

EQUITY RATE						9.25%	
CAPITAL ASSET PRICING MODEL							PAGE
CAPM Ex Ante			8.74%				4
DIVIDEND GROWTH MODELS Single Stage							
Value Line, based on Dividends Growth			8.70%				5
Value Line, based on Earnings Growth			9.30%				6
Value Line, based on Return on Equity			8.50%				7
FCFE GROWTH MODEL Multi Stage			7.50%				8
				RANGE	7.5% - 9.3%		
<hr/>							
DEBT RATE						6.00%	9
SECURED DEBT (LEASE) RATE						5.25%	9
MARKET CAPITAL STRUCTURE							
Equity	60%	x	9.25%	=		5.55%	3
Debt	40%	x	6.00%	=	2.40%		3
Marginal Tax Rate	24%	=	(1-.24)	x	2.40%	<u>1.82%</u>	
<hr/>							
WEIGHTED AVERAGE COST OF CAPITAL						7.37%	

SUPPORT FOR GUIDELINE COMPANIES

Washington State Department of Revenue

2025 Assessment Year

Electric Industry

Capital Structure at Book Value

Company	Ticker	Beta	Fin'I Strength	P/E Ratio	Div'd Yield	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity
Avista Corp	ava	0.95	A	14.0	5.2%	2,603,625,000	49.6%			2,650,100,000	50.4%	5,253,725,000
Black Hills	bkh	1.05	A	15.2	4.4%	3,495,375,000	45.1%			4,248,800,000	54.9%	7,744,175,000
Edison International	eix	1.05	A	15.2	4.0%	15,696,150,000	30.0%	254,400,000	0.5%	36,419,000,000	69.5%	52,369,550,000
Idacorp Inc	ida	0.85	A	19.9	3.1%	3,399,925,000	52.7%			3,054,000,000	47.3%	6,453,925,000
NorthWestern Energy	nwe	1.00	B++	14.0	4.9%	2,850,525,000	52.6%			2,570,700,000	47.4%	5,421,225,000
Pinnacle West Capital	pnw	1.00	A	15.7	4.2%	6,988,200,000	46.5%			8,056,200,000	53.5%	15,044,400,000
TXNM Energy	txnm	0.90	B++	18.0	3.2%	2,493,400,000	35.5%	11,500,000	0.2%	4,522,700,000	64.4%	7,027,600,000
Portland General Electric	por	0.95	A	12.2	4.5%	3,641,100,000	44.0%			4,633,000,000	56.0%	8,274,100,000
Sempra Energy	sre	1.00	A	19.9	2.8%	29,733,000,000	46.6%	2,278,000,000	3.6%	31,853,000,000	49.9%	63,864,000,000
Xcel Energy	xel	0.85	A	18.8	3.3%	19,665,000,000	41.7%			27,471,000,000	58.3%	47,136,000,000
Mean		0.96		16.3	4.0%	9,056,630,000	44.4%		1.4%	12,547,850,000	55.2%	
Harmonic Mean		0.95					43.2%		0.4%		54.4%	
Weighted Mean						90,566,300,000	41.4%	2,543,900,000	1.2%	125,478,500,000	57.4%	218,588,700,000
Median		0.98			4.1%		45.8%		0.5%		54.2%	

SUPPORT FOR CAPITAL STRUCTURE Market Value

Washington State Department of Revenue
2025 Assessment Year
Electric Industry

Company	Ticker	Stock Price	Common Shares	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity
Avista Corp	ava	36.63	79,500,000	2,912,085,000	57.2%	-		2,183,000,000	42.8%	5,095,085,000
Black Hills	bkh	58.52	71,700,000	4,195,884,000	50.8%	-		4,059,100,000	49.2%	8,254,984,000
Edison International	ex	79.00	389,000,000	30,731,000,000	47.9%	254,400,000	0.4%	33,160,000,000	51.7%	64,145,400,000
Idacorp Inc	ida	109.28	53,500,000	5,846,480,000	67.6%	-		2,807,803,000	32.4%	8,654,283,000
NorthWestern Energy	nwe	53.46	61,500,000	3,287,790,000	55.4%	-		2,645,779,000	44.6%	5,933,569,000
Pinnacle West Capital	pnw	83.90	114,000,000	9,564,600,000	54.7%	-		7,918,992,000	45.3%	17,483,592,000
TXNM Energy	txnm	48.76	91,000,000	4,437,160,000	48.5%	11,500,000	0.1%	4,706,076,000	51.4%	9,154,736,000
Portland General Electric	por	43.62	106,000,000	4,623,720,000	53.8%	-		3,963,000,000	46.2%	8,586,720,000
Sempra Energy	sre	87.72	636,000,000	55,789,920,000	63.2%	2,278,000,000	2.6%	30,193,000,000	34.2%	88,260,920,000
Xcel Energy	xel	66.97	575,000,000	38,507,750,000	60.5%	-		25,115,000,000	39.5%	63,622,750,000
			Mean		56.0%		1.0%		43.7%	
			Harmonic Mean		55.3%		0.3%		42.7%	
			Weighted Mean	159,896,389,000	57.3%	2,543,900,000	0.9%	116,751,750,000	41.8%	279,192,039,000
			Median		55.1%		0.4%		44.9%	
			Std Dev		6.4%		1.3%		6.6%	
			Coefficient of Variation		11.3%		130.1%		15.2%	
Target					60%				40%	100%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT
CAPITAL ASSET PRICING MODEL

2025 Assessment Year

Ex Ante
 $Ke = Rf + B (Rp)$

Ke = Cost of Equity **8.74%**

to page 1

Rm =	rate of return	8.91%
Rf =	risk free rate	4.78%
Rp =	risk premium	4.13%
B =	Beta	0.96

page 7

Rp = Risk Premium **4.13%**

to above

Shannon Pratt and Roger Grabowski	3.50% - 6.00%	
Cost of Capital, App and Exam, 5th Ed, 2014		
Dr. Aswath Damodaran	4.33%	chart page 13
http://pages.stern.nyu.edu/~adamodar/	4.13%	adjusted for Rf
2024 Implied Premium		

Rf = Risk Free Rate **4.78%**

Value Line Investment Survey, Selected Yields January 10, 2025, page 206
as of 12-30-24

US Treasury Securities year end data	
5 year	4.37%
10 year	4.55%
30 year	4.77%

Federal Reserve Statistical Release (<http://www.federalreserve.gov/Releases/H15/Current/>)
As of 12-31-24

Treasury Constant Maturities		
5 year	4.38%	
10 year	4.58%	
20 year	4.86%	
30 year	4.78%	
20 year TIPS	2.41%	2.45%
30 year TIPS	2.48%	2.30%

TIPS inflation indication

Inflation **2.30%**

to appraisal template

The Livingston Survey December 20, 2024, page 2, 8
Inflation median (measured by the Consumer Price Index) over next 10 years 2.28%

Gross Domestic Product (GDP) Nominal **4.10%**

real GDP + inflation est

Federal Reserve Projected Long Run Real GDP Growth
Median Projection Value From Dec 18, 2024 Report, Table 1 1.80%
<https://www.federalreserve.gov/monetarypolicy/files/fomcproptabl20241218.pdf>

Congressional Budget Office Real GDP Economic Projections
The Budget and Economic Outlook 2025-2035 Table C-3, pg 29
Average Percentage Change Year To Year 2025-2029 2.20%
<https://www.cbo.gov/system/files/2025-01/60870-Outlo> 2030-2035 1.90%

Federal Reserve Bank of Philadelphia

The Livingston Survey, December 20, 2024, page 8
Average Real GDP Growth Rate for Next 10 Years 2.11%
<https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey>

**SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT
DIVIDEND GROWTH MODEL**

Washington State Department of Revenue
2025 Assessment Year
Electric Industry

Based on Dividend Growth

Ke = (D1 / Po) + G

- Ke = Cost of Equity
- D1 = Expected Dividends
- Po = Current Price
- G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Dividend Growth (G)	Ke with Short Term Growth
Avista Corp	ava	36.63	2.00	5.46%	4.00%	9.46%
Black Hills	bkh	58.52	2.70	4.61%	4.00%	8.61%
Edison International	eix	79.00	3.36	4.25%	6.00%	10.25%
Idacorp Inc	ida	109.28	3.52	3.22%	5.50%	8.72%
NorthWestern Energy	nwe	53.46	2.64	4.94%	1.50%	6.44%
Pinnacle West Capital	pnw	83.90	3.61	4.30%	1.50%	5.80%
TXNM Energy	txnm	48.76	1.65	3.38%	5.50%	8.88%
Portland General Elect	por	43.62	2.08	4.77%	5.50%	10.27%
Sempra Energy	sre	87.72	2.58	2.94%	6.00%	8.94%
Xcel Energy	xel	66.97	2.30	3.43%	6.00%	9.43%
Mean						8.68%
Harmonic Mean						8.41%
Median						8.91%
Max						10.27%
Min						5.80%
Std Dev						1.48%
Coefficient of Variation						
Say						8.70%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT
DIVIDEND GROWTH MODEL

Washington State Department of Revenue

2025 Assessment Year

Electric Industry

Based on Earnings Growth

Ke = (D1 / Po) + G

- Ke = Cost of Equity
- D1 = Expected Dividends
- Po = Current Price
- G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Earnings Growth (G)	Ke with Short Term Growth
Avista Corp	ava	36.63	2.00	5.46%	5.50%	10.96%
Black Hills	bkh	58.52	2.70	4.61%	4.00%	8.61%
Edison International	eix	79.00	3.36	4.25%	6.50%	10.75%
Idacorp Inc	ida	109.28	3.52	3.22%	6.00%	9.22%
NorthWestern Energy	nwe	53.46	2.64	4.94%	4.50%	9.44%
Pinnacle West Capital	pnw	83.90	3.61	4.30%	4.00%	8.30%
TXNM Energy	txnm	48.76	1.65	3.38%	4.00%	7.38%
Portland General Electric	por	43.62	2.08	4.77%	5.50%	10.27%
Sempra Energy	sre	87.72	2.58	2.94%	6.00%	8.94%
Xcel Energy	xel	66.97	2.30	3.43%	6.50%	9.93%
Mean						9.38%
Harmonic Mean						9.26%
Median						9.33%
Max						10.96%
Min						7.38%
Std Dev						1.13%
Coefficient of Variation						12.01%
Say						9.30%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

DIVIDEND GROWTH MODEL

Washington State Department of Revenue

2025 Assessment Year

Electric Industry

Based on Return on Equity $K_e = (D1 / P_o) + G$

K_e = Cost of Equity
 $D1$ = Expected Dividends
 $E1$ = Expected Earnings
 P_o = Current Price
 G = Sustainable Growth
 b = Retained Earnings % = (1 - Payout Ratio)
ROE = Return on Equity = ($E1 / P_o$)

Company	Ticker	Stock Price (P_o)	Expected Dividend ($D1$)	Expected Earnings ($E1$)	Dividend Yield ($D1/P_o$)	Retained Earnings (b)	ROE ($E1/P_o$)	Growth ($b*ROE$)	K_e Dividends	K_e Earnings
Avista Corp	ava	36.63	2.00	2.60	5.46%	22.0%	7.10%	1.56%	7.02%	8.66%
Black Hills	bkh	58.52	2.70	4.10	4.61%	33.0%	7.01%	2.31%	6.93%	9.32%
Edison International	eix	79.00	3.36	5.50	4.25%	32.0%	6.96%	2.23%	6.48%	9.19%
Idacorp Inc	ida	109.28	3.52	5.80	3.22%	38.0%	5.31%	2.02%	5.24%	7.32%
NorthWestern Energy	nwe	53.46	2.64	3.70	4.94%	24.0%	6.92%	1.66%	6.60%	8.58%
Pinnacle West Capital	pnw	83.90	3.61	4.80	4.30%	31.0%	5.72%	1.77%	6.08%	7.49%
TXNM Energy	txn	48.76	1.65	2.85	3.38%	43.0%	5.84%	2.51%	5.90%	8.36%
Portland General Electric	por	43.62	2.08	3.25	4.77%	36.0%	7.45%	2.68%	7.45%	10.13%
Sempra Energy	sre	87.72	2.58	5.10	2.94%	NMF	5.81%	NMF	NMF	NMF
Xcel Energy	xel	66.97	2.30	3.80	3.43%	38.0%	5.67%	2.16%	5.59%	7.83%
Mean									6.36%	8.54%
Harmonic Mean									6.29%	8.46%
Median									6.48%	8.58%
Std Dev									0.72%	0.91%
Coefficient of Variation									11.34%	10.70%
say										8.50%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT
FREE CASH FLOW TO EQUITY MODEL MULTI STAGE

Washington State Department of Revenue

2025 Assessment Year

Electric Industry

Company	Ticker	Stock Price	Expected Earnings	P/E	Payout Ratio	ROE	Ke
Avista Corp	ava	36.63	2.60	14.09	76.00%	7.50%	8.75%
Black Hills	bkh	58.52	4.10	14.27	66.00%	8.00%	8.71%
Edison International	eix	79.00	5.50	14.36	65.00%	12.00%	8.81%
Idacorp Inc	ida	109.28	5.80	18.84	61.00%	9.00%	5.53%
NorthWestern Energy	nwe	53.46	3.70	14.45	71.00%	8.00%	8.47%
Pinnacle West Capital	pnw	83.90	4.80	17.48	75.00%	7.50%	6.53%
TXNM Energy	txnm	48.76	2.85	17.11	58.00%	10.00%	6.46%
Portland General Electric	por	43.62	3.25	13.42	64.00%	9.00%	9.54%
Sempra Energy	sre	87.72	5.10	17.20	51.00%	10.00%	6.66%
Xcel Energy	xel	66.97	3.80	17.62	60.00%	10.50%	6.20%
Mean				15.88	64.70%	9.15%	7.57%
Harmonic Mean				15.67	63.84%	8.95%	7.32%
Median				15.78	64.50%	9.00%	7.57%
Industry Summary				15.80	64.00%	9.00%	
						Say	7.50%

SUPPORT FOR DEBT RATING AND DEBT YIELD RATE

Washington State Department of Revenue

2025 Assessment Year

Electric Industry

Company	Ticker	Moody's Credit Ratings	S&P Ratings
Avista Corp	ava	Baa2	BBB
Black Hills	bkh	Baa2	BBB+
Edison International	eix	Baa2	BBB
Idacorp Inc	ida	Baa2	BBB
NorthWestern Energy	nwe	Baa2	BBB
Pinnacle West Capital	pnw	Baa2	BBB+
TXNM Energy	txnm	Baa2	BBB
Portland General Electric	por	A3	BBB+
Sempra Energy	sre	Baa2	BBB+
Xcel Energy	xel	Baa1	BBB+
Overall Average Debt Rating		Baa2	BBB

Mergent's Bond Record February 2025				
Corporate	Aaa	Aa	A	Baa
October	4.95%	5.17%	5.33%	5.63%
November	5.14%	5.33%	5.49%	5.78%
December	5.20%	5.37%	5.53%	5.80%
4th Qtr Average	5.10%	5.29%	5.45%	5.74%
Public Utilities	Aaa	Aa	A	Baa
October		5.29%	5.41%	5.61%
November		5.43%	5.55%	5.75%
December		5.45%	5.58%	5.77%
4th Qtr Average		5.39%	5.51%	5.71%
Industrials	Aaa	Aa	A	Baa
October	4.95%	5.05%	5.24%	5.65%
November	5.14%	5.23%	5.43%	5.80%
December	5.20%	5.28%	5.47%	5.83%
4th Qtr Average	5.10%	5.19%	5.38%	5.76%

	20Y	25Y	30Y
Bloomberg S&P Bond Yields			
December 2024: BBB+	5.88%	5.83%	5.85%
December 2024: BBB	6.05%	5.97%	6.00%

Debt Yield Rate	6.00%
Cost of Secured Debt (Operating Lease) Rate	5.25%

SUPPORT FOR DIRECT CAPITALIZATION EQUITY COMPONENT

2025 Assessment Year
Electric Industry

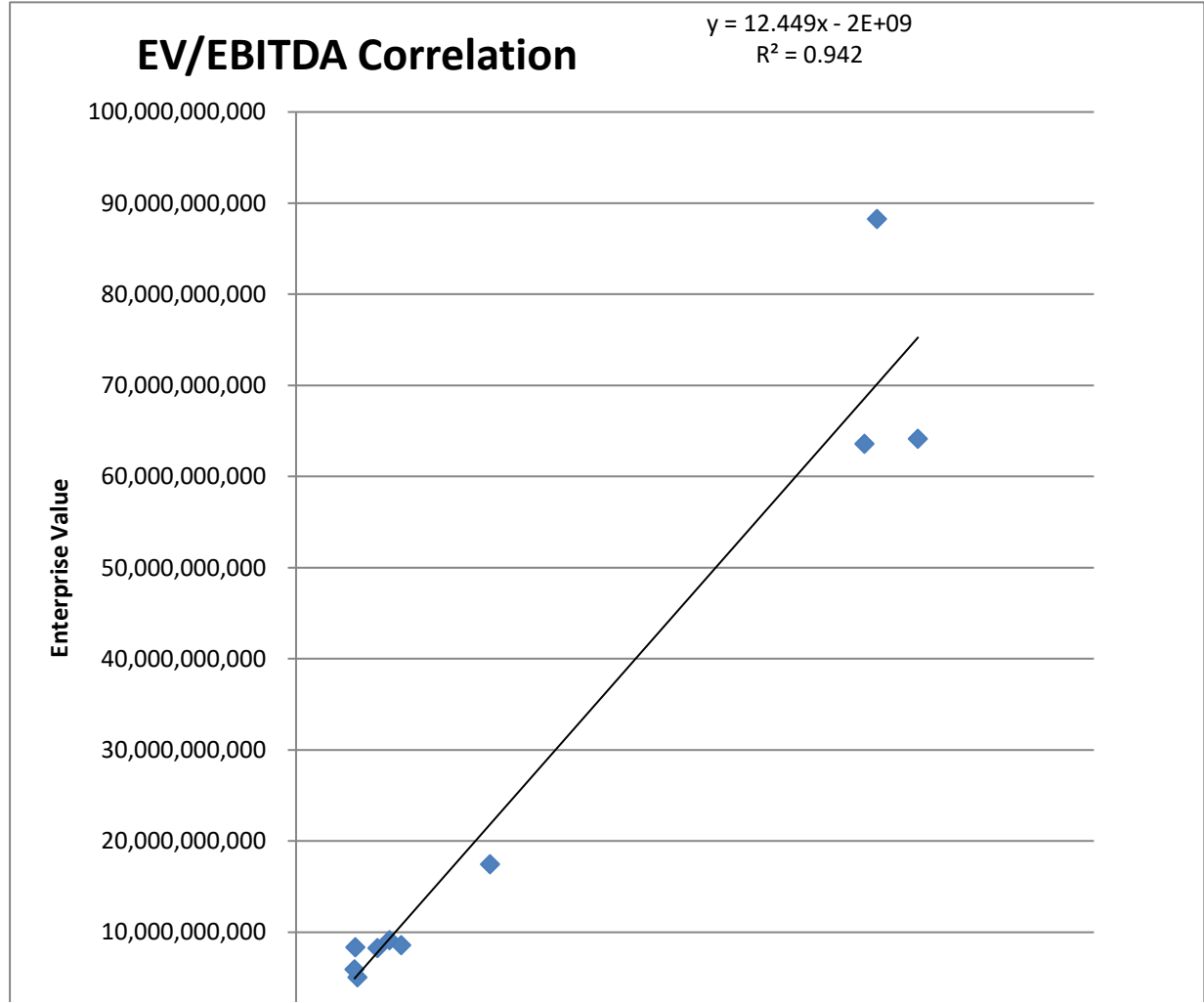
Company	Ticker	Stock Price	2024		2025		2024		2025	
			Actual Earnings Ratio (EPS/P)		Projected Earnings Ratio (PEPS/P)		Cash Flow Ratio (CF/P)		Projected Cash Flow Ratio	
Avista Corp	ava	36.63	2.40	6.6%	2.60	7.1%	5.85	16.0%	6.20	16.9%
Black Hills	bkh	58.52	3.90	6.7%	4.10	7.0%	7.80	13.3%	8.25	14.1%
Edison International	eix	79.00	4.95	6.3%	5.50	7.0%	12.80	16.2%	13.60	17.2%
Idacorp Inc	ida	109.28	5.45	5.0%	5.80	5.3%	9.50	8.7%	10.20	9.3%
NorthWestern Energy	nwe	53.46	3.40	6.4%	3.70	6.9%	7.00	13.1%	7.45	13.9%
Pinnacle West Capital	pnw	83.90	5.10	6.1%	4.80	5.7%	13.10	15.6%	12.95	15.4%
TXNM Energy	txnm	48.76	2.75	5.6%	2.85	5.8%	6.85	14.0%	7.25	14.9%
Portland General Electric	por	43.62	3.10	7.1%	3.25	7.5%	7.75	17.8%	8.10	18.6%
Sempra Energy	sre	87.72	4.75	5.4%	5.10	5.8%	8.25	9.4%	8.90	10.1%
Xcel Energy	xel	66.97	3.55	5.3%	3.80	5.7%	8.40	12.5%	9.10	13.6%
Mean			6.0%		6.4%		13.7%		14.4%	
Harmonic Mean			6.0%		6.3%		13.0%		13.8%	
Median			6.2%		6.4%		13.7%		14.5%	
Max			7.1%		7.5%		17.8%		18.6%	
Min			5.0%		5.3%		8.7%		9.3%	
Std Dev			0.7%		0.8%		2.9%		2.9%	
Coefficient of Variation			11.2%		12.1%		21.4%		20.4%	
Say			6.0%		6.4%		13.5%		14.0%	

Source: Value Line / yr end stock price

SUPPORT FOR DIRECT CAPITALIZATION EQUITY COMPONENT

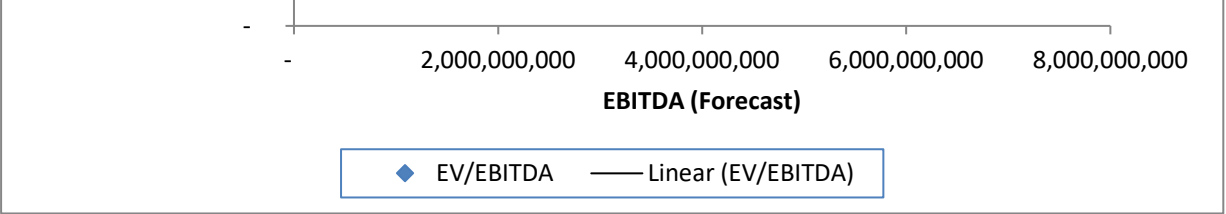
2025 Assessment Year

Company	Ticker	Stock Price	Enterprise Value	EBITDA Historical	Annual Change VL	EBITDA Forecast	EV / EBITDA Forecast	Revenue Forecast	EV / Sales Forecast	CF Forecast	Debt Svc	EV/CF Forecast
Avista Corp	ava	36.63	5,095,085,000	580,000,000	5.98%	614,700,855	8.29	1,864,275,000	2.73	492,900,000	130,980,000	8.17
Black Hills	bkh	58.52	8,254,984,000	773,200,000	5.77%	817,807,692	10.09	2,405,535,000	3.43	591,525,000	243,546,000	9.89
Edison International	edix	79.00	64,145,400,000	5,869,000,000	6.25%	6,235,812,500	10.29	18,399,700,000	3.49	5,290,400,000	1,989,600,000	8.81
Idacorp Inc	ida	109.28	8,366,629,000	555,930,000	7.37%	596,893,263	14.02	1,966,125,000	4.26	545,700,000	168,468,180	11.72
NorthWestern Energy	nwe	53.46	5,933,569,000	550,956,000	6.43%	586,374,600	10.12	1,586,700,000	3.74	458,175,000	158,746,740	9.62
Pinnacle West Capital	pnw	83.90	17,483,592,000	1,968,247,000	-1.15%	1,945,709,821	8.99	4,924,800,000	3.55	1,476,300,000	475,139,520	8.96
TXNM Energy	txnm	48.76	9,154,736,000	885,476,000	5.84%	937,182,628	9.77	2,079,350,000	4.40	659,750,000	282,364,560	9.72
Portland General Electric	por	43.62	8,586,720,000	1,008,000,000	4.52%	1,053,522,581	8.15	3,471,500,000	2.47	858,600,000	237,780,000	7.83
Sempra Energy	sre	87.72	88,260,920,000	5,399,000,000	7.88%	5,824,375,758	15.15	16,059,000,000	5.50	5,660,400,000	1,811,580,000	11.81
Xcel Energy	xel	66.97	63,622,750,000	5,261,000,000	8.33%	5,699,416,667	11.16	15,553,750,000	4.09	5,232,500,000	1,506,900,000	9.44
10							10.60	3.77		9.60		
Harmonic Mean							10.21	3.59		9.44		
Median							10.11	3.64		9.53		
Std Dev							2.31	0.86		1.32		
Say							10.00	3.50		9.30		



Forecast EV/EBITDA By Rank

Guideline Companies	EV/EBITDA forecast		
Portland General Electric	8.15		
Avista Corp	8.29		
Pinnacle West Capital	8.99	9.06	Low Average
TXNM Energy	9.77	8.99	Low Median
Black Hills	10.09	8.40	Say
NorthWestern Energy	10.12	12.15	High Average
Edison International	10.29	11.16	High Median
Xcel Energy	11.16	12.00	Say
Idacorp Inc	14.02		
Sempra Energy	15.15		



IMPLIED PREMIUMS FOR US MARKET

These implied premiums are calculated using the S&P 500.

Year	Earnings Yield	Dividend Yield	S&P 500	Earnings*	Dividends*	Dividends + Buybacks	Change in Earnings	Change in Dividends	T.Bill Rate	T.Bond Rate	Bond-Bill	Smoothed Growth	Implied Premium	Implied Growth Est	Implied Premium (FCFE)	Implied Premium (FCFE with Dividends)	ERP/Riskfree Rate
2002	5.23%	1.83%	879.82	46.04	16.08	29.83	18.51%	2.15%	1.20%	3.81%	2.61%	3.57%	2.29%	8.00%	4.10%	4.73%	1.08
2003	4.87%	1.61%	1111.91	54.69	17.88	31.58	18.79%	11.19%	1.00%	4.25%	3.25%	5.35%	2.12%	11.00%	3.69%	4.74%	0.87
2004	5.58%	1.60%	1211.92	67.68	19.407	40.6	23.75%	8.54%	2.18%	4.22%	2.04%	4.90%	2.02%	8.50%	3.65%	4.86%	0.86
2005	5.47%	1.79%	1248.29	76.45	22.38	61.17	12.96%	15.32%	4.31%	4.39%	0.08%	6.16%	2.20%	8.00%	4.08%	5.22%	0.93
2006	6.18%	1.77%	1418.3	87.72	25.05	73.16	14.74%	11.93%	4.88%	4.70%	-0.18%	5.93%	1.97%	12.50%	4.16%	6.12%	0.89
2007	5.62%	1.89%	1468.36	82.54	27.73	95.36	-5.91%	10.70%	3.31%	4.02%	0.71%	5.03%	2.06%	5.00%	4.37%	4.59%	1.09
2008	7.24%	3.11%	903.25	65.39	28.05	67.52	-20.78%	1.15%	1.59%	2.21%	0.62%	2.11%	4.05%	4.00%	6.43%	6.92%	2.91
2009	5.35%	2.00%	1115.1	59.65	22.31	37.43	-8.78%	-20.46%	0.14%	3.84%	3.70%	0.28%	2.60%	7.20%	4.36%	4.64%	1.14
2010	6.65%	1.84%	1257.64	83.66	23.12	55.53	40.25%	3.63%	0.13%	3.29%	3.16%	3.33%	2.24%	6.95%	5.20%	6.09%	1.58
2011	7.72%	2.07%	1257.6	97.05	26.02	71.28	16.01%	12.54%	0.03%	1.88%	1.85%	2.75%	2.71%	7.18%	6.01%	8.34%	3.2
2012	7.18%	2.13%	1426.19	102.47	30.44	75.9	5.58%	16.99%	0.05%	1.76%	1.71%	2.93%	2.47%	5.27%	5.78%	7.30%	3.28
2013	5.81%	1.96%	1848.36	107.45	36.28	88.13	4.86%	19.19%	0.07%	3.04%	2.97%	5.01%	2.03%	4.28%	4.96%	4.99%	1.63
2014	5.49%	1.92%	2058.9	113.01	39.44	101.98	5.17%	8.71%	0.05%	2.17%	2.12%	2.77%	2.24%	5.58%	5.78%	5.48%	2.66
2015	5.20%	2.11%	2043.94	106.32	43.16	106.1	-5.92%	9.43%	0.21%	2.27%	2.06%	2.96%	2.46%	5.51%	6.12%	5.16%	2.7
2016	4.86%	2.01%	2238.83	108.86	45.03	108.67	2.39%	4.33%	0.51%	2.45%	1.94%	2.64%	2.41%	5.54%	5.69%	4.50%	2.32
2017	4.67%	1.86%	2673.61	124.94	49.73	108.28	14.77%	10.44%	1.39%	2.41%	1.02%	3.22%	2.36%	7.05%	5.08%	4.75%	2.11
2018	5.92%	2.14%	2506.85	148.34	53.61	136.65	18.73%	7.80%	2.37%	2.68%	0.31%	3.24%	2.50%	4.12%	5.96%	5.55%	2.22
2019	5.03%	1.82%	3230.78	162.35	58.8	150.5	9.44%	9.68%	1.55%	1.92%	0.37%	2.57%	2.03%	3.96%	5.20%	5.06%	2.71
2020	3.72%	1.51%	3756.07	139.76	56.7	127.78	-13.91%	-3.57%	0.09%	0.93%	0.84%	0.74%	1.65%	5.42%	4.72%	4.94%	5.08
2021	4.33%	1.24%	4766.18	206.38	59.2	147.24	47.67%	4.41%	0.06%	1.51%	1.45%	1.71%	1.72%	6.47%	4.24%	4.90%	2.81
2022	5.72%	1.78%	3839.5	219.49	68.34	181.99	6.35%	15.44%	4.42%	3.88%	-0.54%	5.59%	2.16%	6.41%	5.94%	5.11%	1.53
2023	4.61%	1.47%	4769.83	219.7	70.3	164.25	0.10%	2.87%	5.20%	3.88%	-1.32%	3.73%	1.97%	8.74%	4.60%	4.57%	1.19
2024	4.14%	1.25%	5881.63	243.32	73.4	182.8	9.92%	4.75%	5.07%	4.58%	-0.49%	4.61%	1.76%	9.57%	4.33%	4.00%	0.95

DATA INPUT

Washington State Department of Revenue

2025 Assessment Year

Electric Industry

Guideline Companies VL 250117		Historic Figures (2024)													
		Stock Price 12/31/24	Beta Levered	Fin'I Strength	Revenues Per Share	Cash Flow Per Share	Earnings Per Share	Dividends Per Share	Bk Value Per Share	Mkt/Bk	Common Shares	LTD (BV)	Trailing P/E Ratio	Div Yield	Calculated Debt
Name	Ticker	Yahoo	VL	VL	VL	VL	VL	VL	VL	Formula	VL	V L	V L	V L	Formula
Avista Corp	ava	36.63	0.95	A	23.40	5.85	2.40	1.90	32.75	1.12	79,500,000	2,650,100,000	14.0	5.4%	80.11%
Black Hills	bkh	58.52	1.05	A	31.75	7.80	3.90	2.60	48.75	1.20	71,700,000	4,248,800,000	15.2	4.8%	95.50%
Edison International	eix	79.00	1.05	A	45.05	12.80	4.95	3.17	40.35	1.96	389,000,000	36,419,000,000	15.2	4.3%	93.19%
Idacorp Inc	ida	109.28	0.85	A	35.05	9.50	5.45	3.35	63.55	1.72	53,500,000	3,054,000,000	19.9	3.2%	91.35%
NorthWestern Energy	nwe	53.46	1.00	B++	24.55	7.00	3.40	2.60	46.35	1.15	61,500,000	2,570,700,000	14.0	5.1%	88.33%
Pinnacle West Capital	pnw	83.90	1.00	A	44.50	13.10	5.10	3.55	61.30	1.37	114,000,000	8,056,200,000	15.7	4.3%	89.39%
TXNM Energy	txnm	48.76	0.90	B++	21.85	6.85	2.75	1.57	27.40	1.78	91,000,000	4,522,700,000	18.0	3.5%	95.59%
Portland General Electric	por	43.62	0.95	A	31.40	7.75	3.10	1.98	34.35	1.27	106,000,000	4,633,000,000	12.2	4.9%	87.31%
Sempra Energy	sre	87.72	1.00	A	22.30	8.25	4.75	2.48	46.75	1.88	636,000,000	31,853,000,000	19.9	3.1%	91.77%
Xcel Energy	xel	66.97	0.85	A	24.55	8.40	3.55	2.19	34.20	1.96	575,000,000	27,471,000,000	18.8	3.5%	88.37%
Average										1.5			16.3		
Harmonic Mean										1.5			15.9		
Median										1.5			15.5		

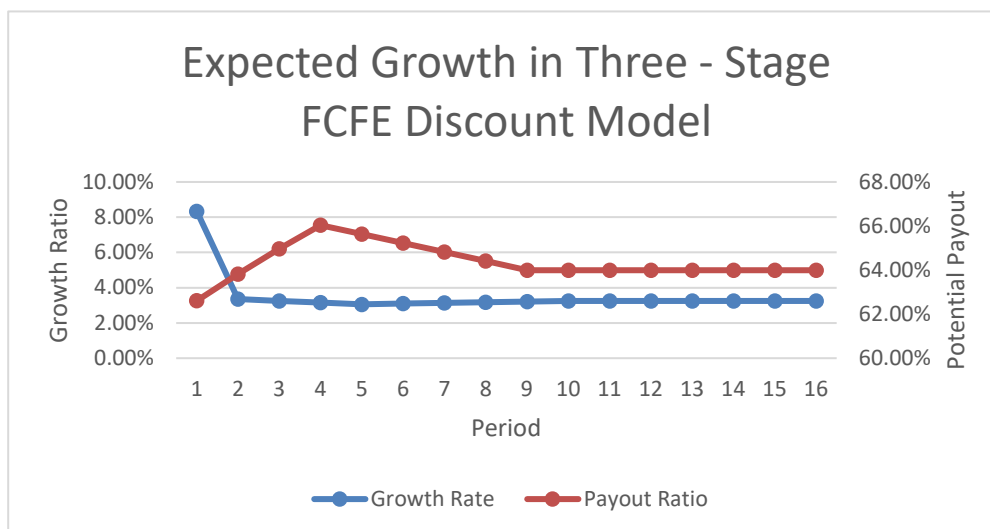
			Projected (Next Year) 2025									Longer Term Forecasts		Income Statement	
Payout Ratio	All Div ds to Net Profits	Rtn on Shrhltrs Equity	Revenues Per Share	Cash Flow Per Share	Earnings Per Share	Dividends Per Share	Bk Value Per Share	All Div ds to Net Profits	Rtn on Shrhltrs Equity	CF Projection 27-29	Earnings Projection 27-29	Earnings Growth 27-29	Dividend Growth 27-29	Operating Income	Current Assets
Formula	V L	V L	V L	V L	V L	V L	V L	VL	V L	V L	VL	VL	VL	Yahoo	Yahoo
79.17%	78%	7.5%	23.45	6.20	2.60	2.00	34.55	76%	7.5%	6.75	2.95	5.5%	4.0%	306,000,000	656,000,000
66.67%	67%	8.0%	33.55	8.25	4.10	2.70	50.35	66%	8.0%	9.55	4.80	4.0%	4.0%	503,100,000	742,300,000
64.04%	68%	11.0%	47.30	13.60	5.50	3.36	40.35	65%	12.0%	15.10	6.75	6.5%	6.0%	2,930,000,000	7,155,000,000
61.47%	62%	9.0%	36.75	10.20	5.80	3.52	66.60	61%	9.0%	12.25	7.10	6.0%	5.5%	327,839,000	988,455,000
76.47%	76%	7.5%	25.80	7.45	3.70	2.64	47.50	71%	8.0%	8.55	4.25	4.5%	1.5%	323,321,000	418,186,000
69.61%	69%	8.5%	43.20	12.95	4.80	3.61	61.20	75%	7.5%	15.35	6.00	4.0%	1.5%	1,012,063,000	1,689,404,000
57.09%	57%	10.0%	22.85	7.25	2.85	1.65	28.80	58%	10.0%	8.65	3.35	4.0%	5.5%	462,466,000	498,836,000
63.87%	64%	9.0%	32.75	8.10	3.25	2.08	35.90	64%	9.0%	9.45	3.85	5.5%	5.5%	512,000,000	1,025,000,000
52.21%	53%	10.0%	25.25	8.90	5.10	2.58	49.50	51%	10.0%	10.75	6.30	6.0%	6.0%	2,962,000,000	5,285,000,000
61.69%	62%	10.0%	27.05	9.10	3.80	2.30	36.00	60%	10.5%	10.95	4.55	6.5%	6.0%	2,386,000,000	4,325,000,000
	65.6%	9.1%						64.7%	9.15%	10.74					
	64.8%	8.9%						63.8%	8.95%	10.12					
	65.5%	9.0%						64.5%	9.00%	10.15					

Balance Sheet				Cash Flow Statement	Other Financials	
Gross PPE	Other Intangible Assets (excl. GW)	Current Liabilities	Long Term Debt Less Current Maturities	Depreciation & Amortization	Carrying Value Debt	Fair Value Debt
Yahoo	Yahoo	Yahoo	Yahoo	Yahoo	10-K	10-K
8,550,000,000	18,000,000	771,000,000	2,666,000,000	274,000,000	2,725,000,000	2,183,000,000
9,566,500,000	7,600,000	763,400,000	4,250,200,000	270,100,000	4,250,200,000	4,059,100,000
74,765,000,000		8,439,000,000	33,534,000,000	2,939,000,000	35,583,000,000	33,160,000,000
9,232,024,000		700,801,000	3,053,777,000	228,091,000	3,073,662,000	2,807,803,000
8,778,105,000		802,200,000	2,695,343,000	227,635,000	2,995,293,000	2,645,779,000
29,624,266,000		2,843,797,000	8,058,648,000	956,184,000	8,858,648,000	7,918,992,000
11,596,275,000		1,775,098,000	4,311,765,000	423,010,000	4,923,368,000	4,706,076,000
15,430,000,000		1,119,000,000	4,354,000,000	496,000,000	4,539,000,000	3,963,000,000
81,574,000,000	292,000,000	9,676,000,000	31,558,000,000	2,437,000,000	32,899,000,000	30,193,000,000
82,319,000,000		6,459,000,000	27,316,000,000	2,875,000,000	28,419,000,000	25,115,000,000

Three Stage Free Cash Flow to Equity Discount Model

Company	Avista Corp	4.10%	GDP
Ticker	ava	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

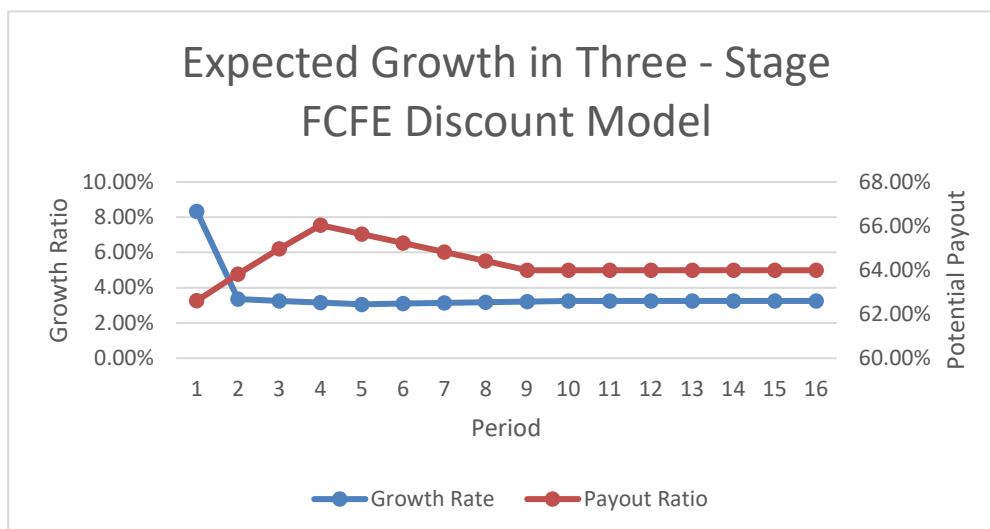
	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		92.59%	7.41%	2.40			(36.63)
Stage 1	1	8.33%	37.39%	62.61%	2.60	1.63		1.63
	2	3.37%	36.18%	63.82%	2.69	1.72		1.72
	3	3.26%	35.04%	64.96%	2.78	1.80		1.80
	4	3.15%	33.96%	66.04%	2.86	1.89		1.89
	5	3.06%	34.37%	65.63%	2.95	1.94		1.94
Stage 2	6	3.09%	34.78%	65.22%	3.04	1.98		1.98
	7	3.13%	35.19%	64.81%	3.14	2.03		2.03
	8	3.17%	35.59%	64.41%	3.24	2.08		2.08
	9	3.20%	36.00%	64.00%	3.34	2.14		2.14
	10	3.24%	36.00%	64.00%	3.45	2.21	56.24	58.44
Stage 3	11+	3.24%	36.00%	64.00%	3.56	2.28		
$K_e = 8.75\%$								



Three Stage Free Cash Flow to Equity Discount Model

Company	Black Hills	4.10%	GDP
Ticker	bkh	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		56.98%	43.02%	3.90			(58.52)
Stage 1	1	5.13%	47.43%	52.57%	4.10	2.16		2.16
	2	4.27%	45.48%	54.52%	4.28	2.33		2.33
	3	4.09%	43.70%	56.30%	4.45	2.51		2.51
	4	3.93%	42.04%	57.96%	4.63	2.68		2.68
	5	3.78%	40.83%	59.17%	4.80	2.84		2.84
Stage 2	6	3.68%	39.63%	60.37%	4.98	3.00		3.00
	7	3.57%	38.42%	61.58%	5.15	3.17		3.17
	8	3.46%	37.21%	62.79%	5.33	3.35		3.35
	9	3.35%	36.00%	64.00%	5.51	3.53		3.53
	10	3.24%	36.00%	64.00%	5.69	3.64	92.80	96.44
Stage 3	11+	3.24%	36.00%	64.00%	5.87	3.76		
$K_e = 8.71\%$								



Three Stage Free Cash Flow to Equity Discount Model

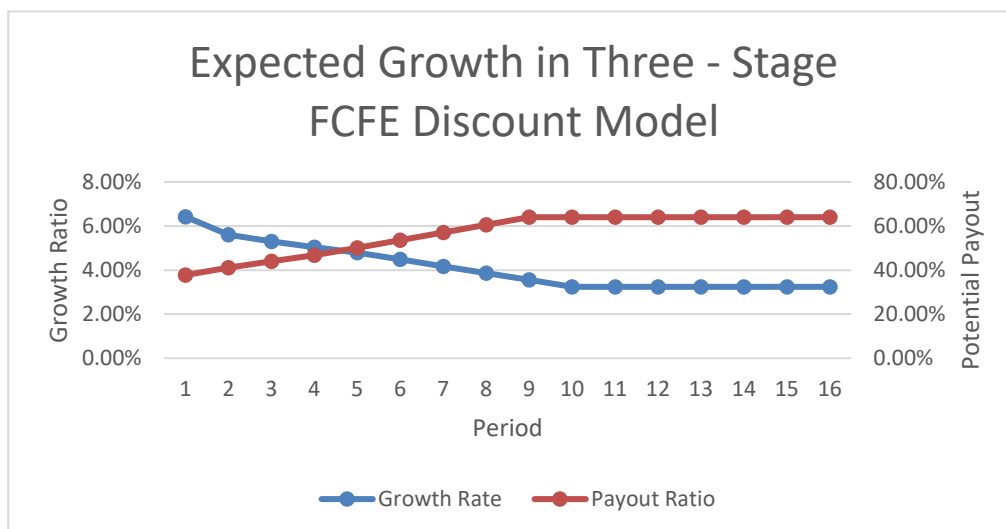
Company	Edison International	4.10%	GDP
Ticker	ED	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		123.46%	-23.46%	4.95			(79.00)
Stage 1	1	11.11%	63.13%	36.87%	5.50	2.03		2.03
	2	5.68%	59.74%	40.26%	5.81	2.34		2.34
	3	5.38%	56.69%	43.31%	6.13	2.65		2.65
	4	5.10%	53.94%	46.06%	6.44	2.97		2.97
	5	4.85%	50.35%	49.65%	6.75	3.35		3.35
Stage 2	6	4.53%	46.76%	53.24%	7.06	3.76		3.76
	7	4.21%	43.17%	56.83%	7.35	4.18		4.18
	8	3.89%	39.59%	60.41%	7.64	4.61		4.61
	9	3.56%	36.00%	64.00%	7.91	5.06		5.06
	10	3.24%	36.00%	64.00%	8.17	5.23	133.22	138.45
Stage 3	11+	3.24%	36.00%	64.00%	8.43	5.40		
							$K_e =$	8.81%

Three Stage Free Cash Flow to Equity Discount Model

Company	Idacorp Inc	4.10%	GDP
Ticker	ida	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

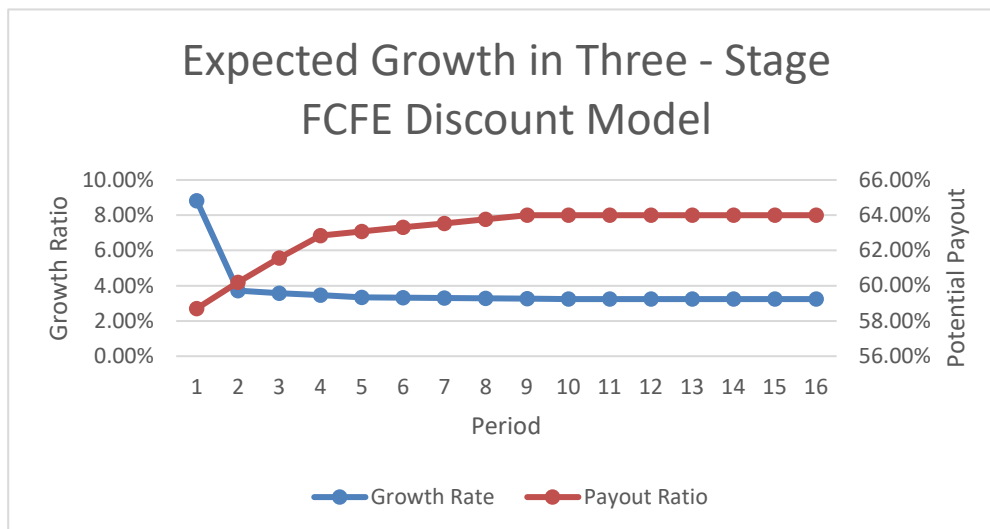
	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		71.36%	28.64%	5.45			(109.28)
Stage 1	1	6.42%	62.26%	37.74%	5.80	2.19		2.19
	2	5.60%	58.96%	41.04%	6.13	2.51		2.51
	3	5.31%	55.99%	44.01%	6.45	2.84		2.84
	4	5.04%	53.30%	46.70%	6.78	3.16		3.16
	5	4.80%	49.84%	50.16%	7.10	3.56		3.56
Stage 2	6	4.49%	46.38%	53.62%	7.42	3.98		3.98
	7	4.17%	42.92%	57.08%	7.73	4.41		4.41
	8	3.86%	39.46%	60.54%	8.03	4.86		4.86
	9	3.55%	36.00%	64.00%	8.31	5.32		5.32
	10	3.24%	36.00%	64.00%	8.58	5.49	139.97	145.46
Stage 3	11+	3.24%	36.00%	64.00%	8.86	5.67		
$K_e =$								5.53%



Three Stage Free Cash Flow to Equity Discount Model

Company	NorthWestern	4.10%	GDP
Ticker	nwe	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

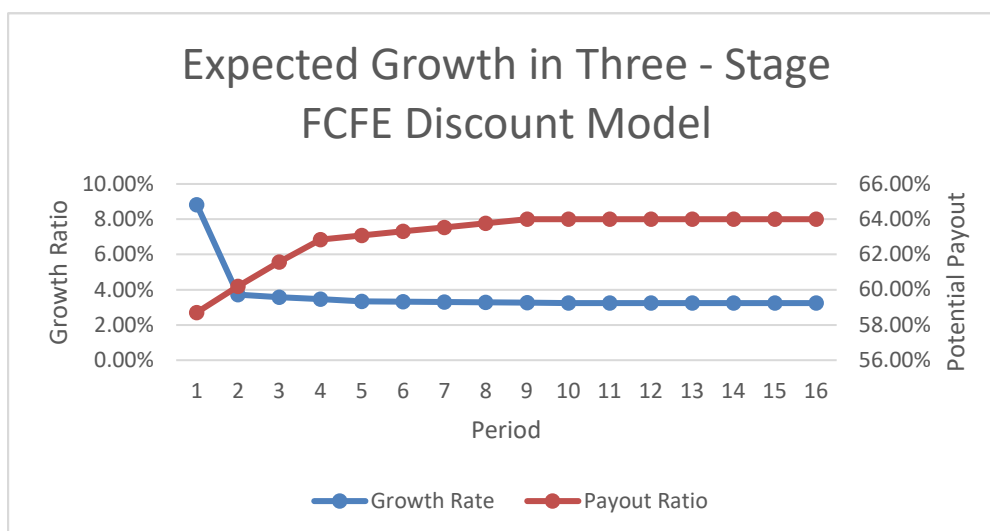
	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		98.04%	1.96%	3.40			(53.46)
Stage 1	1	8.82%	41.29%	58.71%	3.70	2.17		2.17
	2	3.72%	39.81%	60.19%	3.84	2.31		2.31
	3	3.58%	38.43%	61.57%	3.98	2.45		2.45
	4	3.46%	37.15%	62.85%	4.11	2.58		2.58
	5	3.34%	36.92%	63.08%	4.25	2.68		2.68
Stage 2	6	3.32%	36.69%	63.31%	4.39	2.78		2.78
	7	3.30%	36.46%	63.54%	4.54	2.88		2.88
	8	3.28%	36.23%	63.77%	4.69	2.99		2.99
	9	3.26%	36.00%	64.00%	4.84	3.10		3.10
	10	3.24%	36.00%	64.00%	4.99	3.20	81.47	84.67
Stage 3	11+	3.24%	36.00%	64.00%	5.16	3.30		
							$K_e =$	8.47%



Three Stage Free Cash Flow to Equity Discount Model

Company	Pinnacle West Capital Corp	4.10%	GDP
Ticker	pnw	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

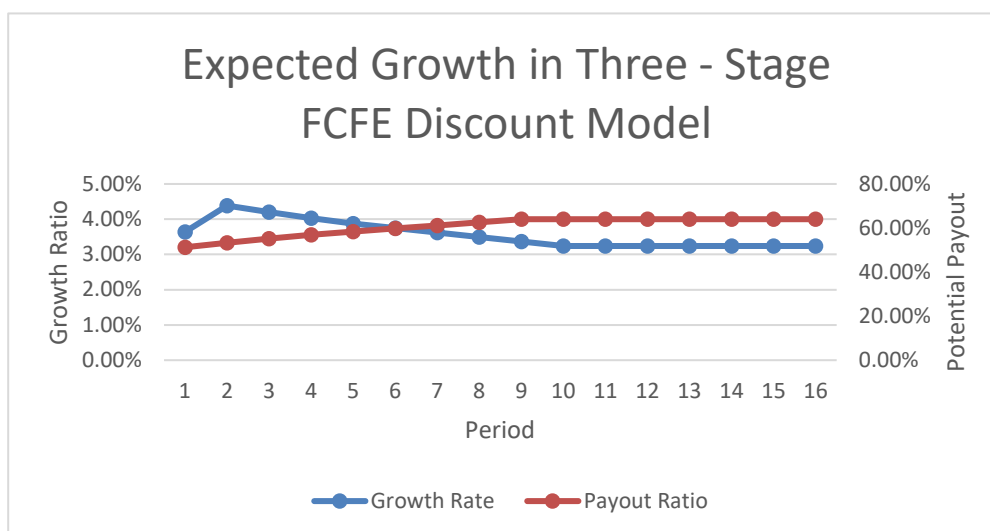
	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		-65.36%	165.36%	5.10			(83.90)
Stage 1	1	-5.88%	69.44%	30.56%	4.80	1.47		1.47
	2	6.25%	65.36%	34.64%	5.10	1.77		1.77
	3	5.88%	61.73%	38.27%	5.40	2.07		2.07
	4	5.56%	58.48%	41.52%	5.70	2.37		2.37
	5	5.26%	53.98%	46.02%	6.00	2.76		2.76
Stage 2	6	4.86%	49.49%	50.51%	6.29	3.18		3.18
	7	4.45%	44.99%	55.01%	6.57	3.61		3.61
	8	4.05%	40.50%	59.50%	6.84	4.07		4.07
	9	3.64%	36.00%	64.00%	7.09	4.54		4.54
	10	3.24%	36.00%	64.00%	7.32	4.68	119.35	124.03
Stage 3	11+	3.24%	36.00%	64.00%	7.55	4.83		
							$K_e =$	6.53%



Three Stage Free Cash Flow to Equity Discount Model

Company	TXNM Energy	4.10%	GDP
Ticker	txn	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

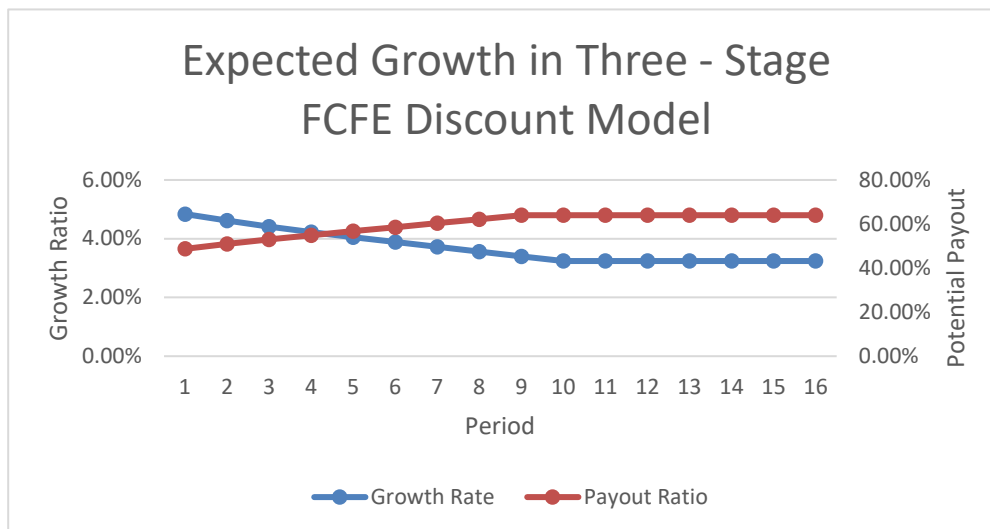
	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		40.40%	59.60%	2.75			(48.76)
Stage 1	1	3.64%	48.73%	51.27%	2.85	1.46		1.46
	2	4.39%	46.69%	53.31%	2.98	1.59		1.59
	3	4.20%	44.80%	55.20%	3.10	1.71		1.71
	4	4.03%	43.07%	56.93%	3.23	1.84		1.84
	5	3.88%	41.65%	58.35%	3.35	1.95		1.95
Stage 2	6	3.75%	40.24%	59.76%	3.48	2.08		2.08
	7	3.62%	38.83%	61.17%	3.60	2.20		2.20
	8	3.49%	37.41%	62.59%	3.73	2.33		2.33
	9	3.37%	36.00%	64.00%	3.85	2.47		2.47
	10	3.24%	36.00%	64.00%	3.98	2.55	64.88	67.43
Stage 3	11+	3.24%	36.00%	64.00%	4.11	2.63		
$K_e = 6.46\%$								



Three Stage Free Cash Flow to Equity Discount Model

Company	Portland General	4.10%	GDP
Ticker	por	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

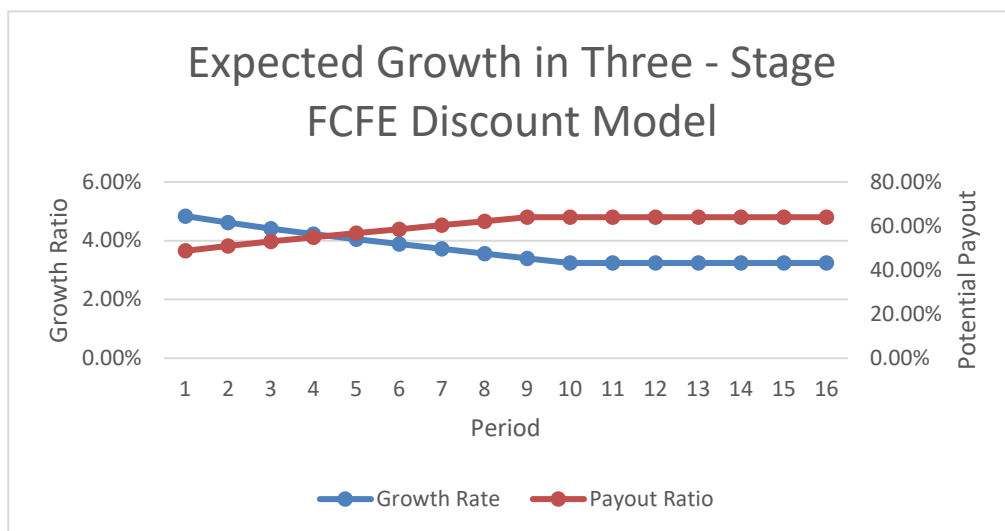
	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		53.76%	46.24%	3.10			(43.62)
Stage 1	1	4.84%	51.28%	48.72%	3.25	1.58		1.58
	2	4.62%	49.02%	50.98%	3.40	1.73		1.73
	3	4.41%	46.95%	53.05%	3.55	1.88		1.88
	4	4.23%	45.05%	54.95%	3.70	2.03		2.03
	5	4.05%	43.24%	56.76%	3.85	2.19		2.19
Stage 2	6	3.89%	41.43%	58.57%	4.00	2.34		2.34
	7	3.73%	39.62%	60.38%	4.15	2.51		2.51
	8	3.57%	37.81%	62.19%	4.30	2.67		2.67
	9	3.40%	36.00%	64.00%	4.44	2.84		2.84
	10	3.24%	36.00%	64.00%	4.59	2.94	74.82	77.76
Stage 3	11+	3.24%	36.00%	64.00%	4.74	3.03		
$K_e =$								9.54%



Three Stage Free Cash Flow to Equity Discount Model

Company	Sempra Energy	4.10%	GDP
Ticker	sre	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		81.87%	18.13%	4.75			(87.72)
Stage 1	1	7.37%	65.36%	34.64%	5.10	1.77		1.77
	2	5.88%	61.73%	38.27%	5.40	2.07		2.07
	3	5.56%	58.48%	41.52%	5.70	2.37		2.37
	4	5.26%	55.56%	44.44%	6.00	2.67		2.67
	5	5.00%	51.64%	48.36%	6.30	3.05		3.05
Stage 2	6	4.65%	47.73%	52.27%	6.59	3.45		3.45
	7	4.30%	43.82%	56.18%	6.88	3.86		3.86
	8	3.94%	39.91%	60.09%	7.15	4.29		4.29
	9	3.59%	36.00%	64.00%	7.40	4.74		4.74
	10	3.24%	36.00%	64.00%	7.64	4.89	124.69	129.58
Stage 3	11+	3.24%	36.00%	64.00%	7.89	5.05		
							$K_e =$	6.66%



Three Stage Free Cash Flow to Equity Discount Model

Company	Xcel Energy	4.10%	GDP
Ticker	xel	15.8	Industry P/E
		64.0%	Target Dividend Payout Ratio
		9.0%	Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		78.25%	21.75%	3.55			(66.97)
Stage 1	1	7.04%	54.82%	45.18%	3.80	1.72		1.72
	2	4.93%	52.25%	47.75%	3.99	1.90		1.90
	3	4.70%	49.90%	50.10%	4.18	2.09		2.09
	4	4.49%	47.76%	52.24%	4.36	2.28		2.28
	5	4.30%	45.40%	54.60%	4.55	2.48		2.48
Stage 2	6	4.09%	43.05%	56.95%	4.74	2.70		2.70
	7	3.87%	40.70%	59.30%	4.92	2.92		2.92
	8	3.66%	38.35%	61.65%	5.10	3.14		3.14
	9	3.45%	36.00%	64.00%	5.28	3.38		3.38
	10	3.24%	36.00%	64.00%	5.45	3.49	88.84	92.33
Stage 3	11+	3.24%	36.00%	64.00%	5.62	3.60		
$K_e = 6.20\%$								

