When the RD was issued in the GFP in 1991, one of the primary concerns identified
7 by the Commission was that the low interest rate environment was causing the DCF
8 model to understate investors' return requirements.⁴⁴ The Commission also noted
9 that there was nothing sacrosanct about the DCF return on equity analysis.⁴⁵ The
10 average daily yield on 30-year Treasury bonds in 1991 was 8.14 percent, whereas the
11 average daily yield on 30-year Treasuries in 2016 through October has been 2.52
12 percent. The extraordinarily low interest rate environment today should do nothing
13 to alleviate the Commission's concerns about how the DCF model is affected by low
14 interest rates. On the contrary, if the interest rate environment in 1991 was
15 sufficient reason for the RD in the GFP to conclude that placing one-third weight
16 on the CAPM results was appropriate, then the current interest rate environment
17 should provide sufficient basis for a conclusion that the weighting of the DCF and
18 CAPM methodologies should be modified in this case.

⁴⁴ 1994 N.Y. PUC Lexis 141, *37.

⁴⁵ *Ibid.*

1 **Q. HAS STAFF PROVIDED ANY ANALYSIS EXPLAINING WHY THIS EXTRAORDINARY**
2 **CHANGE IN INTEREST RATE CONDITIONS DOES NOT SUPPORT A CHANGE IN THE**
3 **DCF WEIGHTING?**

4 A. Staff has provided no record evidence addressing this topic.

5 **Q. HAVE YOU CONDUCTED ANY ANALYSIS REGARDING HOW THE RESULTS OF**
6 **STAFF'S DCF AND CAPM ANALYSES ARE BEING AFFECTED BY CAPITAL MARKET**
7 **CONDITIONS?**

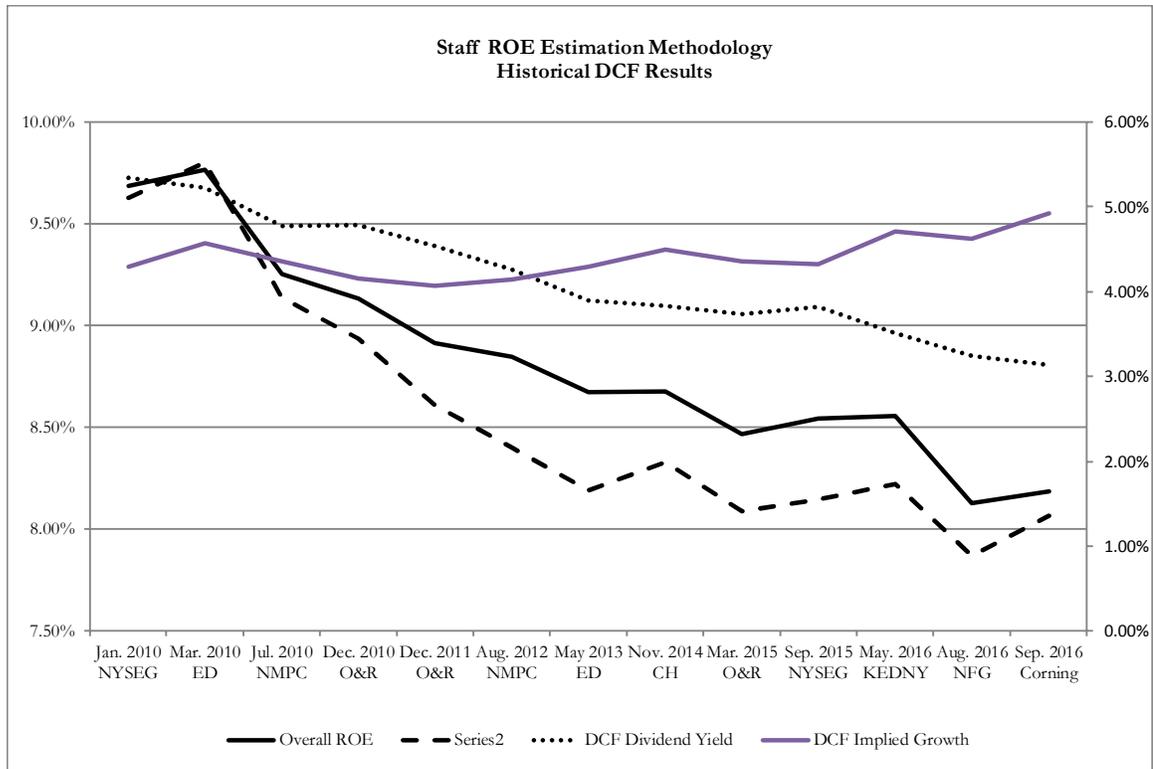
8 A. Yes, I first looked at the results produced by Staff's DCF and CAPM analyses. I
9 then compared those results to the DCF and CAPM results produced by reflecting
10 investor expectations of future market conditions.

11 **Q. WHAT RESULTS HAVE STAFF'S DCF AND CAPM APPROACHES PRODUCED OVER**
12 **RECENT YEARS?**

13 A. I have prepared two charts showing Staff's DCF and CAPM estimates over the
14 period from 2010-2016. As shown in Chart 3, the growth rates in the DCF analysis
15 have increased slightly over this period, while the dividend yields have declined in
16 response to capital market conditions and lower Treasury bond yields. In summary,
17 the lower DCF results are attributable almost entirely to lower dividend yields, which
18 are a function of low government bond yields.

1

Chart 3: Staff DCF Estimate for NY utilities 2010-2016

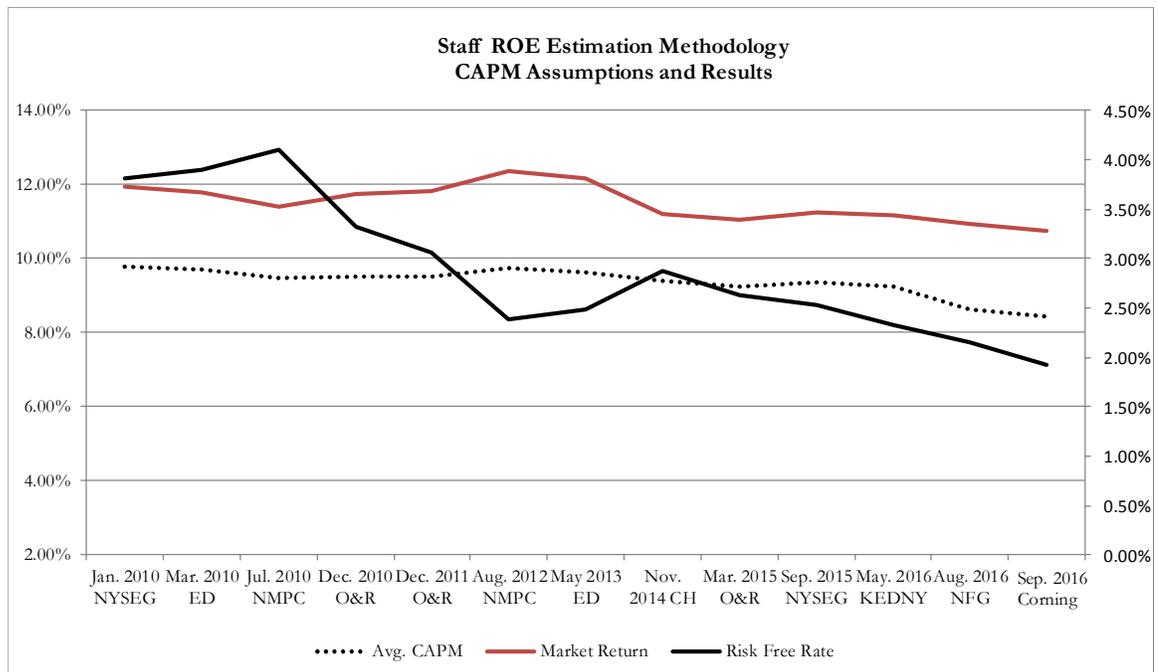


2

3 As shown in Chart 4, the market return used to estimate the market risk premium in
 4 the CAPM method has fallen slightly over this time period, while the risk-free rate
 5 has declined significantly. As with the DCF results, the lower CAPM results are
 6 primarily attributable to the drop in Treasury bond yields.

1

Chart 4: Staff CAPM Estimate for NY utilities 2010-2016



2

3 **Q. CAN THE DCF AND CAPM MODELS BE ADJUSTED TO REFLECT PROJECTED**
4 **MARKET CONDITIONS?**

5 A. It is possible to adjust the CAPM to reflect projected market conditions by also
6 considering projected Treasury bond yields. The analysis shown in Chart 4 above
7 does not rely on projected Treasury bond yields; however, the results of the CAPM
8 presented in my Direct Testimony, and Schedule__(AEB- 7) do provide CAPM
9 results based on near-term and longer-term interest rate projections. The average of
10 the CAPM results presented in that schedule is 10.85 percent, and the increase in the
11 ROE based on the use of projected data is as high as 42 basis points. There is not,
12 however, a comparable method to adjust the DCF analysis to account for current
13 historically low dividend yields that are unsustainable in light of forecasts of higher

1 interest rates. This supports my position that less weight should be afforded the
2 DCF results at this time.

3 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE WEIGHTING OF THE DCF AND**
4 **CAPM METHODOLOGIES?**

5 A. In summary, the GFP was initiated because the Commission recognized that the
6 DCF methodology was particularly sensitive to interest rate fluctuations and was
7 producing returns far below the returns produced by other methodologies. Based on
8 the data presented in Chart 3, I conclude that in current market conditions, the DCF
9 model suffers from the same infirmities. Therefore, it would be appropriate to
10 equally weight the results of the DCF and CAPM models.

11 The Company's proposed ROE of 10.20 percent, which relies on an equal weighting
12 of the results of the DCF and CAPM methodologies, is appropriate and reasonable
13 under the current circumstances. While I understand the desire to employ a
14 consistent process to estimate the return on equity, the *Hope* decision mandates
15 flexibility; "[u]nder the statutory standard of 'just and reasonable,' it is the result
16 reached, not the method employed, which is controlling." Staff's ROE
17 recommendation of 8.20 percent is based on a purely mechanical weighting of the
18 DCF and CAPM results established 25 years ago, does not even attempt to provide
19 an assessment of the "just and reasonable" standard, and is not comparable to
20 returns available to investors in other jurisdictions for companies with comparable
21 risk.

1 As shown in Exhibit ___ (FP-14), Staff's application of the DCF model results in a
2 mean ROE for the proxy group of 8.07 percent, which is:

3 1) 93 basis points below the lowest authorized ROE for a gas distribution
4 company (i.e., 9.00 percent) since January 2014;

5 2) 157 basis points below the mean return for a gas distribution company
6 (i.e., 9.64 percent) over that period; and

7 3) 69 basis points below its Zero-Beta CAPM results of 8.76 percent.

8 In summary, the DCF model is not producing reasonable results as compared to the
9 results of other risk-premium based models, such as the CAPM, and is not
10 producing returns that are consistent with those authorized in other jurisdictions.

11 This provides the Commission with the "good reason" contemplated in the RD of
12 the GFP to consider placing more weight on the results of alternative ROE
13 estimation methodologies.

14 **2. PROXY GROUP COMPOSITION**

15 **Q. WHAT IS YOUR POSITION WITH RESPECT TO THE PROXY GROUP COMPOSITION?**

16 A. The proxy group appropriately consists of companies that are comparable in
17 business and financial risk to Corning Gas. The importance of selecting a proxy
18 group that is similar in overall financial and business risk to the subject company was
19 endorsed by the United States Court of Appeals for the District of Columbia (the
20 "Circuit Court") in the *Petal Gas Storage* decision. The Circuit Court indicated that

1 the goal of a proxy group is to rely on companies with similar risk to the subject
2 company for the determination of the cost of equity:

3 That proxy group arrangements must be risk-appropriate is the
4 common theme in each argument. The principle is well-established.
5 *See Hope Natural Gas Co.*, 320 U.S. at 603 (“[T]he return to the equity
6 owner should be commensurate with returns on investments in other
7 enterprises having corresponding risks.”); *CAPP I*, 254 F.3d at 293
8 (“[A] utility must offer a risk-adjusted expected rate of return
9 sufficient to attract investors.”). The principle captures what proxy
10 groups do, namely, provide market-determined stock and dividend
11 figures from public companies comparable to a target company for
12 which those figures are unavailable. *CAPP I*, 254 F.3d at 293–94.
13 Market determined stock figures reflect a company’s risk level and,
14 when combined with dividend values, permit calculation of the “risk-
15 adjusted expected rate of return sufficient to attract investors.”

16 ***

17 What matters is that the overall proxy group arrangement makes
18 sense in terms of relative risk and, even more importantly, in terms of
19 the statutory command to set “just and reasonable” rates, 15 U.S.C. §
20 717c, that are “commensurate with returns on investments in other
21 enterprises having corresponding risks” and “sufficient to assure
22 confidence in the financial integrity of the enterprise . . . [and]
23 maintain its credit and . . . attract capital,” *Hope Natural Gas Co.*, 320
24 U.S. at 603.⁴⁶

25 Consistent with the Circuit Court’s decision, I have selected a proxy group of
26 companies with comparable investment risk to Corning Gas. In contrast, Staff
27 applied screening criteria that resulted in a larger, less comparable proxy group.

⁴⁶ *Petal Gas Storage v. FERC*, 496 F.3d 695, 699 (D.C. Cir. 2007).

1 **Q. DO YOU AGREE WITH THE STAFF PANEL THAT YOUR PROXY GROUP IS LESS**
2 **COMPARABLE TO CORNING GAS THAN STAFF'S PROXY GROUP CONSISTING OF**
3 **THREE GAS DISTRIBUTION COMPANIES AND 27 ELECTRIC UTILITIES?**

4 A. No, I do not. While my CUPG also includes both gas distribution companies and
5 electric utilities, the business and operating risks for gas distributors and electric
6 utilities are different. In my view, investors would give more weight to market data
7 for companies in the gas distribution industry and less weight to electric utilities.
8 Electric utilities and combination electric and gas utilities account for approximately
9 90 percent of Staff's ROE estimate, while gas distribution companies account for
10 only 10 percent.

11 **Q. HOW DO THE AUTHORIZED ROES FOR YOUR PROXY GROUP COMPARE WITH**
12 **STAFF'S PROPOSED ROE?**

13 A. The average authorized ROE of my CUPG is 9.88 percent, or 168 basis points
14 higher than Staff's proposed ROE. The range of authorized ROEs for the A- rated
15 proxy companies is 9.21 percent to 10.40 percent, with a mean of 9.89 percent. This
16 range is 101 to 220 basis points above Staff's proposed ROE.⁴⁷

⁴⁷ The average credit rating of the NGPG is A, and the average ROE of this group is 9.65 percent.

1 **Q. DO YOU AGREE THAT STAFF’S SCREEN BASED ON PERCENTAGE OF REGULATED**
2 **REVENUE RESULTS IN A MORE COMPARABLE PROXY GROUP THAN YOUR SCREEN**
3 **BASED ON PERCENTAGE OF OPERATING INCOME?**

4 A. No, I do not. Staff asserts that my “application of operating income (earnings)
5 instead of regulated revenue for establishing the proxy group may allow companies
6 into the group that contain substantially greater risk than a typical regulated utility.”⁴⁸
7 In addition, Staff asserts that, “[u]sing 70% of operating income criteria could
8 introduce companies into the proxy group that are simply not suitable due to their
9 higher inherent risk profile.”⁴⁹

10 As explained in my Direct Testimony, I relied on the percentage of net operating
11 income derived from regulated operations instead of the percentage of total revenue
12 derived from regulated operations because net operating income is more
13 representative of the contribution of that business segment to earnings and cash flow
14 (the measures that matters most to investors), as well as the corporation’s overall
15 financial position.⁵⁰ Furthermore, relying on a revenue screen does not provide a
16 clear or necessarily consistent indicator of the contribution of regulated utility
17 operations to a company’s earnings because revenue includes the underlying cost of
18 gas, which is fully passed through to customers. Since fuel costs are the single largest
19 cost, the price of fuel can dramatically influence the overall revenue of a company

⁴⁸ Prepared Testimony of Staff Finance Panel, at 79-80.

⁴⁹ *Ibid.*, at 80.

⁵⁰ Direct Testimony of Ann E. Bulkley, at 27-28.

1 without having any effect on the profitability of the business segment.

2 **Q. STAFF CONTENDS THAT BOTH OF YOUR PROXY GROUPS HAVE SIGNIFICANTLY**
3 **HIGHER BUSINESS RISK THAN THOSE OF STAFF’S PROXY GROUP.⁵¹ WHAT IS YOUR**
4 **RESPONSE?**

5 A. I disagree with Staff’s assertion. As shown in Exhibits___(AEB-R-1) and (AEB-R-
6 2), the average S&P credit ratings for the companies in my NGPG and CUPG are A
7 and A-, respectively, which is one and two notches higher than the average credit
8 rating of Staff’s proxy group of BBB+.⁵² Credit ratings are an important measure of
9 investment risk that consider both the business and financial risk of the company.
10 As such, I conclude that my proxy groups have lower investment risk than Staff’s
11 proxy group.

12 I also compared the S&P business risk ranking for my CUPG to the business risk
13 ranking for Staff’s proxy group. As shown in Exhibit___(AEB-R-8), the average
14 business risk ranking for the companies in my CUPG was “Excellent”, as was the
15 average business risk ranking for Staff’s proxy group. However, as also shown in
16 that schedule, Corning Gas has a business risk ranking of “Satisfactory,” which is
17 two notches lower than the “Excellent” ranking for both my CUPG and Staff’s
18 proxy group. On that basis, I conclude that Corning Gas has higher business risk
19 than the companies in either the Staff Panel’s proxy group or my CUPG.

⁵¹ Prepared Testimony of Staff Finance Panel, at 81.

⁵² See Staff Finance Panel work papers for credit ratings of 27 Electric Utilities and 3 Natural Gas Utilities in Staff’s proxy group.

1 **Q. DO YOU HAVE ANY OTHER COMMENTS REGARDING STAFF'S PROXY GROUP?**

2 A. Yes. One of Staff's screening criterion excludes companies that are engaged in
3 merger and acquisition activity. However, Staff has included Hawaiian Electric
4 Industries ("HEI") in its proxy group, even though HEI did not terminate its merger
5 agreement with NextEra Energy ("NEE") until early July 2016. In addition, Staff
6 also did not exclude NEE from its proxy group based on the merger screen, even
7 though NEE was involved in mergers with both HEI and Oncor Electric Delivery
8 during the July to September 2016 period used by Staff. NEE was ultimately
9 excluded on the basis of percentage of regulated revenue.

10 Additionally, Staff states: "The majority of gas utility companies were eliminated due
11 to below (non-investment) grade credit ratings by Moody's and or S&P."⁵³ Staff
12 describes its credit rating screen as follows: "currently have an investment grade
13 credit rating from Moody's and S&P."⁵⁴ It is not accurate to state that gas
14 distribution companies were excluded from the proxy group because they did not
15 have investment grade credit ratings. Rather, the three gas companies that Staff
16 excluded on this basis do not have investment grade ratings from both Moody's and
17 S&P. In the case of NiSource, the company has a split rating, meaning that S&P
18 rates NiSource as investment grade, while Moody's rate them below investment
19 grade. The other two companies both have investment grade ratings from either
20 S&P or Moody's and should not be excluded on that basis. Although these errors

⁵³ *Ibid.*, at 50.

⁵⁴ *Ibid.*

1 and omissions do not have a material effect on the results of Staff's DCF and CAPM
2 analyses, they demonstrate that Staff has not taken proper care in implementing its
3 own stated screening criteria for the proxy group.

4 **3. APPLICATION OF THE DCF MODEL**

5 **Q. PLEASE SUMMARIZE THE STAFF PANEL'S APPLICATION OF THE DCF MODEL.**

6 A. Staff uses a two-stage DCF model that forecasts dividends from 2016 to 2020 using
7 Value Line's estimates of projected dividends in that period, and a "sustainable
8 growth rate" from 2021 forward. Using the DCF methodology, Staff calculates a
9 median ROE for its proxy group of 7.76 percent and a mean ROE of 8.10 percent.⁵⁵
10 Staff notes that "[t]here have been several significant disruptions in the market
11 recently that we believe have affected Staff's ROE model results."⁵⁶ On that basis,
12 Staff has adjusted its methodology to rely on the mean DCF results rather than the
13 median DCF results because "very recently it appears to us that using the median is
14 suppressing the ROE below what the 'average' or 'typical' investor in the proxy
15 group would require at this time."⁵⁷ Staff continues to apply a 2/3 weight to the
16 DCF model results in deriving its overall ROE recommendation.

⁵⁵ *Ibid.*, at 53.

⁵⁶ *Ibid.*, at 54.

⁵⁷ *Ibid.*, at 55.

1 **Q. BEFORE DISCUSSING YOUR POINTS OF DISAGREEMENT WITH STAFF'S DCF**
2 **METHODOLOGY, DO YOU HAVE ANY PRELIMINARY COMMENTS ON THE**
3 **REASONABLENESS OF STAFF'S DCF RESULTS?**

4 A. Yes, Staff acknowledges that the dividend yields for its proxy group are low based on
5 anomalous market conditions. This is the driver for the low DCF results. Changing
6 the measure of central tendency from the median to the average of a range of results
7 that Staff recognizes is artificially low due to market conditions does not address the
8 fundamental concern that the DCF model is not producing reliable results. The
9 unrealistically low median result of the DCF model should have been a signal that it
10 was necessary to review the ROE estimation methodologies that Staff relies on to
11 establish its recommended ROE. In response to CNG/DPS-065, the Staff
12 recognizes that a given utility's ROE should reflect the actual return requirements of
13 its investors for the period that rates are being in set. The Staff notes that simply
14 because the attributes of New York regulation may be average does not imply that
15 New York's ROEs should be average. Furthermore, in response to CNG/DPS-051,
16 Staff acknowledges that their recommended ROE is below the national average.
17 Despite these acknowledgements, Staff simply relies on the mean results of the
18 proxy group for Corning Gas, which is inconsistent with several of Staff's
19 acknowledgements that Corning Gas faces significantly different financing risks than
20 the proxy group.
21 Furthermore, Staff's mean and median DCF results are well below the average

1 authorized ROE for gas distribution companies since 2014 of 9.64 percent. As
2 shown on page 2 of Exhibit____(FP-14), Staff's individual company DCF results
3 range from 6.51 percent to 11.89 percent. These returns are not reasonable for a
4 typical natural gas or electric utility and are even less appropriate for a utility of the
5 size and risk profile of Corning Gas.

6
7 **Q. WHAT ARE THE DIFFERENCES BETWEEN YOUR APPLICATION OF THE DCF**
8 **MODEL AND STAFF'S APPROACH?**

9 A. The most significant difference between my application of the DCF model and
10 Staff's approach is the growth rates we use in our respective analyses. I have used a
11 consensus of analysts' EPS growth rates for the proxy group companies as the near-
12 term growth rate, and an estimate of growth in the overall economy for the long-
13 term growth rate. This mitigates the uncertainty associated with forecasting
14 individual companies' growth rates over very long time horizons. By contrast, Staff
15 uses more limited dividend growth projections from a single source (*i.e.*, Value Line)
16 for the near-term growth rate, and a "sustainable growth rate" for the long-term
17 growth rate.

1 **Q. DO YOU AGREE WITH STAFF’S PREFERENCE FOR DIVIDEND GROWTH RATES**
2 **RATHER THAN EARNINGS GROWTH RATES AS THE NEAR-TERM GROWTH RATE IN**
3 **THE DCF ANALYSIS?**

4 A. No, I do not. As discussed in my Direct Testimony, dividend growth is
5 fundamentally driven by earnings growth.⁵⁸ While the model is, indeed, called the
6 “Discounted Cash Flow” model, the cash flows it refers to are those an investor can
7 expect to receive during the time they own the stock. Those cash flows are quarterly
8 dividend payments plus any capital appreciation that occurs between the time when
9 the stock is purchased and when it is sold. Dividend payments and capital
10 appreciation are both a function of earnings per share (“EPS”), which is ultimately
11 what determines the return on equity to the investor. As discussed in my Direct
12 Testimony, dividends are based on management decisions related to cash
13 management and other factors, and therefore dividend growth rates are less likely to
14 accurately reflect investors’ growth expectations than earnings growth rates.⁵⁹
15 I have relied on earnings growth because earnings are the fundamental determinant
16 of a company’s ability to pay dividends. As noted by Brigham and Houston:

17 Growth in dividends occurs primarily as a result of growth in
18 earnings per share (EPS). Earnings growth, in turn, results from a
19 number of factors, including (1) inflation, (2) the amount of earnings

⁵⁸ Direct Testimony of Ann E. Bulkley, at 48-49.

⁵⁹ *Ibid.*

1 the company retains and invests, and (3) the rate of return the
2 company earns on its equity (ROE).⁶⁰

3 **Q. STAFF CONTENDS THAT IT IS “HIGHLY UNLIKELY THAT INVESTORS WOULD**
4 **RELY EXCLUSIVELY ON THE EARNINGS PER SHARE GROWTH RATE FORECASTS OF**
5 **WALL STREET ANALYSTS IN DETERMINING SHORT-TERM DIVIDEND**
6 **PROJECTIONS.”⁶¹ WHAT IS YOUR RESPONSE?**

7 A. Investment analysts predominantly report EPS growth projections. In a survey
8 completed by 297 members of the Association for Investment Management and
9 Research, the majority of respondents ranked earnings as the most important
10 variable in valuing a security (more important than cash flow, dividends, or book
11 value).⁶² Academic research also supports the use of EPS growth estimates. A 2002
12 study in the *Journal of Accounting Research* examined “the valuation performance of a
13 comprehensive list of value drivers” and found that “forward earnings explain stock
14 prices remarkably well” and were generally superior to other value drivers analyzed.⁶³
15 A 2012 study from the journal *Contemporary Accounting Research* found that sell-side
16 analysts with the most accurate stock price targets were those whom the researchers
17 found to have more accurate earnings forecasts.⁶⁴

⁶⁰ Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, at 317 (Concise Fourth Edition, Thomson South-Western, 2004).

⁶¹ Prepared Testimony of Staff Finance Panel, at 86.

⁶² Block, Stanley B., “A Study of Financial Analysts: Practice and Theory”, *Financial Analysts Journal* (July/August 1999).

⁶³ Liu, Jing, et al., “Equity Valuation Using Multiples,” *Journal of Accounting Research*, Vol. 40 No. 1, March 2002.

⁶⁴ Gleason, C.A., et al., “Valuation Model Use and the Price Target Performance of Sell-Side Equity Analysts,” *Contemporary Accounting Research*.

1 **Q. WHAT IS YOUR RESPONSE TO STAFF’S CONCERN THAT EPS GROWTH RATES DO**
2 **NOT TAKE INTO CONSIDERATION THE IMPACT OF DIVIDEND PAYOUT POLICIES**
3 **ON FUTURE GROWTH RATES?**⁶⁵

4 A. Staff’s position ignores one of the basic underlying assumptions of the DCF model
5 (i.e., a stable dividend payout ratio). In response to Request No. CNG/DPS-3, Staff
6 acknowledges that, “In the short-term, there can be variations in the growth rates of
7 earnings, dividends and book value but over the long-term they are assumed to grow
8 at the same rate in perpetuity. While the Multi-Stage DCF model assumes that the
9 growth rates change in each stage of the analysis, within each stage of the model the
10 requirements of the Constant Growth form of the DCF model continue to apply,
11 including a stable dividend payout ratio. To assume otherwise would require an
12 individual forecast of growth rates in each year of the analysis, which would be
13 inconsistent with both regulatory and investment community practice.

14 Furthermore, Staff has provided no evidence that the dividend payout ratios for the
15 companies in its proxy group or my CUPG or NGPG are out of line with historical
16 averages. In fact, as shown in Exhibit__(FP-14), page 2 of 2, the average and
17 median dividend payout ratios (calculated as 1 – the retention ratio) for the
18 companies in Staff’s proxy group are approximately 61 percent, which is generally
19 consistent with the long-term historical average for regulated electric and gas utilities.

20 Therefore, I see no basis for Staff’s concern regarding the use of earnings growth

⁶⁵ Prepared Testimony of Staff Finance Panel, at 85.

1 rates.

2 **Q. ACCORDING TO STAFF, THE VALUE LINE GROWTH RATES DO NOT REPRESENT**
3 **THE VIEWS OF A SINGLE ANALYST BECAUSE EACH REPORT IS REVIEWED BY**
4 **MULTIPLE ANALYSTS BEFORE THEY ARE POSTED.⁶⁶ WHAT IS YOUR RESPONSE?**

5 A. I do not agree that the Value Line quality control process is equivalent to a
6 consensus earnings growth rate forecast from sources such as Zacks or Thomson
7 First Call. Staff provides a letter from Value Line describing the development of its
8 growth projections, as Exhibit ___(FP-21). Value Line states that each company it
9 covers is assigned to a lead analyst who is responsible for building the coverage
10 model for that company. Specifically, the letter states, “[e]ach stock in The Value
11 Line Investment Survey is assigned to a specific analyst.”⁶⁷ The letter goes on to
12 report the quality control procedures applied to the analyst’s report. Nowhere in the
13 letter, titled “Quality Control Procedures,” does Value Line describe a process
14 whereby multiple independent evaluations are performed and then averaged together
15 to form a consensus view. Furthermore, it is my understanding that unlike other
16 analysts, Value Line analysts do not actively participate in earnings calls or maintain
17 an ongoing dialogue with company management. Therefore, it is possible that Value
18 Line does not have the same in-depth understanding that other analysts include in
19 consensus estimates, and that the Value Line analysts may not cover each of the
20 companies in the same depth as other industry analysts.

⁶⁶ *Ibid.*, at 88-89.

⁶⁷ Exhibit ___ (FP-21).

1 While I agree that Value Line is a trusted source for investment professionals, it is
2 not the only source that investors rely on. There are additional data sources readily
3 available that compile the consensus viewpoints of multiple brokerage analysts; it is
4 reasonable to expect that investors also consider that information. In fact, studies
5 have compared Value Line and I/B/E/S analyst earnings forecasts in terms of
6 accuracy, rationality and as proxies for market expectations. In 2001, a study
7 concluded that “I/B/E/S forecasts were superior, as explained by the combination
8 of I/B/E/S’s timing advantage and the mitigation of idiosyncratic error through
9 consensus building.”⁶⁸ Furthermore, the I/B/E/S long-term forecasts were less
10 biased and more accurate.⁶⁹

11 **Q. PLEASE SUMMARIZE YOUR CONCERNS WITH STAFF’S SUSTAINABLE GROWTH**
12 **RATE AS THE LONG-TERM GROWTH RATE IN THE MULTI-STAGE DCF MODEL.**

13 A. I have two main concerns with Staff’s sustainable growth rate. First, while Staff
14 asserts that its calculation of the sustainable growth rate represents a measure of
15 long-term growth for the period 2021 and beyond⁷⁰, the inputs to its calculation are,
16 for the most part, shorter-term estimates for the period 2020 and earlier. For
17 example, the “b * r” component of Staff’s sustainable growth rate is derived from
18 Value Line forecasts that only extend through 2020. Therefore, Staff’s long-term
19 growth rate estimate reflects, at best, one analyst’s forecast of only the very early

⁶⁸ Ramnath, Sundaresh, Rock, Steven, Shane, Philip, “Value Line and I/B/E/S Earnings Forecasts, November 8, 2001, at 1.

⁶⁹ *Ibid.*

⁷⁰ Prepared Testimony of Staff Finance Panel, at 60.

1 years of the second stage of Staff's DCF model, which theoretically extends into
2 perpetuity. In contrast, my estimate of long-term GDP growth reflects inflation
3 projections through 2040 and considers overall measures of economic growth.⁷¹

4 Second, Staff's sustainable growth rate relies on Value Line's estimate of each proxy
5 company's ROE.⁷² This introduces an element of circularity into Staff's calculation.

6 In addition, as shown on Exhibit __ (FP-14), the mean and median ROE assumed in
7 Staff's calculation in 2020 are 10.74 percent and 10.10 percent, respectively. The
8 range presented by the mean and median ROE used to calculate Staff's sustainable
9 growth rate is higher than the range of ROEs established in my analysis for my proxy
10 group companies (*i.e.*, 9.70 percent to 10.24 percent).⁷³ It cannot be reconciled,
11 however, with Staff's recommended ROE of 8.20 percent, and especially with its
12 8.07 percent mean DCF result.

13 **Q. HAS ANY OTHER REGULATORY COMMISSION RECENTLY ABANDONED THE USE**
14 **OF THE SUSTAINABLE GROWTH RATE IN THE DCF MODEL?**

15 A. Yes. In Opinion No. 531, the FERC changed its approach on the DCF
16 methodology to be applied in public utility rate cases.⁷⁴ In summary, the FERC
17 adopted the same two-step DCF methodology it has employed in gas and oil pipeline
18 rate proceedings since the mid-1990s, in place of the one-step methodology
19 previously used. The FERC's two-stage DCF approach does not rely on a retention

⁷¹ Direct Testimony of Ann E. Bulkley, at 52-53.

⁷² The "r" in the "b * r" component of the growth rate is the expected ROE

⁷³ Direct Testimony of Ann E. Bulkley, at 68.

⁷⁴ Opinion No. 531 147 FERC ¶ 61,234 (June 19, 2014).

1 growth calculation, and instead incorporates a long-term growth projection equal to
2 GDP. The FERC justified its change on several grounds, but as is relevant in this
3 proceeding, it determined that both a short-term and long-term growth rate should
4 be incorporated into the DCF calculation. The FERC explained that its previous
5 approach for electric utilities, using a single-stage DCF model, based on a short-term
6 retention growth rate, was established at a time when electric utilities were just
7 beginning the process of restructuring, and that in the Commission’s view investors
8 would place limited weight on long-term growth projections. However, in revisiting
9 its approach for electric utilities, the FERC found that there is no longer reason to
10 distinguish between gas pipelines and electric utilities in its DCF methodologies, and
11 it has chosen to align its approach.

12 **Q. DID THE FERC SPECIFICALLY ADDRESS THE RELEVANCE OF A SUSTAINABLE**
13 **GROWTH RATE SIMILAR TO STAFF’S?**

14 A. Yes. When intervenors challenged the use of analyst earnings growth rates as the
15 short term growth rate as opposed to a retention growth rate, the FERC rejected that
16 argument, stating:

17 We also reject Petitioners’ argument that the Commission should
18 have used the “br+sv” growth rate as the short-term growth rate
19 in the two-step DCF methodology. While the “br+sv” growth
20 formula relies on short-term Value Line projections of five years
21 or less for the various inputs to the formula, it seeks to estimate
22 a company’s “sustainable growth rate.”

23 For that reason, although the Commission has stated that the
24 formula “only produces a projection of short-term growth,
25 similar to the IBES projections,” the Commission finds the

1 formula unreasonable for use as the short-term growth
2 projection in the two-step DCF methodology. By seeking to
3 estimate a “sustainable growth rate,” the “br+sv” growth
4 formula also contains some elements of a long-term growth
5 projection, in addition to a short-term growth projection, and
6 thus is inappropriate for use as a purely short-term growth
7 projection in a two-step DCF methodology.

8 The Commission adopted the two-step DCF methodology
9 because, among other reasons, its incorporation of a long-term
10 growth projection in the cost of equity calculation would have the
11 effect of ascribing sustainable long-term growth to all members of
12 a proxy group. Thus, the Commission’s adoption of the two-step
13 DCF methodology accomplishes what the use of the “br+sv”
14 formula was intended to accomplish.⁷⁵
15

16 **Q. HOW DO YOU RESPOND TO STAFF’S OPPOSITION TO YOUR RELIANCE ON**
17 **HISTORICAL AVERAGES OF REAL GDP GROWTH TO APPROXIMATE FUTURE**
18 **ECONOMIC ACTIVITY?**

19 A. I disagree with Staff that historical averages “are poor indicators of future economic
20 activity.”⁷⁶ As discussed in my Direct Testimony, based on current and recent
21 market conditions, the use of historical real GDP growth is more appropriate than
22 using a current projection of real GDP growth.⁷⁷

23 Furthermore, economists have reviewed historical growth patterns related to severe
24 financial crises and have concluded that estimates of GDP growth have generally
25 been understated in the decade following severe financial crises. Specifically, the
26 financial crisis and recession that began in 2007 were qualitatively different from

⁷⁵ Opinion No. 531-B, 147 FERC ¶ 61,234 Order on Rehearing (March 3, 2015), at para.77.

⁷⁶ Prepared Testimony of Staff Finance Panel, at 91.

⁷⁷ Direct Testimony of Ann E. Bulkley, at 54-56.

1 most other U.S. economic downturns, which were followed by a rapid return to pre-
2 recession overall output growth levels. In that regard, the current U.S. economic
3 growth situation is similar to that following the two most severe economic events in
4 U.S. history (i.e., the 1929 stock market crash and the 1973 oil shock). Economists
5 who have examined the repercussions of those two historical crises (and similar
6 severe financial crises in other countries) have found that GDP growth rates tended
7 to be lower during the decade following such events.⁷⁸ Therefore, it would not be
8 appropriate to assume that current projections of GDP growth are representative of
9 long-term GDP growth starting in 2027 and continuing for the next 200 years.

10 **Q. HAVE YOU PERFORMED AN ANALYSIS OF HISTORICAL GDP GROWTH RATES?**

11 A. Yes. I compared the average real GDP growth in the first ten years following the
12 two historical economic crises most comparable to the recent financial crisis (i.e., the
13 1929 stock market crash and the 1973 oil shock) to the average real GDP growth in
14 the next two decades following each crisis (i.e., eleven to 30 years after the events). I
15 did the same for each of the twentieth-century U.S. recessions for which sufficient
16 data are available. My findings are presented in Table 2.

⁷⁸ See, Reinhart, Carmen M. and Vincent R. Reinhart, “After the Fall,” NBER Working Paper 16334, September 2010, in Federal Reserve Bank of Kansas City Economic Policy Symposium Volume, *Macroeconomic Challenges: The Decade Ahead* at Jackson Hole, Wyoming, on August 26-28, 2010, at 2.

1 Table 2: Real GDP Growth Rates Following U.S. Economic Downturns⁷⁹

Event	Compound Average Real GDP Growth Rate		
	Decade Following Crisis	Next Two Decades	Difference (Basis Points)
Major Economic Crises			
1929 Stock Market Crash	2.06%	4.72%	266
1973 Oil Shock	2.55%	3.39%	83
Other Recessions			
1937	6.68%	4.15%	-253
1945	3.77%	3.59%	-18
1948	3.79%	3.95%	16
1953	3.60%	3.23%	-37
1957	4.84%	3.13%	-170
1960	4.41%	3.28%	-112
1969	3.57%	3.01%	-56
1980	3.32%	2.45%	-88
1981	3.52%	2.62%	-90

2

3 Table 2 shows that real GDP growth in the first ten years following the 1929 stock

4 market crash and the 1973 oil shock was substantially lower than real GDP growth

5 in the next two decades following each event. In contrast, eight out of the nine

6 other twentieth century U.S. economic downturns analyzed showed the opposite

7 pattern. In light of the academic research cited above and the findings presented in

8 Table 2, it is reasonable to believe that current projections of real GDP growth are

9 under-stated because they are based on recent trends. For that reason, the most

⁷⁹ Real GDP data are from the U.S. Bureau of Economic Analysis. The years in which each recession started are from the National Bureau of Economic Research (“NBER”), “US Business Cycle Expansions and Contractions,” available at <http://www.nber.org/cycles.html>. Note that this table excludes the three most recent recessions, which started in 1990, 2001, and 2007 owing to a lack of sufficient data for GDP growth in the following years to calculate comparable long-term GDP growth rates.

1 reasonable way to forecast long-term GDP growth is to assume a return to long-
2 term historical rates of real GDP growth and to estimate long-term nominal GDP
3 growth based on market-based, long-term inflation estimates.

4 **Q. DESPITE STAFF'S CONCERN WITH YOUR USE OF HISTORICAL REAL GDP**
5 **GROWTH, HAS STAFF ALSO RELIED ON HISTORICAL DATA?**

6 A. Yes. Staff relies on Value Line Betas in the CAPM analysis that use a five-year
7 historical estimate to establish that relationship. Staff also relies on historical average
8 interest rates on 10-year and 30-year Treasury bonds as the risk-free rate in its CAPM
9 analysis, rather than considering projected Treasury bond yields.

10 **Q. WHAT DO YOU CONCLUDE ABOUT THE RESULTS OF THE DCF MODELS UNDER**
11 **CURRENT MARKET CONDITIONS?**

12 A. As explained in my Direct Testimony, the DCF models are not producing reasonable
13 results under current market conditions as a result of low dividend yields and high
14 stock valuations.⁸⁰ Chart 3 demonstrates that low dividend yields and high
15 valuations on utility shares could result in an underestimation of the cost of equity
16 using the DCF model, especially if those low dividend yields and high valuations are
17 not sustainable in the future as reported by Value Line. For these reasons, I believe
18 it is appropriate to afford greater weight to the results of other ROE estimation
19 methodologies, such as the CAPM, which can be adjusted to reflect investors'

⁸⁰ Direct Testimony of Ann E. Bulkley, at 33-37.

1 expectations of interest rates and therefore provides a better indicator of investors'
2 expected return.

3 **Q. HAVE REGULATORS IN OTHER JURISDICTIONS MADE ADJUSTMENTS TO**
4 **EXCLUDE LOW AND HIGH OUTLIERS FROM THE RESULTS OF THE DCF MODEL?**

5 A. Yes. For example, in a 2014 decision involving Connecticut Light & Power, the
6 Public Utility Regulatory Authority (“PURA”) in Connecticut acknowledged that
7 market conditions resulted in some very low DCF results and, therefore, increased
8 the lower threshold to 375 basis points above the cost of debt, stating:

9 In the case of the electric industry, the Authority implements more
10 stringent screening criteria as there is a large universe of publicly
11 traded electric utilities. In addition to the initial proxy group
12 screening criteria discussed above, the Authority set an acceptance
13 criterion relative to the individual DCF results. With the changing
14 market conditions, the Authority finds the screening mechanism for
15 implausibly high and low DCF results to be beneficial. Regarding the
16 low side threshold, the Authority finds as reasonable, the concept
17 that equity is more risky than debt. Traditionally, the Authority’s
18 method has been to add 100 basis points to the average Mergent
19 Public Utility Bond yield as its low end to screen individual DCF
20 estimates. The cost of debt benchmark consists of the most current
21 effective cost of long-term debt rate for each Authority Peer Group
22 company using the latest Mergent Bond Guide as the source for the
23 corporate bond yield averages. With the continuous decline in
24 interest rates combined with the decrease in stock prices and growth
25 rates, the Authority observed the individual DCF estimates also have
26 fallen.

27 The latest Mergent Bond Record, August 2014 edition indicates that
28 over the time period this rate proceeding commenced, the average Aa
29 Public Utility Bond yield ranged from 4.23% to 4.07%. Applying the
30 concept that equity is more risky than debt, the Authority finds it

1 reasonable to increase the minimum basis point threshold above the
2 cost of debt from 100 basis points to 375 basis points.⁸¹

3 As shown in Exhibit ___(AEB-R-3), if the Commission were to apply the
4 Connecticut PURA thresholds for low and high outliers (i.e., 375 basis points and
5 750 basis points above the Moody's Baa utility cost of debt) to the Staff Panel's DCF
6 analysis, the mean DCF result would increase from 8.07 percent to 9.39 percent.

7 **Q. USING THE FERC'S METHODOLOGY FOR SELECTING THE APPROPRIATE COST**
8 **OF EQUITY FROM THE RANGE OF DCF RESULTS, AS ADOPTED IN OPINION NO.**
9 **531, WHAT WOULD BE THE DCF ESTIMATE USING STAFF'S PROXY GROUP?**

10 A. Given the anomalous conditions in capital markets that are causing concern with the
11 results produced by the DCF model, the FERC has determined that the reasonable
12 cost of equity is the midpoint between the midpoint and high DCF results for the
13 proxy group. The Staff Panel indicates that the range of results using Staff's DCF
14 methodology and proxy group is 6.51 percent to 11.89 percent.⁸² The midpoint of
15 that range of results is 9.20 percent. Applying the FERC's methodology in Opinion
16 No. 531 to the range of results produced by Staff's DCF analysis, the midpoint
17 between the midpoint and high DCF results is 10.55 percent, which is 248 basis
18 points higher than Staff's DCF model result and 235 basis points higher than Staff's
19 recommendation.

⁸¹ The State of Connecticut Public Utilities Regulation Authority Decision, Docket No. 14-05-06 Application of the Connecticut Light and Power Company to Amend Rate Schedules, December 17, 2014, p. 129.

⁸² Prepared Testimony of Staff Finance Panel, at 53.

1 **4. APPLICATION OF THE CAPM**

2 **Q. PLEASE SUMMARIZE STAFF'S CAPM ANALYSES.**

3 A. Staff's CAPM analyses are based on its estimate of the risk-free rate of 1.92 percent
4 using a recent three-month average of 10-year and 30-year Treasury bond yields. For
5 the Beta estimate, Staff uses the median Value Line Beta for its proxy group of 0.70.
6 To estimate the market risk premium, Staff subtracts the risk-free rate estimate from
7 an average of the forecast returns for the S&P 500 from Merrill Lynch's July, August
8 and September 2016 Quantitative Profiles. Staff also develops a Zero-Beta CAPM
9 using similar inputs as the traditional CAPM analysis, but using a market risk
10 premium based on weighting the Beta times the market risk premium by 0.75 and
11 the market risk premium itself by 0.25. Staff's analyses produce ROE estimates of
12 8.10 percent (CAPM) and 8.76 percent (Zero Beta CAPM). Staff relies on the
13 average of these two CAPM analyses of 8.43 percent and weights that result by one-
14 third in the formulation of its overall ROE recommendation.

15 **Q. PLEASE COMMENT ON THE REASONABLENESS OF STAFF'S CAPM RESULTS.**

16 A. Staff's CAPM results are well below comparable returns available to equity investors
17 for gas distribution companies with commensurate risk. Since 2014, the average
18 authorized ROE for gas distributors has been 9.64 percent. Furthermore, Staff's
19 CAPM result of 8.10 percent has never been observed as an authorized ROE for a
20 gas distribution company in at least the past 25 years.

1 **Q. WHAT ARE THE PRIMARY DIFFERENCES BETWEEN YOUR APPLICATION OF THE**
2 **CAPM AND STAFF'S APPLICATION OF THIS MODEL?**

3 A. Because the estimation of the ROE is a forward-looking concept, and the ROE that
4 is authorized in this case will be in effect for some period in the future, my analysis
5 appropriately considers both the recent historical risk-free rate and the projected
6 risk-free rate. In addition, I estimate the market risk premium based on the
7 difference between the return on large company stocks, as measured by the S&P 500
8 and the yield on 30-year Treasury bonds. This approach is consistent with the
9 methodology recently approved by the FERC in Opinion Nos. 531 and 531-B.

10 **Q. STAFF CHALLENGES YOUR REASONING FOR USING 30-YEAR TREASURY BOND**
11 **YIELDS RATHER THAN THE AVERAGE OF 10-YEAR AND 30-YEAR TREASURY BOND**
12 **YIELDS. WHAT IS YOUR RESPONSE?**

13 A. Staff's rationale for relying on 10-year and 30-year Treasury bond yields in its CAPM
14 analysis is that it is consistent with the approach the Commission has relied on in
15 prior cases, and the use of these securities reflects the expectations of utility investors
16 who have "both intermediate and long-term investment horizons."⁸³ I disagree with
17 Staff's rationale and note that Staff did not address evidence that was introduced on
18 this topic in my Direct Testimony where I noted that Morningstar states that "the
19 horizon is a function of the investment, not the investor."⁸⁴ The use of the 30-year
20 Treasury bond yield as the risk-free rate is consistent with the investment horizon for

⁸³ *Ibid.*, at 66.

⁸⁴ Direct Testimony of Ann E. Bulkley, at 62.

1 electric and natural gas utility assets, which are long-duration investments. Taking
2 Staff's rationale to the limits, an investor who plans to hold a position in a utility
3 equity share for only six months would use a certificate of deposit rate to evaluate
4 the potential return. That is clearly not the case for any rational investor considering
5 return requirements.

6 **Q. HAS ANY OTHER REGULATORY COMMISSION COMMENTED ON THE**
7 **APPROPRIATE SECURITY TO USE AS THE RISK-FREE RATE IN THE CAPM?**

8 A. Yes. In Opinion No. 531, the FERC relied on the yield on the 30-year Treasury
9 bond, stating:

10 As noted above, the 30-year U.S. Treasury bond yields are a generally
11 accepted proxy for the risk-free rate in a CAPM analysis, and are also
12 considered superior to short- and intermediate-term bonds for this
13 purpose.⁸⁵

14 **Q. WHY SHOULD PROJECTED TREASURY BOND YIELDS BE CONSIDERED IN THE**
15 **CAPM ANALYSIS?**

16 A. As discussed in my Direct and Rebuttal Testimonies, as confirmed by the FERC in
17 Opinion No. 531 and the recent MISO decisions, and as recognized by Staff, the low
18 interest rate environment has affected the results of the ROE estimation models.
19 Given these “anomalous” capital market conditions, I disagree with Staff that
20 “current rates are the best indicator of future rates as they are based on all the

⁸⁵ FERC Order 531-B at para 114. Citing also to Roger A. Morin, New Regulatory Finance 151-152 (Public Utility Reports, Inc. 2006) (“the yield on very long-term government bonds, namely, the yield on 30-year Treasury bonds, is the best measure of the risk-free rate for use in the CAPM and Risk Premium methods.”).

1 information currently available to investors.”⁸⁶ Just as investors reasonably consider
2 actual and projected growth rates for individual companies, they also consider both
3 current and projected yields on Treasury bonds. Thus, Staff’s position is not only
4 incorrect, but inconsistent with its own recognition of unusual current market
5 conditions.

6 **Q. IS STAFF’S POSITION REGARDING THE USE OF CURRENT INTEREST RATES**
7 **CONSISTENT WITH OTHER ELEMENTS OF ITS CAPM ANALYSIS?**

8 A. No, in the estimation of the market risk premium, Staff states that the ex-post
9 method to derive the market risk premium is “problematic because ex-post MRP’s
10 are based on the faulty premise that past performance is a valid proxy for
11 expectations regarding future results.”⁸⁷ Thus, Staff’s position that it is reasonable to
12 consider forecasts of the market risk premium in the CAPM directly contradicts its
13 position that interest rate forecasts should not be employed in the CAPM. Staff’s
14 opposition to the use of interest rate forecasts is particularly troublesome when one
15 recognizes that investors expect interest rates to increase over the period during
16 which rates will be in effect. As discussed previously, consensus forecasts indicate
17 that interest rates will increase substantially from artificially low levels in the near and
18 longer-term as the Federal Reserve pursues its stated policy of normalizing rates. It
19 is reasonable to expect that investors can and do consider this information, as they
20 do other market projections. Therefore, it is reasonable, and consistent with Staff’s

⁸⁶ Prepared Testimony of Staff Finance Panel, at 96.

⁸⁷ *Ibid.*, at 69-70.

1 position regarding the calculation of the market risk premium, to rely on
2 expectations of future interest rate conditions to the extent that those expected
3 conditions differ from recent history.

4 **Q. DOES STAFF ACCURATELY DESCRIBE YOUR DIRECT TESTIMONY WITH RESPECT**
5 **TO THE USE OF 30-YEAR TREASURY BONDS IN THE CAPM?**

6 A. No. Staff suggests that I concluded that “all utility equity investors have an
7 investment horizon of 30 years.”⁸⁸ Staff then states that this conclusion is
8 unsubstantiated. Staff provides no citation for where this conclusion appears in my
9 Direct Testimony.

10 **Q. WHAT IS YOUR TESTIMONY WITH RESPECT TO THE USE OF THE YIELD ON 30-**
11 **YEAR TREASURY BONDS AS THE RISK-FREE RATE?**

12 A. As explained on pages 62-63 of my Direct Testimony, it is important to select the
13 term (or maturity) that best matches the life of the underlying investment. I also cite
14 Morningstar, which notes that the Treasury security relied on should match the time
15 horizon of what is being valued, and that the time horizon is a function of the
16 investment, not the investor. I do not state that equity investors have an investment
17 horizon of 30 years, nor does my testimony suggest that this would be a relevant
18 factor in determining the appropriate security for the risk-free rate even if investors’
19 time horizons were that long.

⁸⁸ *Ibid.*, at 95.

1 **Q. WHAT IS YOUR RESPONSE TO STAFF'S CONCERN WITH YOUR ESTIMATION OF**
2 **THE MARKET RISK PREMIUM.**

3 A. Staff questions my forward-looking market risk premium because it is based on a
4 Constant Growth DCF analysis of the S&P 500 and assumes that five-year growth
5 rates from Bloomberg will continue in perpetuity.⁸⁹ My calculation of the market risk
6 premium is based on the return on the broader market, as measured by the S&P 500
7 less the return on a risk-free instrument. The S&P 500 is an index that includes the
8 largest 500 companies by market capitalization. Over time, the specific companies
9 included in the S&P 500 Index will vary, but investor expectations of growth and
10 overall return for the index as a whole may not, based on the selection process
11 involved in the index. This is due to the fact that companies in the index with lower
12 growth rates are more likely to drop out of the index and be replaced by companies
13 with higher growth rates. Therefore, there is evidence supporting the reasonableness
14 of my assumption that the average growth of the index could be sustainable in the
15 long-run.

16 **Q. IS THERE SUPPORT FOR THE USE OF A CONSTANT GROWTH DCF MODEL TO**
17 **ESTIMATE THE MARKET RETURN?**

18 A. Yes. In Opinion 531-B, the FERC addresses the use of the Constant Growth DCF
19 model to estimate the market return in the calculation of the market risk premium

⁸⁹ *Ibid.*, at 96-97.

1 used in the CAPM analysis. In that opinion, FERC specifically addresses intervenor
2 concerns that the growth rate of the S&P 500 is not sustainable, stating:

3 While an individual company cannot be expected to sustain high
4 short-term growth rates in perpetuity, the same cannot be said for a
5 stock index like the S&P 500 that is regularly updated to contain only
6 companies with high market capitalization and the record in this
7 proceeding does not indicate that the growth rate of the S&P 500
8 stock index is unsustainable.⁹⁰

9 The methodology and assumptions used in my CAPM analyses are consistent with
10 those adopted by the FERC for estimating the total market return and the market
11 risk premium.

12 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE CAPM ANALYSIS?**

13 A. In principle, Staff and I agree that the inputs and assumptions for the CAPM should
14 be developed on a forward-looking basis, and that ex-post analysis can be flawed
15 under certain circumstances. The two primary areas of disagreement in the CAPM
16 analysis are Staff's refusal to consider interest rate projections along with current
17 rates as the risk-free rate, and its criticism of my market risk premium calculation.
18 Staff's risk-free rate and market risk premium assumptions produce CAPM results
19 well below authorized ROEs for other gas distribution companies, the majority of
20 which are much larger than Corning Gas.

⁹⁰ FERC Opinion 531-B, at para. 113.

1 **5. BUSINESS RISKS AND REGULATORY ENVIRONMENT**

2 **Q. DID STAFF TAKE INTO CONSIDERATION THE BUSINESS RISKS AND REGULATORY**
3 **ENVIRONMENT OF CORNING GAS IN ITS ROE RECOMMENDATION?**

4 A. Staff does not comment on the business risk of Corning Gas specifically, and Staff
5 rejects my proposed small size adjustment of 50 basis points for Corning Gas. Staff
6 makes general observations regarding how they believe the Commission has reduced
7 business risk for utilities in New York through various ratemaking measures that
8 reduce the uncertainty of earnings. As examples, Staff cites the use of revenue
9 decoupling mechanisms, fully-forecasted test years, and deferral and reconciliation
10 mechanisms.

11 However, in response to CNG/DPS-8-1, Staff acknowledges that it has not done its
12 own analysis comparing the business risk of Corning Gas to the proxy group
13 companies, but has relied on a January 2013 survey by the Edison Electric Institute.
14 Thus, Staff has provided no evidence regarding the relative business risks of Corning
15 Gas versus its proxy group. This is a very important omission because, while the
16 ROE is estimated using the proxy group results as a surrogate for the investor
17 required return, a complete ROE analysis must consider the business risks of the
18 subject company relative to the proxy group.

1 **Q. DID STAFF PROVIDE ANY BASIS FOR REJECTING A SMALL SIZE PREMIUM FOR**
2 **CORNING GAS?**

3 A. No. Staff does not respond to the evidence presented in my Direct Testimony
4 regarding the small size of Corning Gas relative to the proxy group and the rationale
5 for a small size premium to compensate investors for that risk. Staff simply states
6 that its ROE recommendation includes “no adjustment for financial and business
7 risks and no size premium.”⁹¹ However, in discussing the Company’s debt costs,
8 Staff notes: “The Company has informed Staff that its relatively small size prevents it
9 from obtaining alternative financing,”⁹² and “We agree that Corning is smaller than a
10 typical utility, and as a result, its access to the capital markets may be more limited
11 than larger utilities.”⁹³ In addition, in explaining why it is necessary to develop a
12 proxy group, Staff states: “First, the proxy group is necessary because Corning’s
13 common stock is very thinly traded.”⁹⁴ Finally, in response to CNG/DPS-10.4, Staff
14 agrees that there is liquidity risk associated with the thin trading volume of Holding
15 Company. Each of these statements demonstrates that Staff is aware of the risks
16 associated with small size and the Company’s ability to raise capital. Given this fact,
17 it is not clear why Staff rejects a small size premium for Corning Gas.

⁹¹ Prepared Testimony of Staff Finance Panel, at 99.

⁹² *Ibid.*, at 30.

⁹³ *Ibid.*

⁹⁴ *Ibid.*, at 44.

1 **Q. ARE THERE OTHER BUSINESS RISKS THAT CORNING FACES THAT STAFF HAS**
2 **NOT CONSIDERED?**

3 A. Yes. Corning has risks associated with both the systematic pipe replacement program
4 and the balance of negative revenue adjustments (“NRA”s) to positive revenue
5 adjustments (“PRA”s) in Staff’s proposal. Regarding the pipe replacement program,
6 the Commission has mandated a systematic replacement program for Corning Gas
7 that requires the replacement of leak-prone pipe and services. In Case 11-G-0280
8 Corning Gas was required to replace a total of 33 miles of leak-prone distribution
9 pipe through 2017, with an additional 10.6 miles per year after 2017. In addition,
10 Corning was required to replace 1,125 leak-prone services through 2017, with an
11 additional 375 per year after 2017. In each case, if Corning Gas does not meet this
12 replacement program, there are specific reductions to the ROE. In 2015, the
13 investment in this program was \$5.8 million in system improvements that are not
14 revenue generating on a rate base of \$53.8 million.⁹⁵ The Company’s investment in
15 this program contributed to Corning Gas’ negative cash flow in 2015.⁹⁶ Corning Gas
16 is projecting the capital expenditures for this program to be \$5.5 million in 2017 and
17 \$5.0 million in 2018 and expects to require additional financing to meet these
18 extraordinary expenditures. Therefore, Corning Gas faces significantly greater risk
19 than other utilities regulated by the Commission.

20 As discussed in more detail in the Company’s Accounting Panel testimony, the Staff

⁹⁵ Corning Natural Gas, SEC Form 10-K, September 30, 2015, at 26.

⁹⁶ *Ibid.*, at 29.

1 Finance Panel's proposed revenue adjustments are significantly weighted towards
2 NRAs. In Exhibit___CAP-R-4), the Company's Accounting Panel has estimated the
3 effect of each of Staff's proposed adjustments. That exhibit demonstrates that Staff's
4 proposed incentive system could result in NRAs of up to 201 basis points while the
5 PRAs are essentially capped at 40 basis points. This skewed incentive structure poses
6 significant risk for Corning Gas.

7 **Q. HAVE YOU COMPARED CORNING GAS'S CAPITAL EXPENDITURE PROGRAM TO**
8 **THE CAPITAL EXPENDITURES PLANNED BY YOUR PROXY COMPANIES?**

9 A. Yes, I compared Corning Gas's projected capital expenditures as a percentage of net
10 plant to the same metric for the proxy companies. Corning Gas's capital expenditure
11 program is within the range established by the CUPG companies.

12 In addition to the magnitude of the program, Corning Gas has additional risk
13 associated with financing this program since increased debt financing would result in
14 a higher debt service obligation and could result in the Company's inability to meet
15 the financing covenants in its existing debt obligations. This is a significant risk that
16 differs from the proxy companies and is the result of the extremely small size of
17 Corning Gas compared to the proxy companies.

18 **Q. HAVE YOU CONSIDERED THE EFFECT OF THE COMPANY'S REVENUE**
19 **DECOUPLING MECHANISM ON THE REQUIRED ROE?**

20 A. Yes. Corning Gas implemented a revenue decoupling mechanism in 2009. I
21 recognize that the Commission has implemented various revenue stabilization and

1 cost recovery mechanisms, and that this Commission may have been an early
2 adopter of these progressive forms of revenue stability and cost recovery. Over time,
3 however, many jurisdictions have adopted some form of revenue decoupling and
4 various cost recovery mechanisms to provide a reasonable opportunity for the utility
5 to recover its costs and earn its authorized ROE. Since the ROE recommendation is
6 established for a company based on its risk relative to the proxy group, I reviewed
7 the alternative rate mechanisms that have been implemented by the NGPG
8 companies. As shown in Exhibit__ (AEB-R-9), the majority of the operating
9 companies in the NGPG have some form of revenue stabilization mechanism (i.e.,
10 revenue decoupling mechanism, straight fixed-variable rate design, formula rate plan)
11 that breaks the link between revenues and volumetric use. In addition, the vast
12 majority of the proxy group companies have cost recovery mechanisms that provide
13 for the recovery of prudently incurred costs between rate cases.⁹⁷
14 Furthermore, as shown in Exhibit ____(AEB-R-10), the CUPG companies also have
15 many revenue stabilization and cost recovery mechanisms. On that basis, my
16 conclusion is that Corning Gas has similar cost recovery protection as the companies
17 in the CUPG and NGPG. Furthermore, Exhibit ____(AEB-R-10) demonstrates that
18 there is no systematic reduction in the ROE for operating utilities that have
19 decoupling mechanisms or other cost recovery mechanisms.

⁹⁷ Source: Regulatory Research Associates, Regulatory Focus, “Adjustment Clauses: A State-by-State Overview,” August 22, 2016.

1 **Q. PLEASE SUMMARIZE STAFF’S POSITION REGARDING A NEUTRAL REGULATORY**
2 **CLIMATE.**

3 A. Staff testifies that, “[a] neutral regulatory climate provides the proper balance
4 between the needs of investors and ratepayers. As such, it should be expected to
5 provide a regulatory framework that will enable reasonable access to financial
6 markets at the lowest cost of service.”⁹⁸

7 **Q. WHAT IS YOUR RESPONSE?**

8 A. While I agree that the regulatory framework should balance the needs of investors
9 and ratepayers, I do not agree that this is accomplished by authorizing an ROE that
10 does not meet the requirements of the *Hope* and *Bluefield* decisions, including the
11 capital attraction standard, the financial integrity standard, and the comparable return
12 standard. A fair return is not the lowest possible return, but rather the return that
13 allows the utility access to capital on reasonable terms, maintains the financial
14 integrity of the utility, and provides investors with a return comparable to returns
15 available in investments of comparable risk. Staff’s ROE recommendation of 8.20
16 percent does not meet those standards.

17 As discussed in my Direct Testimony, I examined two rankings performed by the
18 investment community of U.S. regulatory commissions.⁹⁹ Regulatory Research
19 Associates (“RRA”) accords New York an “Average/2” rating, which is in the exact
20 middle of RRA’s ranking system. S&P ranks New York 34th out of 53 regulatory

⁹⁸ Prepared Testimony of Staff Finance Panel, at 19.

⁹⁹ Direct Testimony of Ann E. Bulkley, at 82-83.

1 jurisdictions (including Federal, the District of Columbia, and two Texas state
2 regulators) for credit supportiveness, suggesting that New York is below average
3 when compared to other U.S. regulatory jurisdictions. Neither of these results
4 supports Staff's contention that New York regulation makes New York utilities less
5 risky than utilities in other jurisdictions. In addition, Value Line, a source on which
6 both Staff and the Commission rely heavily, ranks New York utility regulation as
7 "Below Average," which is the lowest rank of the three categories.¹⁰⁰

8 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING CORNING GAS'S BUSINESS RISK**
9 **RELATIVE TO THE PROXY GROUP?**

10 A. Corning Gas is significantly smaller than the companies in Staff proxy group or my
11 CUPG and NGPG, and yet Staff's ROE recommendation does not take into
12 consideration the risk associated with small size. S&P also ranks the business risk of
13 Corning Gas as "Satisfactory" compared to the "Excellent" business risk ranking for
14 the companies in the Staff's proxy group and my CUPG and NGPG. In addition,
15 S&P's ranking of the New York regulatory environment from a credit perspective
16 demonstrates that the Company's regulatory risk is above average compared to the
17 proxy companies. In light of these factors, the Company's elevated risk profile
18 increases the importance of setting a return for Corning Gas that is within the range
19 of reasonableness as established by the returns for the two proxy groups that I used
20 in formulating my recommendation.

¹⁰⁰ Value Line Investment Survey, Electric Utility (Central) Industry, September 16, 2016, at 901.

1 **Q. SINCE THE FILING OF YOUR DIRECT TESTIMONY, HAVE CREDIT RATING**
2 **AGENCIES OFFERED RECENT OPINIONS ON NEW YORK REGULATORY RISK?**

3 A. Yes. In a recent report “Assessing U.S. Investor-Owned Utility Regulatory
4 Environments” S&P cited this Commission’s Reforming the Energy Vision (“REV”)
5 proceeding as possibly increasing risk for utilities. S&P specifically noted that the
6 REV implementation could disrupt the way utilities make money and affect their
7 ability to earn the authorized ROE. S&P cautioned that if the outcome was greater
8 operating risk and no opportunity to earn greater returns, their assessment of the
9 regulatory environment could change.¹⁰¹ This suggests that the credit rating agencies
10 are focused on regulatory changes that could cause significant financial changes for
11 the regulated utilities. Staff’s proposed ROE and equity ratio for Corning Gas could
12 constitute the very type of change that the credit rating agencies would view as a
13 higher risk for the utility.

14 **6. APPROPRIATE CAPITAL STRUCTURE**

15 **Q. HOW DOES THE STAFF PANEL’S RECOMMENDATION REGARDING THE**
16 **APPROPRIATE EQUITY RATIO FOR THE COMPANY COMPARE WITH THE**
17 **COMPANY’S PROPOSAL?**

18 A. The Company has proposed an equity ratio of 50.0 percent, which as discussed in
19 my Direct Testimony, is below the average equity ratio of the proxy companies over

¹⁰¹ Standard & Poor’s Global Ratings Research, “Assessing U.S. Investor-Owned Utility Regulatory Environments”, August 10, 2016 p. 3.

1 the last four years and therefore is conservative.¹⁰² Staff is recommending a
2 hypothetical equity ratio of 48.0 percent for Corning Gas.

3 **Q. DO YOU AGREE WITH STAFF'S RECOMMENDED CAPITAL STRUCTURE FOR**
4 **CORNING GAS?**

5 A. No, I do not. My disagreement with Staff's capital structure recommendation
6 centers around three primary considerations. First, Staff's rationale for the change in
7 the Company's capital structure is inconsistent with its recommendation in Case 16-
8 G-0257 for National Fuel Gas Distribution Company. Staff's approach to the
9 appropriate equity ratio appears to be the lesser of a 48.0 percent equity ratio or the
10 equity ratio of the parent company. Second, Staff's proposal suggests that the
11 financing of a company the size of Corning Gas would be similar to the financing for
12 Consolidated Edison, a utility company with a market capitalization more than 500
13 times the capitalization of Corning Gas. In response to CNG/DPS-8.5, Staff
14 indicates that it believes that Corning Gas has comparable business and financial risk
15 as Consolidated Edison, stating: The Staff Finance Panel believes that by virtue of
16 their monopoly status, both companies have very low business risk because they can
17 recover their costs and have similar opportunity to earn an authorized return under
18 cost of service rates that stabilize their financial performance. In addition, given that
19 they are regulated by the same Commission and both currently have authorized
20 48.0% common equity ratios, their financial risks are also quite similar." Third,

¹⁰² Direct Testimony of Ann E. Bulkley, at 91-94.

1 Staff's recommended capital structure, combined with its recommended ROE of
2 8.20 percent, results in a weighted equity cost rate for Corning well below the equity
3 cost rates that have been authorized for the other New York utilities, all of which are
4 at least 100 times the market capitalization of Corning Gas. Staff's recommendation
5 is punitive to Corning Gas and fails to satisfy the comparability requirement of the
6 fair return standard.

7 **Q. PLEASE SUMMARIZE THE APPROACHES THAT STAFF SUGGESTS ARE**
8 **APPROPRIATE FOR SETTING THE EQUITY RATIO FOR A UTILITY.**

9 A. Staff outlined three approaches to setting the equity ratio: 1) rely on the utility's
10 stand-alone capital structure if the utility is sufficiently ring-fenced; 2) when the
11 utility is not stand-alone, rely on the capital structure of the parent or holding
12 company; and 3) rely on a hypothetical capital structure if the capital structure
13 established for the utility does not reflect "rational financing policies".¹⁰³ Staff
14 suggests that the capital structure for a utility subsidiary does not reflect "rational
15 financing policies" if the parent company has financed riskier competitive, non-
16 utility operations with less equity than would be required for these ventures to
17 achieve the risk/return profile of the utility operations.¹⁰⁴

18 **Q. DOES CORNING GAS FACE SIGNIFICANT FINANCING RISK RELATED TO NON-**
19 **UTILITY OPERATIONS?**

20 A. No, it does not. Staff recognizes that Corning Gas is a subsidiary of Holding

¹⁰³ Prepared Testimony of Staff Finance Panel, at 25.

¹⁰⁴ *Ibid.*

1 Company. In reviewing Holding Company’s structure, Staff identifies that 99.5
2 percent of Holding Company’s assets are regulated utility assets. Despite
3 acknowledging that Holding Company is largely comprised of utility assets, Staff
4 asserts that because the utility has little ring-fencing in place it is necessary to derive
5 the capital structure for Corning Gas rather than rely on the capital structure
6 established by the Holding Company.

7 **Q. DID STAFF IDENTIFY SPECIFICALLY HOW CORNING GAS’S RING-FENCING**
8 **PROVISIONS ARE DEFICIENT?**

9 A. No. In the Staff Panel’s Prepared Direct Testimony the Staff simply referred to the
10 response to IR DPS-265 and suggested that Corning has “little ring-fencing in
11 place”.¹⁰⁵ In that response, Corning Gas indicated that the following ring-fencing
12 provisions were in place: 1) debt incurred by Corning Natural Gas Corporation
13 (“LDC”) is Company-specific, using only LDC assets for collateral; 2) the LDC does
14 not support or guarantee the debt of the Holding Company or any other subsidiary
15 of the Holding Company; and 3) the LDC has restrictions as to the amount that it
16 can “dividend-up” to the Holding Company based on the Commission-approved
17 debt-to-equity target ratio. In response to CNG/DPS-12, Staff acknowledges that
18 “At this time there is little concern” about the level of ring-fencing for Corning Gas.
19 In response to CNG/DPS-71, Staff stated that it is not proposing any additional
20 ring-fencing provisions for Corning Gas at this time. Furthermore, Staff

¹⁰⁵ *Ibid.*, at 14.

1 acknowledges in that response that Corning Gas is not subsidizing any higher risk
2 investments of the parent company. In response to CNG/DPS-14, Staff recognizes
3 that there are only two non-utility subsidiaries of the Holding company and neither
4 has any assets. Finally, Staff concedes that equity in Corning Natural Gas is not
5 derived from debt issuances at the Holding Company.¹⁰⁶

6 **Q. HAS THIS COMMISSION CONSIDERED THE APPROPRIATE RING-FENCING**
7 **PROVISIONS FOR CORNING GAS?**

8 A. Yes, it has. In Case 12-G-0141, Corning Gas sought the formation of the Holding
9 Company. At that time, the Commission considered and approved a Joint Proposal
10 negotiated by Staff and the Company that established a set of protections that were
11 deemed appropriate and adequate for the protection of Corning Gas and its
12 customers. As the Commission stated in its October 19, 2013 Order:

13 The Joint Proposal includes significant protections for ratepayers against
14 possible negative impacts of the existing relationship with affiliates of
15 the regulated distribution company. Among these are certain financial
16 protections to ensure that the Company and its ratepayers will not be
17 exposed to additional financial risk.¹⁰⁷

18 **Q. IF CORNING GAS IS SUFFICIENTLY RING-FENCED, BASED ON STAFF'S OWN**
19 **METHODOLOGY, HOW SHOULD THE EQUITY RATIO BE ESTABLISHED?**

20 A. As discussed previously, the Staff Finance Panel suggests that the Commission could
21 rely on the utility's stand-alone capital structure if the utility is sufficiently ring-
22 fenced.

¹⁰⁶ See Exhibit ____ (AEB-R-11).

¹⁰⁷ State of New York Public Service Commission decision, Case 12-G-0141, p. 14.

1 **Q. HAS STAFF OUTLINED “SUITABLE” RING-FENCING PROVISIONS IN OTHER RATE**
2 **PROCEEDINGS?**

3 A. Yes. In Case 16-G-0257, the Staff Finance Panel proposed six ring-fencing
4 provisions:

- 5 1. Dividend limitations around a target equity ratio.
- 6 2. Utility subsidiary should issue its own long-term debt.
- 7 3. The Holding Company should pursue individual credit ratings from
8 Moody’s and S&P for utility subsidiary.
- 9 4. If unable to obtain individual credit rating for utility subsidiary, then
10 debt costs should be in line with the utility proxy group for the same
11 credit rating as the holding company held in that proceeding (BBB).
- 12 5. Create a special class of preferred stock to be held by a trustee
13 approved by the Commission, referred to as the “golden share”. The
14 trustee would be independent of the holding company and could
15 prevent the bankruptcy of the holding company or affiliates from
16 affecting the utility subsidiary.
- 17 6. The holding company should issue a non-consolidation letter to
18 demonstrate the implementation of ring-fencing and the creation of
19 the separate legal and credit entity for the utility subsidiary.¹⁰⁸
20
21

22 **Q. HOW DO STAFF’S RECOMMENDATIONS IN CASE 16-G-0257 COMPARE WITH**
23 **CORNING GAS’S CURRENT RING-FENCING PROVISIONS?**

24 A. In Case 12-G-0141, the Commission established the Affiliate Standards for Corning
25 Gas. Those standards include: 1) Board of Directors’ recusal policy, 2) limitations on
26 employee sharing and loaning of employees, 3) a minimum equity ratio and dividend
27 limitations, 4) restrictions on Corning Gas’ participation in money pools and
28 common insurance policies and 5) limitations on loans.¹⁰⁹ Therefore, where

¹⁰⁸ Case 16-G-0257, Prepared Testimony of Staff Finance Panel, at 37-38.

¹⁰⁹ New York Public Service Commission Decision, Case 12-G-0141 & 11-G-0417, p. 6.

1 appropriate, the provisions suggested by Staff in Case 16-G-0257 have been
2 implemented for Corning Gas. As discussed previously, Corning Gas is limited in the
3 dividends that can be paid to the Holding Company based on a target equity ratio,
4 and the debt for Corning Gas is specific to the LDC and backed by the LDC's
5 assets. That debt is not relied on for other business operations of the Holding
6 Company. Finally, the LDC does not guarantee the debt of the Holding Company
7 or any other subsidiaries of the Holding Company.

8 **Q. IS STAFF'S APPROACH FOR DEVELOPING ITS RECOMMENDED CAPITAL**
9 **STRUCTURE FOR CORNING GAS CONSISTENT WITH THE APPROACH THAT STAFF**
10 **APPLIED IN CASE 16-G-0257?**

11 A. No, it is not. Similar to Staff's recommendation for Corning Gas, in Case 16-G-
12 0257, Staff concluded that the utility subsidiary, National Fuel Gas Distribution
13 Company ("NFG"), was not sufficiently ring-fenced from the parent company. In
14 that case, Staff recommended that unless there was "suitable ring-fencing" in place,
15 NFG's corporate common equity ratio should be relied on. Staff suggested that cost
16 causation principles required that the utility capital structure be consistent with the
17 parent company capital structure to ensure that ratepayers were not paying costs that
18 were not incurred by the utility.¹¹⁰ In that case, the parent company equity ratio was
19 42.3 percent, which was significantly below the requested 48 percent equity ratio.

20 In this case, Staff suggests that Corning Gas has little ring-fencing in place, a similar

¹¹⁰ Case 16-G-0257, Prepared Testimony of Staff Finance Panel, at 42.

1 argument to that offered by Staff in the NFG case. If Staff had consistently applied
2 the rationale outlined in the NFG case (i.e., until “suitable” ring-fencing is
3 established, it is necessary to rely on the parent capital structure), Staff’s proposed
4 equity ratio would be 53.4 percent, which is the equity ratio for Holding Company.
5 Staff’s inconsistent approach to their recommended equity ratio suggests that Staff’s
6 “methodology” ratio is nothing more than the lesser of a 48.0 percent equity ratio,
7 which has been relied on for the larger investor-owned utilities in many previous
8 cases, or the parent company capital structure.

9 **Q. IS STAFF’S RECOMMENDED EQUITY RATIO CONSISTENT WITH ITS CONCERNS**
10 **ABOUT THE COMPANY’S FINANCIAL RISK?**

11 A. No, it is not. Staff acknowledges that higher levels of debt increase the financial risk
12 of a company.¹¹¹ In addition, Staff recognizes that Corning Gas is financed with
13 bank loan agreements that are self-amortizing and expose the Company to interest
14 rate and refinancing risk. Staff also recognizes that, because of Corning Gas’s
15 relatively small size, its access to capital markets may be more limited than the larger
16 utilities.¹¹² In response to data requests, Staff has acknowledged very significant risks
17 related to the financing of Corning Gas:

- 18 • In response to CNG/DPS-068 Staff acknowledged that Corning’s debt
19 financings are smaller than larger utilities and, as a result, the market for debt
20 financing for Corning may be more limited. Staff agreed that all else equal,

¹¹¹ Prepared Testimony of Staff Finance Panel, at 14.

¹¹² *Ibid.*, at 29-30.

1 Corning may be modestly riskier as compared with the companies in Staff's
2 proxy group due to its smaller size. Staff suggests that this was a factor in
3 opting not to recommend using the median common equity ratio of the
4 proxy group companies of 45.9 percent.

- 5 • In response to CNG/DPS-075, Staff notes that unlike most utilities,
6 Corning is faced with substantial debt amortization payments due to the
7 terms of its existing loan agreements.
- 8 • In response to CNG/DPS-053, Staff cites to the Commission in its recent
9 order in Case 15-G-0460 where the Commission also noted that much of
10 the Company's financing requirements are a result of the structure of its
11 bank loans which require substantial debt amortization payments, **a**
12 **requirement that is not typical for most utilities.**

13 While Staff has acknowledged the relative risk of Corning Gas and the proxy
14 group, especially the risks of debt financing versus larger utilities, Staff suggests that
15 it is appropriate for Corning Gas to have the same proportion of debt in its capital
16 structure as Consolidated Edison, a company with a market capitalization more than
17 500 times the capitalization of Corning Gas's parent company.

18 **Q. IS STAFF'S PROPOSED EQUITY RATIO CONSISTENT WITH THE DIVIDEND**
19 **RESTRICTION IMPOSED ON CORNING GAS IN CASE 12-G-0141?**

20 A. No, it is not. The Joint Proposal that was adopted in that case recognized the
21 purpose of a dividend restriction is protect the financial health of Corning by

1 prohibiting excessive dividends to the Holding Company. In that proceeding, Staff
2 also raised concerns about “draining capital from the LDC” to support other non-
3 regulated ventures.¹¹³ Establishing a lower equity ratio for Corning Gas than the
4 company proposes contradicts the goal of this ring-fencing provision.

5 **Q. ARE YOU IN AGREEMENT WITH STAFF AS TO THE APPROPRIATE USE OF A**
6 **HYPOTHETICAL CAPITAL STRUCTURE?**

7 A. No. Staff states that a hypothetical capital structure should be used when the
8 “subsidiary or the parent’s capital structure does not reflect reasonable financing
9 policies that reflect the lowest long-run utility cost of capital”.¹¹⁴ There is no case
10 law, of which I am aware, that suggests that the goal in setting the cost of capital is
11 the lowest long-run cost of capital. The landmark cases, *Hope* and *Bluefield*, establish
12 that the return to shareholders must be commensurate with the returns available on
13 other investments of comparable risk. The Staff’s recommendations in this case
14 establish an equity cost rate that is not commensurate with the risks of Corning Gas,
15 or of any of the New York utilities for which the cost of capital has been recently
16 established.

17 **Q. DOES STAFF’S RECOMMENDED CAPITAL SUPPORT THE CAPITAL INVESTMENT**
18 **PLAN THAT WAS REQUIRED IN CASE 11-G-0280?**

19 A. No, it does not. As discussed previously, Corning Gas is required to make
20 substantial investments in incremental non-revenue producing capital. In 2015, the

¹¹³ New York Public Service Commission Decision, Case 12-G-0141 & 11-G-0417, p. 12.

¹¹⁴ Prepared Testimony of Staff Finance Panel, at 26-27.

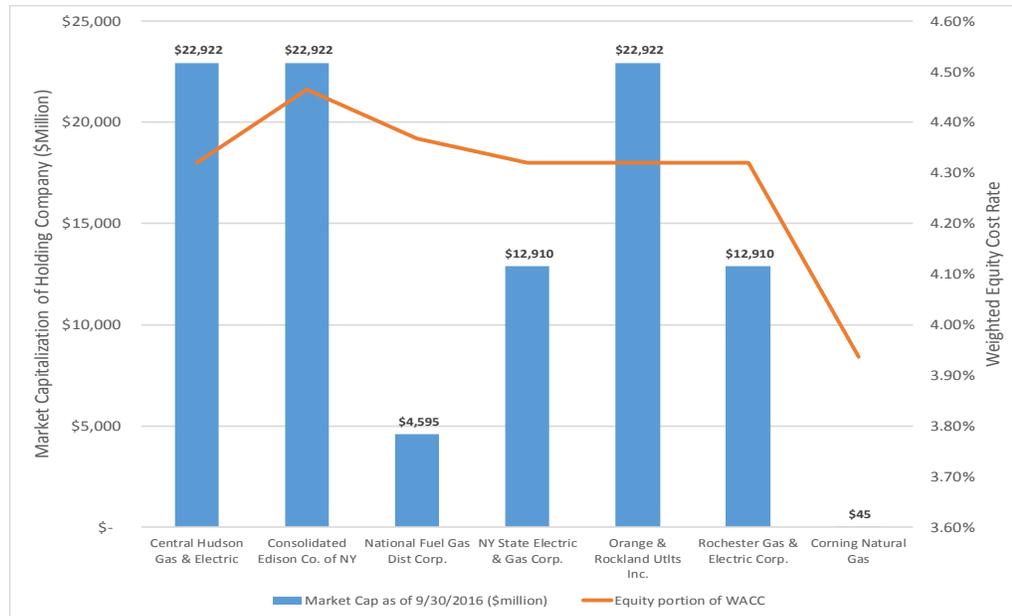
1 investment activity resulted in negative cash flow. As shown in response to IR DPS-
2 319, Corning Gas's equity ratio as of June 30, 2016 was 50.82 percent. The
3 Company expects that future investments will require incremental capital whether
4 through debt or equity financing. Despite this required incremental investment, Staff
5 is suggesting that the equity ratio for Corning Gas be set below the equity ratio that
6 the Company projects for the rate period. If the Company were to manage the
7 capital structure to the 48.0 percent equity ratio proposed by Staff, it would be
8 necessary to finance the incremental capital investments with additional debt that
9 would increase the Company's debt service obligations, possibly affecting the
10 Company's existing financing covenants.

11 **Q. HAVE YOU COMPARED THE WEIGHTED EQUITY COST RATE PROPOSED BY STAFF**
12 **IN THIS CASE WITH OTHER WEIGHTED EQUITY COST RATES THAT HAVE BEEN**
13 **AUTHORIZED BY THE COMMISSION?**

14 A. Yes, I have. Chart 5 summarizes the weighted equity cost rates established in the last
15 five cases in New York. In addition, Chart 5 provides the market capitalization of
16 the companies in each of these proceedings. As shown in the chart, the weighted
17 equity cost rate proposed by Staff for Corning Gas in this case is significantly below
18 the weighted cost rate that has been determined in any case in the last two years.
19 This is particularly alarming given the relative size of Corning Gas and the investor-
20 owned utilities shown in the chart.

1

Chart 5: Weighted Equity Cost Rates in Recent NY Rate Cases



2

3 **Q. ACCORDING TO STAFF, YOUR ANALYSIS DOES NOT INCLUDE A REVIEW OF THE**
 4 **CAPITAL STRUCTURES OF THE REGULATED UTILITY OPERATING COMPANIES IN**
 5 **YOUR PROXY SAMPLES, BUT ONLY REPORTS THE CAPITAL STRUCTURES OF THE**
 6 **HOLDING COMPANIES OF THE REGULATED UTILITIES.¹¹⁵ IS STAFF’S STATEMENT**
 7 **ACCURATE?**

8 A. Not only is this not true, but it is a contention that Staff has repeatedly made, and
 9 that I have corrected in several cases in the last two years.¹¹⁶ Furthermore, Staff has
 10 provided no independent analysis of the capital structures of the proxy companies
 11 used in my Direct Testimony to support this claim. The analysis presented in
 12 Schedules___ (AEB-13) and (AEB-14) to my Direct Testimony reflects an average

¹¹⁵ *Ibid.*, at 32-33.

¹¹⁶ Case Nos. 16-G-0382, 16-G-0257.

1 of the individual utility operating companies' capital structures associated with each
2 proxy company. The equity ratios on those schedules do not reflect the holding
3 company capital structures, nor do they include capital structures of any unregulated
4 operating companies. For example, the capital structure shown for Alliant Energy
5 for 2014 of 48.75 percent is actually composed of the average of the two relevant
6 Alliant-owned operating utilities, Interstate Power and Light Company (47.23
7 percent) and Wisconsin Power and Light Company (50.27 percent). As those
8 schedules demonstrate, the average 2014 capital structure for my CUPG was 54.32
9 percent, and for my NGPG was 56.87 percent. These comprise the actual capital
10 structures of the utility operating companies at the end of fiscal year 2014. Updating
11 the equity ratio data for 2015 results in an average capital structure for the CUPG of
12 54.94 percent and for the NGPG of 57.28 percent.

13 **Q. HAVE YOU CONDUCTED ANY ANALYSIS REGARDING RECENTLY AUTHORIZED**
14 **EQUITY RATIOS OF THE UTILITY SUBSIDIARY COMPANIES IN YOUR PROXY**
15 **GROUPS?**

16 A. Yes, as indicated on Schedules____(AEB-15) and (AEB-16) of my Direct Testimony,
17 the average awarded equity ratios were 50.98 for the CUPG and 52.42 percent for
18 the NGPG. As the data show, authorizing an equity ratio of 48.0 percent for
19 Corning Gas while the proxy group allowed equity ratios average 50.98 percent
20 (CUPG) and 52.42 percent (NGPG), unfairly penalizes Corning Gas and puts the
21 Company at a significant financing disadvantage relative to its peers. This is

1 especially important given the extremely small size of Corning Gas, which limits its
2 ability to borrow and to raise capital in equity markets. In conclusion, Staff's
3 proposed ROE of 8.20 percent on 48.0 percent equity ratio exposes Corning Gas to
4 greater investment risk than other utilities in New York.

V. CONCLUSIONS AND RECOMMENDATIONS

5 **Q. WHAT IS YOUR CONCLUSION REGARDING A FAIR RETURN ON EQUITY FOR**
6 **CORNING GAS?**

7 A. I continue to support a recommended return on equity for Corning Gas within the
8 range of 10.20 percent and 10.74 percent. Nothing in the testimony of the Staff
9 Finance Panel has caused me to change my recommendation. My recommendation
10 considers the results of the DCF and CAPM methods, and the specific risks to
11 which the Company is exposed, especially the extremely small size of Corning Gas
12 compared to the proxy group companies. The requested ROE is based on an equal
13 weighting of the results of the DCF and CAPM, which is justified due to the effect
14 of capital market conditions on the DCF model. The Company's requested ROE of
15 10.20 percent is reasonable and should be adopted.

16 **Q. WHAT IS YOUR CONCLUSION REGARDING THE APPROPRIATE EQUITY RATIO FOR**
17 **RATEMAKING PURPOSES FOR CORNING GAS IN THIS PROCEEDING?**

18 A. I continue to support the Company's proposed 50.0 percent equity ratio as
19 reasonable because it is within the range of the actual and authorized equity ratios of
20 the utility subsidiaries of the proxy group companies. In contrast, Staff's proposed

1 equity ratio is inconsistent with the logic Staff used in the recent National Fuel Gas
2 Distribution Company rate case, does not take into consideration the risk associated
3 with Corning Gas' small size relative to the proxy group, and arbitrarily denies
4 Corning Gas the ability to earn a just and reasonable return.

5 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

6 A. Yes, it does.