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RICHARD A. BAUDINO
ON BEHALF OF
ATTORNEY GENERAL'S
OFFICE

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1 **I. QUALIFICATIONS AND SUMMARY**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 **A.** My name is Richard A. Baudino. My business address is J. Kennedy and
4 Associates, Inc. (“Kennedy and Associates”), 570 Colonial Park Drive, Suite
5 305, Roswell, Georgia 30075.

6 **Q. WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU**
7 **EMPLOYED?**

8 **A.** I am a consultant with Kennedy and Associates.

9 **Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN THESE**
10 **DOCKETS?**

11 **A.** Yes, I filed Direct Testimony in these dockets on behalf of the North Carolina
12 Attorney General’s Office (“AGO”).

13 **Q. PLEASE SUMMARIZE YOUR SUPPLEMENTAL DIRECT**
14 **TESTIMONY IN THIS PROCEEDING.**

15 **A.** My Supplemental Direct Testimony will cover the following areas:

16 1. I will provide an update of the return on equity (“ROE”) analyses for
17 Duke Energy Carolinas (“DEC”) and Duke Energy Progress (“DEP”)¹
18 that were contained in my Direct Testimonies in Docket Nos. E-2, Sub
19 1219 and E-7, Sub 1214.

20 2. I will provide an updated analysis of economic conditions in North
21 Carolina.

¹ I will refer to both DEC and DEP as “the Companies” later in my Supplemental Direct Testimony.

1 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND**
2 **RECOMMENDATIONS.**

3 **A.** Based on my updated ROE analyses, I continue to recommend a 9.0% ROE for
4 DEC and DEP. Consistent with my Direct Testimonies, I continue to
5 recommend that the Commission adopt a capital structure for both Companies
6 that contains a 51.5% common equity ratio. In addition, in light of the shocks
7 that have been delivered to the national and the North Carolina economies and
8 the attendant skyrocketing unemployment of North Carolina's work force due
9 to the COVID-19 pandemic, it is more important than ever that the North
10 Carolina Utilities Commission (“NCUC” or “Commission”) reject the
11 Companies' requested 10.30% ROE. My 9.0% ROE recommendation is
12 consistent with current investor required returns for low-risk regulated electric
13 companies like DEC and DEP and supports just and reasonable rates for the
14 Companies' North Carolina customers.

15 **II. UPDATE OF THE DCF AND CAPM ANALYSES**

16 **Q. PLEASE SUMMARIZE THE IMPACTS ON THE FINANCIAL**
17 **MARKETS DURING MARCH THROUGH JUNE OF THIS YEAR**
18 **FROM THE COVID-19 PANDEMIC.**

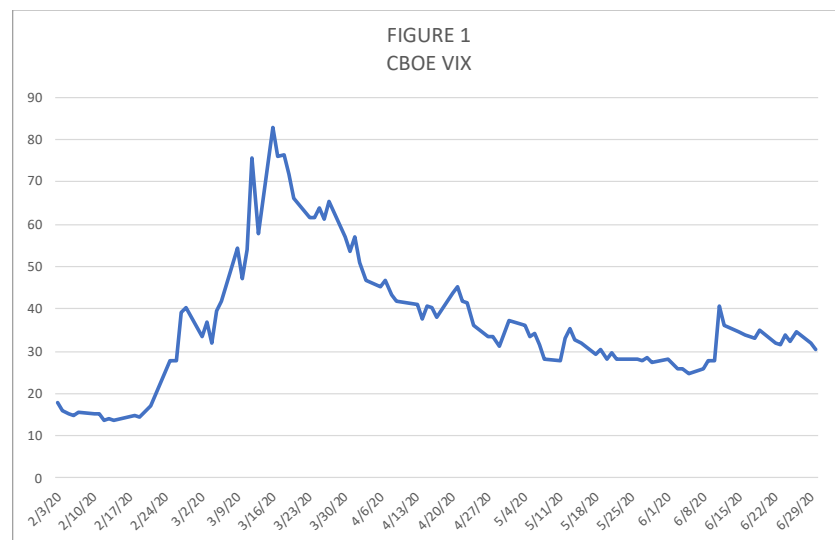
19 **A.** This section of my Supplemental Direct Testimony provides the Commission
20 with an update of the interest rate and bond yield data since the beginning of
21 March 2020, when concerns about the Covid-19 pandemic began to roil
22 financial markets with extreme volatility.

1 As I mentioned in my Direct Testimony for DEP filed April 13, the yield
2 on the 30-Year Treasury bond declined from 1.97% in February 2020 to 0.99%
3 on March 9, increased to 1.63% on March 17, and ended March at 1.46%. The
4 April ending yield on the 30-Year Treasury bond fell even further to 1.27%. As
5 of June 30, 2020 the yield was 1.41%.

6 Alternatively, the yield on the average public utility bond increased
7 dramatically in March, rising from 3.14% in February to 4.24% on March 18,
8 according to Moody's Credit Trends. At the end of March, the average public
9 utility bond yield fell to 3.59% according to the Mergent Bond Record. As of
10 June 30, 2020 Moody's Credit Trends reported that the yield on the average
11 public utility bond was 3.05%, even lower than the March 2020 yield. The
12 3.05% yield is now significantly lower than the pre-pandemic January 2020
13 average utility bond yield of 3.34%.

14 In March, the stock market underwent a steep, sharp decline of
15 approximately 19% due to the COVID-19 pandemic. Utilities also declined in
16 March, with the Dow Jones utility average declining from 886.52 on March 2
17 to a March low of 695, a decline of about 21.6% with substantial volatility, or
18 changes to the index's value, within the month. In April, however, the stock
19 market and the Dow Jones utility index began to recover. After falling to a low
20 in March of 695, the Dow Jones utility index recovered to finish April at 761.83,
21 an increase of 9.6% from the March low. As of June 30, 2020, the Dow Jones
22 Utility Index stood at 767.50, not much different from the end of April.

1 A widely used measure of market volatility is the Chicago Board
2 Options Exchange (“CBOE”) Volatility Index (“VIX”), also called the “fear
3 index” or “fear gauge.” Basically, the VIX measures the market's expectations
4 for volatility over the next 30-day period. The higher the VIX, the greater the
5 expectation of volatility and market risk. Figure 1 below presents the VIX from
6 February 1 through June 30, 2020. Figure 1 shows that the VIX was much lower
7 in February, shot up to a high of 82.69 on March 16, then generally declined
8 through June, with the VIX at 30.43 on June 30, 2020.



9
10 **Q. PLEASE SUMMARIZE RECENT FED ACTIONS WITH RESPECT**
11 **TO MONETARY POLICY.**

12 **A.** As I testified in my Direct Testimony filed April 13 in the DEP proceeding, on
13 March 3 and 15, 2020, the Fed lowered the federal funds rate in response to
14 mounting concerns associated with the spread of the coronavirus worldwide.
15 On June 10, 2020, the Fed issued a press release that stated the following:

1 The Federal Reserve is committed to using its full range of tools to
2 support the U.S. economy in this challenging time, thereby
3 promoting its maximum employment and price stability goals.
4

5 The coronavirus outbreak is causing tremendous human and
6 economic hardship across the United States and around the world.
7 The virus and the measures taken to protect public health have
8 induced sharp declines in economic activity and a surge in job
9 losses. Weaker demand and significantly lower oil prices are
10 holding down consumer price inflation. Financial conditions have
11 improved, in part reflecting policy measures to support the
12 economy and the flow of credit to U.S. households and businesses.
13 The ongoing public health crisis will weigh heavily on economic
14 activity, employment, and inflation in the near term, and poses
15 considerable risks to the economic outlook over the medium term.
16 In light of these developments, the Committee decided to maintain
17 the target range for the federal funds rate at 0 to 1/4 percent. The
18 Committee expects to maintain this target range until it is confident
19 that the economy has weathered recent events and is on track to
20 achieve its maximum employment and price stability goals.
21

22 The Committee will continue to monitor the implications of
23 incoming information for the economic outlook, including
24 information related to public health, as well as global developments
25 and muted inflation pressures, and will use its tools and act as
26 appropriate to support the economy.
27

28 Beginning in March 2020, the Federal Reserve also announced
29 expanded actions to support credit and financial markets. The Board of
30 Governors of the Federal Reserve System established a new resource on
31 its web site that contains the Fed's ongoing response to the Covid-19
32 pandemic: <https://www.federalreserve.gov/covid-19.htm>. Some of the
33 major actions undertaken by the Fed include the following:

- 34 • Creation of the Municipal Liquidity Facility to assist state and local
35 governments manage cash flow to better serve households and
36 businesses (April 9, 2020).

- 1 • Creation of the Main Street Lending Program to support small and
2 medium sized businesses. There are three facilities that comprise this
3 program: the Main Street New Loan Facility, the Main Street Priority
4 Loan Facility, and the Main Street Expanded Loan Facility.
- 5 • Design of the Commercial Paper Funding Facility to support the flow
6 of credit to households and businesses (March 17, 2020).
- 7 • Establishment of the Primary Dealer Credit Facility designed to support
8 households and businesses (March 17, 2020).
- 9 • Establishment of the Money Market Mutual Fund Liquidity Facility as
10 another program to facilitate the flow of credit to households and
11 businesses (March 18, 2020).
- 12 • Establishment of the Primary and Secondary Corporate Credit Facilities
13 that support credit to employers (March 23, 2020).
- 14 • Implementation of the Paycheck Protection Program Liquidity Facility
15 to support the Small Business Administration's Paycheck Protection
16 Program (April 9, 2020).
- 17 • Establishment of the Term Asset-Backed Securities Loan Facility
18 ("TALF"), again to support the flow of credit to consumers and
19 businesses (March 23, 2020).²

² For more information on the Fed's response to Covid-19, please see <https://www.federalreserve.gov/funding-credit-liquidity-and-loan-facilities.htm>

1 **Q. PLEASE UPDATE THE COMMENTS FROM VALUE LINE’S**
2 **REPORTS ON THE ELECTRIC UTILITY INDUSTRY THAT WERE**
3 **PUBLISHED SINCE YOUR DIRECT TESTIMONY WAS FILED.**

4 **A.** In its June 12, 2020 report on the Electric Utility (Central) Industry, Value Line
5 noted the following:

6 Electric utility stocks, as a group, have outperformed the broader market
7 averages in 2020. There has been a wider-than-usual disparity in the
8 performances of individual stocks. Electric company equities have exhibited
9 more volatility than usual, too.
10

11 The Value Line report also noted that perhaps the “economic problems
12 will result in a lower rate of dividend growth, but we do not expect the boards
13 of any companies reviewed here to cut the disbursement.”

14 Value Line also noted the following in its May 15, 2020 report on the
15 Electric Utility (East) Industry:

16 Utility stocks are seen as a safe (more accurately, less-risky) haven when the
17 markets are turbulent. Most of the equities in this group have declined far less
18 than the broader market averages since the market plummeted in late February.
19 However, the volatility these issues have exhibited has belied their high Price
20 Stability Indexes. The quotations of most stocks in the Electric Utility Industry
21 have fallen between 10% and 20% so far this year. The average dividend yield
22 for this group is 3.8%.
23

24 My conclusion from this discussion is that regulated electric utilities
25 like DEC and DEP continue to be safe, conservative, and relatively stable
26 investments even in the currently volatile financial market.

27 **Q. WHAT ARE THE CURRENT CREDIT RATINGS FOR DUKE**
28 **ENERGY PROGRESS AND DUKE ENERGY CAROLINAS?**

1 **A.** The credit ratings for DEC and DEP have not changed since I filed my Direct
2 Testimony. DEC has an A1 rating from Moody's and an A- rating from Standard
3 and Poor's ("S&P"). DEP has an A2 credit rating from Moody's and an A- rating
4 from S&P. These ratings all have stable outlooks.

5 **Q. PLEASE PRESENT YOUR UPDATED ROE CALCULATIONS.**

6 **A.** Supplemental Exhibits RAB-1 through RAB-4 present my updated ROE
7 calculations. Supplemental Exhibit RAB-1 contains updated dividend yields for
8 the companies in the Proxy Group that Companies witness Dylan D'Ascendis
9 used in his Rebuttal Testimony. This is the same proxy group I used in my
10 Direct Testimony, with the addition of Avista Corporation, a company that now
11 meets Mr. D'Ascendis' criteria for inclusion. Stock prices were updated for the
12 six-month period of January through June, 2020.

13 Supplemental Exhibit RAB-2 contains updated growth forecasts from
14 the Value Line Investment Survey, Zacks, and Yahoo! Finance. This exhibit
15 also contains updated ROE estimates using the Discounted Cash Flow ("DCF")
16 method.

17 Supplemental Exhibits RAB-3 and RAB-4 present updated calculations
18 for the Capital Asset Pricing Model ("CAPM"). Supplemental Direct Table 1
19 below provides a summary of the updated ROE results.

**Supplemental Direct Table 1
SUMMARY OF ROE ESTIMATES**

DCF Methodology

Average Growth Rates

- High	8.98%
- Low	8.29%
- Average	8.75%

Median Growth Rates:

- High	9.28%
- Low	8.41%
- Average	8.88%

CAPM Methodology

Forward-looking Market Return:

- Current 30-Year Treasury	9.25%
- D&P Normalized Risk-free Rate	9.61%

Historical Risk Premium:

- Current 30-Year Treasury	6.19% - 6.98%
- D&P Normalized Risk-free Rate	7.56% - 8.35%

1

2 **Q. PLEASE DISCUSS THE DIFFERENCES IN THE RESULTS FROM**
3 **THE ANALYSES IN YOUR DIRECT TESTIMONY.**

4 A. With respect to the DCF results, the updated six-month dividend yield increased
5 to 3.32% from 2.88%. However, the average and median growth rates for
6 Zacks, Yahoo! Finance, and Value Line declined. The resulting updated DCF
7 ROEs increased slightly from those in my Direct Testimony, from 8.60% -
8 8.67% to 8.75% - 8.88%.

9 The CAPM results increased significantly due to a very large increase
10 in the Value Line average beta value, from 0.56 in my Direct Testimony to 0.74
11 in the update. This represents an increase of 32.1% in the average beta for the
12 proxy group. Indeed, my updated results for the forward-looking CAPM
13 increased markedly to 9.25% - 9.61%. My updated results for the historical
14 CAPM also increased significantly to 6.19% - 8.14%.

1 **Q. BASED ON YOUR UPDATED ROE CALCULATIONS, WHAT IS**
2 **YOUR ROE RECOMMENDATION IN THIS CASE?**

3 A. I continue to recommend that the Commission adopt a 9.0% ROE for the
4 Companies. Although the DCF results increased in the update, they did not
5 increase enough to suggest a higher required ROE on the part of investors for
6 low-risk regulated electric utility investments like DEC and DEP. Further, the
7 stability of the Companies' current credit ratings do not suggest that the
8 required ROE increased since I filed my Direct Testimonies. Likewise,
9 although the CAPM results also increased, the range of both historical and
10 forecasted ROE results continue to support 9.0% as just and reasonable.

11 **Q. DOES THE TREND IN BOND YIELDS, BOTH FOR THE 30-YEAR**
12 **TREASURY BOND AND AVERAGE UTILITY BONDS, SUGGEST AN**
13 **INCREASE IN THE REQUIRED ROE FOR DEC AND DEP?**

14 A. No. June 2020 yields were lower than they were in January 2020 for both the
15 30-Year Treasury Bond and for bonds of regulated utilities. This decline in bond
16 yields does not support higher ROEs for the Companies.

17 **Q. IS A SIX-MONTH PERIOD STILL APPROPRIATE FOR**
18 **CALCULATING THE DIVIDEND YIELD FOR THE PROXY GROUP?**

19 A. Yes. The updated six-month period of January through June 2020 is weighted
20 more toward the more volatile period of the pandemic (March through June).
21 Supplemental Exhibit RAB-1 shows that the monthly dividend yield for the
22 proxy group increased significantly in March through May, then declined from
23 May to June. March through June dividend yields are all much higher than

1 January and February. Given the volatility present in financial markets, I
2 believe it is still advisable to include the more stable months of January and
3 February in the average dividend yield calculation for the proxy group.

4 **Q. YOU MENTIONED THAT THE CAPM RESULTS INCREASED SINCE**
5 **YOU FILED YOUR DIRECT TESTIMONY AND THAT A LARGE**
6 **INCREASE IN AVERAGE BETA FOR THE PROXY GROUP WAS**
7 **RESPONSIBLE. PLEASE ADDRESS WHETHER THE COMMISSION**
8 **SHOULD INCLUDE THE HIGHER CAPM RESULTS IN ITS**
9 **CONSIDERATION OF THE ALLOWED ROE FOR DEC AND DEP IN**
10 **THIS CASE.**

11 A. I continue to recommend that the Commission rely on the DCF model for its
12 ROE determination in this case. In my view, the sharp increase in betas for the
13 companies in the proxy group was influenced by the extreme market volatility
14 due to the Covid-19 pandemic. It is likely the increases in beta were due to
15 greater volatility in the stock prices for regulated electric utilities relative to the
16 movement of the market in general since the last Value Line reports that I relied
17 on in my Direct Testimony. The question now is whether investors believe that
18 regulated electric utilities are more risky relative to the general market than they
19 were before the volatile period since March 2020. I believe the sharp increase
20 in betas could be a short-term phenomenon and, as such, I would not advise
21 placing much reliance on the CAPM results at this time. Certainly, the DCF
22 results do not suggest a sharp increase in investor required ROEs for regulated
23 electric companies.

1 The increase in the average beta factor for the proxy group underscores
2 the shortcomings of the CAPM that I described in detail in my Direct Testimony
3 in the DEP case. I point to pages 29 - 30 of my Direct Testimony where the
4 problems with beta were set forth. The recent increase in the average beta for
5 the proxy group is not consistent with the decline in average utility bond yields
6 from January to June 2020. Also, given the decline in the Volatility Index (the
7 “VIX” that I presented earlier), I believe it is highly unlikely that a 32% increase
8 in expected betas for electric utilities since earlier in the year is accurate and
9 reliable. In conclusion, the CAPM results should be viewed with even more
10 caution and skepticism than when I filed my Direct Testimony in this
11 proceeding.

12 **Q. ARE YOU AWARE OF A RECENT ROE AWARD THAT WAS**
13 **GRANTED TO DUKE ENERGY KENTUCKY BY THE KENTUCKY**
14 **PUBLIC SERVICE COMMISSION?**

15 A. Yes, I am aware of this Order, as I was involved in this case on behalf of the
16 Attorney General of the Commonwealth of Kentucky. In its Order in Case No.
17 2019-00271 dated April 27, 2020 the Kentucky Public Service Commission
18 (“KPSC”) authorized an allowed ROE for Duke Energy Kentucky (“DEK”) of
19 9.25%. The KPSC also authorized a common equity ratio of 48.23%. Further,
20 the KPSC denied DEK's request for rehearing on the ROE issue in an Order
21 dated June 4, 2020. In terms of credit ratings, DEK has a Moody's rating of
22 Baa1 with a stable outlook and a S&P rating of A- with a stable outlook. These
23 credit ratings are fairly similar to those of DEC and DEP. In fact, the Companies

1 have slightly higher Moody's credit ratings (A2 and A1 for DEP and DEC,
2 respectively). My recommendation of a 9.0% ROE with a 51.50% common
3 equity ratio compares favorably with the KPSC Order for DEK.

4 I would like to add that I'm also aware that the KPSC made its ROE
5 determination based on data that preceeded the Covid-19 pandemic and the
6 associated market volatility that I described earlier in this testimony. However,
7 my updated DCF analyses show the investor required return for regulated
8 electric companies did not change significantly since I filed my Direct
9 Testimony in the DEP case on April 13. I'm also aware that the NCUC will
10 base its ROE decision in this case on the evidence presented to it and not on the
11 ROE awards from other state commissions. Nevertheless, I wanted to provide
12 this additional recent information from the KPSC Order for the Commission's
13 consideration.

14 **II. ECONOMIC CONDITIONS IN NORTH CAROLINA**

15 **Q. PLEASE SUMMARIZE THE CHANGES IN ECONOMIC**
16 **CONDITIONS SINCE YOU FILED YOUR DIRECT TESTIMONY FOR**
17 **DEC AND DEP.**

18 **A.** The Covid-19 pandemic and the economic shutdowns that accompanied it,
19 including that in North Carolina, caused an unprecedented economic
20 contraction and skyrocketing unemployment. According to the U.S. Bureau of
21 Labor Statistics, the unemployment rate for the United States rose from 3.5%
22 in February 2020 to a high of 14.7% in April 2020. The unemployment rate for
23 May 2020 was 13.3% and declined further in June 2020 to 11.1%. For North

1 Carolina, the unemployment rate rose from 3.6 in February 2020 to 12.9% in
2 May the same as the rate for April.³

3 Nationally, real Gross Domestic Product (“GDP”) declined in the first
4 quarter of 2020 by -5.0%, according to the Bureau of Economic Analysis
5 (“BEA”).⁴ The BEA also reported that profits from current production
6 (corporate profits with inventory valuation and capital consumption
7 adjustments) decreased \$262.8 billion in the first quarter, in contrast to an
8 increase of \$53.0 billion in the fourth quarter of 2019.

9 **Q. HOW DO THESE CHANGED ECONOMIC CONDITIONS AFFECT**
10 **YOUR ROE RECOMMENDATION IN THESE PROCEEDINGS?**

11 **A.** The ongoing Covid-19 pandemic continues to significantly affect economic
12 activity, as well as the employment and incomes of North Carolinians. As I
13 stated in my Direct Testimony on page 48, it is more important than ever for
14 the Commission to consider the impacts of the Companies’ requested ROE of
15 10.3% - 10.5% on North Carolina ratepayers. The Companies’ ratepayers
16 simply cannot afford to be saddled with an excessive ROE in this range. Based
17 on current economic conditions and on my updated analyses, I continue to
18 recommend that the Commission authorize the Companies a ROE of 9.0%.

³ The May 2020 unemployment rate for North Carolina is preliminary. Data from *North Carolina Labor Market Conditions, May 2020*, North Carolina Department of Commerce. The June 2020 North Carolina unemployment rate was not available at the time I prepared my Supplemental Direct Testimony.

⁴ <https://www.bea.gov/news/2020/gross-domestic-product-1st-quarter-2020-third-estimate-corporate-profits-1st-quarter-2020>.

- 1 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT**
2 **TESTIMONY?**
3 **A. Yes.**

PROXY GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
ALLETE, Inc.	High Price (\$)	84.710	84.170	77.390	63.350	59.270	64.900
	Low Price (\$)	79.400	67.990	50.010	53.290	48.220	51.600
	Avg. Price (\$)	82.055	76.080	63.700	58.320	53.745	58.250
	Dividend (\$)	0.588	0.618	0.618	0.618	0.618	0.618
	Mo. Avg. Div.	2.86%	3.25%	3.88%	4.24%	4.60%	4.24%
	6 mos. Avg.	3.84%					
Alliant Energy Corp.	High Price (\$)	59.740	60.280	58.150	54.450	49.720	52.470
	Low Price (\$)	53.320	51.250	37.660	43.610	44.360	46.150
	Avg. Price (\$)	56.530	55.765	47.905	49.030	47.040	49.310
	Dividend (\$)	0.380	0.380	0.380	0.380	0.380	0.380
	Mo. Avg. Div.	2.69%	2.73%	3.17%	3.10%	3.23%	3.08%
	6 mos. Avg.	3.00%					
Ameren Corp.	High Price (\$)	82.410	87.330	87.660	81.250	75.270	77.420
	Low Price (\$)	75.540	77.190	58.740	65.900	66.330	67.140
	Avg. Price (\$)	78.975	82.260	73.200	73.575	70.800	72.280
	Dividend (\$)	0.495	0.495	0.495	0.495	0.495	0.495
	Mo. Avg. Div.	2.51%	2.41%	2.70%	2.69%	2.80%	2.74%
	6 mos. Avg.	2.64%					
American Electric Power Co.	High Price (\$)	104.430	104.970	100.650	88.290	85.850	88.120
	Low Price (\$)	92.940	86.420	65.140	71.200	76.230	77.150
	Avg. Price (\$)	98.685	95.695	82.895	79.745	81.040	82.635
	Dividend (\$)	0.700	0.700	0.700	0.700	0.700	0.700
	Mo. Avg. Div.	2.84%	2.93%	3.38%	3.51%	3.46%	3.39%
	6 mos. Avg.	3.25%					
Avista Corp.	High Price (\$)	50.910	52.430	53.000	45.760	42.530	40.840
	Low Price (\$)	46.180	45.940	32.090	38.780	34.520	33.340
	Avg. Price (\$)	48.545	49.185	42.545	42.270	38.525	37.090
	Dividend (\$)	0.388	0.405	0.405	0.405	0.405	0.405
	Mo. Avg. Div.	3.20%	3.29%	3.81%	3.83%	4.21%	4.37%
	6 mos. Avg.	3.78%					
Avangrid, Inc.	High Price (\$)	53.935	57.240	53.995	46.830	44.610	47.080
	Low Price (\$)	50.210	47.240	35.620	39.720	38.780	40.650
	Avg. Price (\$)	52.073	52.240	44.807	43.275	41.695	43.865
	Dividend (\$)	0.440	0.440	0.440	0.440	0.440	0.440
	Mo. Avg. Div.	3.38%	3.37%	3.93%	4.07%	4.22%	4.01%
	6 mos. Avg.	3.83%					

PROXY GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
CMS Energy Corp.	High Price (\$)	68.980	69.170	68.990	64.080	58.960	61.190
	Low Price (\$)	61.570	59.120	46.030	53.960	52.350	55.800
	Avg. Price (\$)	65.275	64.145	57.510	59.020	55.655	58.495
	Dividend (\$)	0.383	0.408	0.408	0.408	0.408	0.408
	Mo. Avg. Div.	2.34%	2.54%	2.83%	2.76%	2.93%	2.79%
	6 mos. Avg.	2.70%					
DTE Energy Co.	High Price (\$)	134.720	135.670	119.490	113.300	108.730	117.910
	Low Price (\$)	127.620	110.200	71.210	85.530	92.390	102.190
	Avg. Price (\$)	131.170	122.935	95.350	99.415	100.560	110.050
	Dividend (\$)	1.013	1.013	1.013	1.013	1.013	1.013
	Mo. Avg. Div.	3.09%	3.29%	4.25%	4.07%	4.03%	3.68%
	6 mos. Avg.	3.74%					
Evergy, Inc.	High Price (\$)	72.620	76.570	73.160	64.700	62.680	65.400
	Low Price (\$)	62.930	63.180	42.010	50.640	54.000	57.600
	Avg. Price (\$)	67.775	69.875	57.585	57.670	58.340	61.500
	Dividend (\$)	0.505	0.505	0.505	0.505	0.505	0.505
	Mo. Avg. Div.	2.98%	2.89%	3.51%	3.50%	3.46%	3.28%
	6 mos. Avg.	3.27%					
Hawaiian Electric Ind.	High Price (\$)	49.630	50.550	55.150	46.660	39.920	40.760
	Low Price (\$)	45.040	42.030	33.510	38.790	34.930	34.790
	Avg. Price (\$)	47.335	46.290	44.330	42.725	37.425	37.775
	Dividend (\$)	0.320	0.330	0.330	0.330	0.330	0.330
	Mo. Avg. Div.	2.70%	2.85%	2.98%	3.09%	3.53%	3.49%
	6 mos. Avg.	3.11%					
NextEra Energy, Inc.	High Price (\$)	270.660	283.350	282.570	250.870	256.510	262.260
	Low Price (\$)	237.950	243.080	174.800	213.040	222.620	233.760
	Avg. Price (\$)	254.305	263.215	228.685	231.955	239.565	248.010
	Dividend (\$)	1.250	1.400	1.400	1.400	1.400	1.400
	Mo. Avg. Div.	1.97%	2.13%	2.45%	2.41%	2.34%	2.26%
	6 mos. Avg.	2.26%					
Northwestern Corp.	High Price (\$)	77.340	80.520	78.080	65.380	61.420	64.170
	Low Price (\$)	69.690	69.490	45.060	52.470	52.100	51.000
	Avg. Price (\$)	73.515	75.005	61.570	58.925	56.760	57.585
	Dividend (\$)	0.575	0.575	0.600	0.600	0.600	0.600
	Mo. Avg. Div.	3.13%	3.07%	3.90%	4.07%	4.23%	4.17%
	6 mos. Avg.	3.76%					

PROXY GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
OGE Energy Corp.	High Price (\$)	46.330	46.430	40.320	33.770	32.940	34.910
	Low Price (\$)	43.220	37.160	23.010	26.370	27.960	29.220
	Avg. Price (\$)	44.775	41.795	31.665	30.070	30.450	32.065
	Dividend (\$)	0.388	0.388	0.388	0.388	0.388	0.388
	Mo. Avg. Div.	3.46%	3.71%	4.89%	5.15%	5.09%	4.83%
	6 mos. Avg.	4.52%					
Otter Tail Corp.	High Price (\$)	54.300	56.900	51.990	48.220	45.080	44.610
	Low Price (\$)	50.830	47.560	30.950	41.070	36.700	36.800
	Avg. Price (\$)	52.565	52.230	41.470	44.645	40.890	40.705
	Dividend (\$)	0.350	0.370	0.370	0.370	0.370	0.370
	Mo. Avg. Div.	2.66%	2.83%	3.57%	3.32%	3.62%	3.64%
	6 mos. Avg.	3.27%					
Pinnacle West Capital Corp.	High Price (\$)	98.810	105.510	100.730	84.690	78.670	82.290
	Low Price (\$)	88.100	88.600	60.050	67.290	69.560	69.960
	Avg. Price (\$)	93.455	97.055	80.390	75.990	74.115	76.125
	Dividend (\$)	0.783	0.783	0.783	0.783	0.783	0.783
	Mo. Avg. Div.	3.35%	3.22%	3.89%	4.12%	4.22%	4.11%
	6 mos. Avg.	3.82%					
PNM Resources, Inc.	High Price (\$)	55.240	56.140	52.240	46.820	41.380	43.500
	Low Price (\$)	48.520	45.470	27.080	35.390	34.240	36.930
	Avg. Price (\$)	51.880	50.805	39.660	41.105	37.810	40.215
	Dividend (\$)	0.308	0.308	0.308	0.308	0.308	0.308
	Mo. Avg. Div.	2.37%	2.42%	3.10%	2.99%	3.25%	3.06%
	6 mos. Avg.	2.87%					
Portland General Electric Co.	High Price (\$)	61.710	63.080	59.810	53.420	47.500	48.730
	Low Price (\$)	54.550	53.270	37.830	44.580	39.510	40.200
	Avg. Price (\$)	58.130	58.175	48.820	49.000	43.505	44.465
	Dividend (\$)	0.385	0.385	0.385	0.385	0.385	0.385
	Mo. Avg. Div.	2.65%	2.65%	3.15%	3.14%	3.54%	3.46%
	6 mos. Avg.	3.10%					
Southern Company	High Price (\$)	71.100	70.780	68.560	61.860	57.710	60.470
	Low Price (\$)	62.240	59.070	41.960	49.260	51.990	50.400
	Avg. Price (\$)	66.670	64.925	55.260	55.560	54.850	55.435
	Dividend (\$)	0.620	0.620	0.620	0.620	0.640	0.640
	Mo. Avg. Div.	3.72%	3.82%	4.49%	4.46%	4.67%	4.62%
	6 mos. Avg.	4.30%					

PROXY GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
WEC Energy Group, Inc.	High Price (\$)	101.370	103.280	109.530	101.000	91.960	95.820
	Low Price (\$)	90.340	90.160	68.010	80.560	81.490	83.840
	Avg. Price (\$)	95.855	96.720	88.770	90.780	86.725	89.830
	Dividend (\$)	0.590	0.633	0.633	0.633	0.633	0.633
	Mo. Avg. Div.	2.46%	2.62%	2.85%	2.79%	2.92%	2.82%
	6 mos. Avg.	2.74%					
Xcel Energy	High Price (\$)	69.620	72.140	70.680	67.440	65.310	67.540
	Low Price (\$)	61.970	61.250	46.580	56.960	56.070	61.580
	Avg. Price (\$)	65.795	66.695	58.630	62.200	60.690	64.560
	Dividend (\$)	0.405	0.405	0.430	0.430	0.430	0.430
	Mo. Avg. Div.	2.46%	2.43%	2.93%	2.77%	2.83%	2.66%
	6 mos. Avg.	2.68%					
Monthly Avg. Dividend Yield		2.84%	2.92%	3.48%	3.50%	3.66%	3.54%
6-month Avg. Dividend Yield		3.32%					

Source: Yahoo! Finance

PROXY GROUP
DCF Growth Rate Analysis

<u>Company</u>	(1) Value Line <u>DPS</u>	(2) Value Line <u>EPS</u>	(3) <u>Zacks</u>	(4) Yahoo! <u>Finance</u>
ALLETE, Inc.	4.50%	5.50%	7.00%	7.00%
Alliant Energy Corporation	5.50%	6.50%	5.50%	5.30%
Ameren Corp.	5.00%	6.00%	6.80%	5.90%
American Electric Power Co.	5.50%	5.00%	5.80%	5.88%
Avangrid, Inc.	2.50%	6.00%	5.50%	6.40%
Avista Corp.	4.00%	1.00%	5.20%	6.00%
CMS Energy Corporation	7.00%	7.50%	6.90%	7.16%
DTE Energy Company	6.50%	5.00%	5.50%	5.84%
Evergy, Inc.	5.50%	3.00%	5.00%	3.90%
Hawaiian Electric	4.00%	3.50%	1.70%	3.30%
NextEra Energy, Inc.	10.50%	10.00%	7.80%	8.07%
Northwestern Corporation	4.00%	2.50%	3.40%	3.70%
OGE Energy Corp.	6.00%	3.00%	3.70%	2.40%
Otter Tail Corporation	5.00%	3.50%	9.00%	9.00%
Pinnacle West Capital Corp.	5.50%	4.50%	5.20%	4.48%
PNM Resources, Inc.	5.50%	6.00%	6.10%	5.65%
Portland General Electric Company	6.00%	4.00%	5.30%	4.15%
Southern Company	3.00%	3.00%	4.00%	4.52%
WEC Energy Group	6.50%	6.00%	5.90%	5.90%
Xcel Energy Inc.	<u>6.00%</u>	<u>6.00%</u>	<u>5.90%</u>	<u>6.00%</u>
Average	5.40%	4.88%	5.56%	5.53%
Median	5.50%	5.00%	5.50%	5.86%

Sources: Value Line Investment Survey, April 24, May 15, and June 12, 2020
Yahoo! Finance and Zacks growth rates retrieved June 23, 2020
Yahoo! Finance growth rates used for Zacks growth rates for ALLETE, Otter Tail

**PROXY GROUP
DCF RETURN ON EQUITY**

(1) Value Line <u>Dividend Gr.</u>	(2) Value Line <u>Earnings Gr.</u>	(3) Zack's <u>Earning Gr.</u>	(4) Yahoo! <u>Earning Gr.</u>	(5) Average of <u>All Gr. Rates</u>
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Method 1:

Dividend Yield	3.32%	3.32%	3.32%	3.32%	3.32%
Average Growth Rate	5.40%	4.88%	5.56%	5.53%	5.34%
Expected Div. Yield	<u>3.41%</u>	<u>3.41%</u>	<u>3.42%</u>	<u>3.42%</u>	<u>3.41%</u>
DCF Return on Equity	8.81%	8.29%	8.98%	8.95%	8.75%

Method 2:

Dividend Yield	3.32%	3.32%	3.32%	3.32%	3.32%
Median Growth Rate	5.50%	5.00%	5.50%	5.86%	5.47%
Expected Div. Yield	<u>3.42%</u>	<u>3.41%</u>	<u>3.42%</u>	<u>3.42%</u>	<u>3.41%</u>
DCF Return on Equity	8.92%	8.41%	8.92%	9.28%	8.88%

PROXY GROUP
Capital Asset Pricing Model Analysis

30-Year Treasury Bond, Value Line Beta

<u>Line No.</u>		<u>Value Line</u>
1	Market Required Return Estimate	11.90%
2	Risk-free Rate of Return, 30-Year Treasury Bond	
3	Average of Last Six Months	1.63%
4	Risk Premium	
5	(Line 1 minus Line 3)	10.26%
6	Comparison Group Beta	0.74
7	Comparison Group Beta * Risk Premium	
8	(Line 5 * Line 6)	7.62%
9	CAPM Return on Equity	
10	(Line 3 plus Line 8)	9.25%

Duff and Phelps Normalized Risk-free Rate

1	Market Required Return Estimate	11.90%
2	Duff and Phelps Normalized Risk-free Rate	3.00%
3	Risk Premium	
4	(Line 1 minus Line 2)	8.90%
5	Proxy Group Beta	0.74
6	Proxy Group Beta * Risk Premium	
7	(Line 4 * Line 5)	6.61%
8	CAPM Return on Equity	
9	(Line 2 plus Line 7)	9.61%

PROXY GROUP
Capital Asset Pricing Model Analysis

Supporting Data for CAPM Analyses

30 Year Treasury Bond Data

	<u>Avg. Yield</u>
January-20	2.22%
February-20	1.97%
March-20	1.46%
April-20	1.27%
May-20	1.38%
June-20	<u>1.49%</u>

6 month average 1.63%

Source: www.federalreserve.gov

<u>Value Line Market Return Data:</u>	<u>Comparison Group Betas:</u>	<u>Value Line</u>
Forecasted Data:	ALLETE, Inc.	0.85
	Alliant Energy Corporation	0.80
Value Line Median Growth Rates:	Ameren Corp.	0.80
Earnings 9.00%	American Electric Power Co.	0.75
Book Value <u>6.50%</u>	Avangrid, Inc.	0.80
Average 7.75%	Avista Corp.	0.60
Average Dividend Yield <u>1.24%</u>	CMS Energy Corporation	0.80
Estimated Market Return 9.04%	DTE Energy Company	0.90
	Evergy, Inc.	1.05
Value Line Projected 3-5 Yr.	Hawaiian Electric	0.55
Median Annual Total Return 14.00%	NextEra Energy, Inc.	0.85
Average Annual Total Return <u>15.51%</u>	Northwestern Corporation	0.55
Average 14.76%	OGE Energy Corp.	1.05
	Otter Tail Corporation	0.85
	Pinnacle West Capital Corp.	0.45
Average of Projected Mkt.	PNM Resources, Inc.	0.50
Returns 11.90%	Portland General Electric Company	0.55
	Southern Company	0.90
Source: Value Line Investment Analyzer,	WEC Energy Group	0.80
June 24, 2020	Xcel Energy Inc.	<u>0.45</u>
	Average	0.74

PROXY GROUP
Capital Asset Pricing Model Analysis
Historic Market Premium

	<u>Arithmetic Mean</u>	<u>Adjusted Arithmetic Mean</u>
CAPM with Current 30-Year Treasury Yield		
Long-Term Annual Return on Stocks	12.10%	
Long-Term Annual Income Return on Long-Term Treas. Bonds	<u>4.90%</u>	
Historical Market Risk Premium	7.20%	6.14%
Proxy Group Beta, Value Line	<u>0.74</u>	<u>0.74</u>
Beta * Market Premium	5.35%	4.56%
Current 30-Year Treasury Bond Yield	<u>1.63%</u>	<u>1.63%</u>
CAPM Cost of Equity, Value Line Beta	<u>6.98%</u>	<u>6.19%</u>
CAPM with D&P Normalized Risk-Free Rate		
Historical Market Risk Premium	7.20%	6.14%
Proxy Group Beta, Value Line	0.74	0.74
Beta * Market Premium	5.35%	4.56%
D&P Normalized Risk-Free Rate	3.00%	3.00%
CAPM Cost of Equity, Normalized Risk-Free Rate	<u>8.35%</u>	<u>7.56%</u>

Source: Duff and Phelps Cost of Capital Navigator
2020 Cost of Capital: Annual U.S. Guidance and Examples, Chapter 2, Exhibit 2.3,
2019 Cost of Capital: Annual U.S. Guidance and Examples, Chapter 3, pages 45-47