Exhibit No.: Issue: ROR, Capital Structure, ROE Witness: Maureen L. Reno Type of Exhibit: Direct Testimony Sponsoring Party: U.S. Department of Energy Case No.: ER-2014-0370 Date Testimony Prepared: April 2, 2015

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

)

)

In the Matter of Kansas City Power & Light Company's request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2014-0370

DIRECT TESTIMONY

OF

MAUREEN L. RENO

ON BEHALF OF

THE UNITED STATES DEPARTMENT OF ENERGY

AND THE FEDERAL EXECUTIVE AGENCIES

APRIL 2, 2014

TABLE OF CONTENTS

		Page
I.	INTRODUCTION AND QUALIFICATIONS	1
II.	MACROECONOMIC CONDITIONS	5
III.	RATE OF RETURN AND CAPITAL STRUCTURE	10
IV.	THE COST OF COMMON EQUITY CAPITAL	11
V.	METHODOLOGIES	16
	1. The Single-Stage Discounted Cash Flow Model	17
	2. The Three-Stage Discounted Cash Flow Model	23
	3. The Capital Asset Pricing Model	28
VI.	SUMMARY AND RECOMMENDATION	31
VII.	APPENDIX A. CURRICULUM VITAE AND QUALIFICATIONS	
VIII.	APPENDIX B: ATTACHMENTS	
IX.	APPENDIX C: SCHEDULES	

1

I. INTRODUCTION AND QUALIFICATIONS

	Dire	ct Testimony of Maureen L. Reno Page 1
23		capital and a fair rate of return. I also testified or advised the Commission on utility
22		expert witness in several water, electric, and natural gas cases regarding the cost of
21	A.	Yes. While employed at the NHPUC, I served as Public Utility Commission Staff
20		BEFORE A UTILITY REGULATORY COMMISSION?
19	Q.	HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS
18		Energy, LLC.
17		in 2012, I have provided consulting services to Exeter Associates, Inc. and TrueLight
16		of Concerned Scientists ("UCS") as a Senior Energy Economist. Since leaving UCS
15		("NHPUC"). After spending ten years at the NHPUC, I was employed by the Union
14		majority of this time was spent at the New Hampshire Public Utilities Commission
13	A.	I have been employed in the regulated utilities and energy sectors for 13 years. The
12	Q.	WHAT IS YOUR PROFESSIONAL BACKGROUND?
11		environmental economics.
10		economics. My areas of academic concentration included industrial organization and
9		completed all course work and examination requirements for the Ph.D. degree in
8		the University of New Hampshire in Durham, New Hampshire, where I also
7		Orono, Maine in 1996. In 1998, I earned a Master of Arts degree in Economics from
6	A.	I received a Bachelor of Arts degree in Economics from the University of Maine at
5	Q.	PLEASE SUMMARIZE YOUR EDUCATION.
4		business address is 19 Hope Hill Road, Derry, New Hampshire 03038.
3	A.	My name is Maureen L. Reno. I am employed as an independent consultant. My
2	Q.	PLEASE STATE YOUR FULL NAME AND BUSINESS ADDRESS.

debt financings, power plant retrofitting, utility energy charges, energy efficiency
 cases, renewable portfolio standards, and other issues brought before the NHPUC.
 <u>See Appendix A for my curriculum vitae and qualifications.</u>

ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A. I am appearing on behalf of the United States Department of Energy ("DOE" or
"Department") representing the Federal Executive Agencies ("FEA"), which is
comprised of all federal facilities served by Kansas City Power & Light ("KCP&L"
or "the Company").

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS 10 PROCEEDING?

11 The purpose of my testimony is to recommend, for ratemaking purposes in this case, A. 12 an overall rate of return, a capital structure including short-term debt, and a fair rate 13 of return on equity ("ROE") for KCP&L. My recommendation is set forth according to the standards in Bluefield Water Works v. PSC, 262 U.S. 679, 692-93 (1923) 14 15 ("Bluefield") and FPC v. Hope Natural Gas Co., 320 U.S. 591, 605 (1944) ("Hope"). 16 In *Bluefield* and *Hope*, the U.S. Supreme Court established the principle that a public 17 utility may be allowed to earn a return comparable to a return on investments in other 18 enterprises having similar risks that allows the utility the opportunity to attract capital 19 and to maintain its credit rating.

20Q.WHAT IS THE ROE THAT THE COMPANY IS REQUESTING IN ITS21FILING?

4

Q.

A. The Company is requesting that the Public Service Commission of the State of
 Missouri ("the Commission") grant it an ROE of 10.30 percent. <u>See Hevert</u>
 Testimony, page 2, line 18.

4 Q. WHY SHOULD THE COMMISSION DISREGARD MR. ROBERT B. 5 HEVERT'S RECOMMENDATION?

A. The Company's cost of capital witness, Mr. Robert B. Hevert, discounts the majority
of results from various ROE estimation methodologies that he employs and then
proposes an ROE of 10.30 percent. The range of ROE estimates that result from Mr.
Hevert's analytical studies range from 8.35 percent to 12.09 percent. However, even
that range is overstated because of the upwardly biased inputs he utilizes, particularly
his reliance on high growth rates and use of authorized returns when calculating his
equity risk premium.

13 Q. WHAT DO YOU RECOMMEND AS THE ALLOWED RATE OF RETURN14 ON RATE BASE?

A. I recommend an allowed rate of return of 6.62 percent, based on a ROE of
9.00 percent, a cost of long-term debt of 4.88 percent, a cost of short-term debt of
0.26 percent, and a capital structure including 47.89 percent long-term debt,
4.70 percent short term debt, and 47.40 percent equity. My calculations and results
are shown in the following table.

, v	Weighted Average Co	ost of Capital	for KCP&L	
	December 31, 2014 Balance	Weight	Pre-Tax Cost of Capital	Actual Weighted Cost
Long-Term Debt ¹	\$2,298,500,000	47.89%	4.88%	2.34%
Short-Term Debt ²	\$225,750,000	4.70%	0.26%	0.01%
Common Equity ¹	\$2,275,000,000	47.40%	9.00%	4.27%
Total Capitalization	\$4,799,250,000	100.00%		6.62%

Source: Company's 2014 10-k SEC Report.

1. Cost of long-term debt as reported in Company's 2014 10-k SEC Report. The long-term debt cost rate is determined by dividing the actual interest paid of \$112,100,000 by the debt balance of \$2,298,500,000.

2. Average of short-term debt year-end balances for 2013 and 2014 as reported in the Company's 2014 10k SEC Report on page 84. Cost of short-term debt rate is the 30-day average on the three-month LIBOR rate for the period ending March 16, 2015.

Source for LIBOR rate: https://research.stlouisfed.org/fred2/series/USD3MTD156N/downloaddata.

1 Q. WHAT DO YOU RECOMMEND AS THE ALLOWED ROE FOR THE

2 COMPANY?

3 A. I recommend an allowed ROE of 9.0 percent, which is in line with the median result 4 from the various ROE estimation methodologies that I apply to Mr. Hevert's proxy group of comparable risk companies, adjusted for recent merger activity. I adjusted 5 6 the proxy group by removing three companies: Cleco Corporation, NextEra Energy 7 ("NextEra"), and Hawaiian Electric Industries ("Hawaiian"), all of which are 8 involved in mergers and no longer meet Mr. Hevert's proxy group selection criteria. 9 My analytical studies using that adjusted proxy group suggest that a fair and 10 reasonable ROE would range anywhere between 8.2 percent and 9.6 percent.

- 11 O.
- HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is organized into six sections, including this one. In the next section, I
summarize current economic and financial conditions that affect investors'
opportunity cost of capital that drive my quantitative results. In Section III, I discuss
the merits of including the Company's short-term debt in its capital structure and

provide my recommendation on an alternative capital structure. In section IV, I explore different types of risk that an electric utility may face and compare KCP&L's business and economic position to determine whether such risk is already effectively captured in my sample proxy group and in my ROE recommendation. In Section V, I describe the methodologies I apply to develop my ROE recommendation for KCP&L's rate base. Finally, I summarize my conclusions and provide my recommendations to the Commission in Section VI.

8

II. <u>MACROECONOMIC CONDITIONS</u>

9 Q. WHY IS IT IMPORTANT TO CONSIDER MACROECONOMIC
10 CONDITIONS IN DEVELOPING THE ROE THAT YOU RECOMMEND
11 TO THE COMMISSION?

A. Investors consider both economic and monetary conditions when assessing the opportunity costs of their investments with similar risks as KCP&L. These conditions affect the variables that investors consider to assess ROEs, including stock prices, interest rates, and sustainable dividend growth.

16 Q. HOW WOULD YOU DESCRIBE THE CURRENT ECONOMIC17 CONDITIONS?

A. After a period of tepid economic growth during the first quarter of 2015 due mostly to
weather, investors are cautiously optimistic that the economy will rebound.
According to the February 27, 2015 edition of the *Value Line Investment Survey: Selection & Opinion*, "In all, we expect GDP growth of close to 3% for 2015, with
somewhat greater gains coming later in the year, when, as noted, consumer spending

is likely to accelerate, as the recent selective weather related disruptions ease." The 1 2 Council of Economic Advisors to the Congressional Joint Economic Committee also 3 reports a slight increase in economic growth over the past year as measured by Gross 4 Domestic Product ("GDP"), a falling national unemployment rate, and low inflation. 5 See Schedule MLR-1. The Bureau of Economic Analysis reports that the real GDP for the final quarter of 2014 increased from the previous period to 2.6 percent. See 6 7 also Attachment MLR-3: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product: Fourth Quarter and Annual 2014 (Second 8 9 Estimate) February 27, 2015 News Release.

10 A recent press release from the Federal Open Market Committee ("Federal 11 Reserve" or "Committee"), however, notes that economic growth has moderated 12 somewhat. Although labor markets have improved, recovery in the housing sector 13 remains slow. The press release also notes that inflation has declined further below 14 the Committee's longer-run objective, largely reflecting declines in energy prices and, 15 as a result, market-based measures of inflation-related compensation remain low. The press release states: "To support continued progress toward maximum 16 17 employment and price stability, the Committee today reaffirmed its view that the 18 current 0 to ¹/₄ percent target range for the federal funds rate remain appropriate." The Committee further averred "...that an increase in the target range for the federal 19 20 funds rate remains unlikely at the April FOMC meeting." See Press Release dated *March 18*, 2015.¹ The Committee concluded that it is maintaining its existing policy 21 of reinvesting principal payments from its holdings of agency debt and 22

¹ <u>http://www.federalreserve.gov/newsevents/press/monetary/20150318a.htm</u>.

1		mortgage-backed securities and of rolling over maturing U.S. Treasury securities at
2		auction to help maintain accommodative financial conditions.
3	Q.	HOW HAVE FINANCIAL CONDITIONS CHANGED OVER THE LAST
4		FIVE YEARS?
5	A.	The line graph below shows how market costs of capital have changed for the period
6		2009 through 2014. See also Schedule MLR-2a. Despite a sluggish recovery,
7		short-term interest rates and bond yields still remain near historical lows.



8 It is critical to note that yields on long-term bonds have fallen since a year ago 9 as demonstrated by a flattening yield curve. While short-term interest rates are 10 administered by the Federal Reserve System ("Federal Reserve"), long-term interest 11 rates are determined by market forces and are a function of the effect that bond 12 markets believe current short-term interest rates will have on future levels of 13 inflation. In other words, the yield curve reflects the bonds market's consensus 14 opinion of future economic activity: e.g., levels of inflation and interest rates. Current trends, as demonstrated in a flattening of the yield curve (see figure below), show that investors anticipate a slower rate of inflation.



3 Another measure of the collective views of investors regarding long-term inflation expectations is the Treasury Inflation Protection Securities ("TIPS") spread 4 5 or the difference between yields on long-term nominal Treasury Securities and 6 long-term TIPS. The yield on a long-term conventional Treasury bond pays its holder 7 a fixed nominal coupon and principal to compensate the investor for future inflation 8 and includes the real rate of interest and the inflation compensation. For TIPS, the 9 coupons and principal rise and fall with inflation, as measured by the Consumer Price 10 Index ("CPI"), thus the yield includes only the real rate of interest. Therefore, the 11 difference, roughly speaking, between the two yields reflects the inflation 12 compensation over that maturity horizon. The 30-day average rate for the period 13 ending March 12, 2015 equals 1.9 percent and represents the market's most recent expectations of long-term inflation. See Schedule MLR-2b. These expectations for 14 Direct Testimony of Maureen L. Reno Page 8

2

low inflation coupled with accommodative monetary policy reinforce investors'
 expectation of a low opportunity cost of purchasing utility stocks as demonstrated by
 my ROE estimates.

4 Q. WHAT ARE THE ECONOMIC AND FINANCIAL EXPECTATIONS FOR 5 THE NEAR FUTURE?

A. Despite the slowdown over the winter, the economy is gaining a more stable footing
resulting in some positive, albeit cautious, expectations for economic expansion.
According to the March edition of *Blue Chip Economic Indicators ("Blue Chip")*,
economic growth, as measured by real GDP, is expected to approach three percent
during the second half of 2015 and remain at that level in 2016. According to *Blue Chip*, expected long-run economic growth beyond 2016 is expected to return to a rate
of 4.8 percent per year.²

Over the next year, inflation may remain at moderate levels, with the CPI remaining around two percent. The data shows that analysts expect the national economy to remain near full employment, as demonstrated by the fact that the unemployment rate has fallen to around five percent, although this may also reflect discouraged job seekers leaving the labor market.³ *Blue Chip* reports that the yields on government securities are expected to increase slightly in 2015, but remain near record lows. *See Schedule MLR-3b*.

² This rate is reported in the March 10, 2015 edition of *Blue Chip Economic Indicators*, which reports a consensus expected average economic growth from 2017 to 2021 and is the product of real GDP (2.5 percent) and CPI (2.3 percent). I considered other measures of inflation like the GDP deflator, but the CPI is more stable over time. <u>See Schedule MLR-3b</u>.

³ It is important to note that the falling national unemployment rate may also reflect a drop in the labor market participation rate from 65.4 percent in 2008 to 62.9 percent in 2014, showing that discouraged unemployed people are leaving the labor market. <u>See Schedule MLR-1</u>.

1

III. RATE OF RETURN AND CAPITAL STRUCTURE

2 Q. PLEASE SUMMARIZE THE PROCESS OF ESTIMATING THE COST OF
3 CAPITAL.

4 A. The cost of capital is comprised of the costs of long-term debt, short-term debt, and 5 equity capital. The first step in estimating the cost of capital is to determine the appropriate capital structure. For the purpose of estimating KCP&L's overall rate of 6 7 return, I rely on its actual capital structure as of December 31, 2014. I apply a capital 8 structure of 47.89 percent long-term debt, 4.70 percent short-term debt, and 9 47.40 percent equity. Long-term debt costs are computed using the Company's actual 10 embedded costs as reported in the Company's 2014 SEC 10-k Report. I use the 11 actual average short-term debt year-end balances for 2013 and 2014. I apply an 12 estimate of the short-term debt cost rate of 0.26 percent which is the 30-day average 13 of the three-month LIBOR rate. <u>See Schedule MLR-2c</u>.

Unlike the debt component of the capital structure, equity costs must be estimated. Finally, the overall weighted average cost of capital is computed by weighting individual costs of debt and equity capital by their respective proportions of total capital and summing the result.

18 Q. WHY DO YOU INCLUDE THE COMPANY'S SHORT-TERM DEBT IN
19 ITS CAPITAL STRUCTURE?

A. The short-term debt in the cost of capital is the debt used to fund the operations and investments of the firm. Credit rating analysts, therefore, incorporate all interest-bearing debt in their ratings. Although some analysts may assume that short-term debt will be refinanced with long-term debt, any trend in the balance of

1		short-term debt should be reflected in the company's capital structure. Since KCP&L
2		held a positive short-term debt balance throughout the period December 31, 2013
3		through December 31, 2014, I include it in the Company's capital structure.
4	Q.	IS YOUR PROPOSED CAPITAL STRUCTURE FOR THE COMPANY
5		REASONABLE?
6	A.	Yes. Although my proposed equity ratio of approximately 48 percent is slightly less
7		than my sample average, it falls within the reasonableness range provided by the
8		Company witness Hevert of 46.51 percent to 62.35 percent. See Hevert Testimony,
9		page 55, lines 12 and 13.
10		IV. <u>THE COST OF COMMON EQUITY CAPITAL</u>
11	Q.	WHAT IS THE BASIS FOR YOUR RECOMMENDED ROE?
12	А.	For ratemaking purposes, the ROE must be estimated because it varies with changing
13		
		financial market conditions. Specifically, the ROE is the return investors expect
14		financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of
14 15		financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the
14 15 16		financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the investor's current opportunity cost of investing in the securities of that company.
14 15 16 17	Q.	financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the investor's current opportunity cost of investing in the securities of that company. ARE YOU ABLE TO DIRECTLY OBSERVE THE COMPANY'S COST
14 15 16 17 18	Q.	financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the investor's current opportunity cost of investing in the securities of that company. ARE YOU ABLE TO DIRECTLY OBSERVE THE COMPANY'S COST OF EQUITY?
14 15 16 17 18 19	Q. A.	 financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the investor's current opportunity cost of investing in the securities of that company. ARE YOU ABLE TO DIRECTLY OBSERVE THE COMPANY'S COST OF EQUITY? No. Since KCP&L is a subsidiary of Great Plains Inc. and is not a publicly traded
 14 15 16 17 18 19 20 	Q. A.	 financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the investor's current opportunity cost of investing in the securities of that company. ARE YOU ABLE TO DIRECTLY OBSERVE THE COMPANY'S COST OF EQUITY? No. Since KCP&L is a subsidiary of Great Plains Inc. and is not a publicly traded company, it is not possible to directly apply cost of equity models to this utility. As
 14 15 16 17 18 19 20 21 	Q. A.	 financial market conditions. Specifically, the ROE is the return investors expect when they purchase equity shares of a particular company. It reflects the riskiness of that investment comparative to alternative investment opportunities and to the investor's current opportunity cost of investing in the securities of that company. ARE YOU ABLE TO DIRECTLY OBSERVE THE COMPANY'S COST OF EQUITY? No. Since KCP&L is a subsidiary of Great Plains Inc. and is not a publicly traded company, it is not possible to directly apply cost of equity models to this utility. As an alternative, I calculate an estimate of the Company's cost of equity by deriving

1Q.PLEASE DISCUSS THE DIFFERENT TYPES OF RISK THAT A2REGULATED MONOPOLY, SUCH AS AN ELECTRIC UTILITY, MAY3FACE.

4 A. An investor's expected return on an investment is the sum of the real risk-free rate, 5 inflation, interest rate risk, business risk, regulatory risk, and financial risk. Business risk perceived by investors includes all the operating factors that increase the 6 7 probability that expected future cash flows accruing to investors may not be realized. Business risk is due to sales volatility and operating leverage. A utility's business 8 9 risk is a function of customer base diversity, necessary capital expenditures, the 10 regional and national economy, and inflation. As mentioned previously, the risks 11 associated with a slow economic recovery are shared by all businesses and, as a 12 result, are reflected in my proxy group's calculated ROEs.

13 Business risks that the Company faces include planned capital expenditures. 14 For instance, the parent's five-year capital expenditures budget over the 2014-2018 15 timeframe totals approximately \$3.19 billion, which includes substantial investments for KCP&L. See Hevert Testimony, page 41, lines 14 to 16. Since the Company 16 17 plans to continue to make investments in utility operations, it will need access to 18 capital markets at reasonable rates, determined in part by how credit-rating agencies 19 recognize this type of risk. As referenced in Mr. Hevert's testimony, a recent report 20 by S&P Ratings Direct notes that "the real challenge for the industry is the 21 combination of slow growth and huge investment needs." See Hevert Testimony, page 22 *42, lines 6 and 7.*

Another type of risk is regulatory risk which is based on the investor's perceived understanding of the current regulatory environment along with possible changes to that environment. How regulators treat regulatory lag is one example and refers to the time lag associated with the recovery of prudently incurred costs. To the extent that companies face a time lag between incurring expenses and cost recovery, such risk is best measured by choosing a proxy group of companies that face similar regulatory oversight and earn a majority of their revenues from regulated operations.

According to Mr. Hevert, KCP&L faces high regulatory risk relative to the 8 9 utilities in his proxy group, particularly because the Company lacks a rate adjustment 10 mechanism to recover changes in its fuel and purchased power costs or fuel adjustment clause ("FAC").⁴ In general, fuel costs are exogenous, variable, and 11 12 financially significant. For example, the cost of procuring and transporting coal is set 13 by competitive market forces. The Company must pay the market price of coal or 14 face the prospect of another buyer purchasing the necessary coal supply. He further 15 states that, "Because KCP&L does not have an FAC, when it encounters higher than 16 forecasted prices for procuring fuel it experiences a direct reduction in its Funds From Operations and earnings, and a commensurate reduction in its earned ROE."⁵ The 17 18 Company is, however, requesting that the Commission allow it to implement an FAC in this case.⁶ If the Commission were to approve the Company's request, the 19 20 Company would face reduced regulatory risk via more stable earnings through annual

⁴ Mr. Hevert also lists other causes of regulatory risk, such as: the Commission not allowing construction work in progress ("CWIP") in the Company's rate base; rates are based on a historical test year; and the Company is unable to implement interim rates.

⁵ <u>See</u> Hevert Testimony, page 34.

⁶ The Company is requesting an FAC of \$0.01547 per kWh of net base fuel costs and three other rate recovery mechanisms—a property tax tracker; a vegetation management cost tracker; and a tracker for costs associated with CIPs and cyber-security efforts.

true-up filings in-between traditional rate case proceedings. Since the majority of the
 regulated utilities in my sample have similar rate recovery mechanisms such as an
 FAC, my estimated ROE captures the reduced risks associated with such rate
 recovery mechanisms.⁷

5 Financial risk relates to the capital structure of a company, including its fixed 6 contractual obligations and ability to pay interest on its debt. I control for financial 7 risk by choosing representative electric utilities with credit ratings similar to the Company. Credit-rating agencies assess the financial health of a company through 8 9 the use of key financial ratios that measure the extent to which a company can pay its 10 debt. According to Company witness Hevert, the current corporate credit ratings for KCP&L are an S&P rating of BBB+ (outlook: Stable) and a Moody's rating of Baa1 11 12 (outlook: Stable). See Hevert testimony, page 10, lines 3 and 4.

13 Q. BRIEFLY DESCRIBE HOW MR. HEVERT CHOSE COMPANIES FOR 14 HIS REPRESENTATIVE SAMPLE.

15 A. Mr. Hevert starts with the universe of electric utilities included in the Value Line 16 Investment Survey ("Value Line"). He then restricts his sample to include 17 comparable companies that pay consistent quarterly cash dividends; are covered by at 18 least two utility industry equity analysts; have investment grade long-term issues 19 ratings; derive more than 60 percent of their total operating income from regulated 20 operations; derive more than 90 percent of their total regulated operating income from 21 regulated electric operations; and have not been involved in recent mergers or other 22 transformative transactions. <u>See Hevert Testimony</u>, page 10, lines 6 to 20.

⁷ Regulatory Research Associates, Regulatory Focus "Adjustment Clauses A State-by-State Overview" July 1, 2014 publication referenced in *Hevert Testimony, Schedule RBH-7*.

1		Mr. Hevert also excludes Edison International based on recent financial
2		information and Great Plains Energy, Inc. because it is the Company's parent.
3	Q.	IS MR. HEVERT'S SAMPLE AN IDEAL PROXY GROUP FOR KCP&L?
4	A.	No, not for current analyses. His sample includes Cleco Corporation, despite the
5		October 20, 2014 announcement that Cleco Corporation will be acquired by a group
6		of North American long-term infrastructure investors. He states that since the
7		announcement was made subsequent to the period used in his analyses, he included
8		Cleco Corporation in his proxy group. He then states that he may exclude it from any
9		updated analyses to be filed in this proceeding. See Hevert Testimony, page 13,
10		footnote 9.
11		NextEra has recently agreed to acquire Hawaiian three electric utility
12		subsidiaries for \$2.8 billion. Therefore, those two utilities (NextEra and Hawaiian)
13		should also be excluded from Mr. Hevert's proxy group for any updated analyses. ⁸ In
14		summary, for purposes of my studies, I have excluded Cleco Corporation, NextEra,
15		and Hawaiian from my proxy group of comparable companies.
16	Q.	WHY SHOULD YOU EXCLUDE COMPANIES INVOLVED IN RECENT
17		MERGER AND ACQUISITIONS ACTIVITIES?
18	А.	The market values of firms involved in merger activities differ significantly from
19		others and this difference would be reflected in a company's stock price and dividend
20		yields, affecting the estimated ROE. For this reason, I believe that if Mr. Hevert were
21		to write his testimony today, thereby incorporating the latest market information, he
22		would also exclude the same three companies.

⁸ <u>See</u> DOE Work paper MLR-6; Value Investment Survey: NextEra Energy, February 20, 2015 and Hawaiian Electric Industries, January 30, 2015. <u>See</u> also DOE Attachment MLR-5: NextEra Energy press release dated December 3, 2014: <u>http://www.nexteraenergy.com/news/contents/2014/120314.shtml</u>.

1	Q.	WHY DO YOU USE MR. HEVERT'S SAMPLE IN YOUR ROE
2		ANALYSIS AND ULTIMATELY YOUR RECOMMENDATION TO THE
3		COMMISSION?
4	A.	I use his proxy group, minus Cleco Corporation, Hawaiian, and NextEra, to reduce
5		the number of differences between our methodologies in determining a reasonable
6		ROE for KCP&L. This adjusted proxy group of companies that I use in my analysis
7		includes the following: American Electric Power Corporation: Duke Energy
8		Corporation; ⁹ Empire District Electric Company; Eversource Energy; ¹⁰ IDACORP
9		Inc.; Otter Tail Corporation; Pinnacle West Capital Corporation; PNM Resources,
10		Inc.; Portland General Electric Company; Southern Company; and Westar Energy,
11		Inc.
11 12		Inc. V. <u>METHODOLOGIES</u>
11 12 13	Q.	Inc. V. METHODOLOGIES WHAT METHODOLOGIES DO YOU USE TO DERIVE YOUR ROE
11 12 13 14	Q.	Inc. V. METHODOLOGIES WHAT METHODOLOGIES DO YOU USE TO DERIVE YOUR ROE RECOMMENDATION?
 11 12 13 14 15 	Q. A.	Inc. V. METHODOLOGIES WHAT METHODOLOGIES DO YOU USE TO DERIVE YOUR ROE RECOMMENDATION? I used variants of the Single-Stage and Three-Stage DCF model and the Capital Asset
 11 12 13 14 15 16 	Q. A.	Inc. V. METHODOLOGIES WHAT METHODOLOGIES DO YOU USE TO DERIVE YOUR ROE RECOMMENDATION? I used variants of the Single-Stage and Three-Stage DCF model and the Capital Asset Pricing Model ("CAPM") to form the basis of my recommendation of a 9.0 percent
 11 12 13 14 15 16 17 	Q. A.	Inc. V. METHODOLOGIES WHAT METHODOLOGIES DO YOU USE TO DERIVE YOUR ROE RECOMMENDATION? I used variants of the Single-Stage and Three-Stage DCF model and the Capital Asset Pricing Model ("CAPM") to form the basis of my recommendation of a 9.0 percent ROE for KCP&L. The Three-Stage DCF model is an enhancement of the

19 different rates over time.

 ⁹ Duke Energy recently announced that the sale of its non-regulated generating assets has been delayed. *See Value Line Investment Survey: Duke Energy*, February 20, 2015.
 ¹⁰ On March 12, 2015, Eversource Energy announced plans to sell its New Hampshire power plants.

¹⁰ On March 12, 2015, Eversource Energy announced plans to sell its New Hampshire power plants. <u>https://www.eversource.com/Content/general/about/news-room/new-hampshire/newspost?Group=new-hampshire&Post=comprehensive-agreement-to-deliver-customer-savings</u>.

Direct Testimony of Maureen L. Reno

1

1. The Single-Stage Discounted Cash Flow Model

2	Q.	PLEASE DESCRIBE THE SINGLE-STAGE DCF MODEL.
3	A.	The Single-Stage DCF model is based on the dividend discount model first proposed
4		by J.B. Williams in 1938. ¹¹ The model is based on the premise that since cash
5		dividends are the only income from a share of stock held to infinity, the value of that
6		stock will be the present value of its stream of dividends, where the discount rate is
7		the market's required return. The model can be modified to take into account the
8		(more common) situation where shares of stock are bought and sold, producing
9		capital gains income in addition to dividend income. In order to simplify the
10		mathematics of the model, expected future dividends are represented by applying a
11		constant growth rate to the current observable dividend. Mathematically, the present
12		value of an asset (common stock) is expressed as:
13		$P_0 = \frac{D_1}{(K-g)},$
14		Where:
15 16		D_I is the dividend payment in one year from today or the expected dividend;
17 18		<i>K</i> is the rate of return used by investors to discount future dividends; and
19		g is the growth rate of the dividend payment.
20		The estimated cost of equity, <i>K</i> , is specified as:
21		$K = \frac{D_1}{P_0} + g \; ,$

22 Where:

¹¹ Williams, J.B. *The Theory of Investment Value*. 1938. Cambridge: Harvard University Press.

1 2		D_1 is the expected dividend, represented by $D_1 = D_0 (1 + g)$; and
3		D_0 is the current annual dividend per share today.
4		Therefore, the rate of return on equity capital is the sum of the dividend yield
5		(anticipated dividend payments divided by the market price) and the expected growth
6		in dividend income.
7	Q.	PLEASE DESCRIBE HOW YOU DERIVE THE DIVIDEND YIELD
8		COMPONENT OF YOUR DCF ANALYSIS.
9	A.	The dividend yield in my DCF analysis is the annual dividends per share in the next
10		period divided by the 90-day stock price average for the period ending March 25,
11		2015. Mr. Hevert calculates his dividend yields using 30-day, 90-day, and 180-day
12		stock price averages, resulting in ROE estimates that differ by as much as four basis
13		points. While ideally the most recent price of a security should be used because it
14		represents current valuations in equity markets, calculating an average over time to
15		mitigate any irregularities is necessary. However, using too long of a time period,
16		such as Mr. Hevert's 180-day averages, may capture market trends that are no longer
17		relevant. Ideally, the best method is to calculate the 30-day average. However, I use
18		the 90-day average as a compromise to capture current market trends while avoiding
19		market irregularities. See Schedule MLR-5a and Schedule MLR-5b.
20	Q.	HOW DOES COMPANY WITNESS HEVERT CALCULATE THE
21		DIVIDEND YIELD IN HIS DCF ANALYSIS?
22	A.	Mr. Hevert makes an adjustment for quarterly dividend payout to his Constant
23		Growth DCF Model that includes only half of the expected dividend yield for each
24		company in his sample. He avers that this adjustment "ensures that the expected

dividend yield is, on average, representative of the coming twelve-month period, and
 does not overstate the dividends to be paid during that time." <u>See Hevert Testimony</u>
 page 16, lines 18, 19, and 20.

Q. DO YOU AGREE WITH MR. HEVERT'S ADJUSTMENT?
A. No. I disagree with Mr. Hevert's adjustment because there should be consistency
between the growth rate used in making the estimates and the time dimension of the
dividend payments. In addition, this adjustment also assumes that quarterly dividends
are reinvested throughout the year. However, this may not be the case. Quarterly
dividends may have been spent or held in a money market account at a lower rate.

10Q.DESCRIBE THE GROWTH RATE COMPONENT OF YOUR DCF11ANALYSIS.

12 A. I estimated the expected dividend yield by applying the growth rate component of my 13 Single-Stage DCF analysis. I use three variants for calculating the growth rate 14 component; I will discuss these three variants later in my testimony. These methods 15 produce a range of expected dividend yields from 3.70 percent to 3.73 percent for my 16 sample. My first set of growth rates are based on earnings per share forecasts because 17 investors typically view earnings growth as an indicator of dividend growth. Unlike 18 Mr. Hevert, however, I believe that investors also incorporate other sources of 19 information when setting their expectations of dividend growth that I will discuss 20 shortly.

I calculate the estimated earnings growth rates by taking the average of analysts' forecasts from Value Line, Zacks Investment Research, and YahooFinance—all publicly available sources of projected earnings growth rates. 1 Both the Zacks and YahooFinance websites report survey results incorporating 2 securities analysts' projections. Value Line, in contrast, uses a historical base period 3 average value for 2012 to 2014 and a forecast of 2018 to 2020 to calculate its growth 4 rates. The average earnings growth rate for my sample of companies is 5.27 percent. 5 See Schedule MLR-5a. This average growth rate is similar to the earnings growth 6 rates used by Mr. Hevert in his Constant Growth DCF, which range from 5.29 percent 7 to 5.89 percent with an average of 5.64 percent. See Hevert Testimony, Schedule 8 *RBH-1*. This calculation, using a growth rate similar to Mr. Hevert's, results in a 9 9.0 percent return for the proxy group.

10 I also develop an alternative growth rate by averaging Value Line's dividends per share ("DPS") and book value per share ("BVPS") estimates with the previously 11 12 estimated earnings growth rate projections weighted equally. I include these three 13 components of growth in my alternative analysis because investors are not only 14 concerned with dividend growth but also earnings and book value growth as an 15 assurance that dividend growth will be sustained. Moreover, dividend growth rates 16 are more stable than earnings growth. These calculations produce an average growth 17 rate of approximately 4.61 percent. See Schedule MLR-5b.

18 Q. DO YOU EMPLOY OTHER METHODS TO DERIVE GROWTH RATES
19 IN YOUR SINGLE-STAGE DCF MODEL?

A. Yes, I also use the sustainable growth method to estimate the rate of dividend growth.
 The standard DCF model assumes only one source of equity financing, namely the
 retention of earnings. Growth in earnings and dividends, however, can also be

achieved by the sale of new common equity.¹² The basic Single-Stage DCF model
 of:

$$K = \frac{D_1}{P} + g$$

3 Can be rewritten to assume that external sources of financing influences investor 4 expectations of dividend growth and is represented as the following:

$$K = \frac{D_1}{P} + br + sv$$

5 Where:

$$g = br +$$

7 Where:

6

16

8	A rate of return, r, is earned;
9	A portion of earnings are retained, <i>b</i> ; and
10	Stock financing at a rate sv, in which s represents the
11	funds raised from the sale of stock as a fraction of existing
12	common equity and v is the fraction of funds raised from
13	the sale of stock that accrues to shareholders. ¹³

sv.

14 I use Value Line expectations regarding retention ratios and ROEs for five years into

15 the future to derive estimates for b and r, which in turn are used to calculate the

expected internal growth component, br. To incorporate external financing growth,

17 sv, I use Value Line data to derive the market-to-book ratio and expected growth in

¹² This expanded version of the DCF model allows for the value of stocks to vary from book values. If stock prices equal book value, then the equity of the new shareholders is equal to the funds they invest and the existing shareholders, equity is not changed. If, however, stock prices are greater than book value, a portion of the funds accrues to the existing shareholders, thereby increasing their expectations of dividend growth in the future. The reverse can be said if stock prices fall below book value, in that existing shareholders would expect a dilution of their equity position. See example in Morin, Roger M. (2006) *New Regulatory Finance*, Public Utilities Reports, Inc., Arlington, VA, page 269.

¹³ Ibid., page 269.

the number of outstanding shares. The average sustainable growth rate for my proxy
 group is 4.50 percent. <u>See Schedule MLR-6c.</u>

3 Q. PLEASE SUMMARIZE YOUR SINGLE-STAGE DCF MODEL RESULTS.

A. I employ three different methods for deriving the growth rate in the Single-Stage
DCF model, yielding three estimates of the ROE for my proxy group. When I
assume that investors are only concerned with earnings growth when valuing a
company's stock, thereby only using earnings per share ("EPS") growth in the DCF
model, I derive an ROE of 9.0 percent. *See Schedule MLR-5a*.

9 Once I allow for other sources of growth to influence investors' expectations 10 of the return on a particular equity, my analysis yields lower results. For instance, 11 adding DPS and BVPS growth results in an ROE of 8.31 percent. Finally, when I 12 allow for both internal and external funding sources to drive growth in investor 13 income, or my sustainable growth rate model, I derive an average ROE of 14 8.20 percent. <u>See Schedule MLR-6c</u>.

Estimated Return on Equity	
Methodologies	ROE
Single-Stage DCF (EPS Growth)	9.00
Single-Stage DCF (DPS, EPS and BVPS)	8.31
Single-Stage DCF (Sustainable Growth)	8.20

15 Q. DOES YOUR METHODOLOGY FOR CALCULATING THE GROWTH16 RATE DIFFER FROM MR. HEVERT?

A. Yes. In his Constant Growth DCF models, Mr. Hevert relies solely on analysts'
estimates of earnings growth. Since the DCF estimate is derived from the concept
that cash dividends are the only income from a share of stock, in principle, the growth

1 component should only include dividends. Investors, however, are also concerned 2 about whether dividends are sustainable and they realize that dividend growth 3 sustainability is affected by earnings and book value growth. As a result, investors do 4 not use a single growth estimate when pricing a utility's stock. Therefore, I believe it 5 appropriate to include other measures for the growth component in my analysis. Applying Mr. Hevert's methodology of using a growth rate comprised of only 6 7 earnings per share growth yields an ROE of 9.0 percent. This result falls within his range of 8.37 percent to 9.59 percent when he uses his Constant Growth DCF method 8 9 with low to mean growth rates. See Schedule MLR-5a.

10

2. <u>The Three-Stage Discounted Cash Flow Model</u>

11 Q. PLEASE EXPLAIN WHY YOU USE A THREE-STAGE DCF MODEL.

12 I employ a Three-Stage DCF model so that the growth rates of dividends, earnings, A. 13 and book value are allowed to change over time. The Single-Stage DCF model 14 assumes that the value of a common stock can be expressed as the present value of a 15 stream of dividends that grows at the same rate into infinity. Often times, however, 16 investors expect the short-run growth rate of a company to differ from its long-run 17 growth rate. Moreover, my application of the Three-Stage DCF model takes into 18 account the fact that expected growth rates of financial publishing companies reflect 19 expectations in the short-run (three to five years) and are not intended to reflect 20 expectations in the long-run. The Three-Stage DCF model accounts for this inherent 21 limitation in the data by allowing dividends to grow at a different rate in the long-run.

Furthermore, given recent economic events such as the recession of 2008-9,
 current short-term forecasts are likely to reflect depressed figures from a single base
 period. As a result, these short-term growth rates are not sustainable in the long-run.
 Q. PLEASE DESCRIBE IN GREATER DETAIL THE THREE-STAGE DCF
 MODEL THAT YOU APPLY TO ESTIMATE THE COST OF EQUITY
 FOR THE COMPANY.

7 A. The Three-Stage DCF model is represented by the following equation:

8
$$P_0 = D_0 \times \sum_{i=1}^{5} \frac{(1+g_1)^i}{(1+k)^i}$$
 (First Stage)

9
$$+ D_0 \times \frac{(1+g_1)^5}{(1+k)^5} \times \sum_{i=1}^5 \frac{(1+g_2)^i}{(1+k)^i}$$
 (Second Stage)

10
$$+ D_0 \times \frac{(1+g_1)^5 \times (1+g_2)^5}{(1+k)^{10}} \times \frac{1+g_3}{k-g_3}$$
 (Final Stage)

12		P equals present value or stock price;
13		D_0 are dividends in the preceding period;
14 15		g_1 , g_2 , and g_3 represent the expected growth rate in dividends in each stage; and
16		k is the cost of equity or discount rate. ¹⁴
17		I solve this equation iteratively for k using two five-year stages and then a final stage,
18		which follows the first ten years into perpetuity. ¹⁵
19	Q.	DESCRIBE THE GROWTH RATE COMPONENTS OF YOUR THREE-
20		STAGE DCF ANALYSIS.

¹⁴ Pratt, Shannon, *Cost of Capital, Estimation and Applications*, 1998, New York, John Wiley & Sons, Inc., page 101.

¹⁵ SBBI Valuation Edition 2013 Yearbook, Ibbotson Associates, 2013, page 50.

1	A.	For comparison purposes, I first include EPS growth rates in my Three-Stage DCF
2		analysis. Since investors are concerned with dividend sustainability going forward,
3		however, I consider other financial factors beyond just earnings growth when
4		anticipating dividend income in the future. As a result, I allow DPS, EPS and BVPS
5		to influence investor expectations in the short term. Therefore, for the short-term
6		growth rate in my Three-Stage DCF model, I also use the same growth rate that I
7		used in the Single-Stage DCF model-the average of expected DPS, EPS, and BVPS
8		growth.
9	Q.	WHAT SECOND-STAGE RATES DO YOU USE IN THE THREE-STAGE
10		DCF MODEL?
11	A.	The second-stage growth rate is simply the average of the growth rates in the first and
12		third stages. By adding an intermediate growth stage, I allow for investment income
13		growth to adjust to long-term growth over time. I believe that my results from using
14		a three-stage approach are appropriate because most investors do not consider three
15		years or even five years into the future as the long term.
16	Q.	WHAT IS THE THIRD-STAGE GROWTH RATE AND WHY DO YOU
17		USE IT IN THE FINAL STAGE GROWTH RATE IN THE THREE-STAGE
18		DCF MODEL?
19	A.	For the final stage including the 11 th year to infinity, I apply two growth rates of
20		4.8 percent and 5.50 percent, which represent the long-run growth rate of the
21		economy, adjusted for inflation. The lower estimate of 4.8 percent was reported in
22		the March 10, 2015 edition of Blue Chip, which represents an expected nominal GDP
23		from a consensus of investors. I also apply the estimate of 5.5 percent as reported by

1 Ibbotson, which is less than Mr. Hevert's estimate of 5.65 percent. Ibbotson 2 recommends using real GDP, adjusted for inflation, as a proxy for expected long-term future performance because "real GDP, with only a few exceptions, has been 3 4 reasonably stable over time; therefore, its historical performance is a good estimate of expected long-term (future) performance."¹⁶ 5 6 WHAT IS THE ESTIMATED ROE THAT YOU CALCULATE USING Q. 7 THE THREE-STAGE DCF MODEL? Using my average of earnings, dividends, and book value growth, I derive an 8 A. 9 estimated ROE result of 9.01 percent, assuming a final-stage growth rate of 10 5.5 percent. See Schedule MLR-7b. 11 IS YOUR THREE-STAGE DCF MODEL SIMILAR TO MR. HEVERT'S Q. 12 MULTI-STAGE DCF MODEL? 13 A. No, Mr. Hevert uses expected earnings per share and some form of the expected 14 dividend payout ratio in all three stages of his Multi-Stage model. I improve upon his 15 methodology by assuming that investors include growth in EPS, DPS, and BVPS 16 when estimating a company's ROE. 17 We both rely on overall economic growth, measured by nominal GDP, in the 18 long term to some extent because short-term company growth rates may not be 19 sustainable. Mr. Hevert, however, uses his long-term growth rate of 5.65 percent to 20 calculate a terminal Price to Earnings Growth ("PEG") ratio, which he defines as his 21 terminal price to earnings ratio divided by his terminal growth rate or nominal GDP. As I discuss previously in my testimony, recent analyst expectations of long-term 22

¹⁶ Ibbotson Associates, SBBI Valuation Edition 2013 Yearbook, page 52.

economic growth reveal a nominal growth rate of 4.8 percent. To remain
 conservative in my estimates, however, I apply both the 4.8 percent and 5.5 percent
 long-term growth rates in my Multi-Stage DCF model.

4 Q. PLEASE SUMMARIZE YOUR SINGLE-STAGE AND MULTI-STAGE 5 DCF RESULTS.

6 My DCF model results suggest that relying solely on earnings growth yields higher A. 7 ROE estimates. For instance, applying Mr. Hevert's assumption that investors are 8 only concerned with earnings growth when valuing a security results in an estimated 9 ROE of 9.00 percent for my sample. Relaxing such a strict assumption by allowing 10 dividends, book value, and earnings to drive investor valuations leads to lower ROE 11 estimates of 8.31 percent for my sample. Such estimates fall lower still to 12 8.20 percent when I allow for external and internal financing. This observation that 13 earnings growth drives higher ROE results is also verified by my Multi-Stage DCF results of 9.18 percent when only including EPS growth in the first stage and 14 15 9.01 percent when relaxing this assumption (see table below).

Estimated Return on Equity				
DCF Methodologies	ROE			
Single-Stage DCF (EPS Growth)	9.00			
Single-Stage DCF (DPS, EPS and BVPS)	8.31			
Single-Stage DCF (Sustainable Growth)	8.20			
Three-Stage DCF (EPS, 4.8% GDP Growth)	8.62			
Three-Stage DCF (DPS, EPS, BVPS, 4.8% GDP Growth)	8.45			
Three-Stage DCF (EPS, 5.5% GDP Growth)	9.18			
Three-Stage DCF (DPS, EPS, BVPS, 5.5% GDP Growth)	9.01			

1		3. <u>The Capital Asset Pricing Model</u>
2	Q.	DO YOU USE ANY OTHER METHODOLOGIES TO ESTIMATE THE
3		ROE FOR THE COMPANY?
4	A.	Yes, I apply the Capital Asset Pricing Model ("CAPM").
5	Q.	DESCRIBE THE CAPM ALSO USED TO CALCULATE THE COST OF
6		EQUITY.
7	A.	The CAPM is a form of the "risk premium" approach that is rooted in modern
8		portfolio theory. It recognizes that common equity capital is more risky than debt
9		from an investor's perspective, and that investors require higher returns on stocks
10		than on bonds to be compensated for the additional risk. The cost of common equity
11		is represented by the following equation:
12		$K_{_{e}}=R_{_{f}}+eta_{_{s}}*RP$,
13		Where:
14		K_e is the cost of equity;
15		R_f is the yield on risk free securities; and
16 17		<i>RP</i> is the equity risk premium demanded by shareholders to accept equity relative to debt.
18		$\boldsymbol{\beta}_s$ or "Beta" is a company-specific measure which reflects the movement in a
19		company's stock price relative to movements in a composite group of companies
20		representing the stock market. Beta measures the investment risk that cannot be
21		eliminated by holding a diverse portfolio of assets.
22	Q.	WHAT BETA MEASURE DO YOU USE FOR YOUR SAMPLE?

A. I rely on Value Line betas because Value Line is widely used by the utility regulatory
community. It is also known that Value Line adjusts their betas to account for the
long-term tendencies of stocks to converge to a beta of one.¹⁷ As a result, Value Line
betas tend to have higher values than betas provided by other sources. The average
beta for my proxy group is 0.74. A beta value of 0.74 means that the stock price
movement is less than movement in the stock market as a whole. The stock is,
therefore, less volatile than the market as a whole.

8

Q.

HOW DO YOU CALCULATE THE EQUITY RISK PREMIUM?

9 A. I calculate the equity risk premium by first identifying the risk-free rate. In general, 10 most investors agree that an asset perceived by the market as having no risk is a United States Treasury bond because the U.S. government's ability to create money 11 12 to fulfill its debt obligations under virtually any scenario makes Treasury securities 13 practically default free. Since there is no close alternative to Treasury securities, I use 14 the yield on the 30-Year Treasury bond observed over the last month. This first 15 estimate of 2.64 percent is based on recent market information and is the average yield from February 12, 2015 to March 25, 2015.¹⁸ I also apply a forecasted estimate 16 17 provided by *Blue Chip* as a proxy for a risk-free rate. This second estimate is the 18 forecasted yield on the 10-Year Treasury bond of 3.9 percent. See Schedule MLR-3b. 19 As a result of applying both risk-free rates, I estimate two ROE estimates using the 20 CAPM.

¹⁷ Marshall E. Blume investigated the regression tendency of beta and reached the conclusion that betas have the tendency to approach a value of one (1) over time. That is, high-beta (or high-risk relative to the market) portfolios tend to decline over time toward unity, while low-beta portfolios increase to unity. Blume, Marshall E. "Betas and Their Regression Tendencies," *Journal of Finance*, June 1975, pages 785-796. Also referenced in *Morin* (2006), page 73.

¹⁸ <u>See</u> Schedule MLR-8b. Source: <u>www.federalreserve.gov</u>.

Direct Testimony of Maureen L. Reno

1 To calculate the expected equity risk premium, I subtract the risk-free rate 2 from the Duff & Phelps Large Stock Arithmetic Average Return ended December 2013 of 11.63 percent.¹⁹ Using the difference between the market total return and the 3 4 current yield on the 30-Year Treasury bond, I derive a risk premium of 8.99 percent. 5 My estimated risk premium using a forecasted risk-free rate is 7.73 percent. See Schedule MLR-8a. Both results are measures of long-term assessments of market 6 7 risk, and also reflect the historically low interest rates prevalent in our current 8 economy.

9 I adjust both risk premiums to account for industry-specific risk by 10 multiplying it by my sample's average betas, yielding results of 6.62 percent and 11 5.69 percent, respectively. The cost of equity is the sum of the risk-free rate and the 12 beta-adjusted risk premium (equity risk premium multiplied by my sample's average 13 beta). Using Value Line betas, I estimate ROEs of 9.26 percent and 9.59 percent (see 14 table below).

CAPM Methodologies	ROE
Capital Asset Pricing Model (Current Risk-Free Rate)	9.26
Capital Asset Pricing Model (Forecast Risk-Free Rate)	9.59

15 Q. WHAT ISSUES DO YOU HAVE WITH MR. HEVERT'S BOND YIELD16 PLUS RISK PREMIUM METHODOLOGY?

A. In his Bond Yield plus Risk Premium methodology, Mr. Hevert includes authorized
ROEs from 1,433 rate cases during the period January 1980 to September 12, 2014 to
estimate an ROE range of 10.11 percent to 10.85 percent. <u>See Hevert Testimony</u>,

¹⁹ Duff & Phelps, 2014 Valuation Handbook - Guide to Cost of Capital, Exhibit A-1

1 *Table RBH-6.* These allowed ROEs, provided by Regulatory Research Associates 2 ("RRA"), place greater weight on historical market conditions, and in most cases are 3 the result of settlement negotiations where utilities sought to retain existing, and 4 likely inflated, ROEs by adjusting other components in the cost of service.

5 Realized risk premium results are also dependent on the time period chosen. 6 Mr. Hevert chooses a time period of 1980 to 2014 while other studies such as Duff & 7 Phelps, which I apply in my CAPM analysis, use a longer time period (1963 to 2013) 8 to incorporate many business cycles (inflation policy, interest rate cycles, and 9 economic cycles). As a result, Mr. Hevert's analysis overestimates KCP&L's 10 estimated ROE. Furthermore, he relies on outdated authorized returns when 11 calculating his equity risk premium.

12 Since the Federal Reserve, and economists in general, have been cautious 13 about the staying power of the current economic recovery, state public utility 14 commissions have incorporated such cautious expectations and the low opportunity 15 cost of utility stocks in allowed ROEs. As a result, there has been a decreasing trend 16 in the allowed ROEs in recent rate cases, particularly in 2014. For example, the 17 Commission recently authorized a 9.7 percent ROE for KCP&L and KCP&L Greater 18 Missouri Operations Company. See January 9, 2013 Order in Docket Nos. ER-2012-19 0174 and ER-2012-0175, page 1 and page 24.

20

VI. <u>SUMMARY AND RECOMMENDATION</u>

21 Q. WHAT DO YOU RECOMMEND FOR KCP&L'S OVERALL RATE OF22 RETURN AND ALLOWED ROE?

1 A. I recommend that the Commission authorize an overall rate of return of 6.62 percent 2 with a capital structure that incorporates short-term debt, and an allowed ROE of 9.00 percent, which is based on the median rate derived from my ROE methodologies 3 4 (three Single-Stage DCF, one Three-Stage DCF and Capital Asset Pricing Models) 5 using Mr. Hevert's adjusted sample. See Estimated Return on Equity Summary table below. This result lies within the range of 8.2 percent and about 9.6 percent and 6 7 represents a conservative estimate of a fair and reasonable ROE for KCP&L for the 8 reasons I have discussed.

9 My results are derived using a proxy group of electric utilities representing the 10 opportunity cost of investing in KCP&L's assets and best represents the opportunity 11 cost of capital that an investor expects under today's financial circumstances. These 12 results also fall within the range of 8.37 percent to 10.03 percent presented by Mr. 13 Hevert when he applies his Constant Growth and Multi-Stage DCF methods using 14 low to mean growth rates.

Estimated Return on Equity Summary				
Methodologies				
Single-Stage DCF (EPS Growth)	9.00			
Single-Stage DCF (DPS, EPS and BVPS)	8.31			
Single-Stage DCF (Sustainable Growth)	8.20			
Three-Stage DCF (EPS, 4.8% GDP Growth)	8.62			
Three-Stage DCF (DPS, EPS, BVPS, 4.8% GDP Growth)	8.45			
Three-Stage DCF (EPS, 5.5% GDP Growth)	9.18			
Three-Stage DCF (DPS, EPS, BVPS, 5.5% GDP Growth)	9.01			
Capital Asset Pricing Model (Current Risk-Free Rate)	9.26			
Capital Asset Pricing Model (Forecast Risk-Free Rate)	9.59			
Average	8.85			
Median (using all results above)	9.00			
Minimum	8.20			
Maximum				

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2014-0370

AFFIDAVIT OF MAUREEN L. RENO

)

STATE OF NEW HAMPSHIRE)) SS COUNTY OF ROCKINGHAM)

Maureen L. Reno, being first duly sworn, on her oath states:

1. My name is Maureen L. Reno. I am an independent consultant and my principal business address is 19 Hope Hill Road, Derry, New Hampshire 03038.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony

on behalf of the United States Department of Energy which was prepared in written form for introduction into evidence in the above-captioned docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to

the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Maureen L-Renó

Subscribed and sworn before me this 3/2 day of March, 2015.

1 NI 19 - JUNO My commission expires:

Krysten L. Brown otary Public, State of New Hampshire Ay Commission Expires June 19, 2018
VII. APPENDIX A. CURRICULUM VITAE AND QUALIFICATIONS

Maureen L. Reno (Sirois)

Ms. Reno is an independent contractor currently providing services for Exeter Associates, Inc. ("Exeter"). She brings twelve years of regulated utilities and energy sector expertise. The majority of this time was spent at the New Hampshire Public Utilities Commission ("NHPUC"). After ten years at the NHPUC, she was employed by the Union of Concerned Scientists ("UCS") as a Senior Energy Economist. Since leaving UCS in 2012, she has provided consulting services to Exeter and TrueLight Energy, LLC.

Ms. Reno served as a senior energy economist at the UCS developing clean energy financing policies and advocating for electricity sector solutions to global warming. Prior to working for UCS, Ms. Reno worked for the Sustainable Energy Division of the NHPUC as the program manager of New Hampshire's Renewable Portfolio Standard (RPS) program helping both owners of distributed generation and load serving entities meet compliance requirements and maneuver the dynamic wholesale energy and renewable energy certificate markets.

She began her career working for the NHPUC's Electric Division on the development and implementation of the RPS, New Hampshire's participation in the Regional Greenhouse Gas Initiative, net metering and utilities' energy efficiency programs. Ms. Reno also served as staff expert witness on financial issues regarding the regulation of electric, natural gas and water utilities.

Ms. Reno currently volunteers for the town of Derry, New Hampshire, as chair of the Energy and Environmental Advisory Committee to the Derry Town Council, educating town administrators and taxpayers on ways to reduce energy costs. She also advises her local state legislators on energy and environmental policy proposals.

Education

Completed all course work and exam requirements towards the Doctorate of Philosophy in Economics – University of New Hampshire, Durham. Fields of Specialization: Industrial Organization and Environmental Economics

Master of Arts in Economics - University of New Hampshire, Durham, 1998

Bachelor of Arts in Economics - University of Maine, Orono, 1996

Previous Employment

2011-2012 Union of Concerned Scientists Senior Energy Economist

2001-2011	New Hampshire Public Utilities Commission Analyst and Program Manager Utility Analyst Economist
1999-2002	New Hampshire Small Business Development Center Survey Manager
1999-2001	University of New Hampshire Adjunct Instructor

Professional Work

As an independent consultant for Exeter Associates, Ms. Reno:

- Provides consulting services regarding the regulation of energy utilities on the rate of return on equity.
- Provided written testimony in electric utility rate cases before the Public Utilities Commission in Texas and Louisiana. Calculated each company's weighted average cost of capital and estimated the rate of return on equity using discounted cash flow, risk premium, and capital asset pricing models.

As an independent consultant for TrueLight Energy, LLC, Ms. Reno:

- Acted as director of regulatory affairs to expand upon current services to provide clients with guidance on how to navigate the dynamic deregulated electricity industry.
- Developed regulatory service product for clients, which includes ISO/utility tariff tracking and rate impact analysis, policy analysis, new market identification and participation in regulatory processes.
- Identified and originated new commercial opportunities in the U.S. to support principle product/service lines: retail supplier solutions; generation asset management; and sustainability management solutions for large energy users.
- Developed and implemented business development and business-to-business marketing strategies in coordination with senior management.

As a senior economist at the Union of Concerned Scientists, Ms. Reno:

• Promoted the development of clean energy technologies and policies in the electricity sector. Designed and evaluated energy policies at the state, regional, and national levels to maximize economic benefits and overcome market barriers to renewable energy.

- Evaluated and developed alternative financial policies to national and state renewable energy standards. Completed internal documents and research focusing on master limited partnerships and real estate investment trusts as possible sources of financing capital for renewable energy projects.
- Informed and enhanced coalition strategies by evaluating and developing appropriate responses to federal policy opportunities, including a low-carbon electricity standard, production tax credit, and other emerging opportunities.
- Evaluated the net benefits and opportunities for economic development in renewable energy manufacturing and the supply chain.
- Led the selection process and management of Kendall Fellowship on energy innovation, including identifying promising candidates, helping to shape and refine the Fellow's research proposal, and supervising the Fellow.

As an analyst and program manager at the New Hampshire Public Utilities Commission, Ms. Reno:

- Developed and managed New Hampshire's RPS Program.
- Developed internal protocols for managing New Hampshire's RPS program pursuant to PUC's RPS program rules (N.H. Code of Administrative Rules PUC 2500), including designing resource eligibility application forms.
- Verified electricity providers' compliance with state renewable energy policy and processed applications for renewable energy source eligibility.
- Provided RPS program evaluation and policy analysis to the State legislature on behalf of the PUC.
- Prepared and submitted annual RPS compliance reports to the State legislature.
- Monitored and forecasted renewable energy certificate market trends in New England and New Hampshire to estimate available revenues supporting rebate programs.
- Maintained an RPS program website and renewable energy sources database.
- Participated in various regional working groups, including the RGGI Allowance and Offset Market Groups, and the GIS Regulators' Caucus to develop and maintain the NEPOOL GIS Operating Rules.
- Developed Greenhouse Gas Emissions Reduction Fund Cost Effectiveness Analysis model for request for proposal applicants.

As a utility analyst and economist at the New Hampshire Public Utilities Commission, Ms. Reno:

- Provided economic and financial analysis on issues concerning the generation, transmission and distribution of electricity.
- Testified in eight electric, natural gas and water utility rate cases in which she calculated each company's weighted average cost of capital and estimated the rate of return on equity using discounted cash flow, risk premium, and capital asset pricing models.
- Advised the PUC on utilities' debt financings, bond issuances, power plant retrofit, advanced metering, demand response, and incentives for in-state energy efficiency programs.
- Reviewed, analyzed and prepared oral and written recommendations for the Commission on utility requests for changes in base rate revenue requirements and other surcharges, as well as financing arrangements.
- Collaborated on behalf of the PUC with public and private entities to write New Hampshire's RPS law (HB 873), state participation in RGGI (HB 1434) and the PUC's RPS program rules (N.H. Code of Administrative Rules Puc 2500).
- Advised the Commissioners on the development of the RGGI carbon dioxide emission limits and the Allowance Auction Market.
- Prepared fiscal impact statements regarding proposed legislation and regulations in the State of New Hampshire using cost-benefit analysis.

As a Survey Manager for the New Hampshire Small Business Development Center, Ms. Reno:

- Analyzed the economic and behavioral factors that lead to the growth of New Hampshire manufacturing companies.
- Designed and distributed a survey to collect data on the characteristics of New Hampshire manufacturers.
- Managed collection of survey data, designed a database for the data collected and oversaw data entry efforts.
- Completed multivariate regression, factor and cluster analysis of survey data.

As an Adjunct Instructor for the University of New Hampshire, Ms. Reno:

• Taught undergraduate courses in Principles of Macroeconomics and Microeconomics.

- Lectured on a daily basis.
- Developed lesson plans and teaching materials.
- Managed teaching assistant's work correcting and grading testing materials and writing assignments.

Expert Testimony as Maureen L. Reno

Before the Texas Public Utility Commission, Docket No. 41791 on behalf of the United States Department of Energy. Testimony regarding a fair return on equity in the Application of Entergy Texas, Inc. for Authority to Change Rates and Reconcile Fuel Costs.

Expert Testimony as Maureen L. Sirois:

Before the New Hampshire Public Utility Commission, Docket No. DE 05-178 on behalf of Commission Staff. Testimony regarding the Rate of Return for Unitil Energy Systems, Inc.

Before the New Hampshire Public Utility Commission, Docket No. DE 04-177 on behalf of Commission Staff. Testimony regarding the Rate of Return for Public Service Company of New Hampshire's generation assets.

Before the New Hampshire Public Utility Commission, Docket No. DW 04-056 on behalf of Commission Staff. Testimony regarding the Rate of Return for Pennichuck Water Works, Inc.

Before the New Hampshire Public Utility Commission, Docket No. DE 03-200 on behalf of Commission Staff. Testimony regarding the Rate of Return for Public Service Company of New Hampshire.

Before the New Hampshire Public Utility Commission, Docket No. DE 03-166 on behalf of Commission Staff. Testimony regarding the Modification of Schiller Station for Public Service Company of New Hampshire.

Before the New Hampshire Public Utility Commission, Docket No. DE 01-247 on behalf of Commission Staff. Testimony regarding the Rate of Return for Concord Electric Company and Exeter & Hampton Electric Company.

Before the New Hampshire Public Utility Commission, Docket No. DE 01-168 on behalf of Commission Staff. Testimony regarding the Refinancing of Series A, B and C Pollution Control Revenue Bonds, Including an Increase in the Short Term Debt Limit, Issuance of First Mortgage Bonds and Utilization of Derivative Instruments for Public Service Company of New Hampshire. Before the New Hampshire Public Utility Commission, Docket No. DG 01-182 on behalf of Commission Staff. Testimony regarding the Rate of Return for Northern Utilities, Inc.

Before the New Hampshire Public Utility Commission, Docket No. DW 01-081 on behalf of Commission Staff. Testimony regarding the Rate of Return for Pennichuck Water Works, Inc.

Research

Conference Paper – "The Effect of Rate and Energy Efficiency Policies on Electricity Demand: Evidence from New Hampshire" by Chris Schlegel and Maureen L. Sirois, presented at the 22nd Annual Eastern Conference of the Advanced Workshop in Regulation and Competition, Skytop, PA, May 2003.

Dissertation for Ph.D. – "Participation in Environmental Management Systems: The Effect of Supply-Chain Relationships on Company Behavior," presented at the Eastern Economic Association meeting, New York City, NY, February 2001.

Report under the Manufacturing Management Grant – "Report on U.S. Small Business Administration Funded Survey of New Hampshire Manufacturers in Rural Areas," by Linda G. Sprague and Maureen L. Sirois, presented at the Global Manufacturing Research Group (GMRG) Annual Meeting, University of Western Ontario, Canada, August 2000.

VIII. APPENDIX B: ATTACHMENTS

- DOE Attachment MLR-1_GPE 10-k 2015
- DOE Attachment MLR-2_VL_Select_Op_150227
- DOE Attachment MLR-3_BEA_2014 PR_150227
- DOE Attachment MLR-4_FED RESERVE_PR_150318
- DOE Attachment MLR-5_NextEra_PR_141203
- DOE Attachment MLR-6_EverSource_PR_150312
- DOE Attachment MLR-7_Morin_P269
- DOE Attachment MLR-8_SBBI_P50
- DOE Attachment MLR-9_SBBI_P52
- DOE Attachment MLR-10_Morin_P73
- DOE Attachment MLR-11_Duff&Phelps Guide Ex A-1

DOE Attachment MLR-1_GPE 10-k 2015

Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2014

or

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____to____

Commission File Number	Exact name of reg state of incorp executive off	istrant as specified in its charter, oration, address of principal ices and telephone number	I.R.S. Employer Identification Number
001-32206	GREAT PLAINS	ENERGY INCORPORATED	43-1916803
	(A M	ssouri Corporation)	
	1	200 Main Street	
	Kansas	City, Missouri 64105	
	(816) 556-2200	
000-51873	KANSAS CITY F	OWER & LIGHT COMPANY	44-0308720
	(A M	ssouri Corporation)	
	1	200 Main Street	
	Kansas	City, Missouri 64105	
	(816) 556-2200	
h of the following classes k Stock Exchange:	or series of securities registe	red pursuant to Section 12(b) of the Act is reg	istered on the New
Registrant		1 itle of each class	
Great Plains Energy Inco	orporated Cumulativ	e Preferred Stock par value \$100 per share	3.80%
	Cumulativ	e Preferred Stock par value \$100 per share	4.50%
	Cumulativ	e Preferred Stock par value \$100 per chare	4.35%

Securities registered pursuant to Section 12(g) of the Act: Kansas City Power & Light Company Common Stock without par value.

KANSAS CITY POWER & LIGHT COMPANY Consolidated Balance Sheets

	December 31			
		2014		2013
ASSETS	(millions, excep	pt share amounts)	
Current Assets				
Cash and cash equivalents	\$	2.7	S	4.0
Funds on deposit		0.6		0.7
Receivables, net		128.9		129.2
Related party receivables		68.8		50.4
Accounts receivable pledged as collateral		110.0		110.0
Fuel inventories, at average cost		58.8		50.3
Materials and supplies, at average cost		110.1		109.0
Deferred refueling outage costs		12.5		29.5
Refundable income taxes		57.5		15.1
Deferred income taxes		5.0		
Assets held for sale (Note 12)		_		4.7
Prepaid expenses and other assets		32.7		27.5
Total		587.6		530.4
Utility Plant, at Original Cost				
Electric		8,737.3		8,274.9
Less - accumulated depreciation		3,658.7		3,518.3
Net utility plant in service		5,078.6		4,756.6
Construction work in progress		791.2		660.4
Nuclear fuel, net of amortization of \$187.5 and \$161.4		79.2		62.8
Total		5,949.0		5,479.8
Investments and Other Assets				
Nuclear decommissioning trust fund		199.0		183.9
Regulatory assets		745.7		614.1
Other		29.5		31.0
Total		974.2		829.0
Total	\$	7,510.8	S	6,839.2

The disclosures regarding KCP&L included in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

KANSAS CITY POWER & LIGHT COMPANY Consolidated Balance Sheets

	December 31			
		2014		2013
LIABILITIES AND CAPITALIZATION	(millions, except share a			
Current Liabilities				
Collateralized note payable	\$	110.0	S	110.0
Commercial paper		358.3		93.2
Current maturities of long-term debt		14.0		
Accounts payable		305.2		239.8
Related party payables		12.6		0.2
A cerued taxes		23.6		23.8
Accrued interest		29.0		29.1
Accrued compensation and benefits		35.2		47.3
Pension and post-retirement liability		1.5		1.9
Deferred income taxes		_		1.7
Other		12.4		13.0
Total		901.8		560.0
Deferred Credits and Other Liabilities				
Deferred income taxes		1,016.9		922.1
Deferred tax credits		124.3		125.3
Asset retirement obligations		177.7		141.7
Pension and post-retirement liability		485.4		339.9
Regulatory liabilities		172.0		168.3
Other		59.2		90.4
Total		2,035.5		1,787.7
Capitalization				
Common shareholder's equity				
Common stock - 1,000 shares authorized without par value				
1 share issued, stated value		1,563.1		1,563.1
Retained earnings		726.8		636.4
Accumulated other comprehensive loss		(14.9)		(20.2)
Total		2,275.0		2,179.3
Long-term debt (Note 11)		2,298.5		2,312.2
Total		4,573.5		4,491.5
Commitments and Contingencies (Note 15)				
Total	\$	7,510.8	S	6,839.2

The disclosures regarding KCP&L included in the accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

KCP&L Other Operating Activities

Year Ended December 31		2014	2013		2012	
Cash flows affected by changes in:			(millions)			
Receivables	\$	(18.1)	\$	(12.6)	\$	8.8
Accounts receivable pledged as collateral		_		_		(15.0)
Fuel inventories		(8.5)		13.3		(4.6)
Materials and supplies		(1.1)		1.1		(9.0)
Accounts payable		20.4		7.3		48.3
Accrued taxes		(42.5)		(3.7)		(2.0)
Accrued interest		(0.1)		1.4		(2.3)
Deferred refueling outage costs		17.0		(17.6)		15.6
Pension and post-retirement benefit obligations		26.9		35.7		18.0
Allowance for equity funds used during construction		(16.0)		(14.1)		(1.3)
Fuel recovery mechanism		(2.2)		(1.8)		5.1
Solar rebates paid		(17.3)		(8.2)		(5.8)
Uncertain tax positions		_		(10.5)		1.8
Other		(23.2)		0.5		(29.7)
Total other operating activities	\$	(64.7)	\$	(9.2)	\$	27.9
Cash paid during the period:						
Interest	\$	112.1	\$	111.7	\$	118.0
Income taxes	\$	30.2	\$	4.6	\$	18.0
Non-cash investing activities:						
Liabilities accrued for capital expenditures	\$	48.8	\$	40.5	\$	48.4

3. RECEIVABLES

Great Plains Energy's and KCP&L's receivables are detailed in the following table.

	December 31		
	2014		2013
Great Plains Energy	(mil	lions)	
Customer accounts receivable - billed	\$ 1.1	\$	1.5
Customer accounts receivable - unbilled	75.3		74.6
Allowance for doubtful accounts - customer accounts receivable	(2.8)		(2.5)
Other receivables	86.7		88.6
Total	\$ 160.3	\$	162.2
KCP&L			
Customer accounts receivable - billed	\$ 0.6	\$	1.3
Customer accounts receivable - unbilled	49.7		51.2
Allowance for doubtful accounts - customer accounts receivable	(1.2)		(1.1)
Other receivables	79.8		77.8
Total	\$ 128.9	\$	129.2

Great Plains Energy's and KCP&L's other receivables at December 31, 2014 and 2013 consisted primarily of receivables from partners in jointly owned electric utility plants and wholesale sales receivables.

Sale of Accounts Receivable - KCP&L and GMO

KCP&L and GMO sell all of their retail electric accounts receivable to their wholly owned subsidiaries, KCP&L Receivables Company and GMO Receivables Company, respectively, which in turn sell an undivided percentage ownership interest in the accounts receivable to Victory Receivables Corporation, an independent outside investor. Each of KCP&L Receivables Company's and GMO Receivables Company's sale of the undivided

related to nonvested restricted stock granted under the Long-Term Incentive Plan, which will be recognized over the remaining weighted-average contractual term. The total fair value of shares vested was \$1.9 million, \$1.2 million and \$3.3 million in 2014, 2013 and 2012, respectively.

Director Deferred Share Units

Non-employee directors receive shares of Great Plains Energy's common stock as part of their annual retainer. Each director may elect to defer receipt of their shares until the end of January in the year after they leave the Board or such other time as elected by each director. Director Deferred Share Units have a value equal to the market value of Great Plains Energy's common stock on the grant date with accruing dividends. Compensation expense, calculated by multiplying the director Deferred share units by the related grant-date fair value, is recognized at the grant date. The total fair value of shares of Director Deferred Share Units issued was insignificant for 2014 and 2013. Director Deferred Share Units activity is summarized in the following table.

		Gr	ant Date
	Share Units	Fai	r Value*
Beginning balance January 1, 2014	90,120	\$	20.94
lssued	20,621		26.53
Ending balance December 31, 2014	110,741		21.98
* weighted-average			

10. SHORT-TERM BORROWINGS AND SHORT-TERM BANK LINES OF CREDIT

Great Plains Energy's \$200 Million Revolving Credit Facility

In December 2014, Great Plains Energy entered into an amendment to its \$200 million revolving credit facility with a group of banks to extend the term to October 2019 from October 2018. The facility's terms permit transfers of unused commitments between this facility and the KCP&L and GMO facilities discussed below, with the total amount of the facility not exceeding \$400 million at any one time. A default by Great Plains Energy or any of its significant subsidiaries on other indebtedness totaling more than \$50.0 million is a default under the facility. Under the terms of this facility, Great Plains Energy is required to maintain a consolidated indebtedness to consolidated capitalization ratio, as defined in the facility, not greater than 0.65 to 1.00 at all times. At December 31, 2014, Great Plains Energy was in compliance with this covenant. At December 31, 2014, Great Plains Energy had \$4.0 million of outstanding cash borrowings at a weighted-average interest rate of 1.69% and had issued no letters of credit under the credit facility. At December 31, 2013, Great Plains Energy had \$9.0 million of outstanding cash borrowings at a weighted-average interest rate of 1.94% and had issued no letters of credit under the credit facility.

KCP&L's \$600 Million Revolving Credit Facility and Commercial Paper

In December 2014, KCP&L entered into an amendment to its \$600 million revolving credit facility with a group of banks that provides support for its issuance of commercial paper and other general corporate purposes to extend the term to October 2019 from October 2018. Great Plains Energy and KCP&L may transfer up to \$200 million of unused commitments between Great Plains Energy's and KCP&L's facilities. A default by KCP&L on other indebtedness totaling more than \$50.0 million is a default under the facility. Under the terms of this facility, KCP&L is required to maintain a consolidated indebtedness to consolidated capitalization ratio, as defined in the facility, not greater than 0.65 to 1.00 at all times. At December 31, 2014, KCP&L was in compliance with this covenant. At December 31, 2014, KCP&L had \$358.3 million of commercial paper outstanding cash borrowings under the credit facility. At December 31, 2013, KCP&L had \$93.2 million of commercial paper outstanding at a weighted-average interest rate of 0.29%, had issued letters of credit totaling \$3.8 million and had no outstanding cash borrowings under the credit facility.



DOE Attachment MLR-2_VL_Select_Op_150227



PAGES 4353-4364

File in page order in the Selection & Opinion binder.

PART 2

Selection & Opinion

FEBRUARY 27, 2015

Dear Subscribers

As part of our ongoing efforts to keep The Value Line Investment Survey the most valuable investment resource for our subscribers, all updated Ranks are now being released on the Value Line Web Site by 8:00 A.M. Eastern Time on Mondays. You can access all the Ranks each week at www.valueline.com by entering your user name and password. We look forward to continuing to provide you with accurate and timely investment research. Thank you.

The Value Line View

In This Issue

The value Line view	4333
Model Portfolios: Recent Developments	4354
Investors' Datebook: March, 2015	4357
Selection & Opinion Index	4358
Timely Stocks with High Return	
On Equity	4359
Equity Funds Average Performance	4360
Fixed-Income Funds Average	
Performance	4360
Selected Yields	4361
Federal Reserve Data	4361
Tracking the Economy	4362
Major Insider Transactions	4362
Market Monitor	4363
Value Line Asset Allocation Model	4363
Industry Price Performance	4363
Changes in Financial Strength Ratings	4363
Stock Market Averages	4364
The Selection & Opinion Index appears in the selection of	nis

In Three Parts: Part 1 is the Summary & Index. This is Part 2, Selection & Opinion. Part 3 is Ratings & Reports. Volume LXX, Number 28.

Ratings & Reports. Volume LXX, Number 28. Published weekly by VAUE LINE FUBLISHING LIC 485 Listington Avenue, New York, NY 100174280. © 2015 Value Line Publishing LLC. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warrantise of any Hubbishing LLC. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warrantises of any Mind. THE FUBLISHER IS NOT RESPONSIBLE FOR ANY ERPORS OR OMISSIONS HEREIN OR ARVD DAMAGES OR LOSSES ATISING FROM ANV USE OF THE INFORMATION CONTINUED HEREIN. This publication is sticitly for subscribe's own, non-commercial, interral use. No part of It may be reproduced, schord or transmitted in any printed electronic or other form, or used for generating or marketing any printed or electronic publication, service or product. Officers, directors, ce employees of Value Line, Inc. and its affiliates and subsidiaries, and EULAV Asset Management, may on stocks that are leatured in the publication. Natring herein should be construed as an offer to hyor sell securities or to give individual investment advice. Value Line, the Value Line long. The Value Line Investment Survey, Value Line Select. Timeliness and Salety are tademarks or registered trademarks of Value Line. And vis a filiates in the United States and other countries. All other trademarks are the property of their respective owners.

See back cover for important disclosures

ECONOMIC AND STOCK MARKET COMMENTARY

The consumer is being cautious, but not to the extent suggested by the latest retail spending figures. True, such sales did falter last month, plunging by 0.8%. However, the drop was due completely to lower gasoline prices. In fact, if we exclude car sales and receipts at gasoline stations from the mix, to get to the so-called core rate of retail sales, we find that spending was actually up 0.2% last month, as consumers chose to increase their outlays, if cautiously. In all, several categories did quite well, with sales at building materials stores, at appliance dealers, at restaurants, and over the Internet all gaining.

We think spending will increase further as 2015 proceeds. Solid job growth, low-

er gasoline prices (which raise disposable income), rising real estate values, and the resilient bull market all suggest that the recently cautious spending approach (which is helping household budgets) will fade as spring arrives.

Other trends are holding their own, as well. Of note, we are seeing notable gains in employment, and further resilience in housing starts, building permits, industrial output, and factory use. Also, manufacturing and nonmanufacturing continue to be securely in the expansion column.

In all, we expect GDP growth of close to 3% for 2015, with somewhat greater gains coming later in the year, when, as noted, consumer spending is likely to accelerate, as the recent selective weather-related disruptions ease. Our forecast also assumes the West Coast dock dispute is resolved without too much damage ensuing.

Our nation's resilience is likely to come amidst further struggles abroad. On point, we expect China's growth to continue slowing, for the euro zone to post uneven results (with certain nations, notably Greece, likely needing assistance), and for the earlier drop in oil prices to cause instability in certain regions, possibly Russia and the Middle East.

The bulls are now back in stride, with the stock market having followed a weaker January with healthy gains for much of February. It would seem that strong fundamentals at home (including a healthy economy, decent earnings, and accommodative Federal Reserve policies) are enough to counter a dour backdrop overseas.

Conclusion: The market should continue to hold its own, assuming the fundamentals stay healthy. In all, stocks remain a decent investment option. Please refer to the inside back cover of Selection & Opinion for our statistically-based Asset Allocation Model's current reading.

CLOSING STOCK	CLOSING STOCK MARKET AVERAGES AS OF PRESS TIME						
			%Change	%Change			
	2/11/2015	2/18/2015	1 week	12 months			
Dow Jones Industrial Average	17862.14	18029.85	+0.9%	+11.8%			
Standard & Poor's 500	2068.53	2099.68	+1.5%	+14.1%			
N.Y. Stock Exchange Composite	10889.05	11064.10	+1.6%	+7.2%			
NASDAQ Composite	4801.18	4906.36	+2.2%	+14.8%			
NASDAQ 100	4297.28	4390.91	+2.2%	+19.3%			
Amex Major Market Index	2444.19	2472.05	+1.1%	+0.8%			
Value Liné (Geometric)	503.49	513.21	+1.9%	+5.5%			
Value Line (Arithmetic)	4720.27	4814.46	+2.0%	+9.9%			
London (FT-SE 100)	6818.17	6898.08	+1.2%	+1.5%			
Tokyo (Nikkei)	17652.68	18199.17	+3.1%	+22.6%			
Russell 2000	1201.56	1227.96	+2.2%	+5.7%			

DOE Attachment MLR-3_BEA_2014 PR_150227







EMBARGOED UNTIL RELEASE AT 8:30 A.M. EST, FRIDAY, FEBRUARY 27, 2015

Lisa Mataloni: (202) 606-5304 (GDP) <u>gdpniwd@bea.gov</u> Jeannine Aversa: (202) 606-2649 (News Media) BEA 15-07

GROSS DOMESTIC PRODUCT: FOURTH QUARTER AND ANNUAL 2014 (SECOND ESTIMATE)

Real gross domestic product -- the value of the production of goods and services in the United States, adjusted for price changes -- increased at an annual rate of 2.2 percent in the fourth quarter of 2014, according to the "second" estimate released by the Bureau of Economic Analysis. In the third quarter, real GDP increased 5.0 percent.

The GDP estimate released today is based on more complete source data than were available for the "advance" estimate issued last month. In the advance estimate, the increase in real GDP was 2.6 percent. With the second estimate for the fourth quarter, private inventory investment increased less than previously estimated, while nonresidential fixed investment increased more (see "Revisions" on page 3).

The increase in real GDP in the fourth quarter reflected positive contributions from personal consumption expenditures (PCE), nonresidential fixed investment, exports, state and local government spending, private inventory investment, and residential fixed investment that were partly offset by a negative contribution from federal government spending. Imports, which are a subtraction in the calculation of GDP, increased.

The deceleration in real GDP growth in the fourth quarter primarily reflected an upturn in imports, a downturn in federal government spending, and decelerations in nonresidential fixed investment and in exports that were partly offset by an acceleration in PCE, an upturn in private inventory investment, and an acceleration in state and local government spending.

NOTE. Quarterly estimates are expressed at seasonally adjusted annual rates, unless otherwise specified. Quarter-to-quarter dollar changes are differences between these published estimates. Percent changes are calculated from unrounded data and are annualized. "Real" estimates are in chained (2009) dollars. Price indexes are chain-type measures.

This news release is available on <u>BEA's Web site</u> along with the <u>Technical Note</u> and <u>Highlights</u> related to this release. For information on revisions, see "<u>The Revisions to GDP, GDI, and Their Major</u> <u>Components.</u>"

DOE Attachment MLR-4_FED RESERVE_PR_150318

3/29/2015

Printer Version - Board of Governors of the Federal Reserve System

Press Release

FEDERAL RESERVE press release



Release Date: March 18, 2015

For immediate release

Information received since the Federal Open Market Committee met in January suggests that economic growth has moderated somewhat. Labor market conditions have improved further, with strong job gains and a lower unemployment rate. A range of labor market indicators suggests that underutilization of labor resources continues to diminish. Household spending is rising moderately; declines in energy prices have boosted household purchasing power. Business fixed investment is advancing, while the recovery in the housing sector remains slow and export growth has weakened. Inflation has declined further below the Committee's longer-run objective, largely reflecting declines in energy prices. Market-based measures of inflation compensation remain low; surveybased measures of longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators continuing to move toward levels the Committee judges consistent with its dual mandate. The Committee continues to see the risks to the outlook for economic activity and the labor market as nearly balanced. Inflation is anticipated to remain near its recent low level in the near term, but the Committee expects inflation to rise gradually toward 2 percent over the medium term as the labor market improves further and the transitory effects of energy price declines and other factors dissipate. The Committee continues to monitor inflation developments closely.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that the current 0 to 1/4 percent target range for the federal funds rate remains appropriate. In determining how long to maintain this target range, the Committee will assess progress--both realized and expected--toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. Consistent with its previous statement, the Committee judges that an increase in the target range for the federal funds rate remains unlikely at the April FOMC meeting. The Committee anticipates that it will be appropriate to raise the target range for the federal funds rate to raise the target range for the federal funds rate to raise the target range for the federal funds rate to raise the target range for the federal funds rate to raise the target range for the federal funds rate to raise the target range for the federal funds rate to raise the target range for the federal funds rate remains unlikely at the April FOMC meeting. The Committee anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. This change in the forward guidance does not indicate that the Committee has decided on the timing of the initial increase in the target range.

The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial

http://www.federalreserve.gov/newsevents/press/monetary/20150318a.htm

Printer Version - Board of Governors of the Federal Reserve System

3/29/2015 conditions.

When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

Voting for the FOMC monetary policy action were: Janet L. Yellen, Chair; William C. Dudley, Vice Chairman; Lael Brainard; Charles L. Evans; Stanley Fischer; Jeffrey M. Lacker; Dennis P. Lockhart; Jerome H. Powell; Daniel K. Tarullo; and John C. Williams.

http://www.federalreserve.gov/newsevents/press/monetary/20150318a.htm

DOE Attachment MLR-5_NextEra_PR_141203

3/29/2015

NextEra Energy and Hawaiian Electric Industries to Combine

News Room

Facebook Tweet LinkedIn Email Print

NextEra Energy and Hawaiian Electric Industries to Combine

Nation's leading clean energy company to support Hawaii in achieving a more affordable clean energy future

Hawaiian Electric Industries shareholders to receive 0.2413 NextEra Energy shares per Hawaiian Electric Industries share and a one-time special cash dividend payment of \$0.50 per share

Transaction expected to be neutral to earnings per share for NextEra Energy shareholders in first full year post-close; accretive thereafter

Hawaiian Electric Company to maintain name and continue to be based in Honolulu

No involuntary workforce reductions at Hawaiian Electric Company for at least two years after transaction close

Hawaiian Electric Industries to spin off ASB Hawaii to Hawaiian Electric Industries' shareholders

JUNO BEACH, Fla., and HONOLULU – Dec. 3, 2014 – NextEra Energy, Inc. (NYSE:NEE) and Hawalian Electric Industries, Inc. (NYSE:HE) (HEI) today announced a definitive agreement under which the companies have agreed to combine. The transaction, which is valued at approximately \$4.3 billion, includes the assumption of \$1.7 billion in HEI debt and excludes HEI's banking subsidiary. In connection with the agreement, HEI separately today announced a plan to spin off ASB Hawaii, the parent company of American Savings Bank (ASB), to HEI shareholders and establish it as an independent publicly traded company. The American Savings Bank spinoff is expected to be tax-free to HEI shareholders and to be completed immediately prior to and contingent upon the combination of NextEra Energy with HEI. As described further herein, the total value to HEI shareholders, excluding assumed debt and including a one-time special cash dividend to HEI shareholders and the current estimated value of American Savings Bank of approximately \$8.00[1] per share, is estimated to be \$3.5 billion or approximately \$33.50 per HEI share.

"Today's announcement marks an important milestone for both our companies as we seek to leverage our respective strengths, commitments to our customers and the communities we serve and the mutual goal of building a cleaner energy future," said Jim Robo, chairman and chief executive officer of NextEra Energy. "We are proud that Hawaiian Electric has agreed to join our company in large part because of our shared vision to bring cleaner, renewable energy to Hawaii, while at the same time helping to reduce energy costs for Hawaiian Electric's customers. Today, Hawaiian Electric as addressing a vast array of complex and interrelated issues associated with the company's clean energy transformation. We believe our strengths are additive to Hawaiian Electric's, creating an opportunity to enhance value for Hawaii's strategically important energy industry. We look forward to welcoming and working with the Hawaiian Electric team, as well as engaging with and listening to key stakeholders, including Hawaiian Electric's customers and communities, to achieve a more affordable clean energy future."

"This is a transformational opportunity to unlock the value of two strong, local companies, American Savings Bank and Hawaiian Electric," said Connie Lau, HEI's president and chief executive officer and chairman of the boards of American Savings and Hawaiian Electric. "In NextEra Energy, Hawaiian Electric is gaining a trusted partner that can help the company accelerate its plans to achieve the clean energy future we all want for Hawaii. NextEra Energy and Hawaiian Electric is gaining a trusted partner that can help the company accelerate its plans to achieve the clean energy future we all want for Hawaii. NextEra Energy and Hawaiian Electric share a common vision, a more affordable clean energy future for Hawaii. While our goals are among the most ambitious in the nation, including increasing renewables to 65 percent, tripling solar and lowering customer bills 20 percent by 2030, we are confident that by leveraging both NextEra Energy and Hawaiian Electric's expertise and the additional financial resources that NextEra Energy brings, we can meet these targets even sooner. What's more, HEI's shareholders will realize significant value for their shares by participating in the upside potential of the combined company and the future growth of American Savings Bank, one of Hawaii's leading banks. All in all, we believe this transaction will benefit both our utility and bank customers, our employees, our community, our shareholders and Hawaii."

Common Vision, Common Goals: Meeting Hawaii's Clean Energy Needs

The transaction brings together two industry leaders in clean and renewable energy. The Hawaiian Electric Companies – Hawaiian Electric, Maui Electric and Hawaii Electric Light – have put Hawaii on the leading edge of clean energy nationally, successfully integrating rooftop solar with 11 percent of their customers and helping achieve 20 percent renewable energy. NextEra Energy adds its strength as the nation's leading clean energy company. NextEra Energy shares Hawaiian Electric's vision of increasing renewable energy, modernizing its grid, reducing Hawaii's dependence on imported oil, integrating more rooftop solar energy and, importantly, lowering customer bills. Hawaiian Electric has filed plans with the Hawaii Public Utilities Commission (PUC) that seek to enhance Hawaii's energy future by lowering electric bills, giving customers more service options and nearly tripling the amount of distributed solar, while achieving among the nation's highest levels of renewable energy by 2030. NextEra Energy is supportive of Hawaiian Electric's plans to accomplish these goals.

NextEra Energy's principal subsidiaries include Florida Power & Light Company (FPL), one of the nation's largest and most wellrespected electric utilities, and NextEra Energy Resources, LLC, which together with its affiliated entities (NextEra Energy Resources), is North America's largest producer of renewable energy from the wind and sun. Through NextEra Energy Resources, NextEra Energy brings to bear all the capabilities of a renewable energy leader, including utility-scale and distributed solar, wind and battery storage, as well as the resources to help accelerate Hawaiian Electric's efforts to pursue a new energy future in Hawaii. Together, FPL and NextEra Energy Resources have completed more than \$24 billion worth of major capital projects since 2003, overall on time and under budget.

FPL, which was recognized by Market Strategies International as the nation's most trusted electric utility earlier this year, serves approximately 4.7 million customers in a state that, like Hawaii, has no indigenous fossil fuels and was once the largest consumer of oil among all U.S. utilities. Since 2001, FPL has reduced its reliance on foreign oil by more than 99 percent, improved its overall fuel efficiency by 20 percent and saved its customers more than \$6.8 billion in fuel costs. FPL's operational excellence has supported low customer bills, including typical residential customer electric bills that are the lowest in Florida for the fifth consecutive year and approximately 25 percent lower than the national average. Additionally, FPL's highly efficient generation fleet is one of the cleanest and most modern among utilities nationwide. FPL also has developed, built and operates one of the nation's most modern grid networks and offers the highest reliability among Florida's investor-owned utilities, ranking in the top quartile nationally, with more than 99.98 percent reliability. FPL recently was presented with two prestigious reliability-related awards by PA Consulting Group – Outstanding Technology and Innovation in the U.S. and Outstanding Reliability Performance in the U.S. South region.

Transaction Terms

http://www.nexteraenergy.com/news/contents/2014/120314.shtml

NextEra Energy and Hawaiian Electric Industries to Combine

Subject to the terms and conditions of the merger agreement, upon completion of the transaction, HEI shareholders will receive an estimated total value of approximately \$33.50 per share, representing an approximately 21 percent premium to HEI's trailing 20-day volume-weighted average price as of the close on Dec. 2, 2014. The total value will consist of:

- 0.2413 shares of NextEra Energy common stock for each HEI share they own, valued at \$25.00 per HEI share, based on
- NextEra Energy's volume-weighted average stock price for the 20 trading days ended Dec. 2, 2014;
 A one-time special cash dividend, to be paid by HEI, of \$0.50 per HEI share for shareholders of record as of the date immediately prior to the closing of the transaction; and
- Shares of ASB Hawaii, through the spinoff transaction, with a current estimated value of \$8.00 per share based on consensus analyst estimates.

In addition, NextEra Energy will also assume approximately \$1.60[2] per HEI share of tax liability for the spinoff of ASB Hawaii. This corporate-level tax liability results in additional value over time of up to \$1.60 per share to new ASB Hawaii shareholders through an ASB tax basis step-up. With the exception of the one-time special cash dividend, the overall transaction, including the spinoff of ASB Hawaii, is expected to be tax-free to HEI shareholders.

The transaction expands NextEra Energy's regulated holdings and further balances its earnings mix, and is expected to be neutral to carnings per share for NextEra Energy shareholders in the first full year post-close and accretive thereafter. The transaction is expected to have no impact on NextEra Energy's quarterly dividend policy (the most recently declared quarterly dividend was \$0.725 per NextEra

Energy common share). Additionally, NextEra Energy remains committed to maintaining a strong balance sheet and will fund the transaction in a manner consistent with its current credit ratings

Committed to Local Customers, Employees and the Communities We Serve

NextEra Energy and Hawaiian Electric are committed to ensuring that the combination delivers significant value to all Hawaiian Electric stakeholders. The merger approval application that NextEra Energy and Hawaiian Electric intend to file within the next 60 days with the Hawaii PUC will demonstrate that the combination will ensure customer interests are protected and that customers will receive measurable and significant value and savings. In addition, the jurisdiction of the Hawaii PUC over Hawaiian Electric will not be diminished as a result of the transaction. The companies look forward to demonstrating the benefits that this transaction will offer Hawaiian Electric's customers and Hawaii.

Upon completion of the transaction, together with FPL and NextEra Energy Resources, Hawaiian Electric will become a third principal business within the NextEra Energy family of companies. Hawaiian Electric will continue to operate under its current name and continue to be headquartered in Honolulu. Hawalian Electric's utilities will continue to be locally managed from their existing operating locations. No involuntary reductions to Hawalian Electric's workforce are expected as a result of the transaction for at least two years after close, and all of its union labor agreements will be honored.

NextEra Energy has been recognized for an unprecedented eighth consecutive year as No. 1 on the utility industry list of Fortune's "Most Admired Companies" and enjoys a longstanding reputation as a strong corporate citizen throughout the communities in which it operates. Consistent with that, NextEra Energy expects to maintain HEI's overall current level of corporate giving in HEI's communities. NextEra Energy also plans to establish a local Hawaiian Electric advisory board, whose purpose will be to provide input on matters of local and community interest. The advisory board will include six to 12 members, all of whom will have substantial ties to the Hawaii community.

Planned Spinoff of ASB Hawaii

In connection with the agreement, HEI plans to spin off ASB Hawaii to HEI shareholders and establish it as an independent publicly traded company, immediately prior to and contingent upon the completion of the combination of HEI with NextEra Energy

Under the planned spinoff, HEI shareholders would receive a distribution of stock in ASB Hawaii, pro rata to their ownership interest in HEI. NextEra Energy will assume the corporate tax liability related to the spinoff (estimated to total approximately \$1.60 per HEI share). The spinoff is expected to be tax-free for HEI shareholders. In addition, ASB Hawai's tax basis in its assets is expected to be increased to reflect their fair market value at the time of the spinoff, which is expected to create a assets is expected to be increased to reliect their fair market value at the time of the spinori, which is expected to create a deductible amortization of an intangible asset for tax purposes and a corresponding deferred tax asset (DTA) for generally accepted accounting principles purposes, improving regulatory capital ratios and providing improved cash flow by reducing cash taxes as the DTA is amortized. Based on the median of six equity analyst consensus estimates on Dec. 2, 2014, ASB Hawaii's estimated current value is approximately \$800 million, or approximately \$8.00 per share. This valuation represents 1.7-1.8x tangible book value for ASB Hawaii. Following the spinoff, American Savings Bank expects to realize higher year-over-year fee income due to regaining its exemption from regulatory limits on interchange fees (Durbin Amendment). Prior to losing the Durbin Amendment Avertaine in 2012. American Savings Dank expects to realize higher year-over-year fee income due to regaining its exemption from regulatory limits on interchange fees (Durbin Amendment). Prior to losing the Durbin Amendment Avertaine in 2012. American Savings Bank expects to realize higher year bits the test of the taxe of the taxe of the start of the start of the taxe of the start of the st Durbin Amendment exemption in 2013, American Savings Bank realized approximately \$6 million, after tax, in higher interchange fees.

Approvals

In addition to Hawaii PUC approval, the transaction also is subject to approval by HEI shareholders, the expiration or termination of the waiting period under the Hart-Scott-Rodino Act, the Federal Energy Regulatory Commission, SEC effectiveness of registration statements, the spinoff of ASB Hawaii and additional regulatory approvals and other customary conditions. NextEra Energy and HEI expect the transaction, which has been unanimously approved by both companies' boards of directors, to be completed within approximately 12 months. The spinoff of ASB Hawaii is expected to be completed immediately prior to and is contingent upon the completion of the combination of HEI and NextEra Energy. The spinoff is also subject to customary conditions and formal declaration of the dividend to HEI shareholders of ASB Hawaii stock by the HEI board of directors.

Advisors

Citigroup Global Markets Inc. is serving as financial advisor to NextEra Energy, and Wachtell, Lipton, Rosen & Katz is legal counsel

J.P. Morgan Securities LLC is serving as financial advisor to HEL and Skadden, Arps, Slate, Meagher & Flom LLP is legal counsel

Website

Additional information about the benefits of the transaction is available at a new joint website launched by the companies at www.forhawaiisfuture.com

Analyst and Investor Webcast and Conference Call

http://www.nexteraenergy.com/news/contents/2014/120314.shtml

2/4

NextEra Energy and Hawaiian Electric Industries to Combine

NextEra Energy and HEI will conduct a webcast and conference call for analysts and investors to discuss this announcement today, Wednesday, Dec. 3, 2014, at 1:00 p.m. Hawaii time (6:00 p.m. Eastern time). The event can be accessed through each company's website at <u>www.NextEraEnergy.com</u> and <u>www.HEI.com</u> or by dialing (866) 610-1072, passcode: 38818848 for the teleconference call. The presentation for the webcast will be on the websites under the heading "Investor Relations."

An online replay of the webcast will be available on each company's website, beginning about two hours after the event. Audio replays of the teleconference will also be available approximately two hours after the event through Dec. 10, 2014, by dialing (800) 585-8367, passcode: 38818848.

NextEra Energy, Inc.

NextEra Energy, Inc. (NYSE: NEE) is a leading clean energy company with consolidated revenues of approximately \$15.1 billion, approximately 42,500 megawatts of generating capacity, and approximately 13,900 employees in 26 states and Canada as of year-end 2013. Headquartered in Juno Beach, Fla., NextEra Energy's principal subsidiaries are Florida Power & Light Company, which serves approximately 4.7 million customer accounts in Florida and is one of the largest rate-regulated electric utilities in the United States, and NextEra Energy Resources, LLC, which, together with its affiliated entities, is the largest generator in North America of renewable energy from the wind and sun. NextEra Energy has been recognized often by third parties for its efforts in sustainability, corporate responsibility, ethics and compliance, and diversity, and has been named No. 1 overall among electric and gas utilities on Fortune's list of "World's Most Admired Companies" for eight consecutive years, which is an unprecedented achievement in its industry. For more information about NextEra Energy companies, visit these websites: **www.NextEraEnergy.com, www.NextEraEnergy.com, www.NextEraEnergyResources.com**.

Hawaiian Electric Industries, Inc.

HEI supplies power to approximately 450,000 customers or 95 percent of Hawaii's population through its electric utilities, Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited and provides a wide array of banking and other financial services to consumers and businesses through American Savings Bank, one of Hawaii's largest financial institutions.

FORWARD LOOKING STATEMENTS

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are typically identified by words or phrases such as "may," "will," "anticipate," "estimate," "expect," "Intend," "plan," "believe," and "target" and other words and terms of similar meaning. Forwardlooking statements involve estimates, expectations, projections, goals, forecasts, assumptions, risks and uncertainties. NEE and HEI caution readers that any forward-looking statement is not a guarantee of future performance and that actual results could differ materially from those contained in any forward-looking statement. Such forward-looking statements include, but are not limited to, statements about the anticipated benefits of the proposed merger involving NEE and HEI, including future financial or operating results of NEE or HEI. NEE's or HEI's plans, objectives, expectations or intentions, the expected timing of completion of the transaction, the value, as of the completion of the merger or the spin-off in the form of stock or any other security, potential benefit of tax basis step up to HEI shareholders, and other statements that are not historical facts. Important factors that could cause actual results to differ materially from those indicated by any such forward-looking statements include risks and uncertainties relating to: the risk that HEI may be unable to obtain shareholder approval for the merger or tha NEE or HEI may be unable to obtain governmental and regulatory approvals required for the merger or the completion of the spin-off may not be satisfied; the timing to consummate the proposed merger and the expected timing of the completion of the spin-off may not be satisfied; the timing to consummate the proposed merger and the expected siming of the completion of the spin-off may not be satisfied; the timing to consummate the proposed merger and the expected siming of the layer synergies or suppliers; the diversion of management time and attenti

ADDITIONAL INFORMATION AND WHERE TO FIND IT

This document does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. The proposed business combination transaction between NEE and HEI will be submitted to the shareholders of HEI for their consideration. NEE will file with the SEC a Registration Statement on Form S-4 that will include a proxy statement of HEI that also constitutes a prospectus of NEE. HEI will provide the proxy statement/prospectus to its shareholders. NEE and HEI also plan to file other documents with the SEC regarding the proposed transaction. This document is not a substitute for any prospectus, proxy statement or any other document which NEE or HEI may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF HEI ARE URGED TO READ THE PROXY STATEMENT/PROSPECTUS AND ANY OTHER RELEVANT DOCUMENTS THAT WILL BE FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION. You may obtain copies of all documents filed with the SEC regarding this transaction, free of charge, at the SEC's website (www.sec.gov). You may also obtain these documents, free of charge, from NEE's website (www.investors.nexteraenergy.com) under the heading "SEC Filings." You may also obtain these documents, free of charge, from NEE's website launched by the companies at www.forhawaiisfuture.com.

PARTICIPANTS IN THE MERGER SOLICITATION

NEE, HEI, and certain of their respective directors, executive officers and other members of management and employees may be deemed to be participants in the solicitation of proxies from HEI shareholders in connection with the proposed transaction. Information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of HEI

http://www.nexteraenergy.com/news/contents/2014/120314.shtml

3/4

NextEra Energy and Hawaiian Electric Industries to Combine

shareholders in connection with the proposed transaction will be set forth in the proxy statement/prospectus when it is filed with the SEC. You can find information about NEE's executive officers and directors in its definitive proxy statement filed with the SEC on April 4, 2014. You can find information about NEE's executive officers and directors in its definitive proxy statement filed with the SEC on March 25, 2014 and in its Annual Report on Form 10-K filed with the SEC on February 21, 2014. Additional information about NEE's executive officers and HEI's executive officers and directors can be found in the above-referenced Registration Statement on Form 54 when it becomes available. You can obtain free copies of these documents from NEE and HEI using the contact information above.

NextEra Energy Contact

Robert L. Gould Vice President, Chief Communications Officer 561-694-4442

Debra Larsson Manager, Financial and Sustainability Communication 561-694-4442

Hawaiian Electric Industries Contact

Media A.J. Halagao Manager, Corporate & Community Advancement (808) 543-5889 **ajhalagao@hei.com**

Investor Relations Cliff Chen Manager, Investor Relations & Strategic Planning (808) 543-7300 IR@hei.com

American Savings Bank Contact

Jayson Harper First Vice President, Director of Communications and Public Relations (808) 538-2652 <u>iharper@asbhawaii.com</u>

[1] Median of six equity research analyst estimates as of 12/02/2014. Actual value will fluctuate and will depend on market value of the shares of ASB Hawaii at the time of the proposed spinoff and thereafter.

[2] Estimated tax liability of \$1.60/HEI share based on \$8.00/share bank value and assumes HEI fully diluted shares outstanding of 103.5 million

http://www.nexteraenergy.com/news/contents/2014/120314.shtml

DOE Attachment MLR-6_EverSource_PR_150312

3/29/2015

News Post

ABOUT (/CONTENT/GENERAL/ABOUT)

RESIDENTIAL (/CONTENT/GENERAL/RESIDENTIAL)

BUSINESS (/CONTENT/GENERAL/BUSINESS)



COMPREHENSIVE AGREEMENT TO DELIVER \$300 MILLION IN CUSTOMER SAVINGS, PAVES WAY FOR A MORE INNOVATIVE ENERGY FUTURE

Eversource to sell PSNH power plants, protect employees and communities

CONCORD, New Hampshire (March 12, 2015) –As a result of months of negotiations with key state officials, Eversource Energy has agreed to sell its "Public Service of New Hampshire" (PSNH) power plants, resulting in at least \$300 million in savings to its New Hampshire customers. The agreement is focused on providing customer savings and resolving other related issues currently under review by state regulators. It also includes important provisions reflecting the views of diverse parties in those pending regulatory proceedings.

This agreement represents an opportunity to create real savings for PSNH customers, avoids protracted litigation with uncertain outcomes for all parties, and moves the operation of PSNH generating plants to competitive markets rather than remaining an ongoing ratepayer obligation. Having participated in the successful settlement with PSNH 15 years ago, I believe this settlement, while challenging to achieve, will protect customers and enhance the reliability of our electricity generating system," said Senate Majority Leader Jeb Bradley, who led the negotiations with the Company.

Through this agreement Eversource agrees to sell its PSNH hydro facilities and fossil fuel plants, including: Merrimack Station in Bow, which has been in operation for 55 years; Newington Station in Newington, which has been in service since 1974; and Schiller Station in Portsmouth, which has been in operation since 1952.

The sale of the plants means that customers will no longer be responsible for paying for the continued operation of the plants, and will avoid potentially costly investments to meet environmental standards. In addition, customers will no longer pay the existing regulated rate of return on the plants. Instead, upon the sale of the plants, Eversource will purchase energy for its New Hampshire customers in the market, consistent with all other utilities in the state and across the region.

In addition to providing savings to customers, the agreement will resolve three ongoing dockets at the N.H. Public Utilities Commission: DE 11-250, regarding recovery of the cost of the "scrubber" at Merrimack Station; and IR 13-020 and DE 14-238, which focus on Eversource's ownership of power generation and the impact on customers and the competitive energy market.

"This agreement provides significant savings for residential ratepayers and resolves outstanding disputes without protracted litigation," said Susan Chamberlin, Consumer Advocate. "I look forward to working with Eversource and all stakeholders as we transition to a more innovative and fully competitive electric market that provides benefits to all ratepayers."

The agreement contains important protections for current employees:

- Buyers must honor existing Collective Bargaining Agreements.
- Eversource commits to work in good faith with the Union regarding enhancements to employee protections.
- Buyers must agree to keep the plants in service for at least 18 months following purchase.
- Eversource will provide employee protections to non-represented affected employees.

"As New Hampshire transitions to a more competitive marketplace for electricity, we must ensure we expand opportunity for everyone, including residential ratepayers, municipalities, the business community, and workers. This reasonably balances and recognizes all of these very important interests," said Senator Dan Feltes.

https://www.eversource.com/Content/general/about/news-room/new-hampshire/newspost?Group=new-hampshire&Post=comprehensive-agreement-t... 1/5

News Post

The agreement will also provide benefits for the cities and towns where the PSNH plants are located, by providing the host communities three years of property tax stabilization payments if a plant sells for less than its assessed value.

According to the agreement, Eversource shareholders will also provide \$5 million to capitalize a clean energy fund which will target investments in energy efficiency and distributed generation projects.

"I thank all members of the state team and the company for compromising to achieve a balanced agreement that provides significant benefits to the state and puts us on a path to put the current litigation behind us. This agreement allows us to complete the electric restructuring process in a way that includes savings for ratepayers, protections for workers, environmental benefits, and stability for municipalities that host PSNH's generating plants. We hope that by incorporating the views of the diverse parties in the pending PUC cases, the agreement will have the support of a wide range of interests," said Meredith Hatfield, Director of the Office of Energy and Planning, who also led negotiations with the company. "We have more work ahead of us to develop a full settlement document that reflects our agreement, but we begin it encouraged by the good faith that the parties have shown and the strong contributions they have already made."

"The benefits of this agreement for our customers are substantial," said Bill Quinlan, President of Eversource's New Hampshire Operations. "They include an estimated \$300 million in savings over the next five years due to the current availability of low-cost refinancing; our agreement to forego recovery of \$25 million related to the Merrimack Station emission reduction 'scrubber'; and a two-year extension of our current distribution rates, that still allows us to continue to make important electric system investments. We are also committed to ensuring that our employees are treated fairly during this transition."

Agreement Highlights

- · Sale of PSNH generation facilities: three fossil fuel and nine hydroelectric power plants
- The Company's agreement to forego \$25 million in recovery related to the scrubber at Merrimack Station
- Estimated \$300 million in customer savings over five years due to low-cost securitization of stranded costs
- Continued operation of power plants for at least 18 months following sale
- Employee protections for employees affected by sale, including enhancements beyond current Collective Bargaining Agreement, subject to federal requirements
- Employee protections for non-represented employees affected by sale
- Three years of payments in lieu of taxes to power plant communities if the purchase price is less than the municipality's
 assessed value of the asset
- Distribution rate freeze extension of two years, until at least July 2017
- Continuation of PSNH's "Reliability Enhancement Program" and Enhanced Tree Trimming program, under terms of existing Distribution Rate agreement
- Establishment of Clean Energy Fund with \$5 million capitalization by Eversource shareholders
- Recovery by Eversource of remaining stranded costs following sale of assets

Requirements of Agreement

- Creation and execution of a final formal settlement document, in consultation with parties to existing PUC dockets
- NH Public Utilities Commission approval of final settlement agreement
- Legislation authorizing low-cost securitization/financing of any stranded costs remaining following the sale of the PSNH power plant

PSNH Power Plants

Fossil Fuel:

- Merrimack Station, Bow. Coal. 439 MW.
- Newington Station, Newington. Oil and/or natural gas. 400 megawatts (MW).
- Schiller Station, Portsmouth. Coal or oil, two units; biomass, one unit. 150 total MW.

Hydroelectric Plants - 69 MW total

- Amoskeag Hydro, Manchester
- · Ayers Island, Bristol
- Canaan Hydro, West Stewartstown
- Eastman Falls, Franklin
- Garvins Falls, Bow
- Gorham Hydro, Gorham
- Hooksett Hydro, Hooksett
- Jackman Hydro, Hillsborough

https://www.eversource.com/Content/general/about/news-room/new-hampshire/newspost?Group=new-hampshire&Post=comprehensive-agreement-t... 2/5

News Post

• Smith Hydro, Berlin

Parties to the Agreement

- Eversource Energy
- NH State Senators Jeb Bradley and Dan Feltes
- NH Office of the Consumer Advocate
- NH Office of Energy and Planning
- Staff of the NH Public Utilities Commission

CONTACT:

Meredith A. Hatfield NH Office of Energy and Planning 603-271-2155 meredith.hatfield@nh.gov (mailto:meredith.hatfield@nh.gov)

Martin Murray

Eversource 603-634-2228 martin.murray@eversource.com (mailto:martin.murray@eversource.com)

> Outage Map (/Content/general/residential/outages/outagemap)

Pay My Bill (/Content/general/residential/myaccount/payment-options)

Report/Check Outages (/Content/general/residential/outages/reportan-outage)

Switch to Natural Gas (/Content/ctc/residential/switchto-gas)

Dial 811 (/Content/general/residential/safety/safetyprograms/call-before-you-dig)

Energy Saving Facts (/Content/general/residential/savemoney-energy/energy-savingfacts)

https://www.eversource.com/Content/general/about/news-room/new-hampshire/newspost?Group=new-hampshire&Post=comprehensive-agreement-t...3/5

RESIDENTIAL My Account (/Comem/general/residemial/my-account) Programs & Services (/Comem/general/residemial/programs-services) Save Money& Energy (/Coment/general/residemial/save-money-energy) Safety (/Coment/general/residemial/safety) (/Coment/general/residemial/safety)Comact Us (/Comem/general/about/coman)

HERE TO HELP YOU

Privacy & Legal State memory (/Contern/general/about/legal-state memory)

News Room (/Coment/general/about/news-room)

Investors (/Content/general/about/investors)

Careers (/Content/general/about/tareers)

Ττα ή sm (ss ιο η (http://transmission-nu.com)

Real Estate (/Content/general/about/doing-business-winh-us/real-estate)

News Post

BUSINESS

My Attount (/Content/general/business/my-attoum)

Programs & Services (/Coment/general/reside mai/programs-services)

Save Money & Energy (/Content/general/business/save-money-energy)

Safety (/Coment/general/business/safety)

Comaci Us (/Comem/general/about/comaci) (/Comem/general/business/safety)

STAY SAFE

Call Before You Dig (CT) (/Comem/general/residential/safety/safety-programs/call-beforeyou-og)

Dig Safe (MA, NH) (/Coment/general/residential/safety/safety-programs/dig-safe)

Smell of Gas (/Coment/general/residemial/satery/gas-satery-ups/smell-of-gas)

Elemon Safety Typs (/Coment/general/residential/safety/elemon-safety-typs)

Gas Safety Tips (/Content/general/residential/safety/gas-safety-tips) DOING BUSINESS WITH US

Energy Suppliers (/Coment/general/about/doing-business-with-us/energy-supplierinformation)

Builders & Contramors (/Content/general/about/doing-business-with-us/builderscontramors)

Рюрену Манадетент Gateway (/Comem/general/about/doing-business-winhus/propeny-management-gateway#)

eSourcing (/NU/invoicelookup/default.aspx)

Athlianes (/Coment/general/about/doing-business-wnh-us/athlianes)

Municipal Officials (/Coment/general/about/doing-business-with-us/municipal-officials)

SOCIAL

(https://facebook.com/EversourceEnergy)

(https://twitter.com/eversourcecorp)

Yau Tuhe

(https://www.youtube.com/channel/UCpq2zozgxhuM4iafvhVImVg)

Sлетар

News Post

© 2015 Eversource, All rights reserved.

https://www.eversource.com/Content/general/about/news-room/new-hampshire/newspost?Group=new-hampshire&Post=comprehensive-agreement-t... 5/5

DOE Attachment MLR-7_Morin_P269

Chapter 8: Discounted Cash Flow Concepts

$$K = D_1/P + g$$
 (8-19)

is altered as follows. Since growth in book value per share results from both types of operations, now g = br + sv and not simply br, where:

- s = funds raised from the sale of stock as a fraction of existing common equity
- v = fraction of the funds raised from the sale of stock that accrues to shareholders at the start of the period

The only change required in the standard DCF model to recognize the expectation of continuous stock financing at the rate s is the change in the expected rate of growth from br to (br + sv). The expanded DCF model pioneered by Gordon (1974) takes the form:⁴

$$K = \frac{D_1}{P} + br + sv \tag{8-20}$$

In this expanded DCF model, v is the fraction of earnings and dividends generated by the new funds accruing to existing shareholders. To understand the meaning of v, consider a new stock issue sold at a price equal to book value, P = B. The equity of the new shareholders is equal to the funds they invest, and the existing shareholders' equity is not changed. But if the stock is sold at a price greater than book value, P > B, a portion of the funds accrues to the existing shareholders. And if the stock is sold at a price less than book value, P < B, existing shareholders experience a dilution of their equity position. Specifically, Gordon has shown that

$$v = 1 - B/P$$
 (8-21)

where 'v' is the portion of the new funds raised that increases/decreases the book value of the existing shareholders' equity, depending on whether P > B or P < B.

The expanded DCF model in Equation 8-20 reduces to the standard DCF version if either the company does not regularly sell new stock, s = 0, or if new stock is sold at a price equal to book value, v = 0. In the latter case, new stock financing has no impact on stock price. B/P = 1 in Equation 8-21, and v is thus 0.

⁴ An analogous extended DCF model was derived by Miller and Modigliani (1958, 1963), who used a slightly different valuation approach to arrive at an expression which is equivalent to Gordon's model in Equation 8-20. Using the appropriate notational translations, several authors, including Davis and Sparrow (1972) and Arzac and Marcus (1981), have shown the equivalence of the Gordon and the Miller and Modigliani versions.

DOE Attachment MLR-8_SBBI_P50

To illustrate the two-stage growth model, we can alter the growth assumptions of the example found under th stage model. Assume that the analysts' grow 8 percent applies only to years one through five. For years six and onwards, assume a growth rate of 5 percent.

Annual

(\$)

Dividend

2.00

2.16

2.33

2.52

2.72

2.94

3.09

We arrive at the current stock price of \$50 by discounting

this stream of cash flows at an estimated rate of 9.78 per-

cent. This is a considerably different estimate compared to

the 12.32 percent we arrive at using a constant growth rate

of 8 percent. Therefore, the growth rate assumptions can

have a significant impact on the cost of equity estimate.

Annual

(S)

Dividend

2.00

2.16

2.33

2.52

2.72

2.94

3.33

3.55

3.78

4.03

4.23

Factor @ 9.78 %

0.76

0.69

0.63

13.12

Present Value

1.00

0.91

0.83

0.75

0.68

0.62

0.56

0.51

0.47

0.42

0.38

7.63

Factor @

10.03%

Growth

Rate

(%)

8.0

8.0

8.0

8.0

80

5.0

Growth

Rate

8.0

8.0

8.0

8.0

8.0

6.5

6.5

6.5

6.5

6.5

5.0

Timing Differences and Discount Rates

(96)

Yea

n

Λ

Ye

2

3

4

8

10

11-forever

6-forever

er the single-	Additional growth stages can be used but, in practice, only
wth rate of	one-, two-, or three-stage discounted cash flow models

as follows:

Present Value Factor @	Present Value of Dividend	
9.78 %	(S)	$\frac{n!}{CF_0}(1+g_1)'$, $\frac{n2}{CF_0}(1+g_2)'$
1.00		$PV_s = \sum \frac{1}{(a+1)^{1/2}} + \sum \frac{1}{(a+1)^{1/2}}$
0.91	1.97	$i=1 (1+\kappa_s) \qquad i=n+1 (1+\kappa_s)$
0.83	1.94	
0.76	1 00	

The Three-Stage Growth Model

where:

1.87

1.84

40.48

Present Value

of Dividend

1.96

1.93

1.89

1.86

1.82

1.76

1.71

1.65

1.60

1.55

32.27 Total \$50.00

(\$)

Total \$50.00

- k_s = the cost of equity for company s;
- PV_s = the current market value of company s;
- = a measure of time (in this example the unit of i measure is a year);
- n_1 = the number of years in the first stage of growth;

- in year n_{1;} CF_{n2} = the expected dividend or cash flow amount (in \$)
- = the expected dividend or cash flow growth rate 91
- = the expected dividend or cash flow growth rate from g2
- g_3 = the expected perpetual dividend or cash flow growth

To illustrate the three-stage growth model, we alter the growth assumptions of the two-stage model example (see table on left). Again we assume that the analysts' growth rate of eight percent applies only to years one through five. For years 6 through 10, we assume a growth rate of 6.5 percent. In the last stage, from year 11 and beyond, we assume a perpetual growth rate of 5 percent.

By discounting this stream of cash flows at a rate of 10.03 percent, we arrive at the current stock price of \$50.

Year	Growth Rate (%)	Annual Dividend (S)	Periodic Dividend (\$)	Reinvestment (\$)	Total Dividend (\$)	Present Value Factor @ 9.96%	Present Value of Dividend (\$)
0		2.00				1.00	
1	8.0	2.16	0.54	0.08	2.24	0.91	2.04
2	8.0	2.33	0.58	0.09	2.42	0.83	2.00
3	8.0	2.52	0.63	0.10	2.62	0.75	1.97
4	8.0	2.72	0.68	0.10	2.82	0.68	1.93
5	8.0	2.94	0.73	0.11	3.05	0.62	1.90
6-forever	5.0	3.09	0.77	0.12	3.20	12.54	40.16

Total \$50.00

50

Chapter 4: Overview of Cost of Equity Capital Models

n2 = the last year in the second stage of growth; CF_0 = the dividend or cash flow amount (in \$) in year 0; CF_{n1} = the expected dividend or cash flow amount (in \$)

are usually employed. The three-stage model is denoted

 $CF_{n2}(1+g_3)$

(1+k.)

-g₃)

in year n₂;

- from year 1 to year n1;
- year $(n_1 + 1)$ to year n_2 ; and
- rate starting in year $(n_2 + 1)$.

DOE Attachment MLR-9_SBBI_P52

In addition, other sources of growth may exist that do not require the plow-back of earnings. Changes in technology can advance growth with little capital expenditure by a firm. For instance, efficiency in the transfer of information has improved tremendously over the years as a result of internet technology. Many companies benefit from this increased efficiency with little direct investment in the internet. A company may also grow at the rate of inflation without retaining any earnings. The growth rate that the model estimates is a nominal growth rate, not a real growth rate. If retained earnings are zero, the model predicts zero growth; however, a firm could still grow at the general rate of inflation.

Another approach to estimating long-term growth rates is to focus on estimating the overall economic growth rate. Again, this is the approach used in the *Ibbotson Cost of Capital Yearbook*. To obtain the economic growth rate, a forecast is made of the growth rate's component parts. Expected growth can be broken into two main parts: expected inflation and expected real growth. By analyzing these components separately, it is easier to see the factors that drive growth.

Treasury Inflation-Protected Securities (TIPS), a relatively new investment vehicle in the U.S., can be used in conjunction with traditional long-term government bonds to estimate the market expectation for inflation. Theoretically, the yield on inflation-indexed bonds is equal to the real default-free rate of return.

To estimate long-term inflation, we can start with the current yield on a government bond with approximately 20 years to maturity of 2.41 percent and subtract the current yield on an inflation-indexed bond with approximately 20 years to maturity of 0.15 percent, for an inflation estimate of 2.26 percent.

Once the long-term expected inflation rate is estimated, the real growth rate must be determined. The growth rate in real Gross Domestic Product (GDP) for the period 1929 to 2012 was approximately 3.22 percent. Growth in real GDP (with only a few exceptions) has been reasonably stable over time; therefore, its historical performance is a good estimate of expected long-term (future) performance. By combining the inflation estimate with the real growth rate estimate, a long-term estimate of nominal growth is formed:

2.26 percent + 3.22 percent = 5.48 percent.

Endnotes

- 1 This relationship does not seem to hold empirically with small company stocks. This size effect is discussed in Chapter 7. ² In general, small company betas are expected to be higher than large company betas. This, however, does not hold for all time periods. Chapter 6 discusses in more detail the measurement of beta for small stocks. ³The beta-adjusted size premia are different from the small stock premia (or nonbeta-adjusted size premia) shown in previous editions of the Ibbotson Stocks, Bonds, Bills, and Inflation Yearbook (prior to the 1995 Yearbook). The small stock premium reported in older editions of Stocks, Bonds, Bills, and Inflation is the difference in long-term average returns between the large company stock total return series (currently represented by the S&P 500) and the small company stock total return series (currently represented by the Dimensional Fund Advisors U.S. Micro Cap Portfolio). The size premia given here are based on slightly different baskets of stocks from the CRSP (Center for Research in Security Prices) data set and, more importantly, they are adjusted for beta. That is, small stocks do have higher betas than large stocks; the return, above what might be expected because of the higher betas, is the size premium. These size premia increase as the capitalization of the company decreases. Chapter 7 describes the development of these premia in more detail.
- ⁴ Beta estimate is based on the full information beta for SIC code 36 from the *lbbatson Industry Cost of Capital Reports* as of December 31, 2012 and December 31, 1996. This beta estimation methodology is described in detail in Chapter 6. For more information, visit http://global.morningstar.com/ IndReportsStats

⁵ Roll, Richard, and Stephen A. Ross. "An Empirical Investigation of the Arbitrage Pricing Theory," Journal of Finance, Vol. 35, no. 5, December 1980, pp. 1073–1103.

⁶ Chen, Nai-fu: "Some Empirical Tests of Arbitrage Pricing," Journal of Finance, Vol. 18, no. 5, December 1983, pp. 1393–1414.

Chen, Nai-fu, Richard Roll, and Stephen A. Ross. "Economic Forces and the Stock Market: Testing the APT and Alternative Pricing Theories," Journal of Business, Vol. 59, July 1986, pp. 383–403.

⁷ Fama, Eugene, and Kenneth French. "The Cross-Section of Expected Stock Returns," Journal of Finance, Vol. 47, 1992a, pp. 427–465.

^e Williams, John Burr. "The Theory of Investment Value," Harvard University Press, Cambridge, Mass., 1938.

Gordon, Myron J., and Eli Shapiro. "Capital Equipment Analysis: The Required Rate of Profit," Management Science, Vol. 3, October 1956, pp. 102–110.

52

Chapter 4: Overview of Cost of Equity Capital Models

DOE Attachment MLR-10_Morin_P73

Chapter 3: Risk Estimation in Practice

Giscuss the use of adjusted betas.⁴ Several authors have investigated the regression tendency of beta and generally reached similar conclusions. High-beta partfolios have tended to decline over time toward unity, while low-beta partfolios have tended to increase over time toward unity. Blume (1971) examines the stability of beta for all common stocks listed on the NYSE, and finds a tendency for a regression of the betas toward 1.00. He demonstrates that the Value Line adjustment procedure anticipates differences between past and future betas. Chen (1981) also analyzes the variability of beta and suggests the Bayesian adjustment approach used by beta producers to estimate time-varying betas.⁵ Ibbotson Associates' annual Valuation Yearbook relies on Bayesian betas as well.

A comprehensive study of beta measurement methodology by Kryzanowski and Jalilvand (1983) concludes that raw unadjusted beta (OLS beta) is one of the poorest beta predictors, and is outperformed by the Merrill Lynch-style Bayesian beta approach. Gombola and Kahl (1990) examine the time-series properties of utility betas and find strong support for the application of adjustment procedures such as the Value Line and Merrill Lynch procedures.

The tendency of true betas not only to vary over time but to move back toward average levels is not surprising. A company whose operations or financing make the risk of its stock divergent from other companies is more likely to move back toward the average than away from it. Such changes in beta values are due to real economic phenomena, not simply to an artifact of overly simple statistical procedures.

Because of this observed regressive tendency, a company's raw unadjusted beta is not the appropriate measure of market risk to use. Current stock prices reflect expected risk, that is, expected beta, rather than historical risk or historical beta. Historical betas, whether raw or adjusted, are only surrogates for expected beta. The best of the two surrogates is adjusted beta.

There is an additional economic justification for the use of adjusted betas in the case of regulated utilities. Adjusted betas compensate for the tendency of

⁴ The recommended use of adjusted betas is widespread in mainstream investment and corporate finance textbooks. See for example: Brigham and Ehrhardt (2005) Chapter 5, page 193–4. Damodaran (2002) pages 186–7. See also the well-known investment textbook by Sharpe and Alexander (1995), Chapter 15, Section 8.1.

⁵ From a Bayesian statistical framework, and without any information at all on true beta, one would presume a stock's beta in relation to the market to be 1.00. Given a chance to see how the stock moved in relation to the market over some historical period, a modification of this "prior" estimate would seem appropriate. But a sensible "posterior" estimate would likely lie between the two values.



DOE Attachment MLR-11_Duff&Phelps Guide Ex A-1

IX. <u>APPENDIX C: SCHEDULES</u>

- Schedule MLR-1
- Schedule MLR-2a
- Schedule MLR-2b
- Schedule MLR-2c
- Schedule MLR-3a
- Schedule MLR-3b
- Schedule MLR-4
- Schedule MLR-5a
- Schedule MLR-5b
- Schedule MLR-6a
- Schedule MLR-6b
- Schedule MLR-6c
- Schedule MLR-7a
- Schedule MLR-7b
- Schedule MLR-8a
- Schedule MLR-8b
- Schedule MLR-8c

Case No. ER-2014-0370 Schedule MLR-1

Historical Economic Trends (Percent Change from Previous Period)							
	2009	2010	2011	2012	2013	2014	
Real GDP	-2.8	2.5	1.6	2.3	2.2	2.4	
CPI ¹	-0.4	1.6	3.2	2.1	1.5	1.6	
Unemployment	9.3	9.6	8.9	8.1	7.4	6.2	
Employment/Population							
Ratio	59.3	58.5	58.4	58.6	58.6	59.0	
Labor Force Participation							
Rate	65.4	64.7	64.1	63.7	63.2	62.9	

1. Not seasonally adjusted

Source: Economic Indicators, January 2015, Prepared for the Joint Economic Committee by the Council of Economic Advisors.

Case No. ER-2014-0370 Schedule MLR-2a

Interest Rates and Bond Yields, 2009 to 2014						
	2009	2010	2011	2012	2013	2014
3-Month T-Bill	0.15	0.14	0.05	0.09	0.06	0.03
3-Year T-Bond	1.43	1.11	0.75	0.38	0.54	0.90
10-Year T-Bond	3.26	3.22	2.78	1.80	2.35	2.54
Moody's Aaa Bond	5.31	4.94	4.64	3.67	4.23	4.16
Moody's Baa Bond	7.29	6.04	5.66	4.94	5.10	4.85
Prime Interest Rate	3.25	3.25	3.25	3.25	3.25	3.25
Federal Funds Rate	0.16	0.18	0.10	0.14	0.11	0.09
Risk Premium	4.03	2.82	2.88	3.14	2.75	2.31
Mortgage Rate 30 yr	5.04	4.69	4.46	3.66	3.98	4.17

Source: Federal Reserve Bank of the United States of America website

http://www.federalreserve.gov/releases/h15/data.htm

Case No. ER-2014-0370 Schedule MLR-2b

		Yield on 30-yr T-Bond	
	Yield on 30-	(Inflation	TIPs
Date	yr T-Bond	Indexed)	Spread
2/12/2015	2.58	0.78	1.8
2/13/2015	2.63	0.81	1.82
2/16/2015	ND	ND	ND
2/17/2015	2.73	0.87	1.86
2/18/2015	2.7	0.82	1.88
2/19/2015	2.73	0.84	1.89
2/20/2015	2.73	0.83	1.9
2/23/2015	2.66	0.79	1.87
2/24/2015	2.6	0.73	1.87
2/25/2015	2.56	0.7	1.86
2/26/2015	2.63	0.72	1.91
2/27/2015	2.6	0.68	1.92
3/2/2015	2.68	0.75	1.93
3/3/2015	2.71	0.75	1.96
3/4/2015	2.72	0.74	1.98
3/5/2015	2.71	0.74	1.97
3/6/2015	2.83	0.86	1.97
3/9/2015	2.8	0.88	1.92
3/10/2015	2.73	0.85	1.88
3/11/2015	2.69	0.83	1.86
3/12/2015	2.69	0.84	1.85
Average			1.90

http://www.federalreserve.gov/releases/h15/data.htm

Case No. ER-2014-0370 Schedule MLR-2c

	3-Month
DATE	LIBOR
2/16/2015	0.26
2/17/2015	0.26
2/18/2015	0.26
2/19/2015	0.26
2/20/2015	0.26
2/23/2015	0.26
2/24/2015	0.26
2/25/2015	0.26
2/26/2015	0.26
2/27/2015	0.26
3/2/2015	0.26
3/3/2015	0.27
3/4/2015	0.26
3/5/2015	0.26
3/6/2015	0.26
3/9/2015	0.27
3/10/2015	0.27
3/11/2015	0.27
3/12/2015	0.27
3/13/2015	0.27
3/16/2015	0.27
Average	0.26

Source: research.stlouisfed.org

Case No. ER-2014-0370 Schedule MLR-3a

Blue Chip Consensus Forecasts: Short-Term Forecasts						
	2Q 2015	3Q 2015	4Q 2015	1Q 2016	2Q 2016	
Real GDP	3.1	3.0	2.9	2.8	2.8	
СРІ	1.7	2.1	2.1	2.2	2.3	
Unemployment Rate	5.4	5.3	5.2	5.1	5.0	
3-Month T-Bill Yield	0.2	0.4	0.1	0.2	0.3	
10-Year T-Bond Yield	3.0	3.1	3.3	3.5	3.6	

Source: Blue Chip Economic Indicators, March 10, 2015, Aspen Publishers, Kansas City, MO.
Case No. ER-2014-0370 Schedule MLR-3b

Long Range	e Consensus U.S.	Economic Pro	jections comp	ared to Cong	ressional Budg	get Office (CB	O) Expectatior	IS
		2017	2018	2019	2020	2021	Ave 17-21	Ave 22-26
Real GDP	Consensus	2.7	2.6	2.4	2.4	2.3	2.5	2.3
	СВО	2.7	2.2	2.1	2.2	2.2	2.3	2.1
Nominal GDP	Consensus	4.7	4.7	4.6	4.5	4.4	4.6	4.4
	СВО	4.6	4.3	4.1	4.3	4.3	4.3	4.2
СЫ	Consensus	2.3	2.4	2.4	2.4	2.3	2.3	2.2
	СВО	2.3	2.3	2.4	2.4	2.4	2.4	2.4
Unemployment Rate	Consensus	4.9	5.0	5.0	5.0	5.1	5.0	5.1
	СВО	5.3	5.4	5.5	5.5	5.5	5.4	5.4
3-Month T-Bill Yield	Consensus	2.7	3.2	3.3	3.4	3.4	3.2	3.4
	СВО	2.6	3.5	3.4	3.4	3.4	3.3	3.4
10-Year T-Bond Yield	Consensus	3.9	4.2	4.3	4.3	4.3	4.2	4.4
	СВО	3.9	4.2	4.5	4.6	4.6	4.4	4.6

Source: Blue Chip Economic Indicators, March 10, 2015, Aspen Publishers, Kansas City, MO.

Case No. ER-2014-0370 Schedule MLR-4

Sample Selection Criteria and Characteristics									
					% RETU	JRN ON			
	%	S&P	MOODY'S	COMMON	воок	VALUE			
	REG	BOND	BOND	EQUITY	COMMON	TOTAL			
Reno Sample	ELEC REV ¹	RATING	RATING	RATIO	EQUITY	CAPITAL			
American Electric Power Co.	81	BBB/BBB-	Baa1	52.6	8.9	6.7			
Duke Energy Corporation	86	BBB+	A3	49.8	6.0	4.5			
Empire District Electric Co.	91	A-	Baa1	49.2	9.3	7.1			
Eversource Energy	86	A-	A3/Baa1	51.1	8.0	5.9			
IDACORP, Inc	100	A-	A3	54.1	10.0	7.7			
Otter Tail Corporation	43	BBB-	Baa2	51.2	11.0	8.4			
PNM Resources, Inc.	100	BBB	Baa2	45.5	6.2	6.1			
Pinnacle West Capital Corp.	100	BBB	A3/Baa1	55.7	9.5	7.8			
Portland General Electric Co.	100	A-	A3	44.9	9.7	7.1			
Southern Company	96	А	A3/Baa1	47.1	10.4	6.9			
Westar Energy, Inc.	100	A-	A3/Baa1	47.4	9.9	7.4			
Sample Average	89			49.9	9.0	6.9			
Great Plains Energy Inc.	100	BBB	Baa2	48.9	6.7	5.9			

1. Please note that the March 2015 edition data for % Regulated Electric Revenues does not match the results from Mr. Hevert's segment analysis. Source: AUS Monthly Utility Report, March 2015.

Case No. ER-2014-0370 Schedule MLR-5a

Table 5a: Single-Stage DCF, EPS	Table 5a: Single-Stage DCF, EPS Growth Method										
							Yahoo		VL		
	90-Day						Expected	Zacks	Expected	Average	
	Stock				Current		EPS	Expected	EPS	Expected	1St DCF
	Price	DPS	DPS nxt		Div	Expected	Growth	EPS	Growth	Earnings	w/Earnings
	Ave.,	(2015),	period	Adjusted	Yield,	Div YLD,	Next	Growth	Next 5	Growth	Growth,
Reno Sample	P0	D0	D1=D0*(1+g)	Div Yield	D0/P0	D1/P0	5yrs ²	Rate ³	yrs	Rate, g	(D1/P0)+g
American Electric Power Co.	59.22	2.15	2.26	2.21	3.63	3.82	5.05	4.80	5.50	5.12	8.93
Duke Energy Corporation	81.67	3.21	3.36	3.29	3.93	4.12	4.41	4.70	5.00	4.70	8.82
Empire District Electric Co.	27.80	1.05	1.08	1.07	3.78	3.89	3.00	3.00	3.00	3.00	6.89
Eversource Energy	52.35	1.67	1.78	1.73	3.19	3.41	6.25	6.40	8.00	6.88	10.29
IDACORP, Inc	64.16	1.90	1.95	1.93	2.96	3.05	3.00	4.00	1.50	2.83	5.88
Otter Tail Corporation	31.10	1.23	1.33	1.28	3.95	4.27	6.00	N/A	10.00	8.00	12.27
PNM Resources, Inc.	29.16	0.80	0.88	0.84	2.74	3.02	9.86	8.90	11.00	9.92	12.94
Pinnacle West Capital Corp.	66.32	2.44	2.54	2.49	3.68	3.83	4.20	4.00	4.00	4.07	7.90
Portland General Electric Co.	37.66	1.14	1.20	1.17	3.03	3.19	5.26	5.90	5.00	5.39	8.58
Southern Company	47.87	2.15	2.23	2.19	4.49	4.66	3.40	3.70	4.00	3.70	8.36
Westar Energy, Inc.	40.12	1.44	1.50	1.47	3.59	3.75	3.37	3.80	6.00	4.39	8.14
Sample Average	48.86	1.74	1.83	1.79	3.54	3.73	4.89	4.92	5.73	5.27	9.00
Great Plains Energy Inc.	27.47	1.00	1.05	1.03	3.64	3.84	5.90	5.40	5.00	5.43	9.27

2. finanace.yahoo.com

3. www.Zacks.com

Case No. ER-2014-0370 Schedule MLR-5b

Table 5b: Single-Stage DCF, Expected EPS, DPS and BVPS Growth Method											
										Average	
	90-									Expected	1st DCF
	Day						Ave	VL	VL	Growth	using EPS,
	Stock				Current		Expected	Expected	Expected	Rate	DPS, BV
	Price	DPS	DPS nxt	Quarterly	Div	Expected	EPS	DPS	BVPS	(EPS,	Growth
	Ave.,	(2015),	period	Adjusted	Yield,	Div YLD,	Growth	Growth	Growth	DPS,	Rates,
Reno Sample	P0	D0	D1=D0*(1+g)	Div Yield	D0/P0	D1/P0	Rate⁺	Rate	Rate	BVPS), g	(D1/P0)+g
American Electric Power Co.	59.22	2.15	2.25	3.72	3.63	3.81	5.12	5.00	4.50	4.87	8.68
Duke Energy Corporation	81.67	3.21	3.31	3.99	3.93	4.06	4.70	2.50	2.50	3.23	7.29
Empire District Electric Co.	27.80	1.05	1.08	3.83	3.78	3.88	3.00	3.00	2.50	2.83	6.72
Eversource Energy	52.35	1.67	1.77	3.29	3.19	3.39	6.88	7.00	4.50	6.13	9.51
IDACORP, Inc	64.16	1.90	1.99	3.03	2.96	3.11	2.83	8.00	4.00	4.94	8.05
Otter Tail Corporation	31.10	1.23	1.28	4.04	3.95	4.13	8.00	1.50	3.50	4.33	8.46
PNM Resources, Inc.	29.16	0.80	0.87	2.86	2.74	2.98	9.92	12.00	3.50	8.47	11.45
Pinnacle West Capital Corp.	66.32	2.44	2.53	3.75	3.68	3.81	4.07	3.00	4.00	3.69	7.50
Portland General Electric Co.	37.66	1.14	1.19	3.10	3.03	3.17	5.39	4.50	4.00	4.63	7.80
Southern Company	47.87	2.15	2.22	4.57	4.49	4.64	3.70	3.50	3.00	3.40	8.04
Westar Energy, Inc.	40.12	1.44	1.50	3.66	3.59	3.74	4.39	3.00	5.00	4.13	7.87
Sample Average	48.86	1.74	1.82	3.62	3.54	3.70	5.27	4.82	3.73	4.61	8.31
Great Plains Energy Inc.	27.47	1.00	1.05	3.72	3.64	3.81	5.43	5.50	3.00	4.64	8.45

4. Average Expected EPS Growth from Schedule MLR-

5B

Case No. ER-2014-0370 Schedule MLR-6a

Schedule 6a: Sustainable Growt	h DCF - Inte	rnal Growth	Compon	ent							
Reno Sample	Expected DPS (18- 20)	Expected EPS (18- 20)	BVPS (2015)	Expected BVPS (18-20)	Book Value Growth	Expected ROE = EPS/BVPS	Adjustment Factor	Adjusted ROE, r	Payout Ratio, DPS/EPS	Retention Rate, b	Internal Growth Rate, r*b
American Electric Power Co.	2.65	4.50	35.75	42.25	0.034	10.65	1.02	10.83	0.59	0.41	4.45
Duke Energy Corporation	3.55	5.50	59.50	66.00	0.021	8.33	1.01	8.42	0.65	0.35	2.99
Empire District Electric Co.	1.20	1.75	18.35	20.25	0.020	8.64	1.01	8.73	0.69	0.31	2.74
Eversource Energy	2.10	3.75	32.50	38.00	0.032	9.87	1.02	10.02	0.56	0.44	4.41
IDACORP, Inc	2.20	3.75	40.30	44.90	0.022	8.35	1.01	8.44	0.59	0.41	3.49
Otter Tail Corporation	1.32	2.35	16.05	18.10	0.024	12.98	1.01	13.14	0.56	0.44	5.76
PNM Resources, Inc.	1.15	2.35	22.10	24.50	0.021	9.59	1.01	9.69	0.49	0.51	4.95
Pinnacle West Capital Corp.	2.80	4.25	40.85	45.50	0.022	9.34	1.01	9.44	0.66	0.34	3.22
Portland General Electric Co.	1.40	2.50	25.60	29.00	0.025	8.62	1.01	8.73	0.56	0.44	3.84
Southern Company	2.43	3.50	22.60	26.00	0.028	13.46	1.01	13.65	0.69	0.31	4.17
Westar Energy, Inc.	1.65	3.00	25.60	29.25	0.027	10.26	1.01	10.39	0.55	0.45	4.68
Sample Average	2.04	3.38	30.84	34.89	0.03	10.01	1.01	10.13	0.60	0.40	4.06
Great Plains Energy Inc.	1.20	2.00	23.70	26.75	0.02	7.48	1.01	7.57	0.60	0.40	3.03

Schedule 6b: Sustainable Grov	wth DCF - Ext	ternal Gro	wth Compo	nent & Result					
					Expected			Expected	
	90-Day		Market-	Comm	Comm		Expected	Profit of	
	Stock		to-Book	Shares	Shares	Growth	Growth	stock	External
	Price	BVPS	Ratio,	Outstanding	Outstanding	in #	in # of	investment,	Growth,
Reno Sample	Ave., PO	(2015)	PO/BVPS	(mil) 2015	in 5yrs	Shares	shares, s	v	s*v
American Electric Power Co.	59.22	35.75	1.66	492.00	500.00	0.32	0.54	0.40	0.21
Duke Energy Corporation	81.67	59.50	1.37	708.00	712.00	0.11	0.15	0.27	0.04
Empire District Electric Co.	27.80	18.35	1.51	44.00	47.00	1.33	2.01	0.34	0.68
Eversource Energy	52.35	32.50	1.61	318.00	322.00	0.25	0.40	0.38	0.15
IDACORP, Inc	64.16	40.30	1.59	50.20	50.20	0.00	0.00	0.37	0.00
Otter Tail Corporation	31.10	16.05	1.94	38.00	42.00	2.02	3.92	0.48	1.90
PNM Resources, Inc.	29.16	22.10	1.32	80.00	80.00	0.00	0.00	0.24	0.00
Pinnacle West Capital Corp.	66.32	40.85	1.62	111.25	117.50	1.10	1.78	0.38	0.69
Portland General Electric Co.	37.66	25.60	1.47	89.00	89.75	0.17	0.25	0.32	0.08
Southern Company	47.87	22.60	2.12	911.00	919.00	0.18	0.37	0.53	0.20
Westar Energy, Inc.	40.12	25.60	1.57	130.00	140.00	1.49	2.34	0.36	0.85
Sample Average	48.86	30.84	1.62	270.13	274.50	0.63	1.07	0.37	0.44
Great Plains Energy Inc.	27.47	23.70	1.16	154.50	155.50	0.13	0.15	0.14	0.02

Case No. ER-2014-0370 Schedule MLR-6c

Schedule 6c: Sustainable Growth DCF - Result						
Reno Sample	90-Day Stock Price Ave., P0	DPS (2015), D0	DPS next period D1=D0*(1+g)	Expected Div Yield, D1/P0	Sustainable Growth Rate, rb+sv⁵	Sustainable Growth DCF, (D1/P0)+rb+sv
American Electric Power Co.	59.22	2.15	2.25	3.80	4.66	8.46
Duke Energy Corporation	81.67	3.21	3.31	4.05	3.03	7.08
Empire District Electric Co.	27.80	1.05	1.09	3.91	3.43	7.33
Eversource Energy	52.35	1.67	1.75	3.34	4.56	7.90
IDACORP, Inc	64.16	1.90	1.97	3.06	3.49	6.55
Otter Tail Corporation	31.10	1.23	1.32	4.26	7.65	11.91
PNM Resources, Inc.	29.16	0.80	0.84	2.88	4.95	7.83
Pinnacle West Capital Corp.	66.32	2.44	2.54	3.82	3.91	7.73
Portland General Electric Co.	37.66	1.14	1.18	3.15	3.92	7.07
Southern Company	47.87	2.15	2.24	4.69	4.37	9.06
Westar Energy, Inc.	40.12	1.44	1.52	3.79	5.52	9.31
Sample Average	48.86	1.74	1.82	3.70	4.50	8.20
Great Plains Energy Inc.	27.47	1.00	1.03	3.75	3.05	6.80

5. See Schedule MLR-6a for internal growth component, rb and Schedule MLR-6b for external growth component, sv.

Case No. ER-2014-0370 Schedule MLR-7a

Schedule 7a: Three-Stage DCF					3rd Stage G =	= 4.8%
Reno Sample	90-Day Stock Price Ave., P0	DPS (2015), D0	Ave. Expected EPS Growth Rate	Average Expected Growth Rate (EPS, DPS, BVPS), g	ROE using EPS Growth Rate	ROE using EPS, DPS, BVPS Growth Rates
American Electric Power	59.22	2.15	5.12	4.87	8.68	8.62
Duke Energy	81.67	3.21	4.70	3.23	8.89	8.53
Empire District Electric	27.80	1.05	3.00	2.83	8.33	8.29
Eversource Energy	52.35	1.67	6.88	6.13	8.61	8.44
IDACORP, Inc	64.16	1.90	2.83	4.94	7.53	7.93
Otter Tail	31.10	1.23	8.00	4.33	9.83	8.82
PNM Resources	29.16	0.80	9.92	8.47	8.75	8.42
Pinnacle West Capital	66.32	2.44	4.07	3.69	8.48	8.39
Portland General Electric	37.66	1.14	5.39	4.63	8.09	7.94
Southern Co.	47.87	2.15	3.70	3.40	9.20	9.11
Westar Energy, Inc.	40.12	1.44	4.39	4.13	8.46	8.40
Sample Average	48.86	1.74	5.27	4.60	8.62	8.45
Great Plains Energy	27.47	1.00	5.43	4.64	8.77	8.58

Case No. ER-2014-0370 Schedule MLR-7b

Schedule 7b: Three-Stage						
DCF					3rd Stage	G = 5.5%
Reno Sample	90-Day Stock Price Ave., P0	DPS (2015), D0	Ave. Expected EPS Growth Rate	Average Expected Growth Rate (EPS, DPS, BVPS), g	ROE using EPS Growth Rate	ROE using EPS, DPS, BVPS Growth Rates
American Electric Power	59.22	2.15	5.12	4.87	9.24	9.18
Duke Energy	81.67	3.21	4.70	3.23	9.44	9.09
Empire District Electric	27.80	1.05	3.00	2.83	8.90	8.86
Eversource Energy	52.35	1.67	6.88	6.13	9.17	9.00
IDACORP, Inc	64.16	1.90	2.83	4.94	8.12	8.51
Otter Tail	31.10	1.23	8.00	4.33	10.35	9.38
PNM Resources	29.16	0.80	9.92	8.47	9.31	8.99
Pinnacle West Capital	66.32	2.44	4.07	3.69	9.05	8.96
Portland General Electric	37.66	1.14	5.39	4.63	8.67	8.52
Southern Co.	47.87	2.15	3.70	3.40	9.74	9.66
Westar Energy, Inc.	40.12	1.44	4.39	4.13	9.03	8.97
Sample Average	48.86	1.74	5.27	4.60	9.18	9.01
Great Plains Energy	27.47	1.00	5.43	4.64	9.32	9.14

Case No. ER-2014-0370 Schedule MLR-8a

Schedule 8a: Capital Asset Pricing		
Νίδαει	Current Risk- Free Rate ⁷	Forecast Risk- Free Rate ⁸
Large Stock Arithmetic Ave. Return		
(ending Dec. 2013) ⁶	11.63	11.63
Yield on T-Bond (Risk-Free Rate)	2.64	3.90
VL Sample Beta	0.74	0.74
Expected Risk Premium	8.99	7.73
VL Beta Adjusted Risk Premium	6.62	5.69
VL Beta Cost of Equity	9.26	9.59

6. Duff & Phelps, 2014 Valuation Handbook - Guide to Cost of Capital, Exhibit A-1

7. Risk-free Rate based on 30 day average of yield on 30-Year Treasury bonds. See Schedules 8b. Source: www.federalreserve.gov

8. Risk-free rate based on Blue Chip Economic Indicators 2017 forecast for yield on 10-Year Treasury bonds. See Schedule MLR-3b.

For VL Betas, see Schedule MLR-8C

Case No. ER-2014-0370 Schedule MLR-8b

Sch. 8b: Ave Yield on LT T-Bond						
Date	30-YR					
2/11/2015	2.57					
2/12/2015	2.58					
2/13/2015	2.63					
2/17/2015	2.73					
2/18/2015	2.7					
2/19/2015	2.73					
2/20/2015	2.73					
2/23/2015	2.66					
2/24/2015	2.6					
2/25/2015	2.56					
2/26/2015	2.63					
2/27/2015	2.6					
3/2/2015	2.68					
3/3/2015	2.71					
3/4/2015	2.72					
3/5/2015	2.71					
3/6/2015	2.83					
3/9/2015	2.8					
3/10/2015	2.73					
3/11/2015	2.69					
3/12/2015	2.69					
3/13/2015	2.7					
3/16/2015	2.67					
3/17/2015	2.61					
3/18/2015	2.51					
3/19/2015	2.54					
3/20/2015	2.5					
3/23/2015	2.51					
3/24/2015	2.46					
3/25/2015	2.5					
Average	2.64					

source: www.federalreserve.gov

Case No. ER-2014-0370 Schedule MLR-8c

Schedule 8c: Value Line Betas	
Reno Sample	VL Beta (1.00 = Market)
American Electric Power	0.70
Duke Energy	0.60
Empire District Electric	0.70
Eversource Energy	0.75
IDACORP, Inc	0.80
Otter Tail	0.90
PNM Resources	0.85
Pinnacle West Capital	0.70
Portland General Electric	0.80
Southern Co.	0.55
Westar Energy, Inc.	0.75
Sample Average	0.74
Great Plains Energy	0.85