



Summary

Bob Hevert is a financial and economic consultant with more than 30 years of broad experience in the energy and utility industries. He has an extensive background in the areas of corporate finance, mergers and acquisitions, project finance, asset and business unit valuation, rate and regulatory matters, energy market assessment, and corporate strategic planning. He has provided expert testimony on a wide range of financial, strategic, and economic matters on more than 100 occasions at the state, provincial, and federal levels.

Prior to joining ScottMadden, Bob served as managing partner at Sussex Economic Advisors, LLC. Throughout the course of his career, he has worked with numerous leading energy companies and financial institutions throughout North America. He has provided expert testimony and support of litigation in various regulatory proceedings on a variety of energy and economic issues. Bob earned a B.S. in business and economics from the University of Delaware and an M.B.A. with a concentration in finance from the University of Massachusetts at Amherst. Bob also holds the Chartered Financial Analyst designation.

Areas of Specialization

- Regulation and rates
- Utilities
- Fossil/hydro generation
- Markets and RTOs
- Nuclear generation
- Mergers and acquisitions
- Regulatory strategy and rate case support
- Capital project planning
- Strategic and business planning

Recent Expert Testimony Submission/Appearance

- Federal Energy Regulatory Commission – Return on Equity
- New Jersey Board of Public Utilities – Merger Approval
- New Mexico Public Regulation Commission – Cost of Capital and Financial Integrity
- United States District Court – PURPA and FERC Regulations
- Alberta Utilities Commission – Return on Equity and Capital Structure

Recent Assignments

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies, the Alberta Utilities Commission, and the Federal Energy Regulatory Commission
- For an independent electric transmission provider in Texas, prepared an expert report on the economic damages with respect to failure to meet guaranteed completion dates. The report was filed as part of an arbitration proceeding and included a review of the ratemaking implications of economic damages
- Advised the board of directors of a publicly traded electric and natural gas combination utility on dividend policy issues, earnings payout trends and related capital market considerations
- Assisted a publicly traded utility with a strategic buy-side evaluation of a gas utility with more than \$1 billion in assets. The assignment included operational performance benchmarking, calculation of merger synergies, risk analysis, and review of the regulatory implications of the transaction
- Provided testimony before the Arkansas Public Service Commission in support of the acquisition of SourceGas LLC by Black Hills Corporation. The testimony addressed certain balance sheet capitalization and credit rating issues
- For the State of Maine Public Utility Commission, prepared a report that summarized the Northeast and Atlantic Canada natural gas power markets and analyzed the potential benefits and costs associated with natural gas pipeline expansions. The independent report was filed at the Maine Public Utility Commission



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Regulatory Commission of Alaska				
ENSTAR Natural Gas Company	06/16	ENSTAR Natural Gas Company	Matter No. TA 285-4	Return on Equity
ENSTAR Natural Gas Company	08/14	ENSTAR Natural Gas Company	Matter No. TA 262-4	Return on Equity
Alberta Utilities Commission				
Altalink, L.P., and EPCOR Distribution & Transmission, Inc.	02/16	Altalink, L.P., and EPCOR Distribution & Transmission, Inc.	2016 General Cost of Capital, Proceeding ID. 20622	Rate of Return
Arizona Corporation Commission				
Southwest Gas Corporation	05/16	Southwest Gas Corporation	Docket No. G-01551A-16-017	Return on Equity
Southwest Gas Corporation	11/10	Southwest Gas Corporation	Docket No. G-01551A-10-0458	Return on Equity
Arkansas Public Service Commission				
Oklahoma Gas and Electric Company	09/16	Oklahoma Gas and Electric Company	Docket No. 16-052-U	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	11/15	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	Docket No. 15-098-U	Return on Equity
SourceGas Arkansas, Inc.	03/15	SourceGas Arkansas, Inc.	Docket No. 15-011-U	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	01/07	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Arkansas Gas	Docket No. 06-161-U	Return on Equity
California Public Utilities Commission				
Southwest Gas Corporation	12/12	Southwest Gas Corporation	Docket No. A-12-12-024	Return on Equity
Colorado Public Utilities Commission				
Xcel Energy, Inc.	03/15	Public Service Company of Colorado	Docket No. 15AL-0135G	Return on Equity (gas)
Xcel Energy, Inc.	06/14	Public Service Company of Colorado	Docket No. 14AL-0660E	Return on Equity (electric)
Xcel Energy, Inc.	12/12	Public Service Company of Colorado	Docket No. 12AL-1268G	Return on Equity (gas)
Xcel Energy, Inc.	11/11	Public Service Company of Colorado	Docket No. 11AL-947E	Return on Equity (electric)
Xcel Energy, Inc.	12/10	Public Service Company of Colorado	Docket No. 10AL-963G	Return on Equity (electric)
Atmos Energy Corporation	07/09	Atmos Energy Colorado-Kansas Division	Docket No. 09AL-507G	Return on Equity (gas)
Xcel Energy, Inc.	12/06	Public Service Company of Colorado	Docket No. 06S-656G	Return on Equity (gas)



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Xcel Energy, Inc.	04/06	Public Service Company of Colorado	Docket No. 06S-234EG	Return on Equity (electric)
Xcel Energy, Inc.	08/05	Public Service Company of Colorado	Docket No. 05S-369ST	Return on Equity (steam)
Xcel Energy, Inc.	05/05	Public Service Company of Colorado	Docket No. 05S-246G	Return on Equity (gas)
Connecticut Public Utilities Regulatory Authority				
Connecticut Light and Power Company	06/14	Connecticut Light and Power Company	Docket No. 14-05-06	Return on Equity
Southern Connecticut Gas Company	09/08	Southern Connecticut Gas Company	Docket No. 08-08-17	Return on Equity
Southern Connecticut Gas Company	12/07	Southern Connecticut Gas Company	Docket No. 05-03-17PH02	Return on Equity
Connecticut Natural Gas Corporation	12/07	Connecticut Natural Gas Corporation	Docket No. 06-03-04PH02	Return on Equity
Delaware Public Service Commission				
Delmarva Power & Light Company	05/16	Delmarva Power & Light Company	Case No. 16-649 (Electric)	Return on Equity
Delmarva Power & Light Company	05/16	Delmarva Power & Light Company	Case No. 16-650 (Gas)	Return on Equity
Delmarva Power & Light Company	03/13	Delmarva Power & Light Company	Case No. 13-115	Return on Equity
Delmarva Power & Light Company	12/12	Delmarva Power & Light Company	Case No. 12-546	Return on Equity
Delmarva Power & Light Company	03/12	Delmarva Power & Light Company	Case No. 11-528	Return on Equity
District of Columbia Public Service Commission				
Potomac Electric Power Company	07/16	Potomac Electric Power Company	Formal Case No. FC1139	Return on Equity
Washington Gas Light Company	02/16	Washington Gas Light Company	Formal Case No. FC1137	Return on Equity
Potomac Electric Power Company	03/13	Potomac Electric Power Company	Formal Case No. FC1103-2013-E	Return on Equity
Potomac Electric Power Company	07/11	Potomac Electric Power Company	Formal Case No. FC1087	Return on Equity
Federal Energy Regulatory Commission				
Sabine Pipeline, LLC	09/15	Sabine Pipeline, LLC	Docket No. RP15-1322-000	Return on Equity
Nextera Energy Transmission West, LLC	07/15	Nextera Energy Transmission West, LLC	Docket No. ER15-2239-000	Return on Equity
Maritimes & Northeast Pipeline, LLC	05/15	Maritimes & Northeast Pipeline, LLC	Docket No. RP15-1026-000	Return on Equity
Public Service Company of New Mexico	12/12	Public Service Company of New Mexico	Docket No. ER13-685-000	Return on Equity
Public Service Company of New Mexico	10/10	Public Service Company of New Mexico	Docket No. ER11-1915-000	Return on Equity
Portland Natural Gas Transmission System	05/10	Portland Natural Gas Transmission System	Docket No. RP10-729-000	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Florida Gas Transmission Company, LLC	10/09	Florida Gas Transmission Company, LLC	Docket No. RP10-21-000	Return on Equity
Maritimes and Northeast Pipeline, LLC	07/09	Maritimes and Northeast Pipeline, LLC	Docket No. RP09-809-000	Return on Equity
Spectra Energy	02/08	Saltville Gas Storage	Docket No. RP08-257-000	Return on Equity
Panhandle Energy Pipelines	08/07	Panhandle Energy Pipelines	Docket No. PL07-2-000	Response to draft policy statement regarding inclusion of MLPs in proxy groups for determination of gas pipeline ROEs
Southwest Gas Storage Company	08/07	Southwest Gas Storage Company	Docket No. RP07-541-000	Return on Equity
Southwest Gas Storage Company	06/07	Southwest Gas Storage Company	Docket No. RP07-34-000	Return on Equity
Sea Robin Pipeline LLC	06/07	Sea Robin Pipeline LLC	Docket No. RP07-513-000	Return on Equity
Transwestern Pipeline Company	09/06	Transwestern Pipeline Company	Docket No. RP06-614-000	Return on Equity
GPU International and Aquila	11/00	GPU International	Docket No. EC01-24-000	Market Power Study
Florida Public Service Commission				
Florida Power & Light Company	03/16	Florida Power & Light Company	Docket No. 160021-EI	Return on Equity
Tampa Electric Company	04/13	Tampa Electric Company	Docket No. 130040-EI	Return on Equity
Georgia Public Service Commission				
Atlanta Gas Light Company	05/10	Atlanta Gas Light Company	Docket No. 31647-U	Return on Equity
Hawaii Public Utilities Commission				
Hawaiian Electric Company, Inc.	12/16	Hawaiian Electric Company, Inc.	Docket No. 2016-0328	Return on Equity
Hawai'i Electric Light Company, Inc.	09/16	Hawai'i Electric Light Company, Inc.	Docket No. 2015-0170	Return on Equity
Maui Electric Company, Limited	12/14	Maui Electric Company, Limited	Docket No. 2014-0318	Return on Equity
Hawaiian Electric Company, Inc.	06/14	Hawaiian Electric Company, Inc.	Docket No. 2013-0373	Return on Equity
Hawai'i Electric Light Company, Inc.	08/12	Hawai'i Electric Light Company, Inc.	Docket No. 2012-0099	Return on Equity
Illinois Commerce Commission				
Ameren Illinois Company d/b/a Ameren Illinois	01/15	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 15-0142	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	03/14	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Docket No. 14-0371	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/13	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 13-0192	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0279	Return on Equity (electric)
Ameren Illinois Company d/b/a Ameren Illinois	02/11	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 11-0282	Return on Equity (gas)
Indiana Utility Regulatory Commission				
Duke Energy Indiana, Inc.	12/15	Duke Energy Indiana, Inc.	Cause No. 44720	Return on Equity
Duke Energy Indiana, Inc.	12/14	Duke Energy Indiana, Inc.	Cause No. 44526	Return on Equity
Northern Indiana Public Service Company	05/09	Northern Indiana Public Service Company	Cause No. 43894	Assessment of Valuation Approaches
Kansas Corporation Commission				
Kansas City Power & Light Company	01/15	Kansas City Power & Light Company	Docket No. 15-KCPE-116-RTS	Return on Equity
Maine Public Utilities Commission				
Central Maine Power Company	06/11	Central Maine Power Company	Docket No. 2010-327	Response to Bench Analysis provided by Commission Staff relating to the Company's credit and collections processes
Maryland Public Service Commission				
Potomac Electric Power Company	03/17	Potomac Electric Power Company	Case No. 9443	Return on Equity
Potomac Electric Power Company	06/16	Potomac Electric Power Company	Case No. 9424	Return on Equity
Potomac Electric Power Company	06/16	Potomac Electric Power Company	Case No. 9418	Return on Equity
Potomac Electric Power Company	12/13	Potomac Electric Power Company	Case No. 9336	Return on Equity
Delmarva Power & Light Company	03/13	Delmarva Power & Light Company	Case No. 9317	Return on Equity
Potomac Electric Power Company	11/12	Potomac Electric Power Company	Case No. 9311	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Potomac Electric Power Company	12/11	Potomac Electric Power Company	Case No. 9286	Return on Equity
Delmarva Power & Light Company	12/11	Delmarva Power & Light Company	Case No. 9285	Return on Equity
Delmarva Power & Light Company	12/10	Delmarva Power & Light Company	Case No. 9249	Return on Equity
Massachusetts Department of Public Utilities				
NSTAR Electric Company Western and Massachusetts Electric Company each d/b/a Eversource Energy	01/17	NSTAR Electric Company Western Massachusetts Electric Company each d/b/a Eversource Energy	DPU 17-05	Return on Equity
National Grid	11/15	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 15-155	Return on Equity
Fitchburg Gas and Electric Light Company d/b/a Unitil	06/15	Fitchburg Gas and Electric Light Company d/b/a Unitil	DPU 15-80	Return on Equity
NSTAR Gas Company	12/14	NSTAR Gas Company	DPU 14-150	Return on Equity
Fitchburg Gas and Electric Light Company d/b/a Unitil	07/13	Fitchburg Gas and Electric Light Company d/b/a Unitil	DPU 13-90	Return on Equity
Bay State Gas Company d/b/a Columbia Gas of Massachusetts	04/12	Bay State Gas Company d/b/a Columbia Gas of Massachusetts	DPU 12-25	Capital Cost Recovery
National Grid	08/09	Massachusetts Electric Company d/b/a National Grid	DPU 09-39	Revenue Decoupling and Return on Equity
National Grid	08/09	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	DPU 09-38	Return on Equity – Solar Generation
Bay State Gas Company	04/09	Bay State Gas Company	DPU 09-30	Return on Equity
NSTAR Electric	09/04	NSTAR Electric	DTE 04-85	Divestiture of Power Purchase Agreement
NSTAR Electric	08/04	NSTAR Electric	DTE 04-78	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	DTE 04-68	Divestiture of Power Purchase Agreement



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
NSTAR Electric	07/04	NSTAR Electric	DTE 04-61	Divestiture of Power Purchase Agreement
NSTAR Electric	06/04	NSTAR Electric	DTE 04-60	Divestiture of Power Purchase Agreement
Unitil Corporation	01/04	Fitchburg Gas and Electric	DTE 03-52	Integrated Resource Plan; Gas Demand Forecast
Bay State Gas Company	01/93	Bay State Gas Company	DPU 93-14	Divestiture of Shelf Registration
Bay State Gas Company	01/91	Bay State Gas Company	DPU 91-25	Divestiture of Shelf Registration
Minnesota Public Utilities Commission				
ALLETE, Inc., d/b/a Minnesota Power Inc.	11/16	ALLETE, Inc., d/b/a Minnesota Power Inc.	Docket No. E015/GR-16-664	Return on Equity
Otter Tail Power Corporation	02/16	Otter Tail Power Company	Docket No. E017/GR-15-1033	Return on Equity
Minnesota Energy Resources Corporation	09/15	Minnesota Energy Resources Corporation	Docket No. G-011/GR-15-736	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	08/15	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-15-424	Return on Equity
Xcel Energy, Inc.	11/13	Northern States Power Company	Docket No. E002/GR-13-868	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	08/13	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-13-316	Return on Equity
Xcel Energy, Inc.	11/12	Northern States Power Company	Docket No. E002/GR-12-961	Return on Equity
Otter Tail Power Corporation	04/10	Otter Tail Power Company	Docket No. E-017/GR-10-239	Return on Equity
Minnesota Power a division of ALLETE, Inc.	11/09	Minnesota Power	Docket No. E-015/GR-09-1151	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas	11/08	CenterPoint Energy Minnesota Gas	Docket No. G-008/GR-08-1075	Return on Equity
Otter Tail Power Corporation	10/07	Otter Tail Power Company	Docket No. E-017/GR-07-1178	Return on Equity
Xcel Energy, Inc.	11/05	Northern States Power Company -Minnesota	Docket No. E-002/GR-05-1428	Return on Equity (electric)
Xcel Energy, Inc.	09/04	Northern States Power Company - Minnesota	Docket No. G-002/GR-04-1511	Return on Equity (gas)



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Mississippi Public Service Commission				
CenterPoint Energy Resources, Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Mississippi Gas	07/09	CenterPoint Energy Mississippi Gas	Docket No. 09-UN-334	Return on Equity
Missouri Public Service Commission				
Union Electric Company d/b/a Ameren Missouri	07/16	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2016-0179	Return on Equity (electric)
Kansas City Power & Light Company	07/16	Kansas City Power & Light Company	Case No. ER-2016-0285	Return on Equity (electric)
Kansas City Power & Light Company	02/16	Kansas City Power & Light Company	Case No. ER-2016-0156	Return on Equity (electric)
Kansas City Power & Light Company	10/14	Kansas City Power & Light Company	Case No. ER-2014-0370	Return on Equity (electric)
Union Electric Company d/b/a Ameren Missouri	07/14	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2014-0258	Return on Equity (electric)
Union Electric Company d/b/a Ameren Missouri	06/14	Union Electric Company d/b/a Ameren Missouri	Case No. EC-2014-0223	Return on Equity (electric)
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	02/14	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Case No. GR-2014-0152	Return on Equity
Laclede Gas Company	12/12	Laclede Gas Company	Case No. GR-2013-0171	Return on Equity
Union Electric Company d/b/a Ameren Missouri	02/12	Union Electric Company d/b/a Ameren Missouri	Case No. ER-2012-0166	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	09/10	Union Electric Company d/b/a AmerenUE	Case No. ER-2011-0028	Return on Equity (electric)
Union Electric Company d/b/a AmerenUE	06/10	Union Electric Company d/b/a AmerenUE	Case No. GR-2010-0363	Return on Equity (gas)
Montana Public Service Commission				
Northwestern Corporation	09/12	Northwestern Corporation d/b/a Northwestern Energy	Docket No. D2012.9.94	Return on Equity (gas)
Nevada Public Utilities Commission				
Southwest Gas Corporation	04/12	Southwest Gas Corporation	Docket No. 12-04005	Return on Equity (gas)
Nevada Power Company	06/11	Nevada Power Company	Docket No. 11-06006	Return on Equity (electric)
New Hampshire Public Utilities Commission				



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Unitil Energy Systems, Inc.	04/16	Unitil Energy Systems, Inc.	Docket No. DE 16-384	Return on Equity
Liberty Utilities d/b/a Granite State Electric Company	04/16	Liberty Utilities d/b/a Granite State Electric Company	Docket No. DE 16-383	Return on Equity
Liberty Utilities d/b/a EnergyNorth Natural Gas	08/14	Liberty Utilities d/b/a EnergyNorth Natural Gas	Docket No. DG 14-180	Return on Equity
Liberty Utilities d/b/a Granite State Electric Company	03/13	Liberty Utilities d/b/a Granite State Electric Company	Docket No. DE 13-063	Return on Equity
EnergyNorth Natural Gas d/b/a National Grid NH	02/10	EnergyNorth Natural Gas d/b/a National Grid NH	Docket No. DG 10-017	Return on Equity
Unitil Energy Systems, Inc., EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	08/08	Unitil Energy Systems, Inc., EnergyNorth Natural Gas, Inc. d/b/a National Grid NH, Granite State Electric Company d/b/a National Grid, and Northern Utilities, Inc. – New Hampshire Division	Docket No. DG 07-072	Carrying Charge Rate on Cash Working Capital
New Jersey Board of Public Utilities				
Pivotal Utility Holdings, Inc.	08/16	Elizabethtown Gas	Docket No. GR16090826	Return on Equity
The Southern Company; AGL Resources Inc.; AMS Corp. and Pivotal Holdings, Inc. d/b/a Elizabethtown Gas	04/16	The Southern Company; AGL Resources Inc.; AMS Corp. and Pivotal Holdings, Inc. d/b/a Elizabethtown Gas	BPU Docket No. GM15101196	Merger Approval
Atlantic City Electric Company	03/16	Atlantic City Electric Company	Docket No. ER16030252	Return on Equity
Pepco Holdings, Inc.	04/14	Atlantic City Electric Company	Docket No. ER14030245	Return on Equity
Orange and Rockland Utilities	11/13	Rockland Electric Company	Docket No. ER13111135	Return on Equity
Atlantic City Electric Company	12/12	Atlantic City Electric Company	Docket No. ER12121071	Return on Equity
Atlantic City Electric Company	08/11	Atlantic City Electric Company	Docket No. ER11080469	Return on Equity
Pepco Holdings, Inc.	09/06	Atlantic City Electric Company	Docket No. EM06090638	Divestiture and Valuation of Electric Generating Assets
Pepco Holdings, Inc.	12/05	Atlantic City Electric Company	Docket No. EM05121058	Market Value of Electric Generation Assets; Auction



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Conectiv	06/03	Atlantic City Electric Company	Docket No. EO03020091	Market Value of Electric Generation Assets; Auction Process
New Mexico Public Regulation Commission				
Public Service Company of New Mexico	12/16	Public Service Company of New Mexico	Case No. 16-00276-UT	Return on Equity (electric)
Public Service Company of New Mexico	08/15	Public Service Company of New Mexico	Case No. 15-00261-UT	Return on Equity (electric)
Public Service Company of New Mexico	12/14	Public Service Company of New Mexico	Case No. 14-00332-UT	Return on Equity (electric)
Public Service Company of New Mexico	12/14	Public Service Company of New Mexico	Case No. 13-00390-UT	Cost of Capital and Financial Integrity
Southwestern Public Service Company	02/11	Southwestern Public Service Company	Case No. 10-00395-UT	Return on Equity (electric)
Public Service Company of New Mexico	06/10	Public Service Company of New Mexico	Case No. 10-00086-UT	Return on Equity (electric)
Public Service Company of New Mexico	09/08	Public Service Company of New Mexico	Case No. 08-00273-UT	Return on Equity (electric)
Xcel Energy, Inc.	07/07	Southwestern Public Service Company	Case No. 07-00319-UT	Return on Equity (electric)
New York State Public Service Commission				
Consolidated Edison Company of New York, Inc.	01/15	Consolidated Edison Company of New York, Inc.	Case No. 15-E-0050	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	11/14	Orange and Rockland Utilities, Inc.	Case Nos. 14-E-0493 and 14-G-0494	Return on Equity (electric and gas)
Consolidated Edison Company of New York, Inc.	01/13	Consolidated Edison Company of New York, Inc.	Case No. 13-E-0030	Return on Equity (electric)
Niagara Mohawk Corporation d/b/a National Grid for Electric Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Electric Service	Case No. 12-E-0201	Return on Equity (electric)
Niagara Mohawk Corporation d/b/a National Grid for Gas Service	04/12	Niagara Mohawk Corporation d/b/a National Grid for Gas Service	Case No. 12-G-0202	Return on Equity (gas)
Orange and Rockland Utilities, Inc.	07/11	Orange and Rockland Utilities, Inc.	Case No. 11-E-0408	Return on Equity (electric)
Orange and Rockland Utilities, Inc.	07/10	Orange and Rockland Utilities, Inc.	Case No. 10-E-0362	Return on Equity (electric)
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-G-0795	Return on Equity (gas)



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Consolidated Edison Company of New York, Inc.	11/09	Consolidated Edison Company of New York, Inc.	Case No. 09-S-0794	Return on Equity (steam)
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	Case No. 01-E-1046	Power Purchase and Sale Agreement; Standard Offer Service Agreement
North Carolina Utilities Commission				
Public Service Company of North Carolina, Inc.	03/16	Public Service Company of North Carolina, Inc.	Docket No. G-5, Sub 565	Return on Equity
Dominion North Carolina Power	03/16	Dominion North Carolina Power	Docket No. E-22, Sub 532	Return on Equity
Duke Energy Carolinas, LLC	02/13	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1026	Return on Equity
Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.	10/12	Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.	Docket No. E-2, Sub 1023	Return on Equity
Virginia Electric and Power Company d/b/a Dominion North Carolina Power	03/12	Virginia Electric and Power Company d/b/a Dominion North Carolina Power	Docket No. E-22, Sub 479	Return on Equity (electric)
Duke Energy Carolinas, LLC	07/11	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 989	Return on Equity (electric)
North Dakota Public Service Commission				
Otter Tail Power Company	11/08	Otter Tail Power Company	Docket No. 08-862	Return on Equity (electric)
Oklahoma Corporation Commission				
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Oklahoma Gas	03/16	CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Oklahoma Gas	Cause No. PUD201600094	Return on Equity
Oklahoma Gas & Electric Company	12/15	Oklahoma Gas & Electric Company	Cause No. PUD201500273	Return on Equity
Public Service Company of Oklahoma	07/15	Public Service Company of Oklahoma	Cause No. PUD201500208	Return on Equity
Oklahoma Gas & Electric Company	07/11	Oklahoma Gas & Electric Company	Cause No. PUD201100087	Return on Equity
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Oklahoma Gas	03/09	CenterPoint Energy Oklahoma Gas	Cause No. PUD200900055	Return on Equity
Pennsylvania Public Utility Commission				
Pike County Light & Power Company	01/14	Pike County Light & Power Company	Docket No. R-2013-2397237	Return on Equity (electric & gas)



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Veolia Energy Philadelphia, Inc.	12/13	Veolia Energy Philadelphia, Inc.	Docket No. R-2013-2386293	Return on Equity (steam)
Rhode Island Public Utilities Commission				
The Narragansett Electric Company d/b/a National Grid	04/12	The Narragansett Electric Company d/b/a National Grid	Docket No. 4323	Return on Equity (electric & gas)
National Grid RI – Gas	08/08	National Grid RI – Gas	Docket No. 3943	Revenue Decoupling and Return on Equity
South Carolina Public Service Commission				
Duke Energy Progress, LLC	07/16	Duke Energy Progress, LLC	Docket No. 2016-227-E	Return on Equity
Duke Energy Carolinas, LLC	03/13	Duke Energy Carolinas, LLC	Docket No. 2013-59-E	Return on Equity
South Carolina Electric & Gas	06/12	South Carolina Electric & Gas	Docket No. 2012-218-E	Return on Equity
Duke Energy Carolinas, LLC	08/11	Duke Energy Carolinas, LLC	Docket No. 2011-271-E	Return on Equity
South Carolina Electric & Gas	03/10	South Carolina Electric & Gas	Docket No. 2009-489-E	Return on Equity
South Dakota Public Utilities Commission				
Otter Tail Power Company	08/10	Otter Tail Power Company	Docket No. EL10-011	Return on Equity (electric)
Northern States Power Company	06/09	South Dakota Division of Northern States Power	Docket No. EL09-009	Return on Equity (electric)
Otter Tail Power Company	10/08	Otter Tail Power Company	Docket No. EL08-030	Return on Equity (electric)
Texas Public Utility Commission				
Oncor Electric Delivery Company, LLC	03/17	Oncor Electric Delivery Company, LLC	Docket No. 46957	Return on Equity
El Paso Electric Company	02/17	El Paso Electric Company	Docket No. 46831	Return on Equity
Atmos Pipeline - Texas	01/17	Atmos Pipeline - Texas	Docket No. 10580	Return on Equity
Southwestern Public Service Company	12/16	Southwestern Public Service Company	Docket No. 46449	Return on Equity (electric)
Sharyland Utilities, L.P.	12/16	Sharyland Utilities, L.P.	Docket No. 45414	Return on Equity
Southwestern Public Service Company	09/16	Southwestern Public Service Company	Docket No. 44524	Return on Equity (electric)
Wind Energy Transmission Texas, LLC	05/15	Wind Energy Transmission Texas, LLC	Docket No. 44746	Return on Equity
Cross Texas Transmission	12/14	Cross Texas Transmission	Docket No. 43950	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Southwestern Public Service Company	12/14	Southwestern Public Service Company	Docket No. 43695	Return on Equity (electric)
Sharyland Utilities, L.P.	05/13	Sharyland Utilities, L.P.	Docket No. 41474	Return on Equity
Wind Energy Texas Transmission, LLC	08/12	Wind Energy Texas Transmission, LLC	Docket No. 40606	Return on Equity
Southwestern Electric Power Company	07/12	Southwestern Electric Power Company	Docket No. 40443	Return on Equity
Oncor Electric Delivery Company, LLC	01/11	Oncor Electric Delivery Company, LLC	Docket No. 38929	Return on Equity
Texas-New Mexico Power Company	08/10	Texas-New Mexico Power Company	Docket No. 38480	Return on Equity (electric)
CenterPoint Energy Houston Electric LLC	06/10	CenterPoint Energy Houston Electric LLC	Docket No. 38339	Return on Equity
Xcel Energy, Inc.	05/10	Southwestern Public Service Company	Docket No. 38147	Return on Equity (electric)
Texas-New Mexico Power Company	08/08	Texas-New Mexico Power Company	Docket No. 36025	Return on Equity (electric)
Xcel Energy, Inc.	05/06	Southwestern Public Service Company	Docket No. 32766	Return on Equity (electric)
Texas Railroad Commission				
Centerpoint Energy Resources Corp. D/B/A Centerpoint Energy Entex And Centerpoint Energy Texas Gas	12/16	Centerpoint Energy Resources Corp. D/B/A Centerpoint Energy Entex And Centerpoint Energy Texas Gas	D-GUD-10567	Return on Equity
Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	03/15	Centerpoint Energy Resources Corp. d/b/a Centerpoint Energy Entex and Centerpoint Energy Texas Gas	GUD 10432	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/12	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 10182	Return on Equity
Atmos Energy Corporation – West Texas Division	06/12	Atmos Energy Corporation – West Texas Division	GUD 10175	Return on Equity
Atmos Energy Corporation – Mid-Texas Division	06/12	Atmos Energy Corporation – Mid-Texas Division	GUD 10171	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	12/10	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 10038	Return on Equity
Atmos Pipeline – Texas	09/10	Atmos Pipeline - Texas	GUD 10000	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	07/09	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD 9902	Return on Equity
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	03/08	CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Texas Gas	GUD 9791	Return on Equity
Utah Public Service Commission				
Questar Gas Company	12/07	Questar Gas Company	Docket No. 07-057-13	Return on Equity
Vermont Public Service Board				
Central Vermont Public Service Corporation; Green Mountain Power	02/12	Central Vermont Public Service Corporation; Green Mountain Power	Docket No. 7770	Merger Policy
Central Vermont Public Service Corporation	12/10	Central Vermont Public Service Corporation	Docket No. 7627	Return on Equity (electric)
Green Mountain Power	04/06	Green Mountain Power	Docket Nos. 7175 and 7176	Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket Nos. 7109 and 7160	Return on Equity (gas)
Virginia State Corporation Commission				
Virginia Natural Gas, Inc.	03/17	Virginia Natural Gas, Inc.	Case No. PUE-2016-00143	Return on Equity
Virginia Electric and Power Company	10/16	Virginia Electric and Power Company	Case No. PUE-2016-00112; PUE-2016-00113; PUE-2016-00136	Return on Equity
Washington Gas Light Company	07/16	Washington Gas Light Company	Case No. PUE-2016-00001	Return on Equity
Virginia Electric and Power Company	06/16	Virginia Electric and Power Company	Case Nos. PUE-2016-00063; PUE-2016-00062; PUE-2016-00061; PUE-2016-00060; PUE-2016-00059	Return on Equity
Virginia Electric and Power Company	12/15	Virginia Electric and Power Company	Case Nos. PUE-2015-0058; PUE-2015-0059; PUE-2015-0060; PUE-2015-0061; PUE-2015-0075; PUE-2015-0089; PUE-2015-0102; PUE-2015-0104	Return on Equity
Virginia Electric and Power Company	03/15	Virginia Electric and Power Company	Case No. PUE-2015-00027	Return on Equity
Virginia Electric and Power Company	03/13	Virginia Electric and Power Company	Case No. PUE-2013-00020	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Virginia Natural Gas, Inc.	02/11	Virginia Natural Gas, Inc.	Case No. PUE-2010-00142	Capital Structure
Columbia Gas of Virginia, Inc.	06/06	Columbia Gas of Virginia, Inc.	Case No. PUE-2005-00098	Merger Synergies
Dominion Resources	10/01	Virginia Electric and Power Company	Case No. PUE000584	Corporate Structure and Electric Generation Strategy

Expert Report

United States District Court, Western District of Texas, Austin Division				
Southwestern Public Service Company	02/12	Southwestern Public Service Company	C.A. No. A-09-CA-917-SS	PURPA and FERC regulations

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Black Hills Corporation	BKH	\$1.78	\$67.07	2.65%	2.75%	5.00%	10.38%	7.50%	5.41%	7.07%	7.72%	9.82%	13.17%
CenterPoint Energy, Inc.	CNP	\$1.07	\$27.94	3.83%	3.94%	5.00%	6.06%	6.00%	4.98%	5.51%	8.90%	9.44%	10.01%
Sempra Energy	SRE	\$3.29	\$111.49	2.95%	3.06%	8.70%	9.87%	8.00%	2.73%	7.32%	5.72%	10.38%	12.97%
Vectren Corporation	VVC	\$1.68	\$58.79	2.86%	2.95%	5.70%	5.57%	7.00%	6.46%	6.18%	8.51%	9.13%	9.96%
Atmos Energy Corporation	ATO	\$1.80	\$80.11	2.25%	2.33%	7.00%	6.90%	6.00%	8.67%	7.14%	8.31%	9.47%	11.01%
Chesapeake Utilities Corporation	CPK	\$1.22	\$70.37	1.73%	1.81%	6.00%	6.00%	8.00%	14.38%	8.60%	7.79%	10.40%	16.24%
Northwest Natural Gas Company	NWN	\$1.88	\$59.56	3.16%	3.23%	4.30%	4.50%	6.00%	3.46%	4.57%	6.68%	7.79%	9.25%
Southwest Gas Corporation	SWX	\$1.98	\$83.71	2.37%	2.43%	5.00%	4.00%	6.50%	8.02%	5.88%	6.41%	8.31%	10.48%
Spire Inc	SR	\$2.10	\$68.14	3.08%	3.16%	4.10%	4.05%	8.00%	5.24%	5.35%	7.19%	8.51%	11.21%
Proxy Group Mean				2.76%	2.85%	5.64%	6.37%	7.00%	6.59%	6.40%	7.47%	9.25%	11.59%
Proxy Group Median				2.86%	2.95%	5.00%	6.00%	7.00%	5.41%	6.18%	7.72%	9.44%	11.01%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals indicated number of trading day average as of April 28, 2017

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: Exhibit RBH-3, Value Line

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
90 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Black Hills Corporation	BKH	\$1.78	\$64.03	2.78%	2.88%	5.00%	10.38%	7.50%	5.41%	7.07%	7.85%	9.95%	13.30%
CenterPoint Energy, Inc.	CNP	\$1.07	\$26.72	4.00%	4.12%	5.00%	6.06%	6.00%	4.98%	5.51%	9.08%	9.62%	10.19%
Sempra Energy	SRE	\$3.29	\$106.86	3.08%	3.19%	8.70%	9.87%	8.00%	2.73%	7.32%	5.85%	10.52%	13.10%
Vectren Corporation	VVC	\$1.68	\$55.95	3.00%	3.10%	5.70%	5.57%	7.00%	6.46%	6.18%	8.66%	9.28%	10.11%
Atmos Energy Corporation	ATO	\$1.80	\$77.26	2.33%	2.41%	7.00%	6.90%	6.00%	8.67%	7.14%	8.40%	9.56%	11.10%
Chesapeake Utilities Corporation	CPK	\$1.22	\$67.73	1.80%	1.88%	6.00%	6.00%	8.00%	14.38%	8.60%	7.86%	10.47%	16.32%
Northwest Natural Gas Company	NWN	\$1.88	\$59.31	3.17%	3.24%	4.30%	4.50%	6.00%	3.46%	4.57%	6.69%	7.81%	9.26%
Southwest Gas Corporation	SWX	\$1.98	\$81.56	2.43%	2.50%	5.00%	4.00%	6.50%	8.02%	5.88%	6.48%	8.38%	10.55%
Spire Inc	SR	\$2.10	\$65.81	3.19%	3.28%	4.10%	4.05%	8.00%	5.24%	5.35%	7.31%	8.62%	11.32%
Proxy Group Mean				2.87%	2.95%	5.64%	6.37%	7.00%	6.59%	6.40%	7.57%	9.36%	11.69%
Proxy Group Median				3.00%	3.10%	5.00%	6.00%	7.00%	5.41%	6.18%	7.85%	9.56%	11.10%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals indicated number of trading day average as of April 28, 2017

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: Exhibit RBH-3, Value Line

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
180 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	High ROE
Black Hills Corporation	BKH	\$1.78	\$61.79	2.88%	2.98%	5.00%	10.38%	7.50%	5.41%	7.07%	7.95%	10.05%	13.41%
CenterPoint Energy, Inc.	CNP	\$1.07	\$24.91	4.30%	4.41%	5.00%	6.06%	6.00%	4.98%	5.51%	9.38%	9.92%	10.49%
Sempra Energy	SRE	\$3.29	\$105.28	3.12%	3.24%	8.70%	9.87%	8.00%	2.73%	7.32%	5.90%	10.56%	13.15%
Vectren Corporation	VVC	\$1.68	\$52.69	3.19%	3.29%	5.70%	5.57%	7.00%	6.46%	6.18%	8.85%	9.47%	10.30%
Atmos Energy Corporation	ATO	\$1.80	\$75.17	2.39%	2.48%	7.00%	6.90%	6.00%	8.67%	7.14%	8.47%	9.62%	11.17%
Chesapeake Utilities Corporation	CPK	\$1.22	\$65.49	1.86%	1.94%	6.00%	6.00%	8.00%	14.38%	8.60%	7.92%	10.54%	16.38%
Northwest Natural Gas Company	NWN	\$1.88	\$59.19	3.18%	3.25%	4.30%	4.50%	6.00%	3.46%	4.57%	6.70%	7.81%	9.27%
Southwest Gas Corporation	SWX	\$1.98	\$76.46	2.59%	2.67%	5.00%	4.00%	6.50%	8.02%	5.88%	6.64%	8.55%	10.71%
Spire Inc	SR	\$2.10	\$64.75	3.24%	3.33%	4.10%	4.05%	8.00%	5.24%	5.35%	7.36%	8.68%	11.37%
Proxy Group Mean				2.97%	3.07%	5.64%	6.37%	7.00%	6.59%	6.40%	7.68%	9.47%	11.81%
Proxy Group Median				3.12%	3.24%	5.00%	6.00%	7.00%	5.41%	6.18%	7.92%	9.62%	11.17%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals indicated number of trading day average as of April 28, 2017

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[5] Source: Zacks

[6] Source: Yahoo! Finance

[7] Source: Value Line

[8] Source: Exhibit RBH-3, Value Line

[9] Equals Average([5], [6], [7], [8])

[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])

[11] Equals [4] + [9]

[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Retention Growth Estimate

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]
		Projected Earnings per share 2020-22	Projected Dividend Declared per share 2020-22	Retention Ratio (B)	Projected Book Value per Share 2020-22	Return on Book Value (R)	B x R	Projected Common Shares Outstanding 2017	Projected Common Shares Outstanding 2020-22	Common Shares Growth Rate	2017 High Price	2017 Low Price	2017 Price Midpoint	Projected Book Value per Share 2017	Market/Book Ratio	"S"	"V"	S x V	BR + SV
Black Hills Corporation	BKH	4.25	2.20	48.24%	41.00	10.37%	5.00%	60.25	61.00	0.41%	\$ 68.60	\$ 60.00	\$ 64.30	32.25	1.99	0.82%	49.84%	0.41%	5.41%
CenterPoint Energy, Inc.	CNP	1.65	1.23	25.45%	9.75	16.92%	4.31%	431.00	435.00	0.31%	\$ 28.10	\$ 24.50	\$ 26.30	8.25	3.19	0.97%	68.63%	0.67%	4.98%
Sempra Energy	SRE	7.50	4.55	39.33%	57.75	12.99%	5.11%	254.00	236.00	-2.40%	\$ 113.10	\$ 99.70	\$ 106.40	53.40	1.99	-4.77%	49.81%	-2.38%	2.73%
Vectren Corporation	VVC	3.45	2.00	42.03%	27.05	12.75%	5.36%	84.00	86.00	0.78%	\$ 57.10	\$ 51.50	\$ 54.30	22.50	2.41	1.88%	58.56%	1.10%	6.46%
Atmos Energy Corporation	ATO	4.50	2.30	48.89%	38.50	11.69%	5.71%	110.00	120.00	2.91%	\$ 77.00	\$ 72.50	\$ 74.75	37.10	2.01	5.87%	50.37%	2.96%	8.67%
Chesapeake Utilities Corporation	CPK	4.20	1.55	63.10%	32.90	12.77%	8.05%	17.50	20.00	4.51%	\$ 68.80	\$ 63.00	\$ 65.90	27.40	2.41	10.84%	58.42%	6.33%	14.38%
Northwest Natural Gas Company	NWN	3.15	2.05	34.92%	31.75	9.92%	3.46%	30.00	30.00	0.00%	\$ 60.70	\$ 57.10	\$ 58.90	28.45	2.07	0.00%	51.70%	0.00%	3.46%
Southwest Gas Corporation	SWX	4.75	2.50	47.37%	39.60	11.99%	5.68%	50.00	53.00	1.94%	\$ 84.00	\$ 75.60	\$ 79.80	36.20	2.20	4.28%	54.64%	2.34%	8.02%
Spire Inc	SR	4.65	2.50	46.24%	48.30	9.63%	4.45%	48.00	50.00	1.36%	\$ 66.10	\$ 62.30	\$ 64.20	40.65	1.58	2.14%	36.68%	0.79%	5.24%
Average:																		6.59%	

Notes:

- [1] Source: Value Line
 [2] Source: Value Line
 [3] Equals 1 - [2] / [1]
 [4] Source: Value Line
 [5] Equals [1] / [4]
 [6] Equals [3] x [5]
 [7] Source: Value Line
 [8] Source: Value Line
 [9] Equals ([8] / [7]) ^ 0.33 - 1
 [10] Source: Value Line
 [11] Source: Value Line
 [12] Equals Average ([10], [11])
 [13] Source: Value Line
 [14] Equals [12] / [13]
 [15] Equals [9] x [14]
 [16] Equals 1 - (1 / [14])
 [17] Equals [15] x [16]
 [18] Equals [6] + [17]

Multi-Stage Growth Discounted Cash Flow Model
30 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
	Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal		
			Value	Retention										
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2017	2021	2027	Proof	IRR	P/E RatioPEG Ratio
Black Hills Corporation	BKH	\$67.07	5.00%	10.38%	7.50%	5.41%	7.07%	5.48%	50.00%	52.00%	65.58%	\$0.00	8.87%	20.39 3.72
CenterPoint Energy, Inc.	CNP	\$27.94	5.00%	6.06%	6.00%	4.98%	5.51%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.46%	23.23 4.24
Sempra Energy	SRE	\$111.49	8.70%	9.87%	8.00%	2.73%	7.32%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	9.47%	17.36 3.17
Vectren Corporation	VVC	\$58.79	5.70%	5.57%	7.00%	6.46%	6.18%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.62%	22.02 4.02
Atmos Energy Corporation	ATO	\$80.11	7.00%	6.90%	6.00%	8.67%	7.14%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.60%	22.18 4.05
Chesapeake Utilities Corporation	CPK	\$70.37	6.00%	6.00%	8.00%	14.38%	8.60%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	8.79%	20.90 3.81
Northwest Natural Gas Company	NWN	\$59.56	4.30%	4.50%	6.00%	3.46%	4.57%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.78%	30.10 5.49
Southwest Gas Corporation	SWX	\$83.71	5.00%	4.00%	6.50%	8.02%	5.88%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.06%	26.80 4.89
Spire Inc	SR	\$68.14	4.10%	4.05%	8.00%	5.24%	5.35%	5.48%	60.00%	54.00%	65.58%	\$0.00	8.81%	20.77 3.79

Mean 8.61%
Max 9.47%
Min 7.78%

Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Black Hills Corporation	BKH	\$2.83	\$3.03	\$3.24	\$3.47	\$3.72	\$3.98	\$4.26	\$4.55	\$4.85	\$5.16	\$5.47	\$5.78	\$6.10	\$6.43	\$6.78	\$7.16	\$7.55
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$2.05	\$2.17	\$2.28	\$2.41	\$2.54
Sempra Energy	SRE	\$5.23	\$5.61	\$6.02	\$6.47	\$6.94	\$7.45	\$7.99	\$8.55	\$9.13	\$9.71	\$10.30	\$10.90	\$11.50	\$12.13	\$12.79	\$13.49	\$14.23
Vectren Corporation	VVC	\$2.39	\$2.54	\$2.69	\$2.86	\$3.04	\$3.23	\$3.43	\$3.63	\$3.85	\$4.07	\$4.31	\$4.55	\$4.80	\$5.06	\$5.34	\$5.63	\$5.94
Atmos Energy Corporation	ATO	\$3.09	\$3.31	\$3.55	\$3.80	\$4.07	\$4.36	\$4.67	\$5.00	\$5.32	\$5.66	\$6.00	\$6.35	\$6.70	\$7.06	\$7.45	\$7.86	\$8.29
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.91	\$3.16	\$3.43	\$3.73	\$4.05	\$4.40	\$4.75	\$5.11	\$5.47	\$5.83	\$6.18	\$6.51	\$6.87	\$7.25	\$7.65	\$8.06
Northwest Natural Gas Company	NWN	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.45	\$2.56	\$2.68	\$2.81	\$2.96	\$3.11	\$3.27	\$3.45	\$3.64	\$3.84	\$4.05	\$4.27
Southwest Gas Corporation	SWX	\$2.92	\$3.09	\$3.27	\$3.47	\$3.67	\$3.89	\$4.11	\$4.35	\$4.60	\$4.86	\$5.14	\$5.42	\$5.72	\$6.03	\$6.36	\$6.71	\$7.08
Spire Inc	SR	\$3.16	\$3.33	\$3.51	\$3.69	\$3.89	\$4.10	\$4.32	\$4.55	\$4.80	\$5.06	\$5.33	\$5.62	\$5.93	\$6.26	\$6.60	\$6.96	\$7.34

Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value
Black Hills Corporation	BKH	\$1.62	\$1.75	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$153.95
CenterPoint Energy, Inc.	CNP	\$0.99	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$59.04
Sempra Energy	SRE	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$247.16
Vectren Corporation	VVC	\$1.70	\$1.77	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$130.79
Atmos Energy Corporation	ATO	\$1.81	\$1.94	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$183.83
Chesapeake Utilities Corporation	CPK	\$1.42	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$168.54
Northwest Natural Gas Company	NWN	\$1.71	\$1.71	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$128.67
Southwest Gas Corporation	SWX	\$1.73	\$1.83	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$189.77
Spire Inc	SR	\$2.10	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$152.47

Projected Annual Data		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Investor Cash Flows																			
Company	Ticker	Initial	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$67.07)	\$0.00	\$1.10	\$1.68	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$158.90
CenterPoint Energy, Inc.	CNP	(\$27.94)	\$0.00	\$0.67	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$60.71
Sempra Energy	SRE	(\$111.49)	\$0.00	\$2.65	\$4.06	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$256.49
Vectren Corporation	VVC	(\$58.79)	\$0.00	\$1.15	\$1.75	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$134.68
Atmos Energy Corporation	ATO	(\$80.11)	\$0.00	\$1.22	\$1.87	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$189.27
Chesapeake Utilities Corporation	CPK	(\$70.37)	\$0.00	\$0.96	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$173.83
Northwest Natural Gas Company	NWN	(\$59.56)	\$0.00	\$1.16	\$1.75	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$131.48
Southwest Gas Corporation	SWX	(\$83.71)	\$0.00	\$1.17	\$1.79	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$194.41
Spire Inc	SR	(\$68.14)	\$0.00	\$1.42	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$157.28

Multi-Stage Growth Discounted Cash Flow Model
30 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
		Stock	EPS Growth Rate Estimates				Low	Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal					
			Zacks	First Call	Value Line	Retention Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio				
Company	Ticker	Price																	
Black Hills Corporation	BKH	\$67.07	5.00%	10.38%	7.50%	5.41%	5.00%	5.48%	50.00%	52.00%	65.58%	\$0.00	8.39%	23.78	4.34				
CenterPoint Energy, Inc.	CNP	\$27.94	5.00%	6.06%	6.00%	4.98%	4.98%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.34%	24.21	4.42				
Sempra Energy	SRE	\$111.49	8.70%	9.87%	8.00%	2.73%	2.73%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	8.29%	24.61	4.49				
Vectren Corporation	VVC	\$58.79	5.70%	5.57%	7.00%	6.46%	5.57%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.48%	23.06	4.21				
Atmos Energy Corporation	ATO	\$80.11	7.00%	6.90%	6.00%	8.67%	6.00%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	8.35%	24.13	4.40				
Chesapeake Utilities Corporation	CPK	\$70.37	6.00%	6.00%	8.00%	14.38%	6.00%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	8.23%	25.19	4.59				
Northwest Natural Gas Company	NWN	\$59.56	4.30%	4.50%	6.00%	3.46%	3.46%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.59%	32.84	5.99				
Southwest Gas Corporation	SWX	\$83.71	5.00%	4.00%	6.50%	8.02%	4.00%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	7.72%	30.93	5.64				
Spire Inc	SR	\$68.14	4.10%	4.05%	8.00%	5.24%	4.05%	5.48%	60.00%	54.00%	65.58%	\$0.00	8.50%	22.91	4.18				
													Mean	8.21%					
													Max	8.50%					
													Min	7.59%					
Projected Annual Earnings per Share																			
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH	\$2.83	\$2.97	\$3.12	\$3.28	\$3.44	\$3.61	\$3.79	\$3.99	\$4.19	\$4.41	\$4.65	\$4.90	\$5.16	\$5.45	\$5.75	\$6.06	\$6.39	
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.13	\$1.19	\$1.25	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.68	\$1.77	\$1.86	\$1.97	\$2.07	\$2.19	\$2.31	\$2.44	
Sempra Energy	SRE	\$5.23	\$5.37	\$5.52	\$5.67	\$5.82	\$5.98	\$6.15	\$6.34	\$6.57	\$6.84	\$7.16	\$7.52	\$7.93	\$8.36	\$8.82	\$9.30	\$9.81	
Vectren Corporation	VVC	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.31	\$3.49	\$3.69	\$3.89	\$4.10	\$4.33	\$4.57	\$4.82	\$5.08	\$5.36	\$5.65	
Atmos Energy Corporation	ATO	\$3.09	\$3.28	\$3.47	\$3.68	\$3.90	\$4.14	\$4.38	\$4.64	\$4.91	\$5.19	\$5.49	\$5.79	\$6.11	\$6.45	\$6.80	\$7.17	\$7.57	
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38	\$3.59	\$3.80	\$4.03	\$4.26	\$4.51	\$4.76	\$5.03	\$5.30	\$5.59	\$5.90	\$6.22	\$6.56	
Northwest Natural Gas Company	NWN	\$1.96	\$2.03	\$2.10	\$2.17	\$2.25	\$2.32	\$2.40	\$2.50	\$2.60	\$2.72	\$2.85	\$2.99	\$3.16	\$3.33	\$3.51	\$3.70	\$3.91	
Southwest Gas Corporation	SWX	\$2.92	\$3.04	\$3.16	\$3.28	\$3.42	\$3.55	\$3.69	\$3.85	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.77	\$6.08	
Spire Inc	SR	\$3.16	\$3.29	\$3.42	\$3.56	\$3.70	\$3.85	\$4.01	\$4.18	\$4.37	\$4.58	\$4.81	\$5.06	\$5.34	\$5.63	\$5.94	\$6.27	\$6.61	
Projected Annual Dividend Payout Ratio																			
			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%			
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%			
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%			
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%			
Projected Annual Cash Flows																			
			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value		
Black Hills Corporation	BKH	\$1.56	\$1.65	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$152.01		
CenterPoint Energy, Inc.	CNP	\$0.98	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$58.96		
Sempra Energy	SRE	\$3.59	\$3.63	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$241.51		
Vectren Corporation	VVC	\$1.68	\$1.74	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$130.38		
Atmos Energy Corporation	ATO	\$1.77	\$1.88	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$182.58		
Chesapeake Utilities Corporation	CPK	\$1.36	\$1.37	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$165.28		
Northwest Natural Gas Company	NWN	\$1.68	\$1.66	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$128.32		
Southwest Gas Corporation	SWX	\$1.67	\$1.73	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$188.14		
Spire Inc	SR	\$2.05	\$2.08	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$151.38		
Projected Annual Data Investor Cash Flows																			
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$67.07)	\$0.00	\$1.06	\$1.60	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$156.20
CenterPoint Energy, Inc.	CNP	(\$27.94)	\$0.00	\$0.66	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$60.55
Sempra Energy	SRE	(\$111.49)	\$0.00	\$2.43	\$3.64	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$247.95
Vectren Corporation	VVC	(\$58.79)	\$0.00	\$1.14	\$1.72	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$134.09
Atmos Energy Corporation	ATO	(\$80.11)	\$0.00	\$1.20	\$1.82	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$187.54
Chesapeake Utilities Corporation	CPK	(\$70.37)	\$0.00	\$0.92	\$1.40	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$169.58
Northwest Natural Gas Company	NWN	(\$59.56)	\$0.00	\$1.14	\$1.71	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$130.88
Southwest Gas Corporation	SWX	(\$83.71)	\$0.00	\$1.13	\$1.71	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$192.13
Spire Inc	SR	(\$68.14)	\$0.00	\$1.39	\$2.09	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$155.72

Multi-Stage Growth Discounted Cash Flow Model
30 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal							
Company	Ticker	Price	Zacks	First Call	Value Line	Retention Growth	High Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$67.07	5.00%	10.38%	7.50%	5.41%	10.38%	5.48%	50.00%	52.00%	65.58%	\$0.00	9.77%	16.14	2.94					
CenterPoint Energy, Inc.	CNP	\$27.94	5.00%	6.06%	6.00%	4.98%	6.06%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.59%	22.26	4.06					
Sempra Energy	SRE	\$111.49	8.70%	9.87%	8.00%	2.73%	9.87%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	10.26%	14.48	2.64					
Vectren Corporation	VVC	\$58.79	5.70%	5.57%	7.00%	6.46%	7.00%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.82%	20.72	3.78					
Atmos Energy Corporation	ATO	\$80.11	7.00%	6.90%	6.00%	8.67%	8.67%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	8.96%	19.86	3.62					
Chesapeake Utilities Corporation	CPK	\$70.37	6.00%	6.00%	8.00%	14.38%	14.38%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	10.35%	14.20	2.59					
Northwest Natural Gas Company	NWN	\$59.56	4.30%	4.50%	6.00%	3.46%	6.00%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	8.05%	26.93	4.91					
Southwest Gas Corporation	SWX	\$83.71	5.00%	4.00%	6.50%	8.02%	8.02%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.51%	22.87	4.17					
Spire Inc	SR	\$68.14	4.10%	4.05%	8.00%	5.24%	8.00%	5.48%	60.00%	54.00%	65.58%	\$0.00	9.53%	17.11	3.12					
												Mean	9.20%							
												Max	10.35%							
												Min	8.05%							
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$3.12	\$3.45	\$3.81	\$4.20	\$4.64	\$5.12	\$5.61	\$6.10	\$6.58	\$7.05	\$7.49	\$7.91	\$8.34	\$8.80	\$9.28	\$9.79		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.15	\$1.21	\$1.29	\$1.37	\$1.45	\$1.54	\$1.63	\$1.72	\$1.82	\$1.93	\$2.03	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66		
Sempra Energy	SRE	\$5.23	\$5.75	\$6.31	\$6.94	\$7.62	\$8.37	\$9.20	\$10.04	\$10.88	\$11.72	\$12.53	\$13.31	\$14.04	\$14.81	\$15.62	\$16.48	\$17.38		
Vectren Corporation	VVC	\$2.39	\$2.56	\$2.74	\$2.93	\$3.13	\$3.35	\$3.59	\$3.83	\$4.08	\$4.33	\$4.59	\$4.85	\$5.12	\$5.40	\$5.70	\$6.01	\$6.34		
Atmos Energy Corporation	ATO	\$3.09	\$3.36	\$3.65	\$3.97	\$4.31	\$4.68	\$5.09	\$5.50	\$5.92	\$6.34	\$6.76	\$7.16	\$7.55	\$7.97	\$8.41	\$8.87	\$9.35		
Chesapeake Utilities Corporation	CPK	\$2.68	\$3.07	\$3.51	\$4.01	\$4.59	\$5.25	\$6.00	\$6.78	\$7.55	\$8.30	\$9.00	\$9.63	\$10.16	\$10.71	\$11.30	\$11.92	\$12.57		
Northwest Natural Gas Company	NWN	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	\$2.62	\$2.78	\$2.94	\$3.12	\$3.30	\$3.48	\$3.68	\$3.88	\$4.09	\$4.31	\$4.55	\$4.80		
Southwest Gas Corporation	SWX	\$2.92	\$3.15	\$3.41	\$3.68	\$3.98	\$4.29	\$4.64	\$4.99	\$5.35	\$5.71	\$6.07	\$6.43	\$6.78	\$7.15	\$7.55	\$7.96	\$8.40		
Spire Inc	SR	\$3.16	\$3.41	\$3.69	\$3.98	\$4.30	\$4.64	\$5.01	\$5.39	\$5.78	\$6.17	\$6.56	\$6.95	\$7.33	\$7.73	\$8.15	\$8.60	\$9.07		
Projected Annual Dividend Payout Ratio																				
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%				
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%				
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%				
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%				
Projected Annual Cash Flows																				
					[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value			
Black Hills Corporation	BKH	\$1.72	\$1.92	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$157.90			
CenterPoint Energy, Inc.	CNP	\$1.00	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$59.14			
Sempra Energy	SRE	\$4.10	\$4.44	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$251.71			
Vectren Corporation	VVC	\$1.72	\$1.81	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$131.37			
Atmos Energy Corporation	ATO	\$1.86	\$2.02	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$185.72			
Chesapeake Utilities Corporation	CPK	\$1.58	\$1.72	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$178.54			
Northwest Natural Gas Company	NWN	\$1.76	\$1.78	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$129.23			
Southwest Gas Corporation	SWX	\$1.81	\$1.94	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.89	\$5.22	\$5.51	\$5.81	\$192.03			
Spire Inc	SR	\$2.21	\$2.33	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$155.19			
Projected Annual Data Investor Cash Flows																				
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$67.07)	\$0.00	\$1.17	\$1.81	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$164.32	
CenterPoint Energy, Inc.	CNP	(\$27.94)	\$0.00	\$0.67	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$60.89	
Sempra Energy	SRE	(\$111.49)	\$0.00	\$2.78	\$4.31	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$263.11	
Vectren Corporation	VVC	(\$58.79)	\$0.00	\$1.17	\$1.78	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$135.53	
Atmos Energy Corporation	ATO	(\$80.11)	\$0.00	\$1.26	\$1.94	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$191.86	
Chesapeake Utilities Corporation	CPK	(\$70.37)	\$0.00	\$1.07	\$1.69	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$186.78	
Northwest Natural Gas Company	NWN	(\$59.56)	\$0.00	\$1.19	\$1.81	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$132.38	
Southwest Gas Corporation	SWX	(\$83.71)	\$0.00	\$1.22	\$1.88	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.89	\$5.22	\$5.51	\$5.81	\$197.54	
Spire Inc	SR	(\$68.14)	\$0.00	\$1.50	\$2.30	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$161.14	

Multi-Stage Growth Discounted Cash Flow Model
90 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio			Iterative Solution		Terminal	Terminal				
			Value		Retention														
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio				
Black Hills Corporation	BKH	\$64.03	5.00%	10.38%	7.50%	5.41%	7.07%	5.48%	50.00%	52.00%	65.58%	\$0.00	9.03%	19.49	3.56				
CenterPoint Energy, Inc.	CNP	\$26.72	5.00%	6.06%	6.00%	4.98%	5.51%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.60%	22.15	4.04				
Sempra Energy	SRE	\$106.86	8.70%	9.87%	8.00%	2.73%	7.32%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	9.64%	16.63	3.03				
Vectren Corporation	VVC	\$55.95	5.70%	5.57%	7.00%	6.46%	6.18%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.78%	20.95	3.82				
Atmos Energy Corporation	ATO	\$77.26	7.00%	6.90%	6.00%	8.67%	7.14%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.71%	21.40	3.90				
Chesapeake Utilities Corporation	CPK	\$67.73	6.00%	6.00%	8.00%	14.38%	8.60%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	8.91%	20.16	3.68				
Northwest Natural Gas Company	NWN	\$59.31	4.30%	4.50%	6.00%	3.46%	4.57%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.79%	29.97	5.47				
Southwest Gas Corporation	SWX	\$81.56	5.00%	4.00%	6.50%	8.02%	5.88%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.13%	26.12	4.76				
Spire Inc	SR	\$65.81	4.10%	4.05%	8.00%	5.24%	5.35%	5.48%	60.00%	54.00%	65.58%	\$0.00	8.93%	20.05	3.66				
												Mean	8.73%						
												Max	9.64%						
												Min	7.79%						
Projected Annual Earnings per Share																			
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH	\$2.83	\$3.03	\$3.24	\$3.47	\$3.72	\$3.98	\$4.26	\$4.55	\$4.85	\$5.16	\$5.47	\$5.78	\$6.10	\$6.43	\$6.78	\$7.16	\$7.55	
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$2.05	\$2.17	\$2.28	\$2.41	\$2.54	
Sempra Energy	SRE	\$5.23	\$5.61	\$6.02	\$6.47	\$6.94	\$7.45	\$7.99	\$8.55	\$9.13	\$9.71	\$10.30	\$10.90	\$11.50	\$12.13	\$12.79	\$13.49	\$14.23	
Vectren Corporation	VVC	\$2.39	\$2.54	\$2.69	\$2.86	\$3.04	\$3.23	\$3.43	\$3.63	\$3.85	\$4.07	\$4.31	\$4.55	\$4.80	\$5.06	\$5.34	\$5.63	\$5.94	
Atmos Energy Corporation	ATO	\$3.09	\$3.31	\$3.55	\$3.80	\$4.07	\$4.36	\$4.67	\$5.00	\$5.32	\$5.66	\$6.00	\$6.35	\$6.70	\$7.06	\$7.45	\$7.86	\$8.29	
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.91	\$3.16	\$3.43	\$3.73	\$4.05	\$4.40	\$4.75	\$5.11	\$5.47	\$5.83	\$6.18	\$6.51	\$6.87	\$7.25	\$7.65	\$8.06	
Northwest Natural Gas Company	NWN	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.45	\$2.56	\$2.68	\$2.81	\$2.96	\$3.11	\$3.27	\$3.45	\$3.64	\$3.84	\$4.05	\$4.27	
Southwest Gas Corporation	SWX	\$2.92	\$3.09	\$3.27	\$3.47	\$3.67	\$3.89	\$4.11	\$4.35	\$4.60	\$4.86	\$5.14	\$5.42	\$5.72	\$6.03	\$6.36	\$6.71	\$7.08	
Spire Inc	SR	\$3.16	\$3.33	\$3.51	\$3.69	\$3.89	\$4.10	\$4.32	\$4.55	\$4.80	\$5.06	\$5.33	\$5.62	\$5.93	\$6.26	\$6.60	\$6.96	\$7.34	
Projected Annual Dividend Payout Ratio																			
				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH			50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%	
CenterPoint Energy, Inc.	CNP			82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%	
Sempra Energy	SRE			65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%	
Vectren Corporation	VVC			63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%	
Atmos Energy Corporation	ATO			51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%	
Chesapeake Utilities Corporation	CPK			45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%	
Northwest Natural Gas Company	NWN			80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%	
Southwest Gas Corporation	SWX			53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%	
Spire Inc	SR			60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%	
Projected Annual Cash Flows																			
				[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value
Black Hills Corporation	BKH			\$1.62	\$1.75	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$147.12
CenterPoint Energy, Inc.	CNP			\$0.99	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$56.32
Sempra Energy	SRE			\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$236.78
Vectren Corporation	VVC			\$1.70	\$1.77	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$124.42
Atmos Energy Corporation	ATO			\$1.81	\$1.94	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$177.40
Chesapeake Utilities Corporation	CPK			\$1.42	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$162.57
Northwest Natural Gas Company	NWN			\$1.71	\$1.71	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$128.11
Southwest Gas Corporation	SWX			\$1.73	\$1.83	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$184.95
Spire Inc	SR			\$2.10	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$147.23
Projected Annual Data Investor Cash Flows																			
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$64.03)	\$0.00	\$1.10	\$1.68	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$152.07
CenterPoint Energy, Inc.	CNP	(\$26.72)	\$0.00	\$0.67	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$57.99
Sempra Energy	SRE	(\$106.86)	\$0.00	\$2.65	\$4.06	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$246.11
Vectren Corporation	VVC	(\$55.95)	\$0.00	\$1.15	\$1.75	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$128.32
Atmos Energy Corporation	ATO	(\$77.26)	\$0.00	\$1.22	\$1.87	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$182.84
Chesapeake Utilities Corporation	CPK	(\$67.73)	\$0.00	\$0.96	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$167.86
Northwest Natural Gas Company	NWN	(\$59.31)	\$0.00	\$1.16	\$1.75	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$130.92
Southwest Gas Corporation	SWX	(\$81.56)	\$0.00	\$1.17	\$1.79	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$189.59
Spire Inc	SR	(\$65.81)	\$0.00	\$1.42	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$152.04

Multi-Stage Growth Discounted Cash Flow Model
90 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal		Terminal					
				Value	Retention	Low														
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$64.03	5.00%	10.38%	7.50%	5.41%	5.00%	5.48%	50.00%	52.00%	65.58%	\$0.00	8.53%	22.71	4.14					
CenterPoint Energy, Inc.	CNP	\$26.72	5.00%	6.06%	6.00%	4.98%	4.98%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.48%	23.09	4.21					
Sempra Energy	SRE	\$106.86	8.70%	9.87%	8.00%	2.73%	2.73%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	8.42%	23.55	4.30					
Vectren Corporation	VVC	\$55.95	5.70%	5.57%	7.00%	6.46%	5.57%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.63%	21.94	4.00					
Atmos Energy Corporation	ATO	\$77.26	7.00%	6.90%	6.00%	8.67%	6.00%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.45%	23.28	4.25					
Chesapeake Utilities Corporation	CPK	\$67.73	6.00%	6.00%	8.00%	14.38%	6.00%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	8.33%	24.28	4.43					
Northwest Natural Gas Company	NWN	\$59.31	4.30%	4.50%	6.00%	3.46%	3.46%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.60%	32.70	5.97					
Southwest Gas Corporation	SWX	\$81.56	5.00%	4.00%	6.50%	8.02%	4.00%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	7.78%	30.14	5.50					
Spire Inc	SR	\$65.81	4.10%	4.05%	8.00%	5.24%	4.05%	5.48%	60.00%	54.00%	65.58%	\$0.00	8.61%	22.11	4.03					
												Mean	8.31%							
												Max	8.63%							
												Min	7.60%							
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$2.97	\$3.12	\$3.28	\$3.44	\$3.61	\$3.79	\$3.99	\$4.19	\$4.41	\$4.65	\$4.90	\$5.16	\$5.45	\$5.75	\$6.06	\$6.39		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.13	\$1.19	\$1.25	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.68	\$1.77	\$1.86	\$1.97	\$2.07	\$2.19	\$2.31	\$2.44		
Sempra Energy	SRE	\$5.23	\$5.37	\$5.52	\$5.67	\$5.82	\$5.98	\$6.15	\$6.34	\$6.57	\$6.84	\$7.16	\$7.52	\$7.93	\$8.36	\$8.82	\$9.30	\$9.81		
Vectren Corporation	VVC	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.31	\$3.49	\$3.69	\$3.89	\$4.10	\$4.33	\$4.57	\$4.82	\$5.08	\$5.36	\$5.65		
Atmos Energy Corporation	ATO	\$3.09	\$3.28	\$3.47	\$3.68	\$3.90	\$4.14	\$4.38	\$4.64	\$4.91	\$5.19	\$5.49	\$5.79	\$6.11	\$6.45	\$6.80	\$7.17	\$7.57		
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38	\$3.59	\$3.80	\$4.03	\$4.26	\$4.51	\$4.76	\$5.03	\$5.30	\$5.59	\$5.90	\$6.22	\$6.56		
Northwest Natural Gas Company	NWN	\$1.96	\$2.03	\$2.10	\$2.17	\$2.25	\$2.32	\$2.40	\$2.50	\$2.60	\$2.72	\$2.85	\$2.99	\$3.16	\$3.33	\$3.51	\$3.70	\$3.91		
Southwest Gas Corporation	SWX	\$2.92	\$3.04	\$3.16	\$3.28	\$3.42	\$3.55	\$3.69	\$3.85	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.77	\$6.08		
Spire Inc	SR	\$3.16	\$3.29	\$3.42	\$3.56	\$3.70	\$3.85	\$4.01	\$4.18	\$4.37	\$4.58	\$4.81	\$5.06	\$5.34	\$5.63	\$5.94	\$6.27	\$6.61		
Projected Annual Dividend Payout Ratio																				
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%				
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%				
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%				
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%				
Projected Annual Cash Flows																				
					[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			Terminal Value	
Black Hills Corporation	BKH	\$1.56	\$1.65	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$4.41	\$4.65	\$4.90	
CenterPoint Energy, Inc.	CNP	\$0.98	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$1.68	\$1.77	\$1.86	
Sempra Energy	SRE	\$3.59	\$3.63	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$6.79	\$7.17	\$7.57	
Vectren Corporation	VVC	\$1.68	\$1.74	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$3.91	\$4.11	\$4.31	
Atmos Energy Corporation	ATO	\$1.77	\$1.88	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$5.22	\$5.48	\$5.74	
Chesapeake Utilities Corporation	CPK	\$1.36	\$1.37	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$4.53	\$4.76	\$5.00	
Northwest Natural Gas Company	NWN	\$1.68	\$1.66	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$2.70	\$2.83	\$2.96	
Southwest Gas Corporation	SWX	\$1.67	\$1.73	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$4.20	\$4.41	\$4.62	
Spire Inc	SR	\$2.05	\$2.08	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$4.55	\$4.77	\$5.00	
Projected Annual Data Investor Cash Flows																				
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	
Company	Ticker	Initial	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$64.03)	\$0.00	\$1.06	\$1.60	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$4.41	
CenterPoint Energy, Inc.	CNP	(\$26.72)	\$0.00	\$0.66	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$1.68	
Sempra Energy	SRE	(\$106.86)	\$0.00	\$2.43	\$3.64	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$6.79	
Vectren Corporation	VVC	(\$55.95)	\$0.00	\$1.14	\$1.72	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$3.91	
Atmos Energy Corporation	ATO	(\$77.26)	\$0.00	\$1.20	\$1.82	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$5.22	
Chesapeake Utilities Corporation	CPK	(\$67.73)	\$0.00	\$0.92	\$1.40	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$4.53	
Northwest Natural Gas Company	NWN	(\$59.31)	\$0.00	\$1.14	\$1.71	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$2.70	
Southwest Gas Corporation	SWX	(\$81.56)	\$0.00	\$1.13	\$1.71	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$4.20	
Spire Inc	SR	(\$65.81)	\$0.00	\$1.39	\$2.09	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$4.55	

Multi-Stage Growth Discounted Cash Flow Model
90 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Stock		EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution		Terminal	Terminal
				Value	Retention	High									
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio
Black Hills Corporation	BKH	\$64.03	5.00%	10.38%	7.50%	5.41%	10.38%	5.48%	50.00%	52.00%	65.58%	\$0.00	9.96%	15.43	2.82
CenterPoint Energy, Inc.	CNP	\$26.72	5.00%	6.06%	6.00%	4.98%	6.06%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.74%	21.23	3.87
Sempra Energy	SRE	\$106.86	8.70%	9.87%	8.00%	2.73%	9.87%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	10.46%	13.88	2.53
Vectren Corporation	VVC	\$55.95	5.70%	5.57%	7.00%	6.46%	7.00%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.99%	19.72	3.60
Atmos Energy Corporation	ATO	\$77.26	7.00%	6.90%	6.00%	8.67%	8.67%	5.48%	51.00%	51.00%	65.58%	\$0.00	9.09%	19.17	3.50
Chesapeake Utilities Corporation	CPK	\$67.73	6.00%	6.00%	8.00%	14.38%	14.38%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	10.52%	13.72	2.50
Northwest Natural Gas Company	NWN	\$59.31	4.30%	4.50%	6.00%	3.46%	6.00%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	8.06%	26.81	4.89
Southwest Gas Corporation	SWX	\$81.56	5.00%	4.00%	6.50%	8.02%	8.02%	5.48%	53.00%	52.00%	65.58%	\$0.00	8.58%	22.29	4.07
Spire Inc	SR	\$65.81	4.10%	4.05%	8.00%	5.24%	8.00%	5.48%	60.00%	54.00%	65.58%	\$0.00	9.67%	16.53	3.02

Mean 9.34%
Max 10.52%
Min 8.06%

Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Black Hills Corporation	BKH	\$2.83	\$3.12	\$3.45	\$3.81	\$4.20	\$4.64	\$5.12	\$5.61	\$6.10	\$6.58	\$7.05	\$7.49	\$7.91	\$8.34	\$8.80	\$9.28	\$9.79
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.15	\$1.21	\$1.29	\$1.37	\$1.45	\$1.54	\$1.63	\$1.72	\$1.82	\$1.93	\$2.03	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66
Sempra Energy	SRE	\$5.23	\$5.75	\$6.31	\$6.94	\$7.62	\$8.37	\$9.20	\$10.04	\$10.88	\$11.72	\$12.53	\$13.31	\$14.04	\$14.81	\$15.62	\$16.48	\$17.38
Vectren Corporation	VVC	\$2.39	\$2.56	\$2.74	\$2.93	\$3.13	\$3.35	\$3.59	\$3.83	\$4.08	\$4.33	\$4.59	\$4.85	\$5.12	\$5.40	\$5.70	\$6.01	\$6.34
Atmos Energy Corporation	ATO	\$3.09	\$3.36	\$3.65	\$3.97	\$4.31	\$4.68	\$5.09	\$5.50	\$5.92	\$6.34	\$6.76	\$7.16	\$7.55	\$7.97	\$8.41	\$8.87	\$9.35
Chesapeake Utilities Corporation	CPK	\$2.68	\$3.07	\$3.51	\$4.01	\$4.59	\$5.25	\$6.00	\$6.78	\$7.55	\$8.30	\$9.00	\$9.63	\$10.16	\$10.71	\$11.30	\$11.92	\$12.57
Northwest Natural Gas Company	NWN	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	\$2.62	\$2.78	\$2.94	\$3.12	\$3.30	\$3.48	\$3.68	\$3.88	\$4.09	\$4.31	\$4.55	\$4.80
Southwest Gas Corporation	SWX	\$2.92	\$3.15	\$3.41	\$3.68	\$3.98	\$4.29	\$4.64	\$4.99	\$5.35	\$5.71	\$6.07	\$6.43	\$6.78	\$7.15	\$7.55	\$7.96	\$8.40
Spire Inc	SR	\$3.16	\$3.41	\$3.69	\$3.98	\$4.30	\$4.64	\$5.01	\$5.39	\$5.78	\$6.17	\$6.56	\$6.95	\$7.33	\$7.73	\$8.15	\$8.60	\$9.07

Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value
Black Hills Corporation	BKH	\$1.72	\$1.92	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$151.05
CenterPoint Energy, Inc.	CNP	\$1.00	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$56.42
Sempra Energy	SRE	\$4.10	\$4.44	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$241.32
Vectren Corporation	VVC	\$1.72	\$1.81	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$125.01
Atmos Energy Corporation	ATO	\$1.86	\$2.02	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$179.29
Chesapeake Utilities Corporation	CPK	\$1.58	\$1.72	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$172.50
Northwest Natural Gas Company	NWN	\$1.76	\$1.78	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$128.67
Southwest Gas Corporation	SWX	\$1.81	\$1.94	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.84	\$5.22	\$5.51	\$5.81	\$187.21
Spire Inc	SR	\$2.21	\$2.33	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$149.94

Projected Annual Data		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Investor Cash Flows																			
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$64.03)	\$0.00	\$1.17	\$1.81	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$157.46
CenterPoint Energy, Inc.	CNP	(\$26.72)	\$0.00	\$0.67	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$58.16
Sempra Energy	SRE	(\$106.86)	\$0.00	\$2.78	\$4.31	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$252.72
Vectren Corporation	VVC	(\$55.95)	\$0.00	\$1.17	\$1.78	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$129.16
Atmos Energy Corporation	ATO	(\$77.26)	\$0.00	\$1.26	\$1.94	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$185.42
Chesapeake Utilities Corporation	CPK	(\$67.73)	\$0.00	\$1.07	\$1.69	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$180.75
Northwest Natural Gas Company	NWN	(\$59.31)	\$0.00	\$1.19	\$1.81	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$131.82
Southwest Gas Corporation	SWX	(\$81.56)	\$0.00	\$1.22	\$1.88	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.84	\$5.22	\$5.51	\$5.81	\$192.71
Spire Inc	SR	(\$65.81)	\$0.00	\$1.50	\$2.30	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$155.89

Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio			Iterative Solution		Terminal	Terminal				
			Value		Retention														
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio				
Black Hills Corporation	BKH	\$61.79	5.00%	10.38%	7.50%	5.41%	7.07%	5.48%	50.00%	52.00%	65.58%	\$0.00	9.16%	18.82	3.43				
CenterPoint Energy, Inc.	CNP	\$24.91	5.00%	6.06%	6.00%	4.98%	5.51%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.84%	20.57	3.75				
Sempra Energy	SRE	\$105.28	8.70%	9.87%	8.00%	2.73%	7.32%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	9.70%	16.39	2.99				
Vectren Corporation	VVC	\$52.69	5.70%	5.57%	7.00%	6.46%	6.18%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.99%	19.72	3.60				
Atmos Energy Corporation	ATO	\$75.17	7.00%	6.90%	6.00%	8.67%	7.14%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.80%	20.84	3.80				
Chesapeake Utilities Corporation	CPK	\$65.49	6.00%	6.00%	8.00%	14.38%	8.60%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	9.02%	19.53	3.56				
Northwest Natural Gas Company	NWN	\$59.19	4.30%	4.50%	6.00%	3.46%	4.57%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.79%	29.91	5.46				
Southwest Gas Corporation	SWX	\$76.46	5.00%	4.00%	6.50%	8.02%	5.88%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.31%	24.50	4.47				
Spire Inc	SR	\$64.75	4.10%	4.05%	8.00%	5.24%	5.35%	5.48%	60.00%	54.00%	65.58%	\$0.00	8.99%	19.73	3.60				
												Mean	8.85%						
												Max	9.70%						
												Min	7.79%						
Projected Annual Earnings per Share																			
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH	\$2.83	\$3.03	\$3.24	\$3.47	\$3.72	\$3.98	\$4.26	\$4.55	\$4.85	\$5.16	\$5.47	\$5.78	\$6.10	\$6.43	\$6.78	\$7.16	\$7.55	
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$2.05	\$2.17	\$2.28	\$2.41	\$2.54	
Sempra Energy	SRE	\$5.23	\$5.61	\$6.02	\$6.47	\$6.94	\$7.45	\$7.99	\$8.55	\$9.13	\$9.71	\$10.30	\$10.90	\$11.50	\$12.13	\$12.79	\$13.49	\$14.23	
Vectren Corporation	VVC	\$2.39	\$2.54	\$2.69	\$2.86	\$3.04	\$3.23	\$3.43	\$3.63	\$3.85	\$4.07	\$4.31	\$4.55	\$4.80	\$5.06	\$5.34	\$5.63	\$5.94	
Atmos Energy Corporation	ATO	\$3.09	\$3.31	\$3.55	\$3.80	\$4.07	\$4.36	\$4.67	\$5.00	\$5.32	\$5.66	\$6.00	\$6.35	\$6.70	\$7.06	\$7.45	\$7.86	\$8.29	
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.91	\$3.16	\$3.43	\$3.73	\$4.05	\$4.40	\$4.75	\$5.11	\$5.47	\$5.83	\$6.18	\$6.51	\$6.87	\$7.25	\$7.65	\$8.06	
Northwest Natural Gas Company	NWN	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.45	\$2.56	\$2.68	\$2.81	\$2.96	\$3.11	\$3.27	\$3.45	\$3.64	\$3.84	\$4.05	\$4.27	
Southwest Gas Corporation	SWX	\$2.92	\$3.09	\$3.27	\$3.47	\$3.67	\$3.89	\$4.11	\$4.35	\$4.60	\$4.86	\$5.14	\$5.42	\$5.72	\$6.03	\$6.36	\$6.71	\$7.08	
Spire Inc	SR	\$3.16	\$3.33	\$3.51	\$3.69	\$3.89	\$4.10	\$4.32	\$4.55	\$4.80	\$5.06	\$5.33	\$5.62	\$5.93	\$6.26	\$6.60	\$6.96	\$7.34	
Projected Annual Dividend Payout Ratio																			
				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%			
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%			
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%			
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%			
Projected Annual Cash Flows																			
			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value		
Black Hills Corporation	BKH	\$1.62	\$1.75	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$142.06		
CenterPoint Energy, Inc.	CNP	\$0.99	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$52.29		
Sempra Energy	SRE	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$233.25		
Vectren Corporation	VVC	\$1.70	\$1.77	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$117.11		
Atmos Energy Corporation	ATO	\$1.81	\$1.94	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$172.71		
Chesapeake Utilities Corporation	CPK	\$1.42	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$157.51		
Northwest Natural Gas Company	NWN	\$1.71	\$1.71	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$127.84		
Southwest Gas Corporation	SWX	\$1.73	\$1.83	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$173.48		
Spire Inc	SR	\$2.10	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$144.86		
Projected Annual Data Investor Cash Flows																			
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$61.79)	\$0.00	\$1.10	\$1.68	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$147.02
CenterPoint Energy, Inc.	CNP	(\$24.91)	\$0.00	\$0.67	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$53.95
Sempra Energy	SRE	(\$105.28)	\$0.00	\$2.65	\$4.06	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$242.58
Vectren Corporation	VVC	(\$52.69)	\$0.00	\$1.15	\$1.75	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$121.00
Atmos Energy Corporation	ATO	(\$75.17)	\$0.00	\$1.22	\$1.87	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$178.15
Chesapeake Utilities Corporation	CPK	(\$65.49)	\$0.00	\$0.96	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$162.80
Northwest Natural Gas Company	NWN	(\$59.19)	\$0.00	\$1.16	\$1.75	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$130.65
Southwest Gas Corporation	SWX	(\$76.46)	\$0.00	\$1.17	\$1.79	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$178.12
Spire Inc	SR	(\$64.75)	\$0.00	\$1.42	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$149.67

Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Value	Retention	Low	Long-Term	Payout Ratio	Iterative Solution	Terminal	Terminal						
			Zacks	First Call	Line	Growth	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E RatioPEG Ratio					
Company	Ticker	Price																		
Black Hills Corporation	BKH	\$61.79	5.00%	10.38%	7.50%	5.41%	5.00%	5.48%	50.00%	52.00%	65.58%	\$0.00	8.64%	21.92	4.00					
CenterPoint Energy, Inc.	CNP	\$24.91	5.00%	6.06%	6.00%	4.98%	4.98%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.71%	21.44	3.91					
Sempra Energy	SRE	\$105.28	8.70%	9.87%	8.00%	2.73%	2.73%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	8.46%	23.19	4.23					
Vectren Corporation	VVC	\$52.69	5.70%	5.57%	7.00%	6.46%	5.57%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	8.83%	20.64	3.77					
Atmos Energy Corporation	ATO	\$75.17	7.00%	6.90%	6.00%	8.67%	6.00%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.53%	22.66	4.13					
Chesapeake Utilities Corporation	CPK	\$65.49	6.00%	6.00%	8.00%	14.38%	6.00%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	8.42%	23.51	4.29					
Northwest Natural Gas Company	NWN	\$59.19	4.30%	4.50%	6.00%	3.46%	3.46%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.60%	32.63	5.95					
Southwest Gas Corporation	SWX	\$76.46	5.00%	4.00%	6.50%	8.02%	4.00%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	7.93%	28.26	5.16					
Spire Inc	SR	\$64.75	4.10%	4.05%	8.00%	5.24%	4.05%	5.48%	60.00%	54.00%	65.58%	\$0.00	8.66%	21.76	3.97					
													Mean	8.42%						
													Max	8.83%						
													Min	7.60%						
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$2.97	\$3.12	\$3.28	\$3.44	\$3.61	\$3.79	\$3.99	\$4.19	\$4.41	\$4.65	\$4.90	\$5.16	\$5.45	\$5.75	\$6.06	\$6.39		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.13	\$1.19	\$1.25	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.68	\$1.77	\$1.86	\$1.97	\$2.07	\$2.19	\$2.31	\$2.44		
Sempra Energy	SRE	\$5.23	\$5.37	\$5.52	\$5.67	\$5.82	\$5.98	\$6.15	\$6.34	\$6.57	\$6.84	\$7.16	\$7.52	\$7.93	\$8.36	\$8.82	\$9.30	\$9.81		
Vectren Corporation	VVC	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.31	\$3.49	\$3.69	\$3.89	\$4.10	\$4.33	\$4.57	\$4.82	\$5.08	\$5.36	\$5.65		
Atmos Energy Corporation	ATO	\$3.09	\$3.28	\$3.47	\$3.68	\$3.90	\$4.14	\$4.38	\$4.64	\$4.91	\$5.19	\$5.49	\$5.79	\$6.11	\$6.45	\$6.80	\$7.17	\$7.57		
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38	\$3.59	\$3.80	\$4.03	\$4.26	\$4.51	\$4.76	\$5.03	\$5.30	\$5.59	\$5.90	\$6.22	\$6.56		
Northwest Natural Gas Company	NWN	\$1.96	\$2.03	\$2.10	\$2.17	\$2.25	\$2.32	\$2.40	\$2.50	\$2.60	\$2.72	\$2.85	\$2.99	\$3.16	\$3.33	\$3.51	\$3.70	\$3.91		
Southwest Gas Corporation	SWX	\$2.92	\$3.04	\$3.16	\$3.28	\$3.42	\$3.55	\$3.69	\$3.85	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.77	\$6.08		
Spire Inc	SR	\$3.16	\$3.29	\$3.42	\$3.56	\$3.70	\$3.85	\$4.01	\$4.18	\$4.37	\$4.58	\$4.81	\$5.06	\$5.34	\$5.63	\$5.94	\$6.27	\$6.61		
Projected Annual Dividend Payout Ratio																				
			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]			
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%				
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%				
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%				
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%				
Projected Annual Cash Flows																				
			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value			
Black Hills Corporation	BKH	\$1.56	\$1.65	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$140.14			
CenterPoint Energy, Inc.	CNP	\$0.98	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$52.20			
Sempra Energy	SRE	\$3.59	\$3.63	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$227.61			
Vectren Corporation	VVC	\$1.68	\$1.74	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$116.70			
Atmos Energy Corporation	ATO	\$1.77	\$1.88	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$171.47			
Chesapeake Utilities Corporation	CPK	\$1.36	\$1.37	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$154.27			
Northwest Natural Gas Company	NWN	\$1.68	\$1.66	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$127.49			
Southwest Gas Corporation	SWX	\$1.67	\$1.73	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$171.86			
Spire Inc	SR	\$2.05	\$2.08	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$143.77			
Projected Annual Data Investor Cash Flows																				
			[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$61.79)	\$0.00	\$1.06	\$1.60	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$144.33	
CenterPoint Energy, Inc.	CNP	(\$24.91)	\$0.00	\$0.66	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$53.80	
Sempra Energy	SRE	(\$105.28)	\$0.00	\$2.43	\$3.64	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$234.05	
Vectren Corporation	VVC	(\$52.69)	\$0.00	\$1.14	\$1.72	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$120.41	
Atmos Energy Corporation	ATO	(\$75.17)	\$0.00	\$1.20	\$1.82	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$176.43	
Chesapeake Utilities Corporation	CPK	(\$65.49)	\$0.00	\$0.92	\$1.40	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$158.58	
Northwest Natural Gas Company	NWN	(\$59.19)	\$0.00	\$1.14	\$1.71	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$130.05	
Southwest Gas Corporation	SWX	(\$76.46)	\$0.00	\$1.13	\$1.71	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$175.84	
Spire Inc	SR	(\$64.75)	\$0.00	\$1.39	\$2.09	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$148.11	

Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal							
			Zacks	First Call	Value Line	Retention Growth	High Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Company	Ticker																			
Black Hills Corporation	BKH	\$61.79	5.00%	10.38%	7.50%	5.41%	10.38%	5.48%	50.00%	52.00%	65.58%	\$0.00	10.12%	14.92	2.72					
CenterPoint Energy, Inc.	CNP	\$24.91	5.00%	6.06%	6.00%	4.98%	6.06%	5.48%	82.00%	74.00%	65.58%	(\$0.00)	8.99%	19.71	3.60					
Sempra Energy	SRE	\$105.28	8.70%	9.87%	8.00%	2.73%	9.87%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	10.54%	13.68	2.50					
Vectren Corporation	VVC	\$52.69	5.70%	5.57%	7.00%	6.46%	7.00%	5.48%	63.00%	58.00%	65.58%	(\$0.00)	9.21%	18.57	3.39					
Atmos Energy Corporation	ATO	\$75.17	7.00%	6.90%	6.00%	8.67%	8.67%	5.48%	51.00%	51.00%	65.58%	\$0.00	9.19%	18.67	3.41					
Chesapeake Utilities Corporation	CPK	\$65.49	6.00%	6.00%	8.00%	14.38%	14.38%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	10.68%	13.31	2.43					
Northwest Natural Gas Company	NWN	\$59.19	4.30%	4.50%	6.00%	3.46%	6.00%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	8.07%	26.75	4.88					
Southwest Gas Corporation	SWX	\$76.46	5.00%	4.00%	6.50%	8.02%	8.02%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.79%	20.93	3.82					
Spire Inc	SR	\$64.75	4.10%	4.05%	8.00%	5.24%	8.00%	5.48%	60.00%	54.00%	65.58%	\$0.00	9.73%	16.26	2.97					
												Mean	9.48%							
												Max	10.68%							
												Min	8.07%							
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$3.12	\$3.45	\$3.81	\$4.20	\$4.64	\$5.12	\$5.61	\$6.10	\$6.58	\$7.05	\$7.49	\$7.91	\$8.34	\$8.80	\$9.28	\$9.79		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.15	\$1.21	\$1.29	\$1.37	\$1.45	\$1.54	\$1.63	\$1.72	\$1.82	\$1.93	\$2.03	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66		
Sempra Energy	SRE	\$5.23	\$5.75	\$6.31	\$6.94	\$7.62	\$8.37	\$9.20	\$10.04	\$10.88	\$11.72	\$12.53	\$13.31	\$14.04	\$14.81	\$15.62	\$16.48	\$17.38		
Vectren Corporation	VVC	\$2.39	\$2.56	\$2.74	\$2.93	\$3.13	\$3.35	\$3.59	\$3.83	\$4.08	\$4.33	\$4.59	\$4.85	\$5.12	\$5.40	\$5.70	\$6.01	\$6.34		
Atmos Energy Corporation	ATO	\$3.09	\$3.36	\$3.65	\$3.97	\$4.31	\$4.68	\$5.09	\$5.50	\$5.92	\$6.34	\$6.76	\$7.16	\$7.55	\$7.97	\$8.41	\$8.87	\$9.35		
Chesapeake Utilities Corporation	CPK	\$2.68	\$3.07	\$3.51	\$4.01	\$4.59	\$5.25	\$6.00	\$6.78	\$7.55	\$8.30	\$9.00	\$9.63	\$10.16	\$10.71	\$11.30	\$11.92	\$12.57		
Northwest Natural Gas Company	NWN	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	\$2.62	\$2.78	\$2.94	\$3.12	\$3.30	\$3.48	\$3.68	\$3.88	\$4.09	\$4.31	\$4.55	\$4.80		
Southwest Gas Corporation	SWX	\$2.92	\$3.15	\$3.41	\$3.68	\$3.98	\$4.29	\$4.64	\$4.99	\$5.35	\$5.71	\$6.07	\$6.43	\$6.78	\$7.15	\$7.55	\$7.96	\$8.40		
Spire Inc	SR	\$3.16	\$3.41	\$3.69	\$3.98	\$4.30	\$4.64	\$5.01	\$5.39	\$5.78	\$6.17	\$6.56	\$6.95	\$7.33	\$7.73	\$8.15	\$8.60	\$9.07		
Projected Annual Dividend Payout Ratio																				
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%				
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%				
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%				
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%				
Projected Annual Cash Flows																				
					[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value			
Black Hills Corporation	BKH	\$1.72	\$1.92	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$145.98			
CenterPoint Energy, Inc.	CNP	\$1.00	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$52.39			
Sempra Energy	SRE	\$4.10	\$4.44	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$237.78			
Vectren Corporation	VVC	\$1.72	\$1.81	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$117.69			
Atmos Energy Corporation	ATO	\$1.86	\$2.02	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$174.59			
Chesapeake Utilities Corporation	CPK	\$1.58	\$1.72	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$167.38			
Northwest Natural Gas Company	NWN	\$1.76	\$1.78	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$128.40			
Southwest Gas Corporation	SWX	\$1.81	\$1.94	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.69	\$4.95	\$5.22	\$5.51	\$175.72			
Spire Inc	SR	\$2.21	\$2.33	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$147.56			
Projected Annual Data Investor Cash Flows																				
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$61.79)	\$0.00	\$1.17	\$1.81	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$152.40	
CenterPoint Energy, Inc.	CNP	(\$24.91)	\$0.00	\$0.67	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$54.13	
Sempra Energy	SRE	(\$105.28)	\$0.00	\$2.78	\$4.31	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$249.18	
Vectren Corporation	VVC	(\$52.69)	\$0.00	\$1.17	\$1.78	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$121.84	
Atmos Energy Corporation	ATO	(\$75.17)	\$0.00	\$1.26	\$1.94	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$180.72	
Chesapeake Utilities Corporation	CPK	(\$65.49)	\$0.00	\$1.07	\$1.69	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$175.63	
Northwest Natural Gas Company	NWN	(\$59.19)	\$0.00	\$1.19	\$1.81	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$131.55	
Southwest Gas Corporation	SWX	(\$76.46)	\$0.00	\$1.22	\$1.88	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.69	\$4.95	\$5.22	\$5.51	\$181.23	
Spire Inc	SR	(\$64.75)	\$0.00	\$1.50	\$2.30	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$153.51	

Multi-Stage DCF Notes:

- [1] Source: Bloomberg; based on 30-, 90-, and 180-day historical average as of April 28, 2017
- [2] Source: Zacks
- [3] Source: Yahoo! Finance
- [4] Source: Value Line
- [5] Source: Exhibit RBH-3, Value Line
- [6] Equals indicated value (average, minimum, maximum) from Columns [2], [3], [4], [5]
- [7] Source: Federal Reserve, Bureau of Economic Analysis, Blue Chip Financial Forecast
- [8] Source: Value Line
- [9] Source: Value Line
- [10] Source: Bloomberg Professional
- [11] Equals Column [1] + Column [63]
- [12] Equals result of Excel Solver function; goal: Column [11] equals \$0.00
- [13] Equals Column [62] / Column [31]
- [14] Equals Column [13] / (Column [7] x 100)
- [15] Source: Value Line
- [16] Equals Column [15] x (1 + Column [6])
- [17] Equals Column [16] x (1 + Column [6])
- [18] Equals Column [17] x (1 + Column [6])
- [19] Equals Column [18] x (1 + Column [6])
- [20] Equals Column [19] x (1 + Column [6])
- [21] Equals Column [20] x (1 + Column [6])
- [22] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2022 - 2021)))) \times \text{Column [21]}$
- [23] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2023 - 2021)))) \times \text{Column [22]}$
- [24] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2024 - 2021)))) \times \text{Column [23]}$
- [25] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2025 - 2021)))) \times \text{Column [24]}$
- [26] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2026 - 2021)))) \times \text{Column [25]}$
- [27] Equals Column [26] x (1 + Column [7])
- [28] Equals Column [27] x (1 + Column [7])
- [29] Equals Column [28] x (1 + Column [7])
- [30] Equals Column [29] x (1 + Column [7])
- [31] Equals Column [30] x (1 + Column [7])
- [32] Equals Column [8]
- [33] Equals Column [32] + ((Column [36] - Column [32]) / 4)
- [34] Equals Column [33] + ((Column [36] - Column [32]) / 4)
- [35] Equals Column [34] + ((Column [36] - Column [32]) / 4)
- [36] Equals Column [9]
- [37] Equals Column [36] + ((Column [42] - Column [36]) / 6)
- [38] Equals Column [37] + ((Column [42] - Column [36]) / 6)
- [39] Equals Column [38] + ((Column [42] - Column [36]) / 6)
- [40] Equals Column [39] + ((Column [42] - Column [36]) / 6)
- [41] Equals Column [40] + ((Column [42] - Column [36]) / 6)
- [42] Equals Column [10]
- [43] Equals Column [10]
- [44] Equals Column [10]
- [45] Equals Column [10]
- [46] Equals Column [10]
- [47] Equals Column [17] x Column [32]
- [48] Equals Column [18] x Column [33]
- [49] Equals Column [19] x Column [34]
- [50] Equals Column [20] x Column [35]
- [51] Equals Column [21] x Column [36]
- [52] Equals Column [22] x Column [37]
- [53] Equals Column [23] x Column [38]
- [54] Equals Column [24] x Column [39]
- [55] Equals Column [25] x Column [40]
- [56] Equals Column [26] x Column [41]
- [57] Equals Column [27] x Column [42]
- [58] Equals Column [28] x Column [43]
- [59] Equals Column [29] x Column [44]
- [60] Equals Column [30] x Column [45]
- [61] Equals Column [31] x Column [46]
- [62] Equals $(\text{Column [61]} \times (1 + \text{Column [7]})) / (\text{Column [12]} - \text{Column [7]})$
- [63] Equals negative net present value; discount rate equals Column [12], cash flows equal Column [64] through Column [80]
- [64] Equals \$0.00
- [65] Equals $\text{Column [47]} \times (12/31/2017 - 4/28/2017) / 365$
- [66] Equals $\text{Column [47]} \times (1 + (0.5 \times \text{Column [6]}))$
- [67] Equals Column [49]
- [68] Equals Column [50]
- [69] Equals Column [51]
- [70] Equals Column [52]
- [71] Equals Column [53]
- [72] Equals Column [54]
- [73] Equals Column [55]
- [74] Equals Column [56]
- [75] Equals Column [57]
- [76] Equals Column [58]
- [77] Equals Column [59]
- [78] Equals Column [60]
- [79] Equals Column [61]
- [80] Equals Column [61] + [62]

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26

30 Day Average Stock Price

Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal	
					Value	Retention									
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio
Black Hills Corporation	BKH	\$67.07	5.00%	10.38%	7.50%	5.41%	7.07%	5.48%	50.00%	52.00%	65.58%	\$0.00	9.85%	24.26	4.43
CenterPoint Energy, Inc.	CNP	\$27.94	5.00%	6.06%	6.00%	4.98%	5.51%	5.48%	82.00%	74.00%	65.58%	\$0.00	8.70%	24.26	4.43
Sempra Energy	SRE	\$111.49	8.70%	9.87%	8.00%	2.73%	7.32%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	11.29%	24.26	4.43
Vectren Corporation	VVC	\$58.79	5.70%	5.57%	7.00%	6.46%	6.18%	5.48%	63.00%	58.00%	65.58%	\$0.00	9.17%	24.26	4.43
Atmos Energy Corporation	ATO	\$80.11	7.00%	6.90%	6.00%	8.67%	7.14%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	9.11%	24.26	4.43
Chesapeake Utilities Corporation	CPK	\$70.37	6.00%	6.00%	8.00%	14.38%	8.60%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	9.64%	24.26	4.43
Northwest Natural Gas Company	NWN	\$59.56	4.30%	4.50%	6.00%	3.46%	4.57%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	6.54%	24.26	4.43
Southwest Gas Corporation	SWX	\$83.71	5.00%	4.00%	6.50%	8.02%	5.88%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	7.49%	24.26	4.43
Spire Inc	SR	\$68.14	4.10%	4.05%	8.00%	5.24%	5.35%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	9.68%	24.26	4.43
												Mean	9.05%		
												Max	11.29%		
												Min	6.54%		

Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Black Hills Corporation	BKH	\$2.83	\$3.03	\$3.24	\$3.47	\$3.72	\$3.98	\$4.26	\$4.55	\$4.85	\$5.16	\$5.47	\$5.78	\$6.10	\$6.43	\$6.78	\$7.16	\$7.55
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$2.05	\$2.17	\$2.28	\$2.41	\$2.54
Sempra Energy	SRE	\$5.23	\$5.61	\$6.02	\$6.47	\$6.94	\$7.45	\$7.99	\$8.55	\$9.13	\$9.71	\$10.30	\$10.90	\$11.50	\$12.13	\$12.79	\$13.49	\$14.23
Vectren Corporation	VVC	\$2.39	\$2.54	\$2.69	\$2.86	\$3.04	\$3.23	\$3.43	\$3.63	\$3.85	\$4.07	\$4.31	\$4.55	\$4.80	\$5.06	\$5.34	\$5.63	\$5.94
Atmos Energy Corporation	ATO	\$3.09	\$3.31	\$3.55	\$3.80	\$4.07	\$4.36	\$4.67	\$5.00	\$5.32	\$5.66	\$6.00	\$6.35	\$6.70	\$7.07	\$7.45	\$7.86	\$8.29
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.91	\$3.16	\$3.43	\$3.73	\$4.05	\$4.40	\$4.75	\$5.11	\$5.47	\$5.83	\$6.18	\$6.51	\$6.87	\$7.25	\$7.65	\$8.06
Northwest Natural Gas Company	NWN	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.45	\$2.56	\$2.68	\$2.81	\$2.96	\$3.11	\$3.27	\$3.45	\$3.64	\$3.84	\$4.05	\$4.27
Southwest Gas Corporation	SWX	\$2.92	\$3.09	\$3.27	\$3.47	\$3.67	\$3.89	\$4.11	\$4.35	\$4.60	\$4.86	\$5.14	\$5.42	\$5.72	\$6.03	\$6.36	\$6.71	\$7.08
Spire Inc	SR	\$3.16	\$3.33	\$3.51	\$3.69	\$3.89	\$4.10	\$4.32	\$4.55	\$4.80	\$5.06	\$5.33	\$5.62	\$5.93	\$6.26	\$6.60	\$6.96	\$7.34

Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%

Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value
Black Hills Corporation	BKH	\$1.62	\$1.75	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$183.16
CenterPoint Energy, Inc.	CNP	\$0.99	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$61.68
Sempra Energy	SRE	\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$345.38
Vectren Corporation	VVC	\$1.70	\$1.77	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$144.09
Atmos Energy Corporation	ATO	\$1.81	\$1.94	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$201.12
Chesapeake Utilities Corporation	CPK	\$1.42	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$195.66
Northwest Natural Gas Company	NWN	\$1.71	\$1.71	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$103.72
Southwest Gas Corporation	SWX	\$1.73	\$1.83	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$171.82
Spire Inc	SR	\$2.10	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$178.13

Projected Annual Data		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Investor Cash Flows																			
Company	Ticker	Initial	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$67.07)	\$0.00	\$1.10	\$1.68	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$188.11
CenterPoint Energy, Inc.	CNP	(\$27.94)	\$0.00	\$0.67	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$63.35
Sempra Energy	SRE	(\$111.49)	\$0.00	\$2.65	\$4.06	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$354.71
Vectren Corporation	VVC	(\$58.79)	\$0.00	\$1.15	\$1.75	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$147.99
Atmos Energy Corporation	ATO	(\$80.11)	\$0.00	\$1.22	\$1.87	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$206.56
Chesapeake Utilities Corporation	CPK	(\$70.37)	\$0.00	\$0.96	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$200.95
Northwest Natural Gas Company	NWN	(\$59.56)	\$0.00	\$1.16	\$1.75	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$106.52
Southwest Gas Corporation	SWX	(\$83.71)	\$0.00	\$1.17	\$1.79	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$176.47
Spire Inc	SR	(\$68.14)	\$0.00	\$1.42	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$182.95

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
30 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal						
			Value		Retention	Low														
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$67.07	5.00%	10.38%	7.50%	5.41%	5.00%	5.48%	50.00%	52.00%	65.58%	\$0.00	8.51%	24.26	4.43					
CenterPoint Energy, Inc.	CNP	\$27.94	5.00%	6.06%	6.00%	4.98%	4.98%	5.48%	82.00%	74.00%	65.58%	\$0.00	8.35%	24.26	4.43					
Sempra Energy	SRE	\$111.49	8.70%	9.87%	8.00%	2.73%	2.73%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	8.21%	24.26	4.43					
Vectren Corporation	VVC	\$58.79	5.70%	5.57%	7.00%	6.46%	5.57%	5.48%	63.00%	58.00%	65.58%	\$0.00	8.77%	24.26	4.43					
Atmos Energy Corporation	ATO	\$80.11	7.00%	6.90%	6.00%	8.67%	6.00%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.38%	24.26	4.43					
Chesapeake Utilities Corporation	CPK	\$70.37	6.00%	6.00%	8.00%	14.38%	6.00%	5.48%	45.00%	37.00%	65.58%	\$0.00	8.01%	24.26	4.43					
Northwest Natural Gas Company	NWN	\$59.56	4.30%	4.50%	6.00%	3.46%	3.46%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	5.83%	24.26	4.43					
Southwest Gas Corporation	SWX	\$83.71	5.00%	4.00%	6.50%	8.02%	4.00%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	6.30%	24.26	4.43					
Spire Inc	SR	\$68.14	4.10%	4.05%	8.00%	5.24%	4.05%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	8.83%	24.26	4.43					
												Mean	7.91%							
												Max	8.83%							
												Min	5.83%							
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$2.97	\$3.12	\$3.28	\$3.44	\$3.61	\$3.79	\$3.99	\$4.19	\$4.41	\$4.65	\$4.90	\$5.16	\$5.45	\$5.75	\$6.06	\$6.39		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.13	\$1.19	\$1.25	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.68	\$1.77	\$1.86	\$1.97	\$2.07	\$2.19	\$2.31	\$2.44		
Sempra Energy	SRE	\$5.23	\$5.37	\$5.52	\$5.67	\$5.82	\$5.98	\$6.15	\$6.34	\$6.57	\$6.84	\$7.16	\$7.52	\$7.93	\$8.36	\$8.82	\$9.30	\$9.81		
Vectren Corporation	VVC	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.31	\$3.49	\$3.69	\$3.89	\$4.10	\$4.33	\$4.57	\$4.82	\$5.08	\$5.36	\$5.65		
Atmos Energy Corporation	ATO	\$3.09	\$3.28	\$3.47	\$3.68	\$3.90	\$4.14	\$4.38	\$4.64	\$4.91	\$5.19	\$5.49	\$5.79	\$6.11	\$6.45	\$6.80	\$7.17	\$7.57		
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38	\$3.59	\$3.80	\$4.03	\$4.26	\$4.51	\$4.76	\$5.03	\$5.30	\$5.59	\$5.90	\$6.22	\$6.56		
Northwest Natural Gas Company	NWN	\$1.96	\$2.03	\$2.10	\$2.17	\$2.25	\$2.32	\$2.40	\$2.50	\$2.60	\$2.72	\$2.85	\$2.99	\$3.16	\$3.33	\$3.51	\$3.70	\$3.91		
Southwest Gas Corporation	SWX	\$2.92	\$3.04	\$3.16	\$3.28	\$3.42	\$3.55	\$3.69	\$3.85	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.77	\$6.08		
Spire Inc	SR	\$3.16	\$3.29	\$3.42	\$3.56	\$3.70	\$3.85	\$4.01	\$4.18	\$4.37	\$4.58	\$4.81	\$5.06	\$5.34	\$5.63	\$5.94	\$6.27	\$6.61		
Projected Annual Dividend Payout Ratio																				
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%				
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%				
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%				
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%				
Projected Annual Cash Flows																				
					[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value			
Black Hills Corporation	BKH	\$1.56	\$1.65	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$155.12			
CenterPoint Energy, Inc.	CNP	\$0.98	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$59.08			
Sempra Energy	SRE	\$3.59	\$3.63	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$238.14			
Vectren Corporation	VVC	\$1.68	\$1.74	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$137.17			
Atmos Energy Corporation	ATO	\$1.77	\$1.88	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$183.58			
Chesapeake Utilities Corporation	CPK	\$1.36	\$1.37	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$159.22			
Northwest Natural Gas Company	NWN	\$1.68	\$1.66	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$94.81			
Southwest Gas Corporation	SWX	\$1.67	\$1.73	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$147.56			
Spire Inc	SR	\$2.05	\$2.08	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$160.34			
Projected Annual Data Investor Cash Flows																				
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$67.07)	\$0.00	\$1.06	\$1.60	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$159.31	
CenterPoint Energy, Inc.	CNP	(\$27.94)	\$0.00	\$0.66	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$60.68	
Sempra Energy	SRE	(\$111.49)	\$0.00	\$2.43	\$3.64	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$244.58	
Vectren Corporation	VVC	(\$58.79)	\$0.00	\$1.14	\$1.72	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$140.88	
Atmos Energy Corporation	ATO	(\$80.11)	\$0.00	\$1.20	\$1.82	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$188.55	
Chesapeake Utilities Corporation	CPK	(\$70.36)	\$0.00	\$0.92	\$1.40	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$163.53	
Northwest Natural Gas Company	NWN	(\$59.56)	\$0.00	\$1.14	\$1.71	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$97.37	
Southwest Gas Corporation	SWX	(\$83.71)	\$0.00	\$1.13	\$1.71	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$151.55	
Spire Inc	SR	(\$68.14)	\$0.00	\$1.39	\$2.09	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$164.68	

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
30 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates					Long-Term		Payout Ratio		Iterative Solution	Terminal	Terminal						
Company	Ticker		Zacks	First Call	Value Line	Retention Growth	High Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$67.07	5.00%	10.38%	7.50%	5.41%	10.38%	5.48%	50.00%	52.00%	65.58%	(\$0.00)	12.00%	24.26	4.43					
CenterPoint Energy, Inc.	CNP	\$27.94	5.00%	6.06%	6.00%	4.98%	6.06%	5.48%	82.00%	74.00%	65.58%	\$0.00	9.07%	24.26	4.43					
Sempra Energy	SRE	\$111.49	8.70%	9.87%	8.00%	2.73%	9.87%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	13.01%	24.26	4.43					
Vectren Corporation	VVC	\$58.79	5.70%	5.57%	7.00%	6.46%	7.00%	5.48%	63.00%	58.00%	65.58%	\$0.00	9.70%	24.26	4.43					
Atmos Energy Corporation	ATO	\$80.11	7.00%	6.90%	6.00%	8.67%	8.67%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	10.09%	24.26	4.43					
Chesapeake Utilities Corporation	CPK	\$70.37	6.00%	6.00%	8.00%	14.38%	14.38%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	13.29%	24.26	4.43					
Northwest Natural Gas Company	NWN	\$59.56	4.30%	4.50%	6.00%	3.46%	6.00%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.46%	24.26	4.43					
Southwest Gas Corporation	SWX	\$83.71	5.00%	4.00%	6.50%	8.02%	8.02%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.84%	24.26	4.43					
Spire Inc	SR	\$68.14	4.10%	4.05%	8.00%	5.24%	8.00%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	11.44%	24.26	4.43					
													Mean	10.54%						
													Max	13.29%						
													Min	7.46%						
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$3.12	\$3.45	\$3.81	\$4.20	\$4.64	\$5.12	\$5.61	\$6.10	\$6.58	\$7.05	\$7.49	\$7.91	\$8.34	\$8.80	\$9.28	\$9.79		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.15	\$1.21	\$1.29	\$1.37	\$1.45	\$1.54	\$1.63	\$1.72	\$1.82	\$1.93	\$2.03	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66		
Sempra Energy	SRE	\$5.23	\$5.75	\$6.31	\$6.94	\$7.62	\$8.37	\$9.20	\$10.04	\$10.88	\$11.72	\$12.53	\$13.31	\$14.04	\$14.81	\$15.62	\$16.48	\$17.38		
Vectren Corporation	VVC	\$2.39	\$2.56	\$2.74	\$2.93	\$3.13	\$3.35	\$3.59	\$3.83	\$4.08	\$4.33	\$4.59	\$4.85	\$5.12	\$5.40	\$5.70	\$6.01	\$6.34		
Atmos Energy Corporation	ATO	\$3.09	\$3.36	\$3.65	\$3.97	\$4.31	\$4.68	\$5.09	\$5.50	\$5.92	\$6.34	\$6.76	\$7.16	\$7.55	\$7.97	\$8.41	\$8.87	\$9.35		
Chesapeake Utilities Corporation	CPK	\$2.68	\$3.07	\$3.51	\$4.01	\$4.59	\$5.25	\$6.00	\$6.78	\$7.55	\$8.30	\$9.00	\$9.63	\$10.16	\$10.71	\$11.30	\$11.92	\$12.57		
Northwest Natural Gas Company	NWN	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	\$2.62	\$2.78	\$2.94	\$3.12	\$3.30	\$3.48	\$3.68	\$3.88	\$4.09	\$4.31	\$4.55	\$4.80		
Southwest Gas Corporation	SWX	\$2.92	\$3.15	\$3.41	\$3.68	\$3.98	\$4.29	\$4.64	\$4.99	\$5.35	\$5.71	\$6.07	\$6.43	\$6.78	\$7.15	\$7.55	\$7.96	\$8.40		
Spire Inc	SR	\$3.16	\$3.41	\$3.69	\$3.98	\$4.30	\$4.64	\$5.01	\$5.39	\$5.78	\$6.17	\$6.56	\$6.95	\$7.33	\$7.73	\$8.15	\$8.60	\$9.07		
Projected Annual Dividend Payout Ratio																				
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%	65.58%		
Projected Annual Cash Flows																				
					[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	\$1.72	\$1.92	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42				
CenterPoint Energy, Inc.	CNP	\$1.00	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74				
Sempra Energy	SRE	\$4.10	\$4.44	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40				
Vectren Corporation	VVC	\$1.72	\$1.81	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16				
Atmos Energy Corporation	ATO	\$1.86	\$2.02	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13				
Chesapeake Utilities Corporation	CPK	\$1.58	\$1.72	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25				
Northwest Natural Gas Company	NWN	\$1.76	\$1.78	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15				
Southwest Gas Corporation	SWX	\$1.81	\$1.94	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.89	\$5.22	\$5.51	\$5.81				
Spire Inc	SR	\$2.21	\$2.33	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95				
Projected Annual Data Investor Cash Flows																				
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$67.07)	\$0.00	\$1.17	\$1.81	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$243.86	
CenterPoint Energy, Inc.	CNP	(\$27.94)	\$0.00	\$0.67	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$66.22	
Sempra Energy	SRE	(\$111.49)	\$0.00	\$2.78	\$4.31	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$433.19	
Vectren Corporation	VVC	(\$58.79)	\$0.00	\$1.17	\$1.78	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$157.96	
Atmos Energy Corporation	ATO	(\$80.11)	\$0.00	\$1.26	\$1.94	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$233.05	
Chesapeake Utilities Corporation	CPK	(\$70.37)	\$0.00	\$1.07	\$1.69	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$313.33	
Northwest Natural Gas Company	NWN	(\$59.56)	\$0.00	\$1.19	\$1.81	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$119.60	
Southwest Gas Corporation	SWX	(\$83.71)	\$0.00	\$1.22	\$1.88	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.89	\$5.22	\$5.51	\$5.81	\$209.24	
Spire Inc	SR	(\$68.14)	\$0.00	\$1.50	\$2.30	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$226.08	

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
90 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]						
		Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal								
			Value	Retention																	
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio						
Black Hills Corporation	BKH	\$64.03	5.00%	10.38%	7.50%	5.41%	7.07%	5.48%	50.00%	52.00%	65.58%	\$0.00	10.26%	24.26	4.43						
CenterPoint Energy, Inc.	CNP	\$26.72	5.00%	6.06%	6.00%	4.98%	5.51%	5.48%	82.00%	74.00%	65.58%	\$0.00	9.11%	24.26	4.43						
Sempra Energy	SRE	\$106.86	8.70%	9.87%	8.00%	2.73%	7.32%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	11.69%	24.26	4.43						
Vectren Corporation	VVC	\$55.95	5.70%	5.57%	7.00%	6.46%	6.18%	5.48%	63.00%	58.00%	65.58%	\$0.00	9.60%	24.26	4.43						
Atmos Energy Corporation	ATO	\$77.26	7.00%	6.90%	6.00%	8.67%	7.14%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	9.42%	24.26	4.43						
Chesapeake Utilities Corporation	CPK	\$67.73	6.00%	6.00%	8.00%	14.38%	8.60%	5.48%	45.00%	37.00%	65.58%	\$0.00	9.97%	24.26	4.43						
Northwest Natural Gas Company	NWN	\$59.31	4.30%	4.50%	6.00%	3.46%	4.57%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	6.57%	24.26	4.43						
Southwest Gas Corporation	SWX	\$81.56	5.00%	4.00%	6.50%	8.02%	5.88%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	7.71%	24.26	4.43						
Spire Inc	SR	\$65.81	4.10%	4.05%	8.00%	5.24%	5.35%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	9.99%	24.26	4.43						
											Mean	9.37%									
											Max	11.69%									
											Min	6.57%									
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]			
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Black Hills Corporation	BKH	\$2.83	\$3.03	\$3.24	\$3.47	\$3.72	\$3.98	\$4.26	\$4.55	\$4.85	\$5.16	\$5.47	\$5.78	\$6.10	\$6.43	\$6.78	\$7.16	\$7.55			
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$2.05	\$2.17	\$2.28	\$2.41	\$2.54			
Sempra Energy	SRE	\$5.23	\$5.61	\$6.02	\$6.47	\$6.94	\$7.45	\$7.99	\$8.55	\$9.13	\$9.71	\$10.30	\$10.90	\$11.50	\$12.13	\$12.79	\$13.49	\$14.23			
Vectren Corporation	VVC	\$2.39	\$2.54	\$2.69	\$2.86	\$3.04	\$3.23	\$3.43	\$3.63	\$3.85	\$4.07	\$4.31	\$4.55	\$4.80	\$5.06	\$5.34	\$5.63	\$5.94			
Atmos Energy Corporation	ATO	\$3.09	\$3.31	\$3.55	\$3.80	\$4.07	\$4.36	\$4.67	\$5.00	\$5.32	\$5.66	\$6.00	\$6.35	\$6.70	\$7.06	\$7.45	\$7.86	\$8.29			
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.91	\$3.16	\$3.43	\$3.73	\$4.05	\$4.40	\$4.75	\$5.11	\$5.47	\$5.83	\$6.18	\$6.51	\$6.87	\$7.25	\$7.65	\$8.06			
Northwest Natural Gas Company	NWN	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.45	\$2.56	\$2.68	\$2.81	\$2.96	\$3.11	\$3.27	\$3.45	\$3.64	\$3.84	\$4.05	\$4.27			
Southwest Gas Corporation	SWX	\$2.92	\$3.09	\$3.27	\$3.47	\$3.67	\$3.89	\$4.11	\$4.35	\$4.60	\$4.86	\$5.14	\$5.42	\$5.72	\$6.04	\$6.36	\$6.71	\$7.08			
Spire Inc	SR	\$3.16	\$3.33	\$3.51	\$3.69	\$3.89	\$4.10	\$4.32	\$4.55	\$4.80	\$5.06	\$5.33	\$5.62	\$5.93	\$6.26	\$6.60	\$6.96	\$7.34			
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]			
Company	Ticker			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Black Hills Corporation	BKH			50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
CenterPoint Energy, Inc.	CNP			82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%			
Sempra Energy	SRE			65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Vectren Corporation	VVC			63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Atmos Energy Corporation	ATO			51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%			
Chesapeake Utilities Corporation	CPK			45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Northwest Natural Gas Company	NWN			80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%			
Southwest Gas Corporation	SWX			53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Spire Inc	SR			60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%			
Projected Annual Cash Flows				[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]		
Company	Ticker			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value		
Black Hills Corporation	BKH			\$1.62	\$1.75	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$183.16		
CenterPoint Energy, Inc.	CNP			\$0.99	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$61.68		
Sempra Energy	SRE			\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$345.38		
Vectren Corporation	VVC			\$1.70	\$1.77	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$144.09		
Atmos Energy Corporation	ATO			\$1.81	\$1.94	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$201.12		
Chesapeake Utilities Corporation	CPK			\$1.42	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$195.66		
Northwest Natural Gas Company	NWN			\$1.71	\$1.71	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$103.72		
Southwest Gas Corporation	SWX			\$1.73	\$1.83	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$171.82		
Spire Inc	SR			\$2.10	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$178.13		
Projected Annual Data Investor Cash Flows				[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32		
Black Hills Corporation	BKH	(\$64.03)	\$0.00	\$1.10	\$1.68	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$188.11		
CenterPoint Energy, Inc.	CNP	(\$26.72)	\$0.00	\$0.67	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$63.35		
Sempra Energy	SRE	(\$106.86)	\$0.00	\$2.65	\$4.06	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$354.71		
Vectren Corporation	VVC	(\$55.95)	\$0.00	\$1.15	\$1.75	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$147.99		
Atmos Energy Corporation	ATO	(\$77.26)	\$0.00	\$1.22	\$1.87	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$206.56		
Chesapeake Utilities Corporation	CPK	(\$67.73)	\$0.00	\$0.96	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$200.95		
Northwest Natural Gas Company	NWN	(\$59.31)	\$0.00	\$1.16	\$1.75	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$106.52		
Southwest Gas Corporation	SWX	(\$81.56)	\$0.00	\$1.17	\$1.79	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$176.47		
Spire Inc	SR	(\$65.81)	\$0.00	\$1.42	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$182.95		

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
90 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal						
			Value		Retention	Low														
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$64.03	5.00%	10.38%	7.50%	5.41%	5.00%	5.48%	50.00%	52.00%	65.58%	\$0.00	8.90%	24.26	4.43					
CenterPoint Energy, Inc.	CNP	\$26.72	5.00%	6.06%	6.00%	4.98%	4.98%	5.48%	82.00%	74.00%	65.58%	\$0.00	8.75%	24.26	4.43					
Sempra Energy	SRE	\$106.86	8.70%	9.87%	8.00%	2.73%	2.73%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	8.59%	24.26	4.43					
Vectren Corporation	VVC	\$55.95	5.70%	5.57%	7.00%	6.46%	5.57%	5.48%	63.00%	58.00%	65.58%	\$0.00	9.20%	24.26	4.43					
Atmos Energy Corporation	ATO	\$77.26	7.00%	6.90%	6.00%	8.67%	6.00%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.69%	24.26	4.43					
Chesapeake Utilities Corporation	CPK	\$67.73	6.00%	6.00%	8.00%	14.38%	6.00%	5.48%	45.00%	37.00%	65.58%	\$0.00	8.33%	24.26	4.43					
Northwest Natural Gas Company	NWN	\$59.31	4.30%	4.50%	6.00%	3.46%	3.46%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	5.87%	24.26	4.43					
Southwest Gas Corporation	SWX	\$81.56	5.00%	4.00%	6.50%	8.02%	4.00%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	6.51%	24.26	4.43					
Spire Inc	SR	\$65.81	4.10%	4.05%	8.00%	5.24%	4.05%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	9.13%	24.26	4.43					
												Mean	8.22%							
												Max	9.20%							
												Min	5.87%							
Projected Annual Earnings per Share																				
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$2.97	\$3.12	\$3.28	\$3.44	\$3.61	\$3.79	\$3.99	\$4.19	\$4.41	\$4.65	\$4.90	\$5.16	\$5.45	\$5.75	\$6.06	\$6.39		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.13	\$1.19	\$1.25	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.68	\$1.77	\$1.86	\$1.97	\$2.07	\$2.19	\$2.31	\$2.44		
Sempra Energy	SRE	\$5.23	\$5.37	\$5.52	\$5.67	\$5.82	\$5.98	\$6.15	\$6.34	\$6.57	\$6.84	\$7.16	\$7.52	\$7.93	\$8.36	\$8.82	\$9.30	\$9.81		
Vectren Corporation	VVC	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.31	\$3.49	\$3.69	\$3.89	\$4.10	\$4.33	\$4.57	\$4.82	\$5.08	\$5.36	\$5.65		
Atmos Energy Corporation	ATO	\$3.09	\$3.28	\$3.47	\$3.68	\$3.90	\$4.14	\$4.38	\$4.64	\$4.91	\$5.19	\$5.49	\$5.79	\$6.11	\$6.45	\$6.80	\$7.17	\$7.57		
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38	\$3.59	\$3.80	\$4.03	\$4.26	\$4.51	\$4.76	\$5.03	\$5.30	\$5.59	\$5.90	\$6.22	\$6.56		
Northwest Natural Gas Company	NWN	\$1.96	\$2.03	\$2.10	\$2.17	\$2.25	\$2.32	\$2.40	\$2.50	\$2.60	\$2.72	\$2.85	\$2.99	\$3.16	\$3.33	\$3.51	\$3.70	\$3.91		
Southwest Gas Corporation	SWX	\$2.92	\$3.04	\$3.16	\$3.28	\$3.42	\$3.55	\$3.69	\$3.85	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.77	\$6.08		
Spire Inc	SR	\$3.16	\$3.29	\$3.42	\$3.56	\$3.70	\$3.85	\$4.01	\$4.18	\$4.37	\$4.58	\$4.81	\$5.06	\$5.34	\$5.63	\$5.94	\$6.27	\$6.61		
Projected Annual Dividend Payout Ratio																				
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031				
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%				
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%				
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%				
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%				
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%				
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%				
Projected Annual Cash Flows																				
					[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value			
Black Hills Corporation	BKH	\$1.56	\$1.65	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$155.12			
CenterPoint Energy, Inc.	CNP	\$0.98	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$59.08			
Sempra Energy	SRE	\$3.59	\$3.63	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$238.14			
Vectren Corporation	VVC	\$1.68	\$1.74	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$137.17			
Atmos Energy Corporation	ATO	\$1.77	\$1.88	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$183.58			
Chesapeake Utilities Corporation	CPK	\$1.36	\$1.37	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$159.22			
Northwest Natural Gas Company	NWN	\$1.68	\$1.66	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$94.81			
Southwest Gas Corporation	SWX	\$1.67	\$1.73	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$147.56			
Spire Inc	SR	\$2.05	\$2.08	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$160.34			
Projected Annual Data Investor Cash Flows																				
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]	
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$64.03)	\$0.00	\$1.06	\$1.60	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$159.31	
CenterPoint Energy, Inc.	CNP	(\$26.72)	\$0.00	\$0.66	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$60.68	
Sempra Energy	SRE	(\$106.86)	\$0.00	\$2.43	\$3.64	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$244.58	
Vectren Corporation	VVC	(\$55.95)	\$0.00	\$1.14	\$1.72	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$140.88	
Atmos Energy Corporation	ATO	(\$77.26)	\$0.00	\$1.20	\$1.82	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$188.55	
Chesapeake Utilities Corporation	CPK	(\$67.73)	\$0.00	\$0.92	\$1.40	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$163.53	
Northwest Natural Gas Company	NWN	(\$59.31)	\$0.00	\$1.14	\$1.71	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$97.37	
Southwest Gas Corporation	SWX	(\$81.56)	\$0.00	\$1.13	\$1.71	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$151.55	
Spire Inc	SR	(\$65.81)	\$0.00	\$1.39	\$2.09	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$164.68	

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
90 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal						
Company	Ticker	Price	Zacks	First Call	Value	Retention	High Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$64.03	5.00%	10.38%	7.50%	5.41%	10.38%	5.48%	50.00%	52.00%	65.58%	(\$0.00)	12.42%	24.26	4.43					
CenterPoint Energy, Inc.	CNP	\$26.72	5.00%	6.06%	6.00%	4.98%	6.06%	5.48%	82.00%	74.00%	65.58%	\$0.00	9.48%	24.26	4.43					
Sempra Energy	SRE	\$106.86	8.70%	9.87%	8.00%	2.73%	9.87%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	13.41%	24.26	4.43					
Vectren Corporation	VVC	\$55.95	5.70%	5.57%	7.00%	6.46%	7.00%	5.48%	63.00%	58.00%	65.58%	\$0.00	10.14%	24.26	4.43					
Atmos Energy Corporation	ATO	\$77.26	7.00%	6.90%	6.00%	8.67%	8.67%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	10.41%	24.26	4.43					
Chesapeake Utilities Corporation	CPK	\$67.73	6.00%	6.00%	8.00%	14.38%	14.38%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	13.63%	24.26	4.43					
Northwest Natural Gas Company	NWN	\$59.31	4.30%	4.50%	6.00%	3.46%	6.00%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.49%	24.26	4.43					
Southwest Gas Corporation	SWX	\$81.56	5.00%	4.00%	6.50%	8.02%	8.02%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	9.06%	24.26	4.43					
Spire Inc	SR	\$65.81	4.10%	4.05%	8.00%	5.24%	8.00%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	11.76%	24.26	4.43					
												Mean	10.87%							
												Max	13.63%							
												Min	7.49%							
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Black Hills Corporation	BKH	\$2.83	\$3.12	\$3.45	\$3.81	\$4.20	\$4.64	\$5.12	\$5.61	\$6.10	\$6.58	\$7.05	\$7.49	\$7.91	\$8.34	\$8.80	\$9.28	\$9.79		
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.15	\$1.21	\$1.29	\$1.37	\$1.45	\$1.54	\$1.63	\$1.72	\$1.82	\$1.93	\$2.03	\$2.15	\$2.26	\$2.39	\$2.52	\$2.66		
Sempra Energy	SRE	\$5.23	\$5.75	\$6.31	\$6.94	\$7.62	\$8.37	\$9.20	\$10.04	\$10.88	\$11.72	\$12.53	\$13.31	\$14.04	\$14.81	\$15.62	\$16.48	\$17.38		
Vectren Corporation	VVC	\$2.39	\$2.56	\$2.74	\$2.93	\$3.13	\$3.35	\$3.59	\$3.83	\$4.08	\$4.33	\$4.59	\$4.85	\$5.12	\$5.40	\$5.70	\$6.01	\$6.34		
Atmos Energy Corporation	ATO	\$3.09	\$3.36	\$3.65	\$3.97	\$4.31	\$4.68	\$5.09	\$5.50	\$5.92	\$6.34	\$6.76	\$7.16	\$7.55	\$7.97	\$8.41	\$8.87	\$9.35		
Chesapeake Utilities Corporation	CPK	\$2.68	\$3.07	\$3.51	\$4.01	\$4.59	\$5.25	\$6.00	\$6.78	\$7.55	\$8.30	\$9.00	\$9.63	\$10.16	\$10.71	\$11.30	\$11.92	\$12.57		
Northwest Natural Gas Company	NWN	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	\$2.62	\$2.78	\$2.94	\$3.12	\$3.30	\$3.48	\$3.68	\$3.88	\$4.09	\$4.31	\$4.55	\$4.80		
Southwest Gas Corporation	SWX	\$2.92	\$3.15	\$3.41	\$3.68	\$3.98	\$4.29	\$4.64	\$4.99	\$5.35	\$5.71	\$6.07	\$6.43	\$6.78	\$7.15	\$7.55	\$7.96	\$8.40		
Spire Inc	SR	\$3.16	\$3.41	\$3.69	\$3.98	\$4.30	\$4.64	\$5.01	\$5.39	\$5.78	\$6.17	\$6.56	\$6.95	\$7.33	\$7.73	\$8.15	\$8.60	\$9.07		
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Black Hills Corporation	BKH		50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
CenterPoint Energy, Inc.	CNP		82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%			
Sempra Energy	SRE		65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Vectren Corporation	VVC		63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Atmos Energy Corporation	ATO		51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%			
Chesapeake Utilities Corporation	CPK		45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Northwest Natural Gas Company	NWN		80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%			
Southwest Gas Corporation	SWX		53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Spire Inc	SR		60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%			
Projected Annual Cash Flows			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]		
Company	Ticker		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value		
Black Hills Corporation	BKH		\$1.72	\$1.92	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$237.44		
CenterPoint Energy, Inc.	CNP		\$1.00	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$64.47		
Sempra Energy	SRE		\$4.10	\$4.44	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$421.79		
Vectren Corporation	VVC		\$1.72	\$1.81	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$153.81		
Atmos Energy Corporation	ATO		\$1.86	\$2.02	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$226.92		
Chesapeake Utilities Corporation	CPK		\$1.58	\$1.72	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$305.09		
Northwest Natural Gas Company	NWN		\$1.76	\$1.78	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$116.45		
Southwest Gas Corporation	SWX		\$1.81	\$1.94	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.89	\$5.22	\$5.51	\$5.81	\$203.73		
Spire Inc	SR		\$2.21	\$2.33	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$220.13		
Projected Annual Data Investor Cash Flows			[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32	
Black Hills Corporation	BKH	(\$64.03)	\$0.00	\$1.17	\$1.81	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08	\$6.42	\$243.86	
CenterPoint Energy, Inc.	CNP	(\$26.72)	\$0.00	\$0.67	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65	\$1.74	\$66.22	
Sempra Energy	SRE	(\$106.86)	\$0.00	\$2.78	\$4.31	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81	\$11.40	\$433.19	
Vectren Corporation	VVC	(\$55.95)	\$0.00	\$1.17	\$1.78	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94	\$4.16	\$157.96	
Atmos Energy Corporation	ATO	(\$77.26)	\$0.00	\$1.26	\$1.94	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81	\$6.13	\$233.05	
Chesapeake Utilities Corporation	CPK	(\$67.73)	\$0.00	\$1.07	\$1.69	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82	\$8.25	\$313.33	
Northwest Natural Gas Company	NWN	(\$59.31)	\$0.00	\$1.19	\$1.81	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98	\$3.15	\$119.60	
Southwest Gas Corporation	SWX	(\$81.56)	\$0.00	\$1.22	\$1.88	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.89	\$5.22	\$5.51	\$5.81	\$209.24	
Spire Inc	SR	(\$65.81)	\$0.00	\$1.50	\$2.30	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64	\$5.95	\$226.08	

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
180 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal					
			Value		Retention		Average												
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio					
Black Hills Corporation	BKH	\$61.79	5.00%	10.38%	7.50%	5.41%	7.07%	5.48%	50.00%	52.00%	65.58%	\$0.00	10.57%	24.26	4.43				
CenterPoint Energy, Inc.	CNP	\$24.91	5.00%	6.06%	6.00%	4.98%	5.51%	5.48%	82.00%	74.00%	65.58%	\$0.00	9.75%	24.26	4.43				
Sempra Energy	SRE	\$105.28	8.70%	9.87%	8.00%	2.73%	7.32%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	11.83%	24.26	4.43				
Vectren Corporation	VVC	\$52.69	5.70%	5.57%	7.00%	6.46%	6.18%	5.48%	63.00%	58.00%	65.58%	\$0.00	10.14%	24.26	4.43				
Atmos Energy Corporation	ATO	\$75.17	7.00%	6.90%	6.00%	8.67%	7.14%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	9.66%	24.26	4.43				
Chesapeake Utilities Corporation	CPK	\$65.49	6.00%	6.00%	8.00%	14.38%	8.60%	5.48%	45.00%	37.00%	65.58%	\$0.00	10.25%	24.26	4.43				
Northwest Natural Gas Company	NWN	\$59.19	4.30%	4.50%	6.00%	3.46%	4.57%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	6.59%	24.26	4.43				
Southwest Gas Corporation	SWX	\$76.46	5.00%	4.00%	6.50%	8.02%	5.88%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	8.25%	24.26	4.43				
Spire Inc	SR	\$64.75	4.10%	4.05%	8.00%	5.24%	5.35%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	10.14%	24.26	4.43				
												Mean	9.69%						
												Max	11.83%						
												Min	6.59%						
Projected Annual Earnings per Share																			
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH	\$2.83	\$3.03	\$3.24	\$3.47	\$3.72	\$3.98	\$4.26	\$4.55	\$4.85	\$5.16	\$5.47	\$5.78	\$6.10	\$6.43	\$6.78	\$7.16	\$7.55	
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.14	\$1.20	\$1.27	\$1.34	\$1.41	\$1.49	\$1.57	\$1.66	\$1.75	\$1.85	\$1.95	\$2.05	\$2.17	\$2.28	\$2.41	\$2.54	
Sempra Energy	SRE	\$5.23	\$5.61	\$6.02	\$6.47	\$6.94	\$7.45	\$7.99	\$8.55	\$9.13	\$9.71	\$10.30	\$10.90	\$11.50	\$12.13	\$12.79	\$13.49	\$14.23	
Vectren Corporation	VVC	\$2.39	\$2.54	\$2.69	\$2.86	\$3.04	\$3.23	\$3.43	\$3.63	\$3.85	\$4.07	\$4.31	\$4.55	\$4.80	\$5.06	\$5.34	\$5.63	\$5.94	
Atmos Energy Corporation	ATO	\$3.09	\$3.31	\$3.55	\$3.80	\$4.07	\$4.36	\$4.67	\$5.00	\$5.32	\$5.66	\$6.00	\$6.35	\$6.70	\$7.06	\$7.45	\$7.86	\$8.29	
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.91	\$3.16	\$3.43	\$3.73	\$4.05	\$4.40	\$4.75	\$5.11	\$5.47	\$5.83	\$6.18	\$6.51	\$6.87	\$7.25	\$7.65	\$8.06	
Northwest Natural Gas Company	NWN	\$1.96	\$2.05	\$2.14	\$2.24	\$2.34	\$2.45	\$2.56	\$2.68	\$2.81	\$2.96	\$3.11	\$3.27	\$3.45	\$3.64	\$3.84	\$4.05	\$4.27	
Southwest Gas Corporation	SWX	\$2.92	\$3.09	\$3.27	\$3.47	\$3.67	\$3.89	\$4.11	\$4.35	\$4.60	\$4.86	\$5.14	\$5.42	\$5.72	\$6.04	\$6.36	\$6.71	\$7.08	
Spire Inc	SR	\$3.16	\$3.33	\$3.51	\$3.69	\$3.89	\$4.10	\$4.32	\$4.55	\$4.80	\$5.06	\$5.33	\$5.62	\$5.93	\$6.26	\$6.60	\$6.96	\$7.34	
Projected Annual Dividend Payout Ratio																			
				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH			50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%	
CenterPoint Energy, Inc.	CNP			82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%	
Sempra Energy	SRE			65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%	
Vectren Corporation	VVC			63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%	
Atmos Energy Corporation	ATO			51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%	
Chesapeake Utilities Corporation	CPK			45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%	
Northwest Natural Gas Company	NWN			80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%	
Southwest Gas Corporation	SWX			53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%	
Spire Inc	SR			60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%	
Projected Annual Cash Flows																			
				[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value
Black Hills Corporation	BKH			\$1.62	\$1.75	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$183.16
CenterPoint Energy, Inc.	CNP			\$0.99	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$61.68
Sempra Energy	SRE			\$3.92	\$4.14	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$345.38
Vectren Corporation	VVC			\$1.70	\$1.77	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$144.09
Atmos Energy Corporation	ATO			\$1.81	\$1.94	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$201.12
Chesapeake Utilities Corporation	CPK			\$1.42	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$195.66
Northwest Natural Gas Company	NWN			\$1.71	\$1.71	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$103.72
Southwest Gas Corporation	SWX			\$1.73	\$1.83	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$171.82
Spire Inc	SR			\$2.10	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$178.13
Projected Annual Data Investor Cash Flows																			
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$61.79)	\$0.00	\$1.10	\$1.68	\$1.90	\$2.05	\$2.22	\$2.47	\$2.74	\$3.03	\$3.34	\$3.66	\$4.00	\$4.22	\$4.45	\$4.69	\$4.95	\$188.11
CenterPoint Energy, Inc.	CNP	(\$24.91)	\$0.00	\$0.67	\$1.01	\$1.04	\$1.07	\$1.10	\$1.14	\$1.18	\$1.22	\$1.26	\$1.30	\$1.35	\$1.42	\$1.50	\$1.58	\$1.67	\$63.35
Sempra Energy	SRE	(\$105.28)	\$0.00	\$2.65	\$4.06	\$4.37	\$4.62	\$4.88	\$5.28	\$5.71	\$6.15	\$6.60	\$7.07	\$7.54	\$7.95	\$8.39	\$8.85	\$9.33	\$354.71
Vectren Corporation	VVC	(\$52.69)	\$0.00	\$1.15	\$1.75	\$1.84	\$1.91	\$1.99	\$2.15	\$2.33	\$2.52	\$2.72	\$2.93	\$3.15	\$3.32	\$3.50	\$3.69	\$3.89	\$147.99
Atmos Energy Corporation	ATO	(\$75.17)	\$0.00	\$1.22	\$1.87	\$2.08	\$2.23	\$2.38	\$2.67	\$2.97	\$3.30	\$3.64	\$4.01	\$4.39	\$4.63	\$4.89	\$5.15	\$5.44	\$206.56
Chesapeake Utilities Corporation	CPK	(\$65.49)	\$0.00	\$0.96	\$1.48	\$1.53	\$1.58	\$1.63	\$1.98	\$2.38	\$2.81	\$3.27	\$3.76	\$4.27	\$4.51	\$4.75	\$5.01	\$5.29	\$200.95
Northwest Natural Gas Company	NWN	(\$59.19)	\$0.00	\$1.16	\$1.75	\$1.70	\$1.68	\$1.67	\$1.75	\$1.83	\$1.93	\$2.03	\$2.14	\$2.26	\$2.39	\$2.52	\$2.66	\$2.80	\$106.52
Southwest Gas Corporation	SWX	(\$76.46)	\$0.00	\$1.17	\$1.79	\$1.93	\$2.03	\$2.14	\$2.36	\$2.60	\$2.86	\$3.14	\$3.43	\$3.75	\$3.96	\$4.17	\$4.40	\$4.64	\$176.47
Spire Inc	SR	(\$64.75)	\$0.00	\$1.42	\$2.16	\$2.22	\$2.28	\$2.33	\$2.55	\$2.78	\$3.02	\$3.29	\$3.58	\$3.89	\$4.10	\$4.33	\$4.56	\$4.81	\$182.95

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
180 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal					
			Value		Retention	Low													
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio				
Black Hills Corporation	BKH	\$61.79	5.00%	10.38%	7.50%	5.41%	5.00%	5.48%	50.00%	52.00%	65.58%	\$0.00	9.21%	24.26	4.43				
CenterPoint Energy, Inc.	CNP	\$24.91	5.00%	6.06%	6.00%	4.98%	4.98%	5.48%	82.00%	74.00%	65.58%	\$0.00	9.39%	24.26	4.43				
Sempra Energy	SRE	\$105.28	8.70%	9.87%	8.00%	2.73%	2.73%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	8.72%	24.26	4.43				
Vectren Corporation	VVC	\$52.69	5.70%	5.57%	7.00%	6.46%	5.57%	5.48%	63.00%	58.00%	65.58%	\$0.00	9.73%	24.26	4.43				
Atmos Energy Corporation	ATO	\$75.17	7.00%	6.90%	6.00%	8.67%	6.00%	5.48%	51.00%	51.00%	65.58%	\$0.00	8.92%	24.26	4.43				
Chesapeake Utilities Corporation	CPK	\$65.49	6.00%	6.00%	8.00%	14.38%	6.00%	5.48%	45.00%	37.00%	65.58%	\$0.00	8.61%	24.26	4.43				
Northwest Natural Gas Company	NWN	\$59.19	4.30%	4.50%	6.00%	3.46%	3.46%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	5.89%	24.26	4.43				
Southwest Gas Corporation	SWX	\$76.46	5.00%	4.00%	6.50%	8.02%	4.00%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	7.05%	24.26	4.43				
Spire Inc	SR	\$64.75	4.10%	4.05%	8.00%	5.24%	4.05%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	9.27%	24.26	4.43				
												Mean	8.53%						
												Max	9.73%						
												Min	5.89%						
Projected Annual Earnings per Share																			
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Black Hills Corporation	BKH	\$2.83	\$2.97	\$3.12	\$3.28	\$3.44	\$3.61	\$3.79	\$3.99	\$4.19	\$4.41	\$4.65	\$4.90	\$5.16	\$5.45	\$5.75	\$6.06	\$6.39	
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.13	\$1.19	\$1.25	\$1.31	\$1.38	\$1.45	\$1.52	\$1.60	\$1.68	\$1.77	\$1.86	\$1.97	\$2.07	\$2.19	\$2.31	\$2.44	
Sempra Energy	SRE	\$5.23	\$5.37	\$5.52	\$5.67	\$5.82	\$5.98	\$6.15	\$6.34	\$6.57	\$6.84	\$7.16	\$7.52	\$7.93	\$8.36	\$8.82	\$9.30	\$9.81	
Vectren Corporation	VVC	\$2.39	\$2.52	\$2.66	\$2.81	\$2.97	\$3.13	\$3.31	\$3.49	\$3.69	\$3.89	\$4.10	\$4.33	\$4.57	\$4.82	\$5.08	\$5.36	\$5.65	
Atmos Energy Corporation	ATO	\$3.09	\$3.28	\$3.47	\$3.68	\$3.90	\$4.14	\$4.38	\$4.64	\$4.91	\$5.19	\$5.49	\$5.79	\$6.11	\$6.45	\$6.80	\$7.17	\$7.57	
Chesapeake Utilities Corporation	CPK	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38	\$3.59	\$3.80	\$4.03	\$4.26	\$4.51	\$4.76	\$5.03	\$5.30	\$5.59	\$5.90	\$6.22	\$6.56	
Northwest Natural Gas Company	NWN	\$1.96	\$2.03	\$2.10	\$2.17	\$2.25	\$2.32	\$2.40	\$2.50	\$2.60	\$2.72	\$2.85	\$2.99	\$3.16	\$3.33	\$3.51	\$3.70	\$3.91	
Southwest Gas Corporation	SWX	\$2.92	\$3.04	\$3.16	\$3.28	\$3.42	\$3.55	\$3.69	\$3.85	\$4.02	\$4.22	\$4.43	\$4.66	\$4.91	\$5.18	\$5.47	\$5.77	\$6.08	
Spire Inc	SR	\$3.16	\$3.29	\$3.42	\$3.56	\$3.70	\$3.85	\$4.01	\$4.18	\$4.37	\$4.58	\$4.81	\$5.06	\$5.34	\$5.63	\$5.94	\$6.27	\$6.61	
Projected Annual Dividend Payout Ratio																			
					[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031			
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%	65.58%			
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%	65.58%			
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%	65.58%			
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%	65.58%			
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%	65.58%			
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%	65.58%			
Projected Annual Cash Flows																			
		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]		
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Terminal Value		
Black Hills Corporation	BKH	\$1.56	\$1.65	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$155.12		
CenterPoint Energy, Inc.	CNP	\$0.98	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$59.08		
Sempra Energy	SRE	\$3.59	\$3.63	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$238.14		
Vectren Corporation	VVC	\$1.68	\$1.74	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$137.17		
Atmos Energy Corporation	ATO	\$1.77	\$1.88	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$183.58		
Chesapeake Utilities Corporation	CPK	\$1.36	\$1.37	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$159.22		
Northwest Natural Gas Company	NWN	\$1.68	\$1.66	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$94.81		
Southwest Gas Corporation	SWX	\$1.67	\$1.73	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$147.56		
Spire Inc	SR	\$2.05	\$2.08	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$160.34		
Projected Annual Data Investor Cash Flows																			
		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	[80]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	6/30/31	6/30/32
Black Hills Corporation	BKH	(\$61.79)	\$0.00	\$1.06	\$1.60	\$1.75	\$1.86	\$1.97	\$2.16	\$2.37	\$2.59	\$2.84	\$3.10	\$3.39	\$3.57	\$3.77	\$3.97	\$4.19	\$159.31
CenterPoint Energy, Inc.	CNP	(\$24.91)	\$0.00	\$0.66	\$1.00	\$1.02	\$1.05	\$1.07	\$1.10	\$1.14	\$1.17	\$1.21	\$1.25	\$1.29	\$1.36	\$1.44	\$1.51	\$1.60	\$60.68
Sempra Energy	SRE	(\$105.28)	\$0.00	\$2.43	\$3.64	\$3.67	\$3.71	\$3.75	\$3.92	\$4.11	\$4.33	\$4.58	\$4.87	\$5.20	\$5.48	\$5.78	\$6.10	\$6.44	\$244.58
Vectren Corporation	VVC	(\$52.69)	\$0.00	\$1.14	\$1.72	\$1.80	\$1.86	\$1.92	\$2.07	\$2.23	\$2.40	\$2.59	\$2.78	\$2.99	\$3.16	\$3.33	\$3.51	\$3.71	\$140.88
Atmos Energy Corporation	ATO	(\$75.17)	\$0.00	\$1.20	\$1.82	\$1.99	\$2.11	\$2.24	\$2.48	\$2.74	\$3.03	\$3.33	\$3.66	\$4.01	\$4.23	\$4.46	\$4.70	\$4.96	\$188.55
Chesapeake Utilities Corporation	CPK	(\$65.49)	\$0.00	\$0.92	\$1.40	\$1.39	\$1.40	\$1.41	\$1.68	\$1.98	\$2.31	\$2.67	\$3.06	\$3.48	\$3.67	\$3.87	\$4.08	\$4.30	\$163.53
Northwest Natural Gas Company	NWN	(\$59.19)	\$0.00	\$1.14	\$1.71	\$1.63	\$1.60	\$1.56	\$1.62	\$1.69	\$1.77	\$1.86	\$1.96	\$2.07	\$2.18	\$2.30	\$2.43	\$2.56	\$97.37
Southwest Gas Corporation	SWX	(\$76.46)	\$0.00	\$1.13	\$1.71	\$1.79	\$1.86	\$1.92	\$2.09	\$2.28	\$2.48	\$2.70	\$2.95	\$3.22	\$3.40	\$3.58	\$3.78	\$3.99	\$151.55
Spire Inc	SR	(\$64.75)	\$0.00	\$1.39	\$2.09	\$2.11	\$2.14	\$2.17	\$2.34	\$2.53	\$2.74	\$2.97	\$3.22	\$3.50	\$3.69	\$3.90	\$4.11	\$4.33	\$164.68

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 24.26
180 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Stock	EPS Growth Rate Estimates			Value	Retention	Long-Term	Payout Ratio	Iterative Solution		Terminal	Terminal		
			Zacks	First Call	Line	Growth	Growth	Growth	2017	2021	2027	Proof	IRR	P/E Ratio	PEG Ratio
Company	Ticker	Price													
Black Hills Corporation	BKH	\$61.79	5.00%	10.38%	7.50%	5.41%	10.38%	5.48%	50.00%	52.00%	65.58%	(\$0.00)	12.75%	24.26	4.43
CenterPoint Energy, Inc.	CNP	\$24.91	5.00%	6.06%	6.00%	4.98%	6.06%	5.48%	82.00%	74.00%	65.58%	\$0.00	10.13%	24.26	4.43
Sempra Energy	SRE	\$105.28	8.70%	9.87%	8.00%	2.73%	9.87%	5.48%	65.00%	61.00%	65.58%	(\$0.00)	13.56%	24.26	4.43
Vectren Corporation	VVC	\$52.69	5.70%	5.57%	7.00%	6.46%	7.00%	5.48%	63.00%	58.00%	65.58%	\$0.00	10.68%	24.26	4.43
Atmos Energy Corporation	ATO	\$75.17	7.00%	6.90%	6.00%	8.67%	8.67%	5.48%	51.00%	51.00%	65.58%	(\$0.00)	10.65%	24.26	4.43
Chesapeake Utilities Corporation	CPK	\$65.49	6.00%	6.00%	8.00%	14.38%	14.38%	5.48%	45.00%	37.00%	65.58%	(\$0.00)	13.94%	24.26	4.43
Northwest Natural Gas Company	NWN	\$59.19	4.30%	4.50%	6.00%	3.46%	6.00%	5.48%	80.00%	65.00%	65.58%	(\$0.00)	7.51%	24.26	4.43
Southwest Gas Corporation	SWX	\$76.46	5.00%	4.00%	6.50%	8.02%	8.02%	5.48%	53.00%	52.00%	65.58%	(\$0.00)	9.62%	24.26	4.43
Spire Inc	SR	\$64.75	4.10%	4.05%	8.00%	5.24%	8.00%	5.48%	60.00%	54.00%	65.58%	(\$0.00)	11.91%	24.26	4.43
													Mean	11.19%	
													Max	13.94%	
													Min	7.51%	
Projected Annual Earnings per Share															
		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
Company	Ticker	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Black Hills Corporation	BKH	\$2.83	\$3.12	\$3.45	\$3.81	\$4.20	\$4.64	\$5.12	\$5.61	\$6.10	\$6.58	\$7.05	\$7.49	\$7.91	\$8.34
CenterPoint Energy, Inc.	CNP	\$1.08	\$1.15	\$1.21	\$1.29	\$1.37	\$1.45	\$1.54	\$1.63	\$1.72	\$1.82	\$1.93	\$2.03	\$2.15	\$2.26
Sempra Energy	SRE	\$5.23	\$5.75	\$6.31	\$6.94	\$7.62	\$8.37	\$9.20	\$10.04	\$10.88	\$11.72	\$12.53	\$13.31	\$14.04	\$14.81
Vectren Corporation	VVC	\$2.39	\$2.56	\$2.74	\$2.93	\$3.13	\$3.35	\$3.59	\$3.83	\$4.08	\$4.33	\$4.59	\$4.85	\$5.12	\$5.40
Atmos Energy Corporation	ATO	\$3.09	\$3.36	\$3.65	\$3.97	\$4.31	\$4.68	\$5.09	\$5.50	\$5.92	\$6.34	\$6.76	\$7.16	\$7.55	\$7.97
Chesapeake Utilities Corporation	CPK	\$2.68	\$3.07	\$3.51	\$4.01	\$4.59	\$5.25	\$6.00	\$6.78	\$7.55	\$8.30	\$9.00	\$9.63	\$10.16	\$10.71
Northwest Natural Gas Company	NWN	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	\$2.62	\$2.78	\$2.94	\$3.12	\$3.30	\$3.48	\$3.68	\$3.88	\$4.09
Southwest Gas Corporation	SWX	\$2.92	\$3.15	\$3.41	\$3.68	\$3.98	\$4.29	\$4.64	\$4.99	\$5.35	\$5.71	\$6.07	\$6.43	\$6.78	\$7.15
Spire Inc	SR	\$3.16	\$3.41	\$3.69	\$3.98	\$4.30	\$4.64	\$5.01	\$5.39	\$5.78	\$6.17	\$6.56	\$6.95	\$7.33	\$7.73
Projected Annual Dividend Payout Ratio															
			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Black Hills Corporation	BKH	50.00%	50.50%	51.00%	51.50%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%
CenterPoint Energy, Inc.	CNP	82.00%	80.00%	78.00%	76.00%	74.00%	72.60%	71.19%	69.79%	68.39%	66.98%	65.58%	65.58%	65.58%	65.58%
Sempra Energy	SRE	65.00%	64.00%	63.00%	62.00%	61.00%	61.76%	62.53%	63.29%	64.05%	64.82%	65.58%	65.58%	65.58%	65.58%
Vectren Corporation	VVC	63.00%	61.75%	60.50%	59.25%	58.00%	59.26%	60.53%	61.79%	63.05%	64.32%	65.58%	65.58%	65.58%	65.58%
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	51.00%	53.43%	55.86%	58.29%	60.72%	63.15%	65.58%	65.58%	65.58%	65.58%
Chesapeake Utilities Corporation	CPK	45.00%	43.00%	41.00%	39.00%	37.00%	41.76%	46.53%	51.29%	56.05%	60.82%	65.58%	65.58%	65.58%	65.58%
Northwest Natural Gas Company	NWN	80.00%	76.25%	72.50%	68.75%	65.00%	65.10%	65.19%	65.29%	65.39%	65.48%	65.58%	65.58%	65.58%	65.58%
Southwest Gas Corporation	SWX	53.00%	52.75%	52.50%	52.25%	52.00%	54.26%	56.53%	58.79%	61.05%	63.32%	65.58%	65.58%	65.58%	65.58%
Spire Inc	SR	60.00%	58.50%	57.00%	55.50%	54.00%	55.93%	57.86%	59.79%	61.72%	63.65%	65.58%	65.58%	65.58%	65.58%
Projected Annual Cash Flows															
			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]
Company	Ticker	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Black Hills Corporation	BKH	\$1.72	\$1.92	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47	\$5.77	\$6.08
CenterPoint Energy, Inc.	CNP	\$1.00	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48	\$1.57	\$1.65
Sempra Energy	SRE	\$4.10	\$4.44	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71	\$10.25	\$10.81
Vectren Corporation	VVC	\$1.72	\$1.81	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54	\$3.74	\$3.94
Atmos Energy Corporation	ATO	\$1.86	\$2.02	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23	\$5.51	\$5.81
Chesapeake Utilities Corporation	CPK	\$1.58	\$1.72	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03	\$7.41	\$7.82
Northwest Natural Gas Company	NWN	\$1.76	\$1.78	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68	\$2.83	\$2.98
Southwest Gas Corporation	SWX	\$1.81	\$1.94	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.69	\$4.95	\$5.22
Spire Inc	SR	\$2.21	\$2.33	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07	\$5.35	\$5.64
Projected Annual Data Investor Cash Flows															
			[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]
Company	Ticker	Initial Outflow	4/28/17	12/31/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28
Black Hills Corporation	BKH	(\$61.79)	\$0.00	\$1.17	\$1.81	\$2.14	\$2.39	\$2.66	\$3.04	\$3.45	\$3.87	\$4.30	\$4.75	\$5.18	\$5.47
CenterPoint Energy, Inc.	CNP	(\$24.91)	\$0.00	\$0.67	\$1.03	\$1.07	\$1.10	\$1.14	\$1.18	\$1.23	\$1.27	\$1.32	\$1.36	\$1.41	\$1.48
Sempra Energy	SRE	(\$105.28)	\$0.00	\$2.78	\$4.31	\$4.80	\$5.19	\$5.61	\$6.20	\$6.81	\$7.42	\$8.03	\$8.63	\$9.21	\$9.71
Vectren Corporation	VVC	(\$52.69)	\$0.00	\$1.17	\$1.78	\$1.90	\$1.99	\$2.08	\$2.27	\$2.47	\$2.68	\$2.89	\$3.12	\$3.36	\$3.54
Atmos Energy Corporation	ATO	(\$75.17)	\$0.00	\$1.26	\$1.94	\$2.20	\$2.39	\$2.60	\$2.94	\$3.31	\$3.70	\$4.10	\$4.52	\$4.95	\$5.23
Chesapeake Utilities Corporation	CPK	(\$65.49)	\$0.00	\$1.07	\$1.69	\$1.88	\$2.05	\$2.22	\$2.83	\$3.51	\$4.26	\$5.05	\$5.86	\$6.66	\$7.03
Northwest Natural Gas Company	NWN	(\$59.19)	\$0.00	\$1.19	\$1.81	\$1.79	\$1.80	\$1.81	\$1.92	\$2.03	\$2.15	\$2.28	\$2.41	\$2.54	\$2.68
Southwest Gas Corporation	SWX	(\$76.46)	\$0.00	\$1.22	\$1.88	\$2.09	\$2.24	\$2.41	\$2.71	\$3.02	\$3.36	\$3.71	\$4.07	\$4.45	\$4.69
Spire Inc	SR	(\$64.75)	\$0.00	\$1.50	\$2.30	\$2.45	\$2.58	\$2.71	\$3.02	\$3.34	\$3.69	\$4.05	\$4.42	\$4.81	\$5.07

Multi-Stage DCF Notes:

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- [1] Source: Bloomberg; based on 30-, 90-, and 180-day historical average as of April 28, 2017
[2] Source: Zacks
[3] Source: Yahoo! Finance
[4] Source: Value Line
[5] Source: Exhibit RBH-3, Value Line
[6] Equals indicated value (average, minimum, maximum) from Columns [2], [3], [4], [5]
[7] Source: Federal Reserve, Bureau of Economic Analysis, Blue Chip Financial Forecast
[8] Source: Value Line
[9] Source: Value Line
[10] Source: Bloomberg Professional
[11] Equals Column [1] + Column [63]
[12] Equals result of Excel Solver function; goal: Column [11] equals \$0.00
[13] Equals Proxy Group 30-day average PE ratio. Source: SNL Financial
[14] Equals Column [13] / (Column [7] x 100)
[15] Source: Value Line
[16] Equals Column [15] x (1 + Column [6])
[17] Equals Column [16] x (1 + Column [6])
[18] Equals Column [17] x (1 + Column [6])
[19] Equals Column [18] x (1 + Column [6])
[20] Equals Column [19] x (1 + Column [6])
[21] Equals Column [20] x (1 + Column [6])
[22] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2022 - 2021)))) \times \text{Column [21]}$
[23] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2023 - 2021)))) \times \text{Column [22]}$
[24] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2024 - 2021)))) \times \text{Column [23]}$
[25] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2025 - 2021)))) \times \text{Column [24]}$
[26] Equals $(1 + (\text{Column [6]} + (((\text{Column [7]} - \text{Column [6]}) / (2027 - 2022 + 1)) \times (2026 - 2021)))) \times \text{Column [25]}$
[27] Equals Column [26] x (1 + Column [7])
[28] Equals Column [27] x (1 + Column [7])
[29] Equals Column [28] x (1 + Column [7])
[30] Equals Column [29] x (1 + Column [7])
[31] Equals Column [30] x (1 + Column [7])
[32] Equals Column [8]
[33] Equals Column [32] + ((Column [36] - Column [32]) / 4)
[34] Equals Column [33] + ((Column [36] - Column [32]) / 4)
[35] Equals Column [34] + ((Column [36] - Column [32]) / 4)
[36] Equals Column [9]
[37] Equals Column [36] + ((Column [42] - Column [36]) / 6)
[38] Equals Column [37] + ((Column [42] - Column [36]) / 6)
[39] Equals Column [38] + ((Column [42] - Column [36]) / 6)
[40] Equals Column [39] + ((Column [42] - Column [36]) / 6)
[41] Equals Column [40] + ((Column [42] - Column [36]) / 6)
[42] Equals Column [10]
[43] Equals Column [10]
[44] Equals Column [10]
[45] Equals Column [10]
[46] Equals Column [10]
[47] Equals Column [17] x Column [32]
[48] Equals Column [18] x Column [33]
[49] Equals Column [19] x Column [34]
[50] Equals Column [20] x Column [35]
[51] Equals Column [21] x Column [36]
[52] Equals Column [22] x Column [37]
[53] Equals Column [23] x Column [38]
[54] Equals Column [24] x Column [39]
[55] Equals Column [25] x Column [40]
[56] Equals Column [26] x Column [41]
[57] Equals Column [27] x Column [42]
[58] Equals Column [28] x Column [43]
[59] Equals Column [29] x Column [44]
[60] Equals Column [30] x Column [45]
[61] Equals Column [31] x Column [46]
[62] Equals Column [31] x Column [13]
[63] Equals negative net present value; discount rate equals Column [12], cash flows equal Column [64] through Column [80]
[64] Equals \$0.00
[65] Equals Column [47] x $(12/31/2017 - 4/28/2017) / 365$
[66] Equals Column [47] x $(1 + (0.5 \times \text{Column [6]}))$
[67] Equals Column [49]
[68] Equals Column [50]
[69] Equals Column [51]
[70] Equals Column [52]
[71] Equals Column [53]
[72] Equals Column [54]
[73] Equals Column [55]
[74] Equals Column [56]
[75] Equals Column [57]
[76] Equals Column [58]
[77] Equals Column [59]
[78] Equals Column [60]
[79] Equals Column [61]
[80] Equals Column [61] + [62]

Ex-Ante Market Risk Premium
Market DCF Method Based - Bloomberg

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-	Implied Market
Market Return	day average)	Risk Premium
13.37%	2.97%	10.39%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est.	[8] DCF Result	[9] Weighted DCF Result
AGILENT TECHNOLOGIES INC	A	17,742.66	0.08%	0.93%	8.88%	9.84%	0.0082%
AMERICAN AIRLINES GROUP INC	AAL	20,994.14	0.10%	1.00%	-2.71%	-1.73%	-0.0017%
ADVANCE AUTO PARTS INC	AAP	10,492.60	0.05%	0.17%	13.56%	13.74%	0.0068%
APPLE INC	AAPL	753,665.47	3.55%	1.59%	10.64%	12.32%	0.4377%
ABBVIE INC	ABBV	105,080.45	0.50%	3.90%	9.27%	13.35%	0.0661%
AMERISOURCEBERGEN CORP	ABC	17,827.80	0.08%	1.78%	9.46%	11.33%	0.0095%
ABBOTT LABORATORIES	ABT	75,409.82	0.36%	2.49%	10.70%	13.32%	0.0474%
ACCENTURE PLC-CL A	ACN	78,616.83	0.37%	2.00%	10.07%	12.17%	0.0451%
ADOBE SYSTEMS INC	ADBE	66,160.91	0.31%	0.00%	17.48%	17.48%	0.0545%
ANALOG DEVICES INC	ADI	27,819.91	0.13%	2.16%	10.96%	13.24%	0.0174%
ARCHER-DANIELS-MIDLAND CO	ADM	26,107.99	0.12%	2.81%	11.86%	14.84%	0.0183%
AUTOMATIC DATA PROCESSING	ADP	46,905.83	0.22%	2.14%	11.02%	13.27%	0.0294%
ALLIANCE DATA SYSTEMS CORP	ADS	13,948.55	0.07%	0.84%	14.50%	15.40%	0.0101%
AUTODESK INC	ADSK	19,891.89	0.09%	0.00%	24.33%	24.33%	0.0228%
AMEREN CORPORATION	AEE	13,269.70	0.06%	3.28%	6.00%	9.37%	0.0059%
AMERICAN ELECTRIC POWER	AEP	33,352.83	0.16%	3.51%	4.75%	8.34%	0.0131%
AES CORP	AES	7,456.84	0.04%	4.27%	4.37%	8.73%	0.0031%
AETNA INC	AET	44,805.97	0.21%	1.48%	11.72%	13.29%	0.0281%
AFLAC INC	AFL	30,040.15	0.14%	2.34%	3.30%	5.67%	0.0080%
ALLERGAN PLC	AGN	81,814.13	0.39%	1.16%	12.73%	13.96%	0.0538%
AMERICAN INTERNATIONAL GROUP	AIG	59,665.00	0.28%	2.22%	11.00%	13.34%	0.0375%
APARTMENT INVT & MGMT CO -A	AIV	6,867.94	0.03%	3.33%	25.40%	29.14%	0.0094%
ASSURANT INC	AIZ	5,329.22	0.03%	2.25%	21.41%	23.90%	0.0060%
ARTHUR J GALLAGHER & CO	AJG	10,016.53	0.05%	2.80%	9.95%	12.88%	0.0061%
AKAMAI TECHNOLOGIES INC	AKAM	10,537.62	0.05%	0.00%	14.18%	14.18%	0.0070%
ALBEMARLE CORP	ALB	12,061.90	0.06%	1.17%	11.60%	12.84%	0.0073%
ALASKA AIR GROUP INC	ALK	10,525.35	0.05%	1.42%	10.66%	12.16%	0.0060%
ALLSTATE CORP	ALL	29,687.40	0.14%	1.73%	9.70%	11.52%	0.0161%
ALLEGION PLC	ALLE	7,493.36	0.04%	0.78%	13.02%	13.85%	0.0049%
ALEXION PHARMACEUTICALS INC	ALXN	28,693.83	0.14%	0.00%	21.77%	21.77%	0.0294%
APPLIED MATERIALS INC	AMAT	43,851.94	0.21%	1.02%	15.72%	16.82%	0.0348%
ADVANCED MICRO DEVICES	AMD	12,520.60	0.06%	0.00%	8.33%	8.33%	0.0049%
AMETEK INC	AME	13,156.82	0.06%	0.68%	10.29%	11.01%	0.0068%
AFFILIATED MANAGERS GROUP	AMG	9,369.81	0.04%	0.48%	13.98%	14.50%	0.0064%
AMGEN INC	AMGN	120,105.39	0.57%	2.82%	6.81%	9.73%	0.0551%
AMERIPRISE FINANCIAL INC	AMP	19,671.48	0.09%	2.53%	10.40%	13.07%	0.0121%
AMERICAN TOWER CORP	AMT	53,525.69	0.25%	2.06%	17.98%	20.23%	0.0510%
AMAZON.COM INC	AMZN	442,122.56	2.08%	0.00%	35.49%	35.49%	0.7398%
AUTONATION INC	AN	4,252.98	0.02%	0.00%	7.92%	7.92%	0.0016%
ANTHEM INC	ANTM	47,138.40	0.22%	1.46%	8.15%	9.67%	0.0215%
AON PLC	AON	31,470.08	0.15%	1.15%	9.77%	10.97%	0.0163%
APACHE CORP	APA	18,501.20	0.09%	2.06%	-14.70%	-12.80%	-0.0112%
ANADARKO PETROLEUM CORP	APC	31,857.18	0.15%	0.35%	-0.49%	-0.14%	-0.0002%
AIR PRODUCTS & CHEMICALS INC	APD	30,590.29	0.14%	2.57%	8.19%	10.86%	0.0157%
AMPHENOL CORP-CL A	APH	22,082.65	0.10%	0.89%	10.03%	10.95%	0.0114%
ALEXANDRIA REAL ESTATE EQUIT	ARE	10,246.67	0.05%	2.98%	6.97%	10.05%	0.0049%
ARCONIC INC	ARNC	12,042.81	0.06%	0.97%	13.10%	14.13%	0.0080%
ACTIVISION BLIZZARD INC	ATVI	39,373.86	0.19%	0.29%	9.46%	9.76%	0.0181%
AVALONBAY COMMUNITIES INC	AVB	26,099.26	0.12%	3.00%	6.96%	10.06%	0.0124%
BROADCOM LTD	AVGO	88,624.85	0.42%	1.85%	15.42%	17.41%	0.0728%
AVERY DENNISON CORP	AVY	7,332.77	0.03%	2.03%	7.10%	9.20%	0.0032%
AMERICAN WATER WORKS CO INC	AWK	14,175.49	0.07%	2.05%	7.00%	9.12%	0.0061%
AMERICAN EXPRESS CO	AXP	70,832.00	0.33%	1.67%	8.20%	9.94%	0.0332%
ACUITY BRANDS INC	AYI	7,764.69	0.04%	0.30%	20.00%	20.33%	0.0074%
AUTOZONE INC	AZO	19,663.15	0.09%	0.00%	13.68%	13.68%	0.0127%
BOEING CO/THE	BA	111,559.87	0.53%	3.07%	14.33%	17.62%	0.0927%
BANK OF AMERICA CORP	BAC	233,678.75	1.10%	1.62%	13.94%	15.67%	0.1727%
BAXTER INTERNATIONAL INC	BAX	30,176.19	0.14%	0.97%	12.68%	13.71%	0.0195%
BED BATH & BEYOND INC	BBBY	5,624.71	0.03%	1.02%	5.53%	6.58%	0.0017%
BB&T CORP	BBT	35,034.97	0.17%	2.94%	8.41%	11.47%	0.0189%
BEST BUY CO INC	BBY	16,015.03	0.08%	2.52%	11.44%	14.11%	0.0107%
CR BARD INC	BCR	22,266.83	0.10%	0.35%	9.30%	9.66%	0.0101%
BECTON DICKINSON AND CO	BDX	39,791.91	0.19%	1.57%	10.19%	11.84%	0.0222%
FRANKLIN RESOURCES INC	BEN	24,198.35	0.11%	1.86%	10.00%	11.96%	0.0136%
BROWN-FORMAN CORP-CLASS B	BF/B	18,291.27	0.09%	1.51%	1.53%	3.04%	0.0026%
BAKER HUGHES INC	BHI	25,259.78	0.12%	1.15%	20.50%	21.76%	0.0259%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
BIOGEN INC	BIIB	57,527.76	0.27%	0.00%	7.70%	7.70%	0.0209%
BANK OF NEW YORK MELLON CORP	BK	48,737.00	0.23%	1.76%	12.31%	14.17%	0.0326%
BLACKROCK INC	BLK	62,833.27	0.30%	2.61%	13.87%	16.66%	0.0494%
BALL CORP	BLL	13,460.89	0.06%	0.67%	5.50%	6.19%	0.0039%
BRISTOL-MYERS SQUIBB CO	BMJ	92,338.70	0.44%	2.83%	13.26%	16.28%	0.0709%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	407,512.26	N/A	0.00%	N/A	N/A	N/A
BOSTON SCIENTIFIC CORP	BSX	36,113.47	0.17%	0.00%	9.80%	9.80%	0.0167%
BORGWARNER INC	BWA	8,972.64	0.04%	1.32%	6.13%	7.49%	0.0032%
BOSTON PROPERTIES INC	BXP	19,477.31	0.09%	2.38%	5.33%	7.78%	0.0071%
CITIGROUP INC	C	163,458.84	0.77%	1.34%	4.43%	5.80%	0.0447%
CA INC	CA	13,722.09	0.06%	3.12%	6.05%	9.26%	0.0606%
CONAGRA BRANDS INC	CAG	16,500.95	0.08%	2.18%	8.65%	10.92%	0.0085%
CARDINAL HEALTH INC	CAH	22,898.86	0.11%	2.39%	8.33%	10.81%	0.0117%
CATERPILLAR INC	CAT	60,247.20	0.28%	3.03%	7.64%	10.78%	0.0306%
CHUBB LTD	CB	63,928.46	0.30%	2.03%	10.63%	12.77%	0.0385%
CBRE GROUP INC - A	CBG	12,099.29	0.06%	0.00%	10.23%	10.23%	0.0058%
CBOE HOLDINGS INC	CBOE	9,228.64	N/A	1.24%	N/A	N/A	N/A
CBS CORP-CLASS B NON VOTING	CBS	27,154.66	0.13%	1.09%	12.64%	13.80%	0.0177%
CROWN CASTLE INTL CORP	CCI	34,633.89	0.16%	4.07%	19.97%	24.44%	0.0399%
CARNIVAL CORP	CCL	44,711.68	0.21%	2.38%	13.55%	16.09%	0.0339%
CELGENE CORP	CELG	96,861.26	0.46%	0.00%	20.68%	20.68%	0.0944%
CERNER CORP	CERN	21,389.07	0.10%	0.00%	12.82%	12.82%	0.0129%
CF INDUSTRIES HOLDINGS INC	CF	6,235.36	0.03%	4.49%	-0.05%	4.44%	0.0013%
CITIZENS FINANCIAL GROUP	CFG	18,697.26	0.09%	1.65%	19.13%	20.93%	0.0184%
CHURCH & DWIGHT CO INC	CHD	12,582.40	0.06%	1.53%	9.02%	10.62%	0.0063%
CHESAPEAKE ENERGY CORP	CHK	4,776.26	0.02%	0.00%	-0.57%	-0.57%	-0.0001%
C.H. ROBINSON WORLDWIDE INC	CHRW	10,307.48	0.05%	2.50%	9.28%	11.89%	0.0058%
CHARTER COMMUNICATIONS INC-A	CHTR	106,729.90	0.50%	0.00%	22.33%	22.33%	0.1124%
CIGNA CORP	CI	40,135.44	0.19%	0.03%	11.98%	12.01%	0.0227%
CINCINNATI FINANCIAL CORP	CINF	11,872.37	N/A	2.77%	N/A	N/A	N/A
COLGATE-PALMOLIVE CO	CL	63,632.42	0.30%	2.26%	9.26%	11.62%	0.0349%
CLOROX COMPANY	CLX	17,147.86	0.08%	2.40%	7.01%	9.50%	0.0077%
COMERICA INC	CMA	12,465.74	0.06%	1.41%	10.97%	12.46%	0.0073%
COMCAST CORP-CLASS A	CMCSA	185,876.48	0.88%	1.54%	10.31%	11.93%	0.1046%
CME GROUP INC	CME	39,480.81	0.19%	5.02%	9.84%	15.10%	0.0281%
CHIPOTLE MEXICAN GRILL INC	CMG	13,599.75	0.06%	0.00%	20.00%	20.00%	0.0128%
CUMMINS INC	CMI	25,353.58	0.12%	2.75%	6.00%	8.83%	0.0106%
CMS ENERGY CORP	CMS	12,712.60	0.06%	2.93%	6.33%	9.36%	0.0056%
CENTENE CORP	CNC	12,817.46	0.06%	0.00%	13.22%	13.22%	0.0080%
CENTERPOINT ENERGY INC	CNP	12,295.23	0.06%	3.77%	6.00%	9.88%	0.0057%
CAPITAL ONE FINANCIAL CORP	COF	38,800.02	0.18%	2.11%	4.52%	6.68%	0.0122%
CABOT OIL & GAS CORP	COG	10,818.76	0.05%	0.34%	41.29%	41.70%	0.0213%
COACH INC	COH	11,053.47	0.05%	3.44%	10.89%	14.51%	0.0076%
ROCKWELL COLLINS INC	COL	16,902.49	0.08%	1.27%	9.57%	10.90%	0.0087%
COOPER COS INC/THE	COO	9,803.39	0.05%	0.04%	11.64%	11.68%	0.0054%
CONOCOPHILLIPS	COP	59,267.09	0.28%	2.23%	7.00%	9.31%	0.0260%
COSTCO WHOLESALE CORP	COST	77,920.84	0.37%	1.02%	10.40%	11.47%	0.0421%
COTY INC-CL A	COTY	13,336.05	0.06%	2.97%	1.89%	4.89%	0.0031%
CAMPBELL SOUP CO	CPB	17,513.98	0.08%	2.45%	4.98%	7.49%	0.0062%
SALESFORCE.COM INC	CRM	61,260.46	0.29%	0.00%	25.53%	25.53%	0.0737%
CISCO SYSTEMS INC	CSCO	170,617.66	0.80%	3.21%	7.44%	10.77%	0.0866%
CSRA INC	CSRA	4,743.24	0.02%	1.39%	6.20%	7.63%	0.0017%
CSX CORP	CSX	46,906.06	0.22%	1.52%	9.90%	11.50%	0.0254%
CINTAS CORP	CTAS	12,898.85	0.06%	1.09%	11.15%	12.30%	0.0075%
CENTURYLINK INC	CTL	14,089.33	0.07%	8.41%	-4.08%	4.16%	0.0028%
COGNIZANT TECH SOLUTIONS-A	CTSH	35,475.18	0.17%	0.78%	13.78%	14.61%	0.0244%
CITRIX SYSTEMS INC	CTXS	12,236.75	0.06%	0.00%	10.34%	10.34%	0.0060%
CVS HEALTH CORP	CVS	85,390.62	0.40%	2.37%	11.89%	14.40%	0.0580%
CHEVRON CORP	CVX	202,149.72	0.95%	4.07%	29.90%	34.57%	0.3295%
CONCHO RESOURCES INC	CXO	18,767.33	0.09%	0.00%	3.24%	3.24%	0.0029%
DOMINION RESOURCES INC/VA	D	48,643.98	0.23%	3.88%	5.68%	9.67%	0.0222%
DELTA AIR LINES INC	DAL	33,422.50	0.16%	1.99%	11.44%	13.55%	0.0214%
DU PONT (E.I.) DE NEMOURS	DD	69,145.80	0.33%	1.86%	6.72%	8.64%	0.0282%
DEERE & CO	DE	35,523.58	0.17%	2.18%	7.70%	9.96%	0.0167%
DISCOVER FINANCIAL SERVICES	DFS	24,028.33	0.11%	1.99%	6.91%	8.97%	0.0102%
DOLLAR GENERAL CORP	DG	19,987.41	0.09%	1.43%	9.65%	11.16%	0.0105%
QUEST DIAGNOSTICS INC	DGX	14,436.46	0.07%	1.68%	8.51%	10.27%	0.0070%
DR HORTON INC	DHI	12,352.74	0.06%	1.20%	11.77%	13.04%	0.0076%
DANAHER CORP	DHR	57,841.05	0.27%	0.68%	10.41%	11.13%	0.0303%
WALT DISNEY CO/THE	DIS	182,792.30	0.86%	1.36%	7.75%	9.16%	0.0790%
DISCOVERY COMMUNICATIONS-A	DISCA	16,512.38	0.08%	0.00%	14.07%	14.07%	0.0110%
DISH NETWORK CORP-A	DISH	29,989.41	0.14%	0.00%	2.99%	2.99%	0.0042%
DELPHI AUTOMOTIVE PLC	DLPH	21,650.70	0.10%	1.51%	11.76%	13.35%	0.0136%
DIGITAL REALTY TRUST INC	DLR	18,601.69	0.09%	3.25%	5.10%	8.42%	0.0074%
DOLLAR TREE INC	DLTR	19,558.38	0.09%	0.00%	15.23%	15.23%	0.0140%
DOVER CORP	DOV	12,279.23	0.06%	2.29%	13.63%	16.08%	0.0093%
DOW CHEMICAL CO/THE	DOW	76,722.93	0.36%	3.17%	6.58%	9.86%	0.0357%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
DR PEPPER SNAPPLE GROUP INC	DPS	16,846.60	0.08%	2.48%	8.58%	11.17%	0.0089%
DARDEN RESTAURANTS INC	DRI	10,592.41	0.05%	2.63%	9.69%	12.44%	0.0062%
DTE ENERGY COMPANY	DTE	18,762.22	0.09%	3.17%	5.50%	8.75%	0.0077%
DUKE ENERGY CORP	DUK	57,740.37	0.27%	4.26%	5.05%	9.42%	0.0257%
DAVITA INC	DVA	13,429.35	0.06%	0.00%	8.84%	8.84%	0.0056%
DEVON ENERGY CORP	DVN	20,758.47	0.10%	0.61%	18.53%	19.19%	0.0188%
DXC TECHNOLOGY CO	DXC	21,367.56	N/A	0.00%	N/A	N/A	N/A
ELECTRONIC ARTS INC	EA	29,229.64	0.14%	0.00%	11.27%	11.27%	0.0155%
EBAY INC	EBAY	36,160.91	0.17%	0.00%	9.52%	9.52%	0.0162%
ECOLAB INC	ECL	37,443.50	0.18%	1.15%	13.00%	14.22%	0.0251%
CONSOLIDATED EDISON INC	ED	24,202.16	0.11%	3.47%	3.27%	6.80%	0.0078%
EQUIFAX INC	EFX	16,265.86	0.08%	1.10%	8.90%	10.05%	0.0077%
EDISON INTERNATIONAL	EIX	26,055.12	0.12%	2.74%	4.76%	7.56%	0.0093%
ESTEE LAUDER COMPANIES-CL A	EL	31,928.60	0.15%	1.49%	10.82%	12.39%	0.0187%
EASTMAN CHEMICAL CO	EMN	11,629.53	0.05%	2.55%	6.40%	9.03%	0.0050%
EMERSON ELECTRIC CO	EMR	38,884.50	0.18%	3.20%	7.08%	10.39%	0.0191%
EOG RESOURCES INC	EOG	53,387.27	0.25%	0.73%	-6.08%	-5.37%	-0.0135%
EQUINIX INC	EQIX	32,543.78	0.15%	1.92%	21.38%	23.50%	0.0361%
EQUITY RESIDENTIAL	EQR	23,709.76	0.11%	3.17%	9.07%	12.38%	0.0138%
EQT CORP	EQT	10,076.59	0.05%	0.21%	15.00%	15.22%	0.0072%
EVERSOURCE ENERGY	ES	18,823.02	0.09%	3.21%	6.00%	9.31%	0.0083%
EXPRESS SCRIPTS HOLDING CO	ESRX	36,406.95	0.17%	0.00%	11.99%	11.99%	0.0206%
ESSEX PROPERTY TRUST INC	ESS	16,026.97	0.08%	2.82%	6.95%	9.87%	0.0075%
E*TRADE FINANCIAL CORP	ETFC	9,490.91	0.04%	0.00%	16.17%	16.17%	0.0072%
EATON CORP PLC	ETN	33,928.82	0.16%	3.16%	9.20%	12.50%	0.0200%
ENTERGY CORP	ETR	13,738.64	0.06%	4.62%	-2.70%	1.86%	0.0012%
ENVISION HEALTHCARE CORP	EVHC	6,584.77	0.03%	0.00%	9.99%	9.99%	0.0031%
EDWARDS LIFESCIENCES CORP	EW	23,160.76	0.11%	0.00%	16.68%	16.68%	0.0182%
EXELON CORP	EXC	32,059.18	0.15%	3.76%	4.33%	8.18%	0.0124%
EXPEDITORS INTL WASH INC	EXPD	10,135.25	0.05%	1.48%	7.85%	9.39%	0.0045%
EXPEDIA INC	EXPE	20,184.46	0.10%	0.84%	19.18%	20.10%	0.0191%
EXTRA SPACE STORAGE INC	EXR	9,510.16	0.04%	4.44%	7.54%	12.15%	0.0054%
FORD MOTOR CO	F	45,673.38	0.22%	5.32%	3.82%	9.24%	0.0199%
FASTENAL CO	FAST	12,924.31	0.06%	2.84%	14.37%	17.41%	0.0106%
FACEBOOK INC-A	FB	435,328.93	2.05%	0.00%	25.04%	25.04%	0.5140%
FORTUNE BRANDS HOME & SECURI	FBHS	9,784.37	0.05%	1.12%	12.53%	13.72%	0.0063%
FREEMPORT-MCMORAN INC	FCX	18,444.74	0.09%	0.00%	12.55%	12.55%	0.0109%
FEDEX CORP	FDX	50,721.03	0.24%	0.88%	13.67%	14.61%	0.0349%
FIRSTENERGY CORP	FE	13,285.58	0.06%	4.81%	-0.30%	4.51%	0.0028%
F5 NETWORKS INC	FFIV	8,366.03	0.04%	0.00%	12.21%	12.21%	0.0048%
FIDELITY NATIONAL INFO SERV	FIS	27,758.72	0.13%	1.39%	11.10%	12.56%	0.0164%
FISERV INC	FISV	25,302.71	0.12%	0.00%	10.13%	10.13%	0.0121%
FIFTH THIRD BANCORP	FITB	18,337.68	0.09%	2.41%	3.30%	5.75%	0.0050%
FOOT LOCKER INC	FL	10,149.56	0.05%	1.59%	10.12%	11.80%	0.0056%
FLIR SYSTEMS INC	FLIR	5,008.88	N/A	1.49%	N/A	N/A	N/A
FLUOR CORP	FLR	7,171.29	0.03%	1.66%	16.85%	18.65%	0.0063%
FLOWSERVE CORP	FLS	6,637.97	0.03%	1.51%	11.74%	13.34%	0.0042%
FMC CORP	FMC	9,800.12	0.05%	0.94%	12.00%	13.00%	0.0060%
TWENTY-FIRST CENTURY FOX-A	FOXA	55,981.50	0.26%	1.26%	9.84%	11.16%	0.0295%
FEDERAL REALTY INVS TRUST	FRT	9,446.68	0.04%	3.08%	6.26%	9.44%	0.0042%
TECHNIPFMC PLC	FTI	14,058.42	0.07%	1.66%	-6.95%	-5.35%	-0.0035%
FORTIVE CORP	FTV	21,924.93	0.10%	0.39%	7.65%	8.06%	0.0083%
GENERAL DYNAMICS CORP	GD	58,463.62	0.28%	1.70%	8.55%	10.32%	0.0285%
GENERAL ELECTRIC CO	GE	252,465.61	1.19%	3.29%	10.03%	13.48%	0.1604%
GGP INC	GGP	19,091.31	0.09%	4.27%	5.90%	10.30%	0.0093%
GILEAD SCIENCES INC	GILD	89,611.07	0.42%	3.12%	0.34%	3.47%	0.0146%
GENERAL MILLS INC	GIS	33,133.55	0.16%	3.34%	8.10%	11.57%	0.0181%
CORNING INC	GLW	26,548.68	0.13%	2.13%	9.19%	11.41%	0.0143%
GENERAL MOTORS CO	GM	52,275.62	0.25%	4.46%	10.14%	14.83%	0.0365%
ALPHABET INC-CL A	GOOGL	632,353.25	2.98%	0.00%	16.26%	16.26%	0.4847%
GENUINE PARTS CO	GPC	13,563.20	0.06%	2.95%	10.32%	13.41%	0.0086%
GLOBAL PAYMENTS INC	GPN	12,467.74	0.06%	0.05%	12.00%	12.05%	0.0071%
GAP INC/THE	GPS	10,485.78	0.05%	3.51%	5.46%	9.06%	0.0045%
GARMIN LTD	GRMN	9,561.82	0.05%	3.93%	2.45%	6.42%	0.0029%
GOLDMAN SACHS GROUP INC	GS	93,458.61	0.44%	1.30%	7.16%	8.50%	0.0375%
GOODYEAR TIRE & RUBBER CO	GT	9,122.51	N/A	1.14%	N/A	N/A	N/A
WW GRAINGER INC	GWW	11,254.78	0.05%	2.61%	12.28%	15.04%	0.0080%
HALLIBURTON CO	HAL	39,817.80	N/A	1.57%	N/A	N/A	N/A
HASBRO INC	HAS	12,389.42	0.06%	2.29%	9.45%	11.85%	0.0069%
HUNTINGTON BANCSHARES INC	HBAN	14,019.71	0.07%	2.58%	10.35%	13.07%	0.0086%
HANESBRANDS INC	HBI	8,124.18	0.04%	2.68%	13.88%	16.75%	0.0064%
HCA HOLDINGS INC	HCA	31,194.82	0.15%	0.00%	11.18%	11.18%	0.0164%
WELLTOWER INC	HCN	25,947.43	0.12%	4.90%	4.59%	9.61%	0.0118%
HCP INC	HCP	14,684.81	0.07%	4.96%	-1.90%	3.01%	0.0021%
HOME DEPOT INC	HD	187,502.48	0.88%	2.25%	12.56%	14.95%	0.1321%
HESS CORP	HES	15,455.83	0.07%	2.07%	-9.60%	-7.63%	-0.0056%
HARTFORD FINANCIAL SVCS GRP	HIG	17,765.57	0.08%	1.99%	9.50%	11.58%	0.0097%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
HARLEY-DAVIDSON INC	HOG	9,977.39	0.05%	2.59%	8.80%	11.50%	0.0054%
HOLOGIC INC	HOLX	12,610.23	0.06%	0.00%	10.22%	10.22%	0.0061%
HONEYWELL INTERNATIONAL INC	HON	99,973.03	0.47%	2.05%	9.29%	11.43%	0.0539%
HELMERICH & PAYNE	HP	6,583.26	0.03%	4.63%	4.10%	8.82%	0.0027%
HEWLETT PACKARD ENTERPRIS	HPE	30,883.04	N/A	1.40%	N/A	N/A	N/A
HP INC	HPQ	31,820.52	0.15%	2.84%	1.75%	4.61%	0.0069%
H&R BLOCK INC	HRB	5,135.68	0.02%	3.54%	11.00%	14.74%	0.0036%
HORMEL FOODS CORP	HRL	18,554.28	0.09%	1.87%	4.07%	5.98%	0.0052%
HARRIS CORP	HRS	13,926.02	N/A	1.89%	N/A	N/A	N/A
HENRY SCHEIN INC	HSIC	13,856.01	0.07%	0.00%	10.09%	10.09%	0.0066%
HOST HOTELS & RESORTS INC	HST	13,245.74	0.06%	4.57%	3.40%	8.05%	0.0050%
HERSHEY CO/THE	HSY	23,023.52	0.11%	2.33%	10.30%	12.75%	0.0138%
HUMANA INC	HUM	32,028.27	0.15%	0.71%	12.53%	13.28%	0.0201%
INTL BUSINESS MACHINES CORP	IBM	150,591.96	0.71%	3.60%	6.64%	10.36%	0.0736%
INTERCONTINENTAL EXCHANGE IN	ICE	35,725.91	0.17%	1.33%	11.30%	12.71%	0.0214%
IDEXX LABORATORIES INC	IDXX	14,780.95	0.07%	0.00%	12.32%	12.32%	0.0086%
INTL FLAVORS & FRAGRANCES	IFF	10,944.85	0.05%	1.85%	6.55%	8.46%	0.0044%
ILLUMINA INC	ILMN	26,990.36	0.13%	0.00%	14.61%	14.61%	0.0186%
INCYTE CORP	INCY	25,425.94	0.12%	0.00%	42.38%	42.38%	0.0508%
INTEL CORP	INTC	170,230.35	0.80%	3.00%	7.79%	10.90%	0.0875%
INTUIT INC	INTU	32,026.88	0.15%	1.08%	14.78%	15.94%	0.0241%
INTERNATIONAL PAPER CO	IP	22,284.02	0.11%	3.43%	6.86%	10.41%	0.0109%
INTERPUBLIC GROUP OF COS INC	IPG	9,312.75	0.04%	3.03%	9.21%	12.38%	0.0054%
INGERSOLL-RAND PLC	IR	22,721.98	0.11%	1.83%	10.30%	12.23%	0.0131%
IRON MOUNTAIN INC	IRM	9,180.69	0.04%	6.00%	11.45%	17.80%	0.0077%
INTUITIVE SURGICAL INC	ISRG	30,794.09	0.15%	0.00%	9.73%	9.73%	0.0141%
GARTNER INC	IT	10,320.17	0.05%	0.00%	14.83%	14.83%	0.0072%
ILLINOIS TOOL WORKS	ITW	47,733.33	0.23%	1.88%	8.40%	10.36%	0.0233%
INVESCO LTD	IVZ	13,401.86	0.06%	3.55%	10.79%	14.53%	0.0092%
HUNT (JB) TRANSPRT SVCS INC	JBHT	9,861.09	0.05%	1.02%	13.43%	14.51%	0.0067%
JOHNSON CONTROLS INTERNATION	JCI	39,022.18	0.18%	2.42%	10.50%	13.04%	0.0240%
JACOBS ENGINEERING GROUP INC	JEC	6,649.24	0.03%	0.56%	8.49%	9.07%	0.0028%
JOHNSON & JOHNSON	JNJ	334,713.83	1.58%	2.72%	6.45%	9.26%	0.1462%
JUNIPER NETWORKS INC	JNPR	11,500.78	0.05%	1.40%	9.32%	10.78%	0.0058%
JPMORGAN CHASE & CO	JPM	309,533.68	1.46%	2.39%	7.80%	10.28%	0.1500%
NORDSTROM INC	JWN	8,053.91	0.04%	3.21%	7.63%	10.96%	0.0042%
KELLOGG CO	K	24,853.60	0.12%	3.03%	6.82%	9.95%	0.0117%
KEYCORP	KEY	19,735.97	0.09%	2.06%	7.42%	9.55%	0.0089%
KRAFT HEINZ CO/THE	KHC	110,016.93	0.52%	2.60%	10.03%	12.76%	0.0662%
KIMCO REALTY CORP	KIM	8,636.54	0.04%	5.36%	7.66%	13.22%	0.0054%
KLA-TENCOR CORP	KLAC	15,397.22	0.07%	2.16%	4.20%	6.40%	0.0046%
KIMBERLY-CLARK CORP	KMB	46,051.92	0.22%	2.98%	6.99%	10.08%	0.0219%
KINDER MORGAN INC	KMI	46,055.29	0.22%	2.42%	10.00%	12.54%	0.0272%
CARMAX INC	KMX	10,863.55	0.05%	0.00%	12.32%	12.32%	0.0063%
COCA-COLA CO/THE	KO	184,360.93	0.87%	3.43%	5.16%	8.67%	0.0754%
MICHAEL KORS HOLDINGS LTD	KORS	6,064.07	0.03%	0.00%	0.74%	0.74%	0.0002%
KROGER CO	KR	27,107.23	0.13%	1.72%	6.66%	8.44%	0.0108%
KOHL'S CORP	KSS	6,727.07	0.03%	5.64%	5.42%	11.21%	0.0036%
KANSAS CITY SOUTHERN	KSU	9,554.96	0.05%	1.53%	12.56%	14.19%	0.0064%
LOEWS CORP	L	15,696.22	N/A	0.54%	N/A	N/A	N/A
L BRANDS INC	LB	15,040.77	0.07%	4.72%	8.73%	13.66%	0.0097%
LEGGETT & PLATT INC	LEG	6,986.77	0.03%	2.70%	19.00%	21.96%	0.0072%
LENNAR CORP-A	LEN	11,593.40	0.05%	0.32%	10.09%	10.42%	0.0057%
LABORATORY CRP OF AMER HLDGS	LH	14,337.35	0.07%	0.00%	10.03%	10.03%	0.0068%
LKQ CORP	LKQ	9,628.63	0.05%	0.00%	15.00%	15.00%	0.0068%
L3 TECHNOLOGIES INC	LLL	13,376.99	0.06%	1.76%	9.77%	11.61%	0.0073%
ELI LILLY & CO	LLY	90,541.26	0.43%	2.54%	12.63%	15.34%	0.0655%
LOCKHEED MARTIN CORP	LMT	77,990.43	0.37%	2.76%	7.35%	10.21%	0.0375%
LINCOLN NATIONAL CORP	LNC	14,868.55	0.07%	1.77%	9.79%	11.65%	0.0082%
ALLIANT ENERGY CORP	LNT	8,958.01	0.04%	3.19%	6.40%	9.70%	0.0041%
LOWE'S COS INC	LOW	72,770.42	0.34%	1.82%	14.79%	16.75%	0.0575%
LAM RESEARCH CORP	LRCX	23,366.03	0.11%	1.10%	11.74%	12.91%	0.0142%
LEUCADIA NATIONAL CORP	LUK	9,135.18	0.04%	0.98%	18.00%	19.07%	0.0082%
SOUTHWEST AIRLINES CO	LUV	34,538.82	0.16%	0.79%	10.10%	10.93%	0.0178%
LEVEL 3 COMMUNICATIONS INC	LVL	21,955.33	0.10%	0.00%	7.50%	7.50%	0.0078%
LYONDELLBASELL INDU-CL A	LYB	34,139.30	0.16%	4.10%	6.50%	10.73%	0.0173%
MACY'S INC	M	8,917.56	0.04%	5.38%	2.63%	8.08%	0.0034%
MASTERCARD INC - A	MA	125,383.63	0.59%	0.75%	15.87%	16.68%	0.0986%
MID-AMERICA APARTMENT COMM	MAA	11,267.83	N/A	3.53%	N/A	N/A	N/A
MACERICH CO/THE	MAC	8,888.90	0.04%	4.88%	8.51%	13.59%	0.0057%
MARRIOTT INTERNATIONAL -CL A	MAR	36,108.06	0.17%	1.31%	13.19%	14.58%	0.0248%
MASCO CORP	MAS	11,822.81	0.06%	1.10%	13.68%	14.85%	0.0083%
MATTEL INC	MAT	7,680.11	0.04%	6.78%	25.65%	33.30%	0.0121%
MCDONALD'S CORP	MCD	114,288.26	0.54%	2.72%	9.77%	12.62%	0.0680%
MICROCHIP TECHNOLOGY INC	MCHP	16,357.94	0.08%	1.89%	17.52%	19.57%	0.0151%
MCKESSON CORP	MCK	29,324.74	0.14%	0.81%	7.18%	8.03%	0.0111%
MOODY'S CORP	MCO	22,601.43	0.11%	1.32%	8.00%	9.37%	0.0100%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
MONDELEZ INTERNATIONAL INC-A	MDLZ	68,648.46	0.32%	1.75%	11.04%	12.88%	0.0417%
MEDTRONIC PLC	MDT	113,740.65	0.54%	2.05%	6.64%	8.75%	0.0469%
METLIFE INC	MET	55,978.03	0.26%	3.12%	7.04%	10.27%	0.0271%
MOHAWK INDUSTRIES INC	MHK	17,445.36	0.08%	0.00%	7.01%	7.01%	0.0058%
MEAD JOHNSON NUTRITION CO	MJN	16,292.54	0.08%	1.92%	6.27%	8.25%	0.0063%
MCCORMICK & CO-NON VTG SHRS	MKC	12,451.26	0.06%	1.87%	7.86%	9.80%	0.0058%
MARTIN MARIETTA MATERIALS	MLM	13,790.82	0.07%	0.78%	22.91%	23.77%	0.0155%
MARSH & MCLENNAN COS	MMC	38,201.73	0.18%	1.92%	11.78%	13.82%	0.0249%
3M CO	MMM	117,027.39	0.55%	2.41%	8.40%	10.91%	0.0602%
MALLINCKRODT PLC	MNK	4,912.27	0.02%	0.00%	6.33%	6.33%	0.0015%
MONSTER BEVERAGE CORP	MNST	25,713.19	0.12%	0.00%	19.30%	19.30%	0.0234%
ALTRIA GROUP INC	MO	138,946.01	0.66%	3.60%	7.64%	11.38%	0.0745%
MONSANTO CO	MON	51,169.36	0.24%	1.96%	10.10%	12.16%	0.0293%
MOAIC CO/THE	MOS	9,452.59	0.04%	2.27%	17.50%	19.97%	0.0089%
MARATHON PETROLEUM CORP	MPC	26,889.96	0.13%	2.93%	16.55%	19.72%	0.0250%
MERCK & CO. INC.	MRK	170,879.55	0.81%	3.02%	5.36%	8.46%	0.0682%
MARATHON OIL CORP	MRO	12,642.00	0.06%	1.34%	8.60%	10.00%	0.0060%
MORGAN STANLEY	MS	80,337.42	0.38%	2.06%	14.87%	17.08%	0.0647%
MICROSOFT CORP	MSFT	528,546.44	2.49%	2.25%	9.57%	11.93%	0.2973%
MOTOROLA SOLUTIONS INC	MSI	14,089.86	0.07%	2.11%	4.65%	6.81%	0.0045%
M & T BANK CORP	MTB	23,896.12	0.11%	1.95%	6.26%	8.27%	0.0093%
METTLER-TOLEDO INTERNATIONAL	MTD	13,300.45	0.06%	0.00%	11.78%	11.78%	0.0074%
MICRON TECHNOLOGY INC	MU	30,611.52	0.14%	0.00%	10.00%	10.00%	0.0144%
MURPHY OIL CORP	MUR	4,517.23	N/A	4.00%	N/A	N/A	N/A
MYLAN NV	MYL	20,000.81	0.09%	0.00%	6.47%	6.47%	0.0061%
NAVIENT CORP	NAVI	4,331.10	0.02%	4.26%	8.00%	12.43%	0.0025%
NOBLE ENERGY INC	NBL	14,079.13	0.07%	1.24%	10.62%	11.92%	0.0079%
NASDAQ INC	NDAQ	11,442.31	0.05%	2.10%	8.35%	10.54%	0.0057%
NEXTERA ENERGY INC	NEE	62,527.81	0.29%	2.93%	6.75%	9.78%	0.0288%
NEWMONT MINING CORP	NEM	18,028.62	0.09%	0.66%	-12.95%	-12.33%	-0.0105%
NETFLIX INC	NFLX	65,598.88	0.31%	0.00%	36.35%	36.35%	0.1124%
NEWFIELD EXPLORATION CO	NFX	6,888.22	0.03%	0.00%	20.39%	20.39%	0.0066%
NISOURCE INC	NI	7,849.82	0.04%	2.90%	6.38%	9.37%	0.0035%
NIKE INC -CL B	NKE	91,468.97	0.43%	1.26%	12.13%	13.47%	0.0581%
NIELSEN HOLDINGS PLC	NLSN	14,695.84	0.07%	3.21%	10.67%	14.05%	0.0097%
NORTHROP GRUMMAN CORP	NOC	42,937.92	0.20%	1.56%	5.96%	7.56%	0.0153%
NATIONAL OILWELL VARCO INC	NOV	13,290.05	N/A	0.57%	N/A	N/A	N/A
NRG ENERGY INC	NRG	5,341.76	N/A	0.71%	N/A	N/A	N/A
NORFOLK SOUTHERN CORP	NSC	34,046.56	0.16%	2.08%	11.67%	13.87%	0.0223%
NETAPP INC	NTAP	10,797.41	0.05%	1.91%	10.16%	12.17%	0.0062%
NORTHERN TRUST CORP	NTRS	20,653.64	0.10%	1.76%	13.15%	15.02%	0.0146%
NUCOR CORP	NUE	19,557.53	0.09%	2.46%	6.63%	9.18%	0.0085%
VIDIA CORP	NVDA	62,010.21	0.29%	0.51%	9.40%	9.94%	0.0291%
NEWELL BRANDS INC	NWL	23,062.71	0.11%	1.69%	11.80%	13.59%	0.0148%
NEWS CORP - CLASS A	NWSA	7,452.46	0.04%	1.69%	10.73%	12.51%	0.0044%
REALTY INCOME CORP	O	15,933.01	0.08%	4.28%	4.91%	9.29%	0.0070%
ONEOK INC	OKE	11,095.73	0.05%	5.20%	25.10%	30.95%	0.0162%
OMNICOM GROUP	OMC	19,127.51	0.09%	2.76%	7.48%	10.35%	0.0093%
ORACLE CORP	ORCL	184,996.19	0.87%	1.41%	9.22%	10.69%	0.0933%
O'REILLY AUTOMOTIVE INC	ORLY	22,741.98	0.11%	0.00%	15.50%	15.50%	0.0166%
OCCIDENTAL PETROLEUM CORP	OXY	47,052.22	0.22%	4.96%	-1.99%	2.92%	0.0065%
PAYCHEX INC	PAYX	21,296.24	0.10%	3.09%	8.60%	11.82%	0.0119%
PEOPLE'S UNITED FINANCIAL	PBCT	6,001.09	0.03%	3.94%	2.00%	5.98%	0.0017%
PACCAR INC	PCAR	23,439.24	0.11%	2.58%	6.73%	9.40%	0.0104%
P G & E CORP	PCG	34,236.42	0.16%	3.12%	6.50%	9.72%	0.0157%
PRICELINE GROUP INC/THE	PCLN	90,776.21	0.43%	0.00%	16.83%	16.83%	0.0720%
PATTERSON COS INC	PDGO	4,321.49	0.02%	2.22%	4.76%	7.03%	0.0014%
PUBLIC SERVICE ENTERPRISE GP	PEG	22,298.87	0.11%	3.90%	2.05%	5.99%	0.0063%
PEPSICO INC	PEP	161,820.62	0.76%	2.79%	6.40%	9.27%	0.0707%
PFIZER INC	PFE	201,997.87	0.95%	3.77%	5.08%	8.95%	0.0852%
PRINCIPAL FINANCIAL GROUP	PFG	18,777.96	0.09%	2.83%	9.53%	12.50%	0.0111%
PROCTER & GAMBLE CO/THE	PG	223,356.46	1.05%	3.11%	7.56%	10.79%	0.1136%
PROGRESSIVE CORP	PGR	23,069.50	0.11%	2.56%	10.26%	12.95%	0.0141%
PARKER HANNIFIN CORP	PH	21,433.63	0.10%	1.61%	9.81%	11.50%	0.0116%
PULTEGROUP INC	PHM	7,152.47	0.03%	1.63%	17.05%	18.82%	0.0063%
PERKINELMER INC	PKI	6,522.45	0.03%	0.47%	9.57%	10.06%	0.0031%
PROLOGIS INC	PLD	28,813.35	0.14%	3.20%	5.09%	8.37%	0.0114%
PHILIP MORRIS INTERNATIONAL	PM	172,150.39	0.81%	3.84%	9.47%	13.49%	0.1095%
PNC FINANCIAL SERVICES GROUP	PNC	58,217.21	0.27%	1.95%	6.65%	8.66%	0.0238%
PENTAIR PLC	PNR	11,756.63	0.06%	2.19%	5.96%	8.21%	0.0046%
PINNACLE WEST CAPITAL	PNW	9,492.27	0.04%	3.12%	5.05%	8.25%	0.0037%
PPG INDUSTRIES INC	PPG	28,191.44	0.13%	1.50%	7.71%	9.26%	0.0123%
PPL CORP	PPL	25,944.95	0.12%	4.15%	1.70%	5.88%	0.0072%
PRIGO CO PLC	PRGO	10,601.11	0.05%	0.77%	5.20%	5.99%	0.0030%
PRUDENTIAL FINANCIAL INC	PRU	46,062.51	0.22%	2.87%	9.70%	12.71%	0.0276%
PUBLIC STORAGE	PSA	36,328.93	0.17%	3.91%	6.06%	10.10%	0.0173%
PHILLIPS 66	PSX	41,130.17	0.19%	3.34%	-12.61%	-9.48%	-0.0184%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
PVH CORP	PVH	7,900.87	0.04%	0.16%	8.31%	8.48%	0.0032%
QUANTA SERVICES INC	PWR	5,508.76	0.03%	0.00%	16.80%	16.80%	0.0044%
PRAXAIR INC	PX	35,663.54	0.17%	2.53%	9.97%	12.62%	0.0212%
PIONEER NATURAL RESOURCES CO	PXD	29,438.84	0.14%	0.05%	20.00%	20.05%	0.0278%
PAYPAL HOLDINGS INC	PYPL	57,324.05	0.27%	0.00%	17.70%	17.70%	0.0478%
QUALCOMM INC	QCOM	79,397.44	0.37%	4.07%	8.72%	12.97%	0.0485%
QORVO INC	QRVO	8,602.57	0.04%	0.00%	14.07%	14.07%	0.0057%
RYDER SYSTEM INC	R	3,637.27	0.02%	2.69%	15.00%	17.90%	0.0031%
REYNOLDS AMERICAN INC	RAI	91,972.76	0.43%	3.17%	8.09%	11.39%	0.0494%
ROYAL CARIBBEAN CRUISES LTD	RCL	22,910.71	0.11%	1.86%	18.57%	20.60%	0.0223%
REGENCY CENTERS CORP	REG	10,740.82	0.05%	3.26%	8.57%	11.97%	0.0061%
REGENERON PHARMACEUTICALS	REGN	41,292.84	0.19%	0.00%	19.27%	19.27%	0.0375%
REGIONS FINANCIAL CORP	RF	16,572.31	0.08%	2.19%	8.95%	11.24%	0.0088%
ROBERT HALF INTL INC	RHI	5,858.58	0.03%	2.09%	8.00%	10.17%	0.0028%
RED HAT INC	RHT	15,658.59	0.07%	0.00%	14.90%	14.90%	0.0110%
TRANSOCEAN LTD	RIG	4,311.86	0.02%	0.00%	-25.60%	-25.60%	-0.0052%
RAYMOND JAMES FINANCIAL INC	RJF	10,707.48	0.05%	1.16%	13.50%	14.74%	0.0074%
RALPH LAUREN CORP	RL	6,636.20	0.03%	2.52%	1.46%	3.99%	0.0012%
ROCKWELL AUTOMATION INC	ROK	20,235.18	0.10%	2.05%	10.99%	13.15%	0.0125%
ROPER TECHNOLOGIES INC	ROP	22,279.89	0.11%	0.62%	12.53%	13.19%	0.0139%
ROSS STORES INC	ROST	25,479.97	0.12%	0.98%	12.62%	13.66%	0.0164%
RANGE RESOURCES CORP	RRC	6,558.67	0.03%	0.33%	-10.13%	-9.81%	-0.0030%
REPUBLIC SERVICES INC	RSG	21,295.77	0.10%	2.11%	9.23%	11.44%	0.0115%
RAYTHEON COMPANY	RTN	45,177.60	0.21%	2.04%	7.82%	9.94%	0.0212%
STARBUCKS CORP	SBUX	87,531.44	0.41%	1.70%	17.13%	18.97%	0.0783%
SCANA CORP	SCG	9,476.82	0.04%	3.69%	5.30%	9.09%	0.0041%
SCHWAB (CHARLES) CORP	SCHW	51,934.37	0.24%	0.80%	18.17%	19.04%	0.0466%
SEALED AIR CORP	SEE	8,598.22	0.04%	1.49%	3.47%	4.98%	0.0020%
SHERWIN-WILLIAMS CO/THE	SHW	31,168.18	0.15%	1.02%	13.65%	14.74%	0.0217%
SIGNET JEWELERS LTD	SIG	4,496.90	0.02%	1.88%	5.63%	7.57%	0.0016%
JM SMUCKER CO/THE	SJM	14,755.42	0.07%	2.31%	5.90%	8.28%	0.0058%
SCHLUMBERGER LTD	SLB	100,862.12	0.48%	2.79%	36.05%	39.35%	0.1871%
SL GREEN REALTY CORP	SLG	10,842.32	0.05%	2.99%	0.58%	3.58%	0.0018%
SNAP-ON INC	SNA	9,708.21	0.05%	2.04%	9.80%	11.94%	0.0055%
SCRIPPS NETWORKS INTER-CL A	SNI	9,691.83	0.05%	1.58%	7.56%	9.19%	0.0042%
SYNOPSYS INC	SNPS	11,091.68	0.05%	0.00%	9.36%	9.36%	0.0049%
SOUTHERN CO/THE	SO	49,562.22	0.23%	4.63%	4.40%	9.13%	0.0213%
SIMON PROPERTY GROUP INC	SPG	51,617.54	0.24%	4.27%	7.87%	12.31%	0.0300%
S&P GLOBAL INC	SPGI	34,594.18	0.16%	1.22%	11.00%	12.28%	0.0200%
STAPLES INC	SPLS	6,380.66	0.03%	4.97%	5.94%	11.06%	0.0033%
STERICYCLE INC	SRCL	7,276.22	0.03%	0.00%	9.95%	9.95%	0.0034%
SEMPRA ENERGY	SRE	28,323.39	0.13%	2.90%	7.32%	10.32%	0.0138%
SUNTRUST BANKS INC	STI	27,917.17	0.13%	1.98%	8.50%	10.56%	0.0139%
STATE STREET CORP	STT	32,021.07	0.15%	1.89%	9.70%	11.68%	0.0176%
SEAGATE TECHNOLOGY	STX	12,512.61	0.06%	5.47%	12.45%	18.26%	0.0108%
CONSTELLATION BRANDS INC-A	STZ	33,589.81	0.16%	1.20%	17.83%	19.13%	0.0303%
STANLEY BLACK & DECKER INC	SWK	20,827.30	0.10%	1.74%	11.00%	12.83%	0.0126%
SKYWORKS SOLUTIONS INC	SWKS	18,401.19	0.09%	1.13%	14.22%	15.43%	0.0134%
SYNCHRONY FINANCIAL	SYF	22,540.37	0.11%	2.08%	10.35%	12.53%	0.0133%
STRYKER CORP	SYK	50,970.34	0.24%	1.23%	8.04%	9.32%	0.0224%
SYMANTEC CORP	SYMC	19,573.73	0.09%	1.01%	11.63%	12.70%	0.0117%
SYSO CORP	SYO	28,561.01	0.13%	2.46%	9.11%	11.68%	0.0157%
AT&T INC	T	243,605.61	1.15%	4.97%	4.83%	9.92%	0.1139%
MOLSON COORS BREWING CO -B	TAP	20,636.85	0.10%	1.73%	16.88%	18.75%	0.0182%
TERADATA CORP	TDC	3,819.30	0.02%	0.00%	4.76%	4.76%	0.0009%
TRANSDIGM GROUP INC	TDG	13,038.33	0.06%	0.00%	9.39%	9.39%	0.0058%
TE CONNECTIVITY LTD	TEL	27,468.46	0.13%	1.96%	6.75%	8.78%	0.0114%
TEGNA INC	TGNA	5,472.56	0.03%	2.25%	5.50%	7.81%	0.0020%
TARGET CORP	TGT	30,866.92	0.15%	4.39%	-1.11%	3.26%	0.0047%
TIFFANY & CO	TIF	11,435.63	0.05%	2.05%	8.73%	10.87%	0.0059%
TJX COMPANIES INC	TJX	50,687.65	0.24%	1.56%	9.62%	11.26%	0.0269%
TORCHMARK CORP	TMK	9,043.91	0.04%	0.78%	7.57%	8.38%	0.0036%
THERMO FISHER SCIENTIFIC INC	TMO	64,679.61	0.30%	0.36%	11.98%	12.37%	0.0377%
TRIPADVISOR INC	TRIP	6,355.91	0.03%	0.00%	15.53%	15.53%	0.0047%
T ROWE PRICE GROUP INC	TROW	17,103.51	0.08%	3.19%	12.15%	15.53%	0.0125%
TRAVELERS COS INC/THE	TRV	33,993.73	0.16%	2.32%	6.88%	9.28%	0.0149%
TRACTOR SUPPLY COMPANY	TSCO	8,042.77	0.04%	1.66%	13.80%	15.58%	0.0059%
TYSON FOODS INC-CL A	TSN	24,988.06	0.12%	1.41%	6.30%	7.75%	0.0091%
TESORO CORP	TSO	9,356.35	0.04%	2.85%	10.00%	12.99%	0.0057%
TOTAL SYSTEM SERVICES INC	TSS	10,508.05	0.05%	0.70%	11.00%	11.74%	0.0058%
TIME WARNER INC	TWX	76,868.16	0.36%	1.69%	9.30%	11.06%	0.0401%
TEXAS INSTRUMENTS INC	TXN	79,151.47	0.37%	2.42%	10.34%	12.89%	0.0481%
TEXTRON INC	TXT	12,490.38	0.06%	0.18%	9.66%	9.85%	0.0058%
UNDER ARMOUR INC-CLASS A	UAA	8,947.92	0.04%	0.00%	17.98%	17.98%	0.0076%
UNITED CONTINENTAL HOLDINGS	UAL	22,082.37	0.10%	0.00%	1.90%	1.90%	0.0020%
UDR INC	UDR	9,984.41	0.05%	3.32%	6.41%	9.83%	0.0046%
UNIVERSAL HEALTH SERVICES-B	UHS	11,670.02	0.06%	0.26%	9.49%	9.76%	0.0054%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
ULTA BEAUTY INC	ULTA	17,488.06	0.08%	0.00%	22.30%	22.30%	0.0184%
UNITEDHEALTH GROUP INC	UNH	168,603.59	0.79%	1.50%	12.98%	14.58%	0.1159%
UNUM GROUP	UNM	10,573.15	0.05%	1.81%	6.53%	8.40%	0.0042%
UNION PACIFIC CORP	UNP	90,400.90	0.43%	2.20%	9.82%	12.12%	0.0517%
UNITED PARCEL SERVICE-CL B	UPS	93,493.39	0.44%	3.07%	8.50%	11.70%	0.0516%
UNITED RENTALS INC	URI	9,267.74	0.04%	0.00%	15.17%	15.17%	0.0066%
US BANCORP	USB	86,828.50	0.41%	2.29%	8.78%	11.18%	0.0458%
UNITED TECHNOLOGIES CORP	UTX	95,338.06	0.45%	2.30%	7.92%	10.31%	0.0464%
VISA INC-CLASS A SHARES	V	210,322.97	0.99%	0.72%	17.43%	18.22%	0.1806%
VARIAN MEDICAL SYSTEMS INC	VAR	8,479.69	N/A	0.00%	N/A	N/A	N/A
VF CORP	VFC	22,645.41	0.11%	3.13%	6.68%	9.92%	0.0106%
VIACOM INC-CLASS B	VIAB	16,992.74	0.08%	1.93%	1.59%	3.54%	0.0028%
VALERO ENERGY CORP	VLO	28,992.50	0.14%	4.34%	13.15%	17.78%	0.0243%
VULCAN MATERIALS CO	VMC	16,033.14	0.08%	0.72%	28.41%	29.23%	0.0221%
VORNADO REALTY TRUST	VNO	18,217.45	0.09%	2.81%	4.32%	7.19%	0.0062%
VERISK ANALYTICS INC	VRSK	13,777.59	0.06%	0.00%	10.55%	10.55%	0.0069%
VERISIGN INC	VRSN	9,023.21	0.04%	0.00%	9.30%	9.30%	0.0040%
VERTEX PHARMACEUTICALS INC	VRTX	29,461.80	0.14%	0.00%	74.91%	74.91%	0.1041%
VENTAS INC	VTR	22,714.14	0.11%	4.89%	4.17%	9.16%	0.0098%
VERIZON COMMUNICATIONS INC	VZ	187,283.85	0.88%	5.07%	2.72%	7.86%	0.0694%
WATERS CORP	WAT	13,604.03	0.06%	0.00%	7.51%	7.51%	0.0048%
WALGREENS BOOTS ALLIANCE INC	WBA	93,545.49	0.44%	1.74%	10.65%	12.49%	0.0551%
WESTERN DIGITAL CORP	WDC	25,658.43	0.12%	2.25%	9.87%	12.23%	0.0148%
WEC ENERGY GROUP INC	WEC	19,098.92	0.09%	3.45%	6.23%	9.78%	0.0088%
WELLS FARGO & CO	WFC	269,408.48	1.27%	2.91%	11.03%	14.10%	0.1791%
WHOLE FOODS MARKET INC	WFM	11,586.19	0.05%	1.53%	3.17%	4.73%	0.0026%
WHIRLPOOL CORP	WHR	13,734.81	0.06%	2.25%	15.88%	18.31%	0.0119%
WILLIS TOWERS WATSON PLC	WLTW	17,962.58	0.08%	1.51%	11.90%	13.50%	0.0114%
WASTE MANAGEMENT INC	WM	32,164.45	0.15%	2.34%	10.77%	13.24%	0.0201%
WILLIAMS COS INC	WMB	25,307.25	0.12%	3.92%	10.00%	14.11%	0.0168%
WAL-MART STORES INC	WMT	227,912.40	1.07%	2.71%	4.84%	7.61%	0.0818%
WESTROCK CO	WRK	13,411.61	0.06%	2.99%	7.31%	10.40%	0.0066%
WESTERN UNION CO	WU	9,458.00	0.04%	3.52%	5.70%	9.33%	0.0042%
WEYERHAEUSER CO	WY	25,446.35	0.12%	3.81%	7.50%	11.45%	0.0137%
WYNDHAM WORLDWIDE CORP	WYN	9,945.96	0.05%	2.32%	12.90%	15.36%	0.0072%
WYNN RESORTS LTD	WYNN	12,536.92	0.06%	1.70%	17.20%	19.04%	0.0113%
CIMAREX ENERGY CO	XEC	11,097.87	0.05%	0.30%	77.89%	78.31%	0.0410%
XCEL ENERGY INC	XEL	22,874.72	0.11%	3.20%	6.00%	9.29%	0.0100%
XL GROUP LTD	XL	11,038.93	0.05%	1.83%	9.00%	10.91%	0.0057%
XILINX INC	XLNX	15,710.28	0.07%	2.18%	9.10%	11.38%	0.0084%
EXXON MOBIL CORP	XOM	346,174.09	1.63%	3.76%	13.80%	17.82%	0.2909%
DENTSPLY SIRONA INC	XRAY	14,557.31	0.07%	0.54%	9.47%	10.04%	0.0069%
XEROX CORP	XRX	7,309.24	0.03%	3.73%	1.80%	5.56%	0.0019%
XYLEM INC	XYL	9,237.74	0.04%	1.40%	15.00%	16.51%	0.0072%
YAHOO! INC	YHOO	46,191.51	0.22%	0.00%	10.37%	10.37%	0.0226%
YUM! BRANDS INC	YUM	23,161.74	0.11%	2.29%	12.56%	14.99%	0.0164%
ZIMMER BIOMET HOLDINGS INC	ZBH	24,076.39	0.11%	0.83%	8.74%	9.61%	0.0109%
ZIONS BANCORPORATION	ZION	8,103.01	0.04%	1.01%	9.00%	10.06%	0.0038%
ZOETIS INC	ZTS	27,585.24	0.13%	0.74%	12.25%	13.04%	0.0170%
Total Market Capitalization:		21,209,328.43					13.37%

Notes:

- [1] Equals sum of Col. [9]
[2] Source: Bloomberg Professional
[3] Equals [1] - [2]
[4] Source: Bloomberg Professional
[5] Equals weight in S&P 500 based on market capitalization
[6] Source: Bloomberg Professional
[7] Source: Bloomberg Professional
[8] Equals ([6] x (1 + (0.5 x [7]))) + [7]
[9] Equals Col. [5] x Col. [8]

Ex-Ante Market Risk Premium
Market DCF Method Based - Value Line

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est. Required	Treasury (30-	Implied Market
Market Return	day average)	Risk Premium
14.09%	2.97%	11.12%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est.	[8] DCF Result	[9] Weighted DCF Result
AGILENT TECHNOLOGIES INC	A	17,107.86	0.09%	1.00%	6.50%	7.53%	0.0067%
AMERICAN AIRLINES GROUP INC	AAL	22,939.84	N/A	0.89%	N/A	N/A	N/A
ADVANCE AUTO PARTS INC	AAP	10,808.65	0.06%	0.16%	9.50%	9.67%	0.0054%
APPLE INC	AAPL	748,582.40	3.88%	1.71%	10.00%	11.80%	0.4574%
ABBVIE INC	ABBV	101,570.50	0.53%	4.01%	11.50%	15.74%	0.0828%
AMERISOURCEBERGEN CORP	ABC	17,873.05	0.09%	1.77%	10.00%	11.86%	0.0110%
ABBOTT LABORATORIES	ABT	64,752.20	0.34%	2.41%	7.50%	10.00%	0.0335%
ACCENTURE PLC-CL A	ACN	76,552.49	0.40%	2.10%	8.00%	10.18%	0.0404%
ADOBE SYSTEMS INC	ADBE	65,069.99	0.34%	0.00%	29.50%	29.50%	0.0994%
ANALOG DEVICES INC	ADI	24,322.22	0.13%	2.29%	16.00%	18.47%	0.0233%
ARCHER-DANIELS-MIDLAND CO	ADM	25,727.70	0.13%	2.85%	5.00%	7.92%	0.0106%
AUTOMATIC DATA PROCESSING	ADP	46,254.65	0.24%	2.31%	10.00%	12.43%	0.0298%
ALLIANCE DATA SYSTEMS CORP	ADS	15,063.84	0.08%	0.80%	10.00%	10.84%	0.0085%
AUTODESK INC	ADSK	19,476.72	N/A	0.00%	N/A	N/A	N/A
AMEREN CORPORATION	AEE	13,233.26	0.07%	3.28%	6.00%	9.38%	0.0064%
AMERICAN ELECTRIC POWER	AEP	33,160.99	0.17%	3.59%	4.00%	7.66%	0.0132%
AES CORP	AES	7,527.79	0.04%	4.20%	7.00%	11.35%	0.0044%
AETNA INC	AET	46,399.78	0.24%	1.52%	8.00%	9.58%	0.0230%
AFLAC INC	AFL	30,098.93	0.16%	2.37%	4.00%	6.42%	0.0100%
ALLERGAN PLC	AGN	79,686.11	0.41%	0.12%	10.00%	10.13%	0.0418%
AMERICAN INTERNATIONAL GROUP	AIG	62,229.18	0.32%	2.15%	10.00%	12.26%	0.0395%
APARTMENT INVT & MGMT CO -A	AIV	-	N/A	3.27%	N/A	N/A	N/A
ASSURANT INC	AIZ	5,517.43	0.03%	2.23%	7.00%	9.31%	0.0027%
ARTHUR J GALLAGHER & CO	AJG	10,029.38	0.05%	2.77%	13.50%	16.46%	0.0085%
AKAMAI TECHNOLOGIES INC	AKAM	10,429.95	0.05%	0.00%	12.50%	12.50%	0.0068%
ALBEMARLE CORP	ALB	11,873.53	0.06%	1.21%	11.00%	12.28%	0.0076%
ALASKA AIR GROUP INC	ALK	10,898.50	0.06%	1.36%	13.00%	14.45%	0.0082%
ALLSTATE CORP	ALL	29,334.90	0.15%	1.85%	5.50%	7.40%	0.0112%
LEGION PLC	ALLE	7,404.70	0.04%	0.82%	10.00%	10.86%	0.0042%
ALEXION PHARMACEUTICALS INC	ALXN	26,702.62	0.14%	0.00%	20.00%	20.00%	0.0277%
APPLIED MATERIALS INC	AMAT	43,074.46	0.22%	1.00%	23.50%	24.62%	0.0549%
ADVANCED MICRO DEVICES	AMD	12,257.85	N/A	0.00%	N/A	N/A	N/A
AMETEK INC	AME	12,563.09	0.07%	0.66%	5.50%	6.18%	0.0040%
AFFILIATED MANAGERS GROUP	AMG	9,331.69	0.05%	0.49%	8.50%	9.01%	0.0044%
AMGEN INC	AMGN	119,617.90	0.62%	2.90%	7.50%	10.51%	0.0651%
AMERIPRISE FINANCIAL INC	AMP	20,052.25	0.10%	2.32%	10.50%	12.94%	0.0134%
AMERICAN TOWER CORP	AMT	52,904.82	0.27%	2.11%	11.00%	13.23%	0.0362%
AMAZON.COM INC	AMZN	430,282.70	2.23%	0.00%	91.00%	91.00%	2.0282%
AUTONATION INC	AN	4,393.46	0.02%	0.00%	7.00%	7.00%	0.0016%
ANTHEM INC	ANTM	44,327.96	0.23%	1.55%	9.00%	10.62%	0.0244%
AON PLC	AON	31,586.72	0.16%	1.19%	12.00%	13.26%	0.0217%
APACHE CORP	APA	18,599.61	0.10%	2.04%	7.00%	9.11%	0.0088%
ANADARKO PETROLEUM CORP	APC	32,520.80	N/A	0.34%	N/A	N/A	N/A
AIR PRODUCTS & CHEMICALS INC	APD	29,788.07	0.15%	2.78%	10.50%	13.43%	0.0207%
AMPHENOL CORP-CL A	APH	21,862.14	0.11%	0.90%	8.00%	8.94%	0.0101%
ALEXANDRIA REAL ESTATE EQUIT	ARE	N/A	N/A	0.00%	N/A	N/A	N/A
ARCONIC INC	ARNC	11,449.76	N/A	0.92%	N/A	N/A	N/A
ACTIVISION BLIZZARD INC	ATVI	37,237.02	0.19%	0.60%	7.00%	7.62%	0.0147%
AVALONBAY COMMUNITIES INC	AVB	-	N/A	3.13%	N/A	N/A	N/A
BROADCOM LTD	AVGO	87,347.71	0.45%	1.87%	19.50%	21.55%	0.0975%
AVERY DENNISON CORP	AVY	7,331.83	0.04%	2.19%	9.00%	11.29%	0.0043%
AMERICAN WATER WORKS CO INC	AWK	14,099.86	0.07%	2.07%	8.50%	10.66%	0.0078%
AMERICAN EXPRESS CO	AXP	72,338.09	0.37%	1.68%	4.50%	6.22%	0.0233%
ACUITY BRANDS INC	AYI	7,821.48	0.04%	0.29%	19.00%	19.32%	0.0078%
AUTOZONE INC	AZO	20,111.89	0.10%	0.00%	12.00%	12.00%	0.0125%
BOEING CO/THE	BA	110,655.30	0.57%	3.29%	7.00%	10.41%	0.0596%
BANK OF AMERICA CORP	BAC	233,557.10	1.21%	1.39%	17.00%	18.51%	0.2239%
BAXTER INTERNATIONAL INC	BAX	28,767.56	0.15%	0.98%	-2.50%	-1.53%	-0.0023%
BED BATH & BEYOND INC	BBBY	6,002.08	0.03%	1.50%	-1.00%	0.49%	0.0002%
BB&T CORP	BBT	35,349.77	0.18%	2.79%	7.50%	10.39%	0.0190%
BEST BUY CO INC	BBY	15,720.29	0.08%	2.69%	6.00%	8.77%	0.0071%
CR BARD INC	BCR	18,732.22	0.10%	0.42%	10.50%	10.94%	0.0106%
BECTON DICKINSON AND CO	BDX	39,596.09	0.21%	1.65%	9.00%	10.72%	0.0220%
FRANKLIN RESOURCES INC	BEN	23,543.77	0.12%	1.97%	6.00%	8.03%	0.0098%
BROWN-FORMAN CORP-CLASS B	BF/B	17,705.52	0.09%	1.61%	8.50%	10.18%	0.0093%
BAKER HUGHES INC	BHI	25,228.00	0.13%	1.14%	29.00%	30.31%	0.0396%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
BIOGEN INC	BIIB	59,280.22	0.31%	0.00%	9.50%	9.50%	0.0292%
BANK OF NEW YORK MELLON CORP	BK	48,865.32	0.25%	1.63%	10.50%	12.22%	0.0309%
BLACKROCK INC	BLK	61,639.76	0.32%	2.62%	7.50%	10.22%	0.0326%
BALL CORP	BLL	12,812.36	0.07%	0.71%	14.50%	15.26%	0.0101%
BRISTOL-MYERS SQUIBB CO	BMJ	88,924.16	0.46%	2.92%	14.50%	17.63%	0.0812%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	-	N/A	0.00%	N/A	N/A	N/A
BOSTON SCIENTIFIC CORP	BSX	34,063.33	0.18%	0.00%	18.00%	18.00%	0.0318%
BORGWARNER INC	BWA	8,540.74	0.04%	1.40%	6.00%	7.44%	0.0033%
BOSTON PROPERTIES INC	BXP	-	N/A	2.23%	N/A	N/A	N/A
CITIGROUP INC	C	166,452.70	0.86%	1.10%	11.50%	12.66%	0.1092%
CA INC	CA	13,433.65	0.07%	3.17%	6.50%	9.77%	0.0068%
CONAGRA BRANDS INC	CAG	17,326.44	0.09%	1.97%	1.00%	2.98%	0.0027%
CARDINAL HEALTH INC	CAH	23,165.96	0.12%	2.66%	13.00%	15.83%	0.0190%
CATERPILLAR INC	CAT	55,383.01	0.29%	3.25%	4.50%	7.82%	0.0224%
CHUBB LTD	CB	63,641.82	0.33%	2.02%	7.50%	9.60%	0.0316%
CBRE GROUP INC - A	CBG	11,524.82	0.06%	0.00%	8.50%	8.50%	0.0051%
CBOE HOLDINGS INC	CBOE	6,746.66	0.03%	1.21%	12.50%	13.79%	0.0048%
CBS CORP-CLASS B NON VOTING	CBS	28,292.04	0.15%	1.05%	13.00%	14.12%	0.0207%
CROWN CASTLE INTL CORP	CCI	32,420.22	0.17%	4.10%	8.50%	12.77%	0.0215%
CARNIVAL CORP	CCL	42,986.46	0.22%	2.70%	15.50%	18.41%	0.0410%
CELGENE CORP	CELG	95,583.56	0.50%	0.00%	26.00%	26.00%	0.1287%
CERNER CORP	CERN	19,564.19	0.10%	0.00%	11.50%	11.50%	0.0117%
CF INDUSTRIES HOLDINGS INC	CF	6,196.17	0.03%	4.63%	10.00%	14.86%	0.0048%
CITIZENS FINANCIAL GROUP	CFG	18,275.08	N/A	1.59%	N/A	N/A	N/A
CHURCH & DWIGHT CO INC	CHD	12,987.71	0.07%	1.51%	7.00%	8.56%	0.0058%
CHESAPEAKE ENERGY CORP	CHK	4,313.07	N/A	0.00%	N/A	N/A	N/A
C.H. ROBINSON WORLDWIDE INC	CHRW	10,848.10	0.06%	2.35%	6.50%	8.93%	0.0050%
CHARTER COMMUNICATIONS INC-A	CHTR	90,239.15	0.47%	0.00%	26.00%	26.00%	0.1215%
CIGNA CORP	CI	39,940.74	0.21%	0.03%	11.50%	11.53%	0.0239%
CINCINNATI FINANCIAL CORP	CINF	11,603.11	0.06%	2.84%	6.00%	8.93%	0.0054%
COLGATE-PALMOLIVE CO	CL	66,353.18	0.34%	2.21%	12.00%	14.34%	0.0493%
CLOROX COMPANY	CLX	17,387.21	0.09%	2.40%	7.50%	9.99%	0.0090%
COMERICA INC	CMA	11,908.83	0.06%	1.33%	10.50%	11.90%	0.0073%
COMCAST CORP-CLASS A	CMCSA	180,561.00	0.94%	1.45%	11.00%	12.53%	0.1172%
CME GROUP INC	CME	40,287.77	0.21%	2.22%	7.50%	9.80%	0.0205%
CHIPOTLE MEXICAN GRILL INC	CMG	13,864.70	0.07%	0.00%	8.50%	8.50%	0.0061%
CUMMINS INC	CMI	24,595.36	0.13%	2.81%	5.50%	8.39%	0.0107%
CMS ENERGY CORP	CMS	12,514.01	0.06%	3.01%	6.50%	9.61%	0.0062%
CENTENE CORP	CNC	12,196.11	0.06%	0.00%	17.00%	17.00%	0.0107%
CENTERPOINT ENERGY INC	CNP	12,016.03	0.06%	3.87%	6.00%	9.99%	0.0062%
CAPITAL ONE FINANCIAL CORP	COF	40,957.50	0.21%	1.91%	2.50%	4.43%	0.0094%
CABOT OIL & GAS CORP	COG	11,382.20	0.06%	0.33%	32.50%	32.88%	0.0194%
COACH INC	COH	11,162.27	0.06%	3.39%	9.00%	12.54%	0.0073%
ROCKWELL COLLINS INC	COL	13,026.37	0.07%	1.33%	6.50%	7.87%	0.0053%
COOPER COS INC/THE	COO	9,804.45	0.05%	0.03%	16.50%	16.53%	0.0084%
CONOCOPHILLIPS	COP	59,327.05	0.31%	2.21%	9.50%	11.81%	0.0363%
COSTCO WHOLESALE CORP	COST	74,685.80	0.39%	1.18%	9.00%	10.23%	0.0396%
COTY INC-CL A	COTY	13,371.30	0.07%	2.79%	8.00%	10.90%	0.0076%
CAMPBELL SOUP CO	CPB	18,572.50	0.10%	2.44%	5.00%	7.50%	0.0072%
SALESFORCE.COM INC	CRM	59,462.02	N/A	0.00%	N/A	N/A	N/A
CISCO SYSTEMS INC	CSCO	164,379.80	0.85%	3.53%	7.00%	10.65%	0.0907%
CSRA INC	CSRA	4,713.61	N/A	1.38%	N/A	N/A	N/A
CSX CORP	CSX	45,728.36	0.24%	1.45%	6.50%	8.00%	0.0189%
CINTAS CORP	CTAS	12,949.01	0.07%	1.08%	8.00%	9.12%	0.0061%
CENTURYLINK INC	CTL	13,931.43	0.07%	8.47%	10.50%	19.41%	0.0140%
COGNIZANT TECH SOLUTIONS-A	CTSH	35,130.24	0.18%	1.04%	12.00%	13.10%	0.0238%
CITRIX SYSTEMS INC	CTXS	13,077.54	0.07%	0.00%	8.50%	8.50%	0.0058%
CVS HEALTH CORP	CVS	84,672.38	0.44%	2.52%	9.50%	12.14%	0.0532%
CHEVRON CORP	CVX	198,381.20	1.03%	4.12%	3.00%	7.18%	0.0738%
CONCHO RESOURCES INC	CXO	18,116.27	0.09%	0.00%	14.00%	14.00%	0.0131%
DOMINION RESOURCES INC/VA	D	48,566.61	0.25%	3.90%	5.50%	9.51%	0.0239%
DELTA AIR LINES INC	DAL	33,782.89	0.17%	1.76%	11.50%	13.36%	0.0234%
DU PONT (E.I.) DE NEMOURS	DD	67,564.50	0.35%	2.07%	8.00%	10.15%	0.0355%
DEERE & CO	DE	34,629.19	0.18%	2.21%	5.00%	7.27%	0.0130%
DISCOVER FINANCIAL SERVICES	DFS	26,438.38	0.14%	1.80%	5.00%	6.85%	0.0094%
DOLLAR GENERAL CORP	DG	19,523.58	0.10%	1.59%	11.00%	12.68%	0.0128%
QUEST DIAGNOSTICS INC	DGX	14,252.11	0.07%	1.73%	9.00%	10.81%	0.0080%
DR HORTON INC	DHI	12,357.45	0.06%	1.24%	11.00%	12.31%	0.0079%
DANAHER CORP	DHR	57,533.95	0.30%	0.68%	9.00%	9.71%	0.0289%
WALT DISNEY CO/THE	DIS	183,664.00	0.95%	1.36%	8.50%	9.92%	0.0944%
DISCOVERY COMMUNICATIONS-A	DISCA	15,920.76	0.08%	0.00%	15.50%	15.50%	0.0128%
DISH NETWORK CORP-A	DISH	27,840.38	0.14%	0.00%	7.00%	7.00%	0.0101%
DELPHI AUTOMOTIVE PLC	DLPH	21,016.56	0.11%	1.59%	14.00%	15.70%	0.0171%
DIGITAL REALTY TRUST INC	DLR	-	N/A	3.36%	N/A	N/A	N/A
DOLLAR TREE INC	DLTR	18,778.52	0.10%	0.00%	16.50%	16.50%	0.0160%
DOVER CORP	DOV	12,408.46	0.06%	2.21%	1.50%	3.73%	0.0024%
DOW CHEMICAL CO/THE	DOW	75,017.58	0.39%	3.29%	8.00%	11.42%	0.0444%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
DR PEPPER SNAPPLE GROUP INC	DPS	17,962.24	0.09%	2.39%	7.00%	9.47%	0.0088%
DARDEN RESTAURANTS INC	DRI	10,450.69	0.05%	2.69%	14.50%	17.39%	0.0094%
DTE ENERGY COMPANY	DTE	18,560.45	0.10%	3.31%	5.00%	8.39%	0.0081%
DUKE ENERGY CORP	DUK	56,518.67	0.29%	4.24%	4.50%	8.84%	0.0259%
DAVITA INC	DVA	13,313.33	0.07%	0.00%	11.00%	11.00%	0.0076%
DEVON ENERGY CORP	DVN	20,802.80	0.11%	0.61%	4.50%	5.12%	0.0055%
DXC TECHNOLOGY CO	DXC	10,642.96	0.06%	0.74%	4.00%	4.75%	0.0026%
ELECTRONIC ARTS INC	EA	28,001.47	0.15%	0.00%	13.50%	13.50%	0.0196%
EBAY INC	EBAY	35,067.34	0.18%	0.00%	1.50%	1.50%	0.0027%
ECOLAB INC	ECL	36,837.60	0.19%	1.17%	8.00%	9.22%	0.0176%
CONSOLIDATED EDISON INC	ED	23,875.40	0.12%	3.55%	3.00%	6.60%	0.0082%
EQUIFAX INC	EFX	16,422.28	0.09%	1.14%	10.50%	11.70%	0.0100%
EDISON INTERNATIONAL	EIX	26,165.88	0.14%	2.80%	3.00%	5.84%	0.0079%
ESTEE LAUDER COMPANIES-CL A	EL	31,498.59	0.16%	1.58%	8.50%	10.15%	0.0166%
EASTMAN CHEMICAL CO	EMN	11,662.32	0.06%	2.56%	8.00%	10.66%	0.0064%
EMERSON ELECTRIC CO	EMR	38,146.60	0.20%	3.26%	5.00%	8.34%	0.0165%
EOG RESOURCES INC	EOG	51,429.67	0.27%	0.80%	7.50%	8.33%	0.0222%
EQUINIX INC	EQIX	28,929.93	0.15%	1.98%	23.00%	25.21%	0.0378%
EQUITY RESIDENTIAL	EQR	-	N/A	3.15%	N/A	N/A	N/A
EQT CORP	EQT	10,935.46	0.06%	0.19%	22.00%	22.21%	0.0126%
EVERSOURCE ENERGY	ES	18,835.64	0.10%	3.20%	7.00%	10.31%	0.0101%
EXPRESS SCRIPTS HOLDING CO	ESRX	41,343.03	0.21%	0.00%	14.50%	14.50%	0.0311%
ESSEX PROPERTY TRUST INC	ESS	-	N/A	2.99%	N/A	N/A	N/A
E*TRADE FINANCIAL CORP	ETFC	9,484.60	0.05%	0.00%	14.00%	14.00%	0.0069%
EATON CORP PLC	ETN	33,439.35	0.17%	3.24%	5.50%	8.83%	0.0153%
ENTERGY CORP	ETR	13,577.98	0.07%	4.64%	-2.50%	2.08%	0.0015%
ENVISION HEALTHCARE CORP	EVHC	-	N/A	0.00%	N/A	N/A	N/A
EDWARDS LIFESCIENCES CORP	EW	21,051.59	0.11%	0.00%	15.00%	15.00%	0.0164%
EXELON CORP	EXC	32,360.62	0.17%	3.74%	6.00%	9.85%	0.0165%
EXPEDITORS INTL WASH INC	EXPD	10,133.43	0.05%	1.42%	8.50%	9.98%	0.0052%
EXPEDIA INC	EXPE	19,793.72	0.10%	0.85%	21.50%	22.44%	0.0230%
EXTRA SPACE STORAGE INC	EXR	-	N/A	4.02%	N/A	N/A	N/A
FORD MOTOR CO	F	44,765.84	0.23%	5.23%	3.00%	8.31%	0.0193%
FASTENAL CO	FAST	13,152.83	0.07%	2.82%	6.50%	9.41%	0.0064%
FACEBOOK INC-A	FB	415,869.60	2.15%	0.00%	37.50%	37.50%	0.8078%
FORTUNE BRANDS HOME & SECURI	FBHS	9,616.41	0.05%	1.16%	13.50%	14.74%	0.0073%
FREEMPORT-MCMORAN INC	FCX	18,076.95	N/A	0.00%	N/A	N/A	N/A
FEDEX CORP	FDX	49,860.09	0.26%	0.86%	11.00%	11.91%	0.0308%
FIRSTENERGY CORP	FE	13,053.28	0.07%	4.70%	5.00%	9.82%	0.0066%
F5 NETWORKS INC	FFIV	8,867.53	0.05%	0.00%	7.50%	7.50%	0.0034%
FIDELITY NATIONAL INFO SERV	FIS	26,754.96	0.14%	1.42%	14.50%	16.02%	0.0222%
FISERV INC	FISV	25,654.66	0.13%	0.00%	9.50%	9.50%	0.0126%
FIFTH THIRD BANCORP	FITB	18,724.45	0.10%	2.29%	3.00%	5.32%	0.0052%
FOOT LOCKER INC	FL	10,066.02	0.05%	1.62%	9.50%	11.20%	0.0058%
FLIR SYSTEMS INC	FLIR	4,966.65	0.03%	1.73%	7.50%	9.29%	0.0024%
FLUOR CORP	FLR	7,031.14	0.04%	1.66%	4.50%	6.20%	0.0023%
FLOWERVE CORP	FLS	6,382.91	0.03%	1.55%	2.50%	4.07%	0.0013%
FMC CORP	FMC	9,814.18	0.05%	0.91%	8.50%	9.45%	0.0048%
TWENTY-FIRST CENTURY FOX-A	FOXA	57,505.44	0.30%	1.16%	12.00%	13.23%	0.0394%
FEDERAL REALTY INVS TRUST	FRT	-	N/A	2.96%	N/A	N/A	N/A
TECHNIPFMC PLC	FTI	N/A	N/A	0.00%	N/A	N/A	N/A
FORTIVE CORP	FTV	20,952.88	N/A	0.46%	N/A	N/A	N/A
GENERAL DYNAMICS CORP	GD	56,894.09	0.29%	1.79%	5.50%	7.34%	0.0216%
GENERAL ELECTRIC CO	GE	264,638.90	1.37%	3.17%	13.50%	16.88%	0.2314%
GGP INC	GGP	-	N/A	3.95%	N/A	N/A	N/A
GILEAD SCIENCES INC	GILD	87,115.00	0.45%	3.13%	-3.50%	-0.42%	-0.0019%
GENERAL MILLS INC	GIS	33,344.66	0.17%	3.35%	5.00%	8.43%	0.0146%
CORNING INC	GLW	25,103.86	0.13%	2.29%	10.50%	12.91%	0.0168%
GENERAL MOTORS CO	GM	51,150.00	0.26%	4.46%	9.00%	13.66%	0.0362%
ALPHABET INC-CL A	GOOGL	N/A	N/A	0.00%	N/A	N/A	N/A
GENUINE PARTS CO	GPC	13,817.67	0.07%	2.91%	6.50%	9.50%	0.0068%
GLOBAL PAYMENTS INC	GPN	12,332.11	0.06%	0.05%	14.50%	14.55%	0.0093%
GAP INC/THE	GPS	10,142.58	0.05%	3.62%	0.50%	4.13%	0.0022%
GARMIN LTD	GRMN	9,424.48	0.05%	4.08%	5.00%	9.18%	0.0045%
GOLDMAN SACHS GROUP INC	GS	86,870.09	0.45%	1.38%	9.50%	10.95%	0.0493%
GOODYEAR TIRE & RUBBER CO	GT	8,992.08	0.05%	1.18%	10.00%	11.24%	0.0052%
WW GRAINGER INC	GWW	11,523.23	0.06%	2.49%	6.00%	8.56%	0.0051%
HALLIBURTON CO	HAL	41,299.54	0.21%	1.51%	8.00%	9.57%	0.0205%
HASBRO INC	HAS	11,952.00	0.06%	2.38%	12.00%	14.52%	0.0090%
HUNTINGTON BANCSHARES INC	HBAN	13,809.96	0.07%	2.59%	8.00%	10.69%	0.0076%
HANESBRANDS INC	HBI	8,384.13	0.04%	2.71%	9.50%	12.34%	0.0054%
HCA HOLDINGS INC	HCA	31,137.27	0.16%	0.00%	10.00%	10.00%	0.0161%
WELLTOWER INC	HCN	-	N/A	4.71%	N/A	N/A	N/A
HCP INC	HCP	-	N/A	4.58%	N/A	N/A	N/A
HOME DEPOT INC	HD	181,438.40	0.94%	2.39%	11.50%	14.03%	0.1318%
HESS CORP	HES	14,846.36	0.08%	2.13%	-1.00%	1.12%	0.0009%
HARTFORD FINANCIAL SVCS GRP	HIG	18,082.63	0.09%	1.93%	11.50%	13.54%	0.0127%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
HARLEY-DAVIDSON INC	HOG	9,935.78	0.05%	2.59%	9.00%	11.71%	0.0060%
HOLOGIC INC	HOLX	12,014.43	0.06%	0.00%	25.00%	25.00%	0.0156%
HONEYWELL INTERNATIONAL INC	HON	94,164.22	0.49%	2.15%	8.00%	10.24%	0.0499%
HELMERICH & PAYNE	HP	7,038.14	0.04%	4.32%	4.50%	8.92%	0.0033%
HEWLETT PACKARD ENTERPRIS	HPE	30,482.79	0.16%	1.42%	1.50%	2.93%	0.0046%
HP INC	HPQ	31,361.40	N/A	2.97%	N/A	N/A	N/A
H&R BLOCK INC	HRB	4,897.40	0.03%	3.72%	10.00%	13.91%	0.0035%
HORMEL FOODS CORP	HRL	18,259.60	0.09%	2.00%	10.50%	12.61%	0.0119%
HARRIS CORP	HRS	13,664.26	0.07%	1.98%	6.50%	8.54%	0.0060%
HENRY SCHEIN INC	HSIC	13,661.09	0.07%	0.00%	8.50%	8.50%	0.0060%
HOST HOTELS & RESORTS INC	HST	-	N/A	4.20%	N/A	N/A	N/A
HERSHEY CO/THE	HSY	23,093.78	0.12%	2.27%	6.50%	8.84%	0.0106%
HUMANA INC	HUM	31,943.40	0.17%	0.75%	9.00%	9.78%	0.0162%
INTL BUSINESS MACHINES CORP	IBM	153,514.20	N/A	3.70%	N/A	N/A	N/A
INTERCONTINENTAL EXCHANGE IN	ICE	36,074.85	0.19%	1.32%	12.00%	13.40%	0.0250%
IDEXX LABORATORIES INC	IDXX	14,310.06	0.07%	0.00%	12.50%	12.50%	0.0093%
INTL FLAVORS & FRAGRANCES	IFF	10,792.98	0.06%	2.02%	7.50%	9.60%	0.0054%
ILLUMINA INC	ILMN	26,024.80	0.13%	0.00%	19.00%	19.00%	0.0256%
INCYTE CORP	INCY	23,318.02	0.12%	0.00%	69.50%	69.50%	0.0839%
INTEL CORP	INTC	171,131.40	0.89%	3.01%	8.00%	11.13%	0.0987%
INTUIT INC	INTU	30,277.36	0.16%	1.15%	13.50%	14.73%	0.0231%
INTERNATIONAL PAPER CO	IP	21,803.36	0.11%	3.49%	17.50%	21.30%	0.0241%
INTERPUBLIC GROUP OF COS INC	IPG	10,327.25	0.05%	2.86%	13.00%	16.05%	0.0086%
INGERSOLL-RAND PLC	IR	21,432.75	0.11%	1.93%	8.00%	10.01%	0.0111%
IRON MOUNTAIN INC	IRM	9,620.28	0.05%	6.02%	10.00%	16.32%	0.0081%
INTUITIVE SURGICAL INC	ISRG	29,971.76	0.16%	0.00%	11.50%	11.50%	0.0179%
GARTNER INC	IT	9,337.16	0.05%	0.00%	11.50%	11.50%	0.0056%
ILLINOIS TOOL WORKS	ITW	47,238.25	0.24%	1.93%	10.00%	12.03%	0.0294%
INVESCO LTD	IVZ	12,877.02	0.07%	3.55%	4.50%	8.13%	0.0054%
HUNT (JB) TRANSPRT SVCS INC	JBHT	9,991.85	0.05%	1.03%	9.00%	10.08%	0.0052%
JOHNSON CONTROLS INTERNATION	JCI	39,171.33	0.20%	2.68%	2.00%	4.71%	0.0096%
JACOBS ENGINEERING GROUP INC	JEC	6,504.19	0.03%	1.16%	8.00%	9.21%	0.0031%
JOHNSON & JOHNSON	JNJ	331,801.30	1.72%	2.75%	8.50%	11.37%	0.1954%
JUNIPER NETWORKS INC	JNPR	10,594.58	0.05%	1.51%	8.00%	9.57%	0.0053%
JPMORGAN CHASE & CO	JPM	306,120.50	1.59%	2.34%	6.00%	8.41%	0.1334%
NORDSTROM INC	JWN	8,137.90	0.04%	3.09%	2.00%	5.12%	0.0022%
KELLOGG CO	K	25,554.31	0.13%	2.89%	6.50%	9.48%	0.0126%
KEYCORP	KEY	19,654.29	0.10%	2.03%	9.00%	11.12%	0.0113%
KRAFT HEINZ CO/THE	KHC	111,964.40	N/A	2.67%	N/A	N/A	N/A
KIMCO REALTY CORP	KIM	-	N/A	4.91%	N/A	N/A	N/A
KLA-TENCOR CORP	KLAC	15,439.37	0.08%	2.19%	13.50%	15.84%	0.0127%
KIMBERLY-CLARK CORP	KMB	46,796.62	0.24%	2.96%	10.00%	13.11%	0.0318%
KINDER MORGAN INC	KMI	46,207.71	0.24%	2.41%	24.00%	26.70%	0.0639%
CARMAX INC	KMX	11,016.24	0.06%	0.00%	10.50%	10.50%	0.0060%
COCA-COLA CO/THE	KO	184,769.90	0.96%	3.48%	4.50%	8.06%	0.0771%
MICHAEL KORS HOLDINGS LTD	KORS	6,104.35	0.03%	0.00%	4.50%	4.50%	0.0014%
KROGER CO	KR	27,452.04	0.14%	1.78%	8.50%	10.36%	0.0147%
KOHL'S CORP	KSS	7,092.24	0.04%	5.40%	7.00%	12.59%	0.0046%
KANSAS CITY SOUTHERN	KSU	9,655.31	0.05%	1.46%	9.50%	11.03%	0.0055%
LOEWS CORP	L	15,504.76	0.08%	0.54%	13.00%	13.58%	0.0109%
L BRANDS INC	LB	14,202.76	0.07%	4.83%	2.50%	7.39%	0.0054%
LEGGETT & PLATT INC	LEG	6,971.37	0.04%	2.60%	7.50%	10.20%	0.0037%
LENNAR CORP-A	LEN	12,166.39	0.06%	0.31%	10.00%	10.33%	0.0065%
LABORATORY CRP OF AMER HLDGS	LH	14,959.28	0.08%	0.00%	9.00%	9.00%	0.0070%
LKQ CORP	LKQ	8,910.97	0.05%	0.00%	12.50%	12.50%	0.0058%
L3 TECHNOLOGIES INC	LLL	12,985.79	0.07%	1.78%	10.00%	11.87%	0.0080%
ELI LILLY & CO	LLY	90,205.70	0.47%	2.54%	11.00%	13.68%	0.0639%
LOCKHEED MARTIN CORP	LMT	78,564.64	0.41%	2.74%	8.50%	11.36%	0.0462%
LINCOLN NATIONAL CORP	LNC	14,725.36	0.08%	1.84%	7.00%	8.90%	0.0068%
ALLIANT ENERGY CORP	LNT	9,043.21	0.05%	3.17%	6.50%	9.77%	0.0046%
LOWE'S COS INC	LOW	72,712.16	0.38%	1.86%	14.50%	16.49%	0.0621%
LAM RESEARCH CORP	LRCX	22,626.07	0.12%	1.36%	19.50%	20.99%	0.0246%
LEUCADIA NATIONAL CORP	LUK	9,273.17	0.05%	0.97%	31.00%	32.12%	0.0154%
SOUTHWEST AIRLINES CO	LUV	34,418.26	0.18%	0.72%	14.50%	15.27%	0.0272%
LEVEL 3 COMMUNICATIONS INC	LVL	21,667.60	0.11%	0.00%	29.50%	29.50%	0.0331%
LYONDELLBASELL INDU-CL A	LYB	34,987.78	0.18%	3.98%	5.00%	9.08%	0.0165%
MACY'S INC	M	9,124.93	0.05%	5.03%	2.50%	7.59%	0.0036%
MASTERCARD INC - A	MA	123,871.80	0.64%	0.77%	12.00%	12.82%	0.0822%
MID-AMERICA APARTMENT COMM	MAA	N/A	N/A	0.00%	N/A	N/A	N/A
MACERICH CO/THE	MAC	-	N/A	4.39%	N/A	N/A	N/A
MARRIOTT INTERNATIONAL -CL A	MAR	35,582.96	0.18%	1.29%	13.00%	14.37%	0.0265%
MASCO CORP	MAS	10,789.74	0.06%	1.18%	11.50%	12.75%	0.0071%
MATTEL INC	MAT	8,631.90	0.04%	6.03%	4.50%	10.67%	0.0048%
MCDONALD'S CORP	MCD	110,667.40	0.57%	2.85%	6.50%	9.44%	0.0541%
MICROCHIP TECHNOLOGY INC	MCHP	16,368.60	0.08%	1.90%	12.00%	14.01%	0.0119%
MCKESSON CORP	MCK	29,191.22	0.15%	0.81%	11.00%	11.85%	0.0179%
MOODY'S CORP	MCO	22,053.49	0.11%	1.32%	6.50%	7.86%	0.0090%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
MONDELEZ INTERNATIONAL INC-A	MDLZ	68,745.86	0.36%	1.82%	10.00%	11.91%	0.0424%
MEDTRONIC PLC	MDT	110,907.10	0.57%	2.17%	6.00%	8.24%	0.0473%
METLIFE INC	MET	56,725.97	0.29%	3.32%	7.00%	10.44%	0.0307%
MOHAWK INDUSTRIES INC	MHK	17,525.16	0.09%	0.00%	7.50%	7.50%	0.0068%
MEAD JOHNSON NUTRITION CO	MJN	16,282.25	0.08%	1.86%	5.50%	7.41%	0.0063%
MCCORMICK & CO-NON VTG SHRS	MKC	12,522.66	0.06%	1.87%	6.50%	8.43%	0.0055%
MARTIN MARIETTA MATERIALS	MLM	13,727.51	0.07%	0.77%	17.50%	18.34%	0.0130%
MARSH & MCLENNAN COS	MMC	37,855.97	0.20%	1.86%	9.00%	10.94%	0.0215%
3M CO	MMM	114,976.20	0.60%	2.46%	8.00%	10.56%	0.0629%
MALLINCKRODT PLC	MNK	4,815.01	0.02%	0.00%	53.00%	53.00%	0.0132%
MONSTER BEVERAGE CORP	MNST	25,914.73	0.13%	0.00%	12.00%	12.00%	0.0161%
ALTRIA GROUP INC	MO	138,769.10	0.72%	3.42%	9.50%	13.08%	0.0940%
MONSANTO CO	MON	50,767.64	0.26%	1.87%	9.50%	11.46%	0.0301%
MOAIC CO/THE	MOS	9,491.45	0.05%	2.21%	3.50%	5.75%	0.0028%
MARATHON PETROLEUM CORP	MPC	25,532.04	0.13%	3.21%	3.50%	6.77%	0.0089%
MERCK & CO. INC.	MRK	171,933.10	0.89%	3.01%	5.50%	8.59%	0.0765%
MARATHON OIL CORP	MRO	12,781.23	0.07%	1.33%	14.50%	15.93%	0.0105%
MORGAN STANLEY	MS	79,749.80	0.41%	1.88%	12.00%	13.99%	0.0578%
MICROSOFT CORP	MSFT	506,315.00	2.62%	2.38%	8.00%	10.48%	0.2747%
MOTOROLA SOLUTIONS INC	MSI	13,851.27	0.07%	2.24%	10.50%	12.86%	0.0092%
M & T BANK CORP	MTB	23,906.15	0.12%	1.95%	6.50%	8.51%	0.0105%
METTLER-TOLEDO INTERNATIONAL	MTD	12,744.33	0.07%	0.00%	10.50%	10.50%	0.0069%
MICRON TECHNOLOGY INC	MU	30,923.76	0.16%	0.00%	18.00%	18.00%	0.0288%
MURPHY OIL CORP	MUR	4,609.79	N/A	3.74%	N/A	N/A	N/A
MYLAN NV	MYL	19,849.96	0.10%	0.00%	16.50%	16.50%	0.0170%
NAVIENT CORP	NAVI	4,851.03	N/A	4.00%	N/A	N/A	N/A
NOBLE ENERGY INC	NBL	14,813.58	N/A	1.17%	N/A	N/A	N/A
NASDAQ INC	NDAQ	11,680.52	0.06%	1.83%	8.50%	10.41%	0.0063%
NEXTERA ENERGY INC	NEE	61,247.16	0.32%	3.00%	6.00%	9.09%	0.0288%
NEWMONT MINING CORP	NEM	17,860.76	0.09%	0.59%	0.50%	1.09%	0.0010%
NETFLIX INC	NFLX	60,847.59	0.32%	0.00%	42.00%	42.00%	0.1324%
NEWFIELD EXPLORATION CO	NFX	6,940.77	0.04%	0.00%	12.50%	12.50%	0.0045%
NISOURCE INC	NI	7,780.24	0.04%	2.90%	2.00%	4.93%	0.0020%
NIKE INC -CL B	NKE	93,172.80	0.48%	1.28%	15.00%	16.38%	0.0790%
NIELSEN HOLDINGS PLC	NLSN	14,701.09	0.08%	3.02%	-2.50%	0.48%	0.0004%
NORTHROP GRUMMAN CORP	NOC	42,865.40	0.22%	1.47%	8.00%	9.53%	0.0212%
NATIONAL OILWELL VARCO INC	NOV	13,456.52	0.07%	0.56%	-9.50%	-8.97%	-0.0062%
NRG ENERGY INC	NRG	5,438.24	N/A	0.70%	N/A	N/A	N/A
NORFOLK SOUTHERN CORP	NSC	33,809.80	0.18%	2.11%	6.50%	8.68%	0.0152%
NETAPP INC	NTAP	10,924.01	0.06%	1.89%	9.00%	10.98%	0.0062%
NORTHERN TRUST CORP	NTRS	19,801.39	0.10%	1.74%	8.00%	9.81%	0.0101%
NUCOR CORP	NUE	19,220.57	0.10%	2.50%	20.50%	23.26%	0.0232%
VIDIA CORP	NVDA	59,237.10	0.31%	0.55%	14.50%	15.09%	0.0463%
NEWELL BRANDS INC	NWL	22,725.75	0.12%	1.61%	18.00%	19.75%	0.0233%
NEWS CORP - CLASS A	NWSA	7,523.38	0.04%	1.55%	59.00%	61.01%	0.0238%
REALTY INCOME CORP	O	-	N/A	4.11%	N/A	N/A	N/A
ONEOK INC	OKE	11,323.76	0.06%	4.69%	11.00%	15.95%	0.0094%
OMNICOM GROUP	OMC	19,832.88	0.10%	2.74%	9.00%	11.86%	0.0122%
ORACLE CORP	ORCL	183,240.90	0.95%	1.71%	5.00%	6.75%	0.0641%
O'REILLY AUTOMOTIVE INC	ORLY	24,420.08	0.13%	0.00%	11.00%	11.00%	0.0139%
OCCIDENTAL PETROLEUM CORP	OXY	47,326.16	0.25%	4.94%	3.50%	8.53%	0.0209%
PAYCHEX INC	PAYX	21,067.08	0.11%	3.29%	9.00%	12.44%	0.0136%
PEOPLE'S UNITED FINANCIAL	PBCT	5,550.36	0.03%	3.93%	10.50%	14.64%	0.0042%
PACCAR INC	PCAR	23,097.53	0.12%	2.49%	5.00%	7.55%	0.0090%
P G & E CORP	PCG	34,037.73	0.18%	3.16%	9.50%	12.81%	0.0226%
PRICELINE GROUP INC/THE	PCLN	86,610.23	0.45%	0.00%	15.00%	15.00%	0.0673%
PATTERSON COS INC	PDGO	4,300.12	0.02%	2.35%	10.50%	12.97%	0.0029%
PUBLIC SERVICE ENTERPRISE GP	PEG	22,406.85	0.12%	3.88%	2.50%	6.43%	0.0075%
PEPSICO INC	PEP	162,206.50	0.84%	2.71%	7.00%	9.80%	0.0824%
PFIZER INC	PFE	204,801.80	1.06%	3.79%	11.00%	15.00%	0.1591%
PRINCIPAL FINANCIAL GROUP	PFG	18,102.08	0.09%	2.86%	5.00%	7.93%	0.0074%
PROCTER & GAMBLE CO/THE	PG	228,370.10	1.18%	3.09%	7.50%	10.71%	0.1266%
PROGRESSIVE CORP	PGR	22,853.86	0.12%	1.73%	7.50%	9.29%	0.0110%
PARKER HANNIFIN CORP	PH	20,936.49	0.11%	1.68%	7.50%	9.24%	0.0100%
PULTEGROUP INC	PHM	7,447.54	0.04%	1.59%	16.50%	18.22%	0.0070%
PERKINELMER INC	PKI	6,268.41	0.03%	0.49%	8.00%	8.51%	0.0028%
PROLOGIS INC	PLD	-	N/A	3.23%	N/A	N/A	N/A
PHILIP MORRIS INTERNATIONAL	PM	170,621.40	0.88%	3.78%	7.50%	11.42%	0.1009%
PNC FINANCIAL SERVICES GROUP	PNC	57,989.04	0.30%	1.85%	3.00%	4.88%	0.0147%
PENTAIR PLC	PNR	11,417.04	0.06%	2.20%	11.00%	13.32%	0.0079%
PINNACLE WEST CAPITAL	PNW	9,499.19	0.05%	3.18%	5.50%	8.77%	0.0043%
PPG INDUSTRIES INC	PPG	27,372.19	0.14%	1.50%	9.50%	11.07%	0.0157%
PPL CORP	PPL	25,676.33	0.13%	4.18%	2.00%	6.22%	0.0083%
PERRIGO CO PLC	PRGO	9,571.65	N/A	0.96%	N/A	N/A	N/A
PRUDENTIAL FINANCIAL INC	PRU	45,466.11	0.24%	2.83%	5.50%	8.41%	0.0198%
PUBLIC STORAGE	PSA	-	N/A	3.55%	N/A	N/A	N/A
PHILLIPS 66	PSX	39,454.39	0.20%	3.70%	2.00%	5.74%	0.0117%

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		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
PVH CORP	PVH	7,965.86	0.04%	0.15%	7.00%	7.16%	0.0030%
QUANTA SERVICES INC	PWR	5,089.71	0.03%	0.00%	10.50%	10.50%	0.0028%
PRAXAIR INC	PX	34,169.63	0.18%	2.68%	6.00%	8.76%	0.0155%
PIONEER NATURAL RESOURCES CO	PXD	29,605.43	0.15%	0.05%	20.00%	20.06%	0.0308%
PAYPAL HOLDINGS INC	PYPL	52,733.83	N/A	0.00%	N/A	N/A	N/A
QUALCOMM INC	QCOM	77,778.83	0.40%	4.41%	6.00%	10.54%	0.0425%
QORVO INC	QRVO	8,973.29	N/A	0.00%	N/A	N/A	N/A
RYDER SYSTEM INC	R	4,097.25	0.02%	2.30%	7.50%	9.89%	0.0021%
REYNOLDS AMERICAN INC	RAI	90,953.38	0.47%	3.20%	13.50%	16.92%	0.0797%
ROYAL CARIBBEAN CRUISES LTD	RCL	20,860.68	0.11%	1.98%	16.50%	18.64%	0.0201%
REGENCY CENTERS CORP	REG	N/A	N/A	0.00%	N/A	N/A	N/A
REGENERON PHARMACEUTICALS	REGN	39,901.41	0.21%	0.00%	22.00%	22.00%	0.0455%
REGIONS FINANCIAL CORP	RF	16,566.88	0.09%	2.05%	7.50%	9.63%	0.0083%
ROBERT HALF INTL INC	RHI	5,917.16	0.03%	2.09%	6.00%	8.15%	0.0025%
RED HAT INC	RHT	15,623.26	0.08%	0.00%	16.50%	16.50%	0.0134%
TRANSOCEAN LTD	RIG	4,430.99	0.02%	0.00%	-19.00%	-19.00%	-0.0044%
RAYMOND JAMES FINANCIAL INC	RJF	10,599.69	0.05%	1.19%	10.50%	11.75%	0.0065%
RALPH LAUREN CORP	RL	6,552.98	0.03%	2.51%	1.00%	3.52%	0.0012%
ROCKWELL AUTOMATION INC	ROK	19,781.25	0.10%	1.98%	4.00%	6.02%	0.0062%
ROPER TECHNOLOGIES INC	ROP	21,233.18	0.11%	0.67%	6.50%	7.19%	0.0079%
ROSS STORES INC	ROST	25,483.80	0.13%	1.01%	9.00%	10.06%	0.0133%
RANGE RESOURCES CORP	RRC	6,822.43	0.04%	0.29%	14.00%	14.31%	0.0051%
REPUBLIC SERVICES INC	RSG	21,473.81	0.11%	2.10%	8.00%	10.18%	0.0113%
RAYTHEON COMPANY	RTN	45,122.00	0.23%	2.07%	8.00%	10.15%	0.0237%
STARBUCKS CORP	SBUX	87,548.58	0.45%	1.83%	15.00%	16.97%	0.0769%
SCANA CORP	SCG	9,437.12	0.05%	3.71%	4.50%	8.29%	0.0041%
SCHWAB (CHARLES) CORP	SCHW	51,213.36	0.27%	0.83%	14.50%	15.39%	0.0408%
SEALED AIR CORP	SEE	8,511.27	0.04%	1.46%	12.00%	13.55%	0.0060%
SHERWIN-WILLIAMS CO/THE	SHW	30,138.07	0.16%	1.05%	8.50%	9.59%	0.0150%
SIGNET JEWELERS LTD	SIG	4,604.10	0.02%	1.84%	7.00%	8.90%	0.0021%
JM SMUCKER CO/THE	SJM	14,841.83	0.08%	2.35%	7.00%	9.43%	0.0073%
SCHLUMBERGER LTD	SLB	106,461.80	0.55%	2.61%	10.00%	12.74%	0.0703%
SL GREEN REALTY CORP	SLG	-	N/A	2.90%	N/A	N/A	N/A
SNAP-ON INC	SNA	10,045.87	0.05%	1.64%	9.50%	11.22%	0.0058%
SCRIPPS NETWORKS INTER-CL A	SNI	9,778.26	0.05%	1.59%	9.00%	10.66%	0.0054%
SYNOPSYS INC	SNPS	10,915.05	0.06%	0.00%	9.00%	9.00%	0.0051%
SOUTHERN CO/THE	SO	48,774.55	0.25%	4.66%	4.50%	9.26%	0.0234%
SIMON PROPERTY GROUP INC	SPG	-	N/A	4.01%	N/A	N/A	N/A
S&P GLOBAL INC	SPGI	34,167.52	0.18%	1.24%	11.00%	12.31%	0.0218%
STAPLES INC	SPLS	6,289.34	0.03%	4.93%	1.50%	6.47%	0.0021%
STERICYCLE INC	SRCL	7,240.39	0.04%	0.00%	5.50%	5.50%	0.0021%
SEMPRA ENERGY	SRE	28,089.57	0.15%	2.99%	8.00%	11.11%	0.0162%
SUNTRUST BANKS INC	STI	27,519.49	0.14%	1.98%	7.00%	9.05%	0.0129%
STATE STREET CORP	STT	29,913.46	0.15%	2.04%	5.50%	7.60%	0.0118%
SEAGATE TECHNOLOGY	STX	14,329.63	0.07%	5.19%	4.50%	9.81%	0.0073%
CONSTELLATION BRANDS INC-A	STZ	34,421.89	0.18%	1.22%	14.50%	15.81%	0.0282%
STANLEY BLACK & DECKER INC	SWK	19,997.94	0.10%	1.75%	9.00%	10.83%	0.0112%
SKYWORKS SOLUTIONS INC	SWKS	18,781.22	0.10%	1.10%	12.50%	13.67%	0.0133%
SYNCHRONY FINANCIAL	SYF	27,941.96	N/A	1.54%	N/A	N/A	N/A
STRYKER CORP	SYK	49,652.24	0.26%	1.28%	14.50%	15.87%	0.0408%
SYMANTEC CORP	SYMC	18,865.32	0.10%	0.98%	5.00%	6.00%	0.0059%
SYSCO CORP	SYO	28,343.09	0.15%	2.59%	11.50%	14.24%	0.0209%
AT&T INC	T	247,769.80	1.28%	4.88%	5.50%	10.51%	0.1349%
MOLSON COORS BREWING CO -B	TAP	21,329.22	0.11%	1.84%	3.50%	5.37%	0.0059%
TERADATA CORP	TDC	4,145.81	0.02%	0.00%	0.50%	0.50%	0.0001%
TRANSDIGM GROUP INC	TDG	12,814.77	0.07%	0.00%	12.00%	12.00%	0.0080%
TE CONNECTIVITY LTD	TEL	26,349.73	0.14%	2.00%	7.50%	9.58%	0.0131%
TEGNA INC	TGNA	5,598.43	0.03%	2.15%	1.00%	3.16%	0.0009%
TARGET CORP	TGT	30,388.36	0.16%	4.39%	4.50%	8.99%	0.0141%
TIFFANY & CO	TIF	11,471.43	0.06%	2.13%	8.00%	10.22%	0.0061%
TJX COMPANIES INC	TJX	50,959.10	0.26%	1.60%	10.00%	11.68%	0.0308%
TORCHMARK CORP	TMK	8,970.36	0.05%	0.79%	7.50%	8.32%	0.0039%
THERMO FISHER SCIENTIFIC INC	TMO	61,371.08	0.32%	0.39%	9.50%	9.91%	0.0315%
TRIPADVISOR INC	TRIP	6,154.94	0.03%	0.00%	10.50%	10.50%	0.0033%
T ROWE PRICE GROUP INC	TROW	17,697.88	0.09%	3.15%	7.50%	10.77%	0.0099%
TRAVELERS COS INC/THE	TRV	33,238.85	0.17%	2.25%	1.50%	3.77%	0.0065%
TRACTOR SUPPLY COMPANY	TSCO	8,489.90	0.04%	1.66%	10.50%	12.25%	0.0054%
TYSON FOODS INC-CL A	TSN	23,216.61	0.12%	1.48%	9.00%	10.55%	0.0127%
TESORO CORP	TSO	8,935.11	0.05%	2.88%	7.50%	10.49%	0.0049%
TOTAL SYSTEM SERVICES INC	TSS	9,840.31	0.05%	0.75%	10.50%	11.29%	0.0058%
TIME WARNER INC	TWX	77,200.00	0.40%	1.61%	11.00%	12.70%	0.0508%
TEXAS INSTRUMENTS INC	TXN	80,435.66	0.42%	2.48%	8.00%	10.58%	0.0441%
TEXTRON INC	TXT	12,408.88	0.06%	0.17%	12.00%	12.18%	0.0078%
UNDER ARMOUR INC-CLASS A	UAA	8,495.79	0.04%	0.00%	15.50%	15.50%	0.0068%
UNITED CONTINENTAL HOLDINGS	UAL	21,716.88	0.11%	0.00%	6.00%	6.00%	0.0067%
UDR INC	UDR	-	N/A	3.42%	N/A	N/A	N/A
UNIVERSAL HEALTH SERVICES-B	UHS	11,511.53	0.06%	0.34%	10.50%	10.86%	0.0065%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est.	DCF Result	Weighted DCF Result
ULTA BEAUTY INC	ULTA	17,369.34	0.09%	0.00%	22.00%	22.00%	0.0198%
UNITEDHEALTH GROUP INC	UNH	163,306.10	0.85%	1.46%	12.50%	14.05%	0.1189%
UNUM GROUP	UNM	10,516.70	0.05%	1.75%	10.50%	12.34%	0.0067%
UNION PACIFIC CORP	UNP	88,027.41	0.46%	2.24%	8.00%	10.33%	0.0471%
UNITED PARCEL SERVICE-CL B	UPS	92,127.69	0.48%	3.15%	9.50%	12.80%	0.0611%
UNITED RENTALS INC	URI	9,569.57	0.05%	0.00%	8.00%	8.00%	0.0040%
US BANCORP	USB	85,999.50	0.45%	2.25%	4.00%	6.30%	0.0280%
UNITED TECHNOLOGIES CORP	UTX	92,143.39	0.48%	2.32%	7.50%	9.91%	0.0473%
VISA INC-CLASS A SHARES	V	192,782.20	1.00%	0.76%	13.50%	14.31%	0.1429%
VARIAN MEDICAL SYSTEMS INC	VAR	8,351.42	0.04%	0.00%	7.00%	7.00%	0.0030%
VF CORP	VFC	23,366.84	0.12%	2.98%	8.50%	11.61%	0.0140%
VIACOM INC-CLASS B	VIAB	17,599.01	0.09%	1.81%	1.00%	2.82%	0.0026%
VALERO ENERGY CORP	VLO	28,941.28	0.15%	4.37%	4.50%	8.97%	0.0134%
VULCAN MATERIALS CO	VMC	15,858.18	0.08%	0.84%	20.50%	21.43%	0.0176%
VORNADO REALTY TRUST	VNO	19,196.12	0.10%	2.80%	19.50%	22.57%	0.0224%
VERISK ANALYTICS INC	VRSK	13,697.91	0.07%	0.00%	10.00%	10.00%	0.0071%
VERISIGN INC	VRSN	9,145.20	0.05%	0.00%	12.00%	12.00%	0.0057%
VERTEX PHARMACEUTICALS INC	VRTX	29,083.88	N/A	0.00%	N/A	N/A	N/A
VENTAS INC	VTR	-	N/A	4.85%	N/A	N/A	N/A
VERIZON COMMUNICATIONS INC	VZ	197,349.80	1.02%	4.77%	3.00%	7.84%	0.0802%
WATERS CORP	WAT	12,808.39	0.07%	0.00%	6.00%	6.00%	0.0040%
WALGREENS BOOTS ALLIANCE INC	WBA	90,929.68	0.47%	1.78%	11.00%	12.88%	0.0607%
WESTERN DIGITAL CORP	WDC	24,310.08	0.13%	2.37%	7.50%	9.96%	0.0125%
WEC ENERGY GROUP INC	WEC	18,864.25	0.10%	3.53%	6.00%	9.64%	0.0094%
WELLS FARGO & CO	WFC	268,778.10	1.39%	2.90%	4.50%	7.47%	0.1039%
WHOLE FOODS MARKET INC	WFM	11,306.75	0.06%	1.61%	3.50%	5.14%	0.0030%
WHIRLPOOL CORP	WHR	12,873.00	0.07%	2.56%	9.50%	12.18%	0.0081%
WILLIS TOWERS WATSON PLC	WLTW	17,697.19	N/A	1.57%	N/A	N/A	N/A
WASTE MANAGEMENT INC	WM	32,195.06	0.17%	2.33%	7.50%	9.92%	0.0165%
WILLIAMS COS INC	WMB	22,664.74	0.12%	3.97%	14.00%	18.25%	0.0214%
WAL-MART STORES INC	WMT	227,990.40	1.18%	2.73%	4.00%	6.78%	0.0801%
WESTROCK CO	WRK	13,275.31	N/A	3.01%	N/A	N/A	N/A
WESTERN UNION CO	WU	9,625.19	0.05%	3.50%	8.00%	11.64%	0.0058%
WEYERHAEUSER CO	WY	26,033.80	0.13%	3.57%	12.50%	16.29%	0.0220%
WYNDHAM WORLDWIDE CORP	WYN	9,664.55	0.05%	2.59%	8.00%	10.69%	0.0054%
WYNN RESORTS LTD	WYNN	11,823.95	0.06%	1.72%	5.00%	6.76%	0.0041%
CIMAREX ENERGY CO	XEC	11,104.14	0.06%	0.27%	16.00%	16.29%	0.0094%
XCEL ENERGY INC	XEL	22,647.46	0.12%	3.27%	4.50%	7.84%	0.0092%
XL GROUP LTD	XL	11,895.91	0.06%	2.18%	8.00%	10.27%	0.0063%
XILINX INC	XLNX	14,366.04	0.07%	2.29%	6.50%	8.86%	0.0066%
EXXON MOBIL CORP	XOM	336,029.50	1.74%	3.73%	11.50%	15.44%	0.2688%
DENTSPLY SIRONA INC	XRAY	14,471.56	0.07%	0.56%	8.50%	9.08%	0.0068%
XEROX CORP	XRX	7,066.03	0.04%	3.59%	0.50%	4.10%	0.0015%
XYLEM INC	XYL	9,014.49	0.05%	1.43%	12.00%	13.52%	0.0063%
YAHOO! INC	YHOO	45,451.77	N/A	0.00%	N/A	N/A	N/A
YUM! BRANDS INC	YUM	24,455.04	0.13%	1.89%	4.00%	5.93%	0.0075%
ZIMMER BIOMET HOLDINGS INC	ZBH	24,394.37	0.13%	0.85%	12.50%	13.40%	0.0169%
ZIONS BANCORPORATION	ZION	8,342.73	0.04%	0.83%	11.00%	11.88%	0.0051%
ZOETIS INC	ZTS	26,757.10	0.14%	0.77%	11.50%	12.31%	0.0171%
Total Market Capitalization:		19,305,717.66					14.09%

Notes:

[1] Equals sum of Col. [9]

[2] Source: Bloomberg Professional

[3] Equals [1] - [2]

[4] Source: Value Line

[5] Equals weight in S&P 500 based on market capitalization

[6] Source: Value Line

[7] Source: Value Line

[8] Equals ([6] x (1 + (0.5 x [7]))) + [7]

[9] Equals Col. [5] x Col. [8]

Bloombergb and Value Line Beta Coefficients

Company	Ticker	[1]	[2]
		Bloomberg	Value Line
Black Hills Corporation	BKH	0.504	0.850
CenterPoint Energy, Inc.	CNP	0.696	0.850
Sempra Energy	SRE	0.734	0.800
Vectren Corporation	VVC	0.675	0.750
Atmos Energy Corporation	ATO	0.632	0.700
Chesapeake Utilities Corporation	CPK	0.665	0.700
Northwest Natural Gas Company	NWN	0.549	0.650
Southwest Gas Corporation	SWX	0.588	0.750
Spire Inc	SR	0.636	0.700
Mean		0.631	0.750

Notes:

[1] Source: Bloomberg Professional

[2] Source: Value Line

Capital Asset Pricing Model Results
Bloomberg, and Value Line Derived Market Risk Premium

	[1]	[2]	[3]	[4]	[5]	[6]
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg Market DCF Derived	Value Line Market DCF Derived
PROXY GROUP AVERAGE BLOOMBERG BETA COEFFICIENT						
Current 30-Year Treasury [7]	2.97%	0.631	10.39%	11.12%	9.53%	9.99%
Projected 30-Year Treasury [8]	3.43%	0.631	10.39%	11.12%	9.99%	10.45%
Mean					9.76%	10.22%
PROXY GROUP AVERAGE VALUE LINE AVERAGE BETA COEFFICIENT						
Current 30-Year Treasury [7]	2.97%	0.750	10.39%	11.12%	10.77%	11.31%
Projected 30-Year Treasury [8]	3.43%	0.750	10.39%	11.12%	11.23%	11.77%
Mean					11.00%	11.54%

Notes:

[1] See Note [7] and [8]

[2] Source: Exhibit RBH-6

[3] Source: Exhibit RBH-5

[4] Source: Exhibit RBH-5

[5] Equals Col. [1] + (Col. [2] x Col. [3])

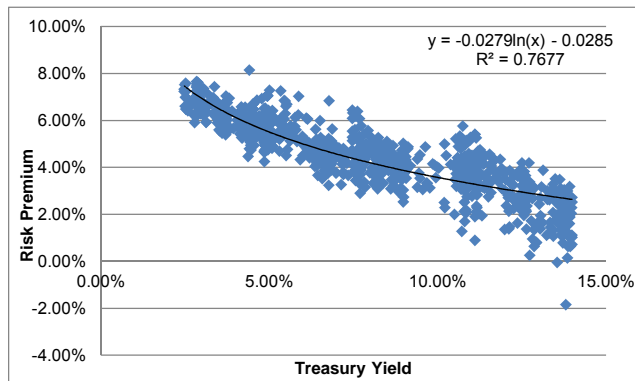
[6] Equals Col. [1] + (Col. [2] x Col. [4])

[7] Source: Bloomberg Professional

[8] Source: Blue Chip Financial Forecasts, Vol. 36, No. 5, May 1, 2017, at 2

Bond Yield Plus Risk Premium

[1]	[2]	[3]	[4]	[5]
Constant	Slope	30-Year Treasury Yield	Risk Premium	Return on Equity
-2.85%	-2.79%			
Current 30-Year Treasury		2.97%	6.96%	9.93%
Near-Term Projected 30-Year Treasury		3.43%	6.55%	9.99%
Long-Term Projected 30-Year Treasury		4.35%	5.89%	10.24%



Notes:

[1] Constant of regression equation

[2] Slope of regression equation

[3] Source: Current = Bloomberg Professional,

Near Term Projected = Blue Chip Financial Forecasts, Vol. 36, No. 5, May 1, 2017, at 2

Long Term Projected = Blue Chip Financial Forecasts, Vol. 35, No. 12, December 1, 2016, at 14

[4] Equals [1] + ln([3]) x [2]

[5] Equals [3] + [4]

[6] Source: SNL Financial

[7] Source: SNL Financial

[8] Source: Bloomberg Professional, equals 188-trading day average (i.e. lag period)

[9] Equals [7] - [8]

[6]	[7]	[8]	[9]
Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/3/1980	12.55%	9.39%	3.16%
1/4/1980	13.75%	9.40%	4.35%
1/14/1980	13.20%	9.44%	3.76%
1/18/1980	14.00%	9.47%	4.53%
1/31/1980	12.61%	9.56%	3.05%
2/8/1980	14.50%	9.63%	4.87%
2/14/1980	13.00%	9.67%	3.33%
2/15/1980	13.00%	9.69%	3.31%
2/29/1980	14.00%	9.85%	4.15%
3/5/1980	14.00%	9.90%	4.10%
3/7/1980	13.50%	9.94%	3.56%
3/14/1980	14.00%	10.03%	3.97%
3/27/1980	12.69%	10.19%	2.50%
4/1/1980	14.75%	10.25%	4.50%
4/29/1980	12.50%	10.50%	2.00%
5/7/1980	14.27%	10.55%	3.72%
5/8/1980	13.75%	10.55%	3.20%
5/19/1980	15.50%	10.61%	4.89%
5/27/1980	14.60%	10.64%	3.96%
5/29/1980	16.00%	10.66%	5.34%
6/10/1980	13.78%	10.70%	3.08%
6/25/1980	14.25%	10.73%	3.52%
7/9/1980	14.51%	10.77%	3.74%
7/17/1980	12.90%	10.78%	2.12%
7/18/1980	13.80%	10.79%	3.01%
7/22/1980	14.10%	10.79%	3.31%
7/23/1980	14.19%	10.79%	3.40%
8/1/1980	12.50%	10.80%	1.70%
8/11/1980	14.85%	10.81%	4.04%
8/21/1980	13.03%	10.84%	2.19%
8/28/1980	13.61%	10.87%	2.74%
8/28/1980	14.00%	10.87%	3.13%
9/4/1980	14.00%	10.89%	3.11%
9/24/1980	15.00%	10.98%	4.02%
10/9/1980	14.50%	11.05%	3.45%
10/9/1980	14.50%	11.05%	3.45%
10/24/1980	14.00%	11.09%	2.91%
10/27/1980	15.20%	11.10%	4.10%
10/27/1980	15.20%	11.10%	4.10%
10/28/1980	12.00%	11.10%	0.90%
10/28/1980	13.00%	11.10%	1.90%
10/31/1980	14.50%	11.12%	3.38%
11/4/1980	15.00%	11.13%	3.87%
11/6/1980	14.35%	11.13%	3.22%
11/10/1980	13.25%	11.14%	2.11%
11/17/1980	15.50%	11.15%	4.35%
11/19/1980	13.50%	11.15%	2.35%
12/5/1980	14.60%	11.14%	3.46%
12/8/1980	16.40%	11.14%	5.26%
12/12/1980	15.45%	11.15%	4.30%
12/17/1980	14.20%	11.16%	3.04%
12/17/1980	14.40%	11.16%	3.24%
12/18/1980	14.00%	11.17%	2.83%
12/22/1980	13.45%	11.16%	2.29%
12/26/1980	14.00%	11.15%	2.85%
12/30/1980	14.50%	11.15%	3.35%
12/31/1980	14.56%	11.15%	3.41%
1/7/1981	14.30%	11.14%	3.16%
1/12/1981	14.95%	11.14%	3.81%
1/26/1981	15.25%	11.20%	4.05%
1/30/1981	13.25%	11.23%	2.02%
2/11/1981	14.50%	11.33%	3.17%
2/20/1981	14.50%	11.39%	3.11%
3/12/1981	15.65%	11.59%	4.06%
3/25/1981	15.30%	11.73%	3.57%
4/1/1981	15.30%	11.81%	3.49%
4/9/1981	15.00%	11.90%	3.10%
4/29/1981	13.50%	12.11%	1.39%
4/29/1981	14.25%	12.11%	2.14%
4/30/1981	13.60%	12.13%	1.47%
4/30/1981	15.00%	12.13%	2.87%
5/21/1981	14.00%	12.37%	1.63%
6/3/1981	14.67%	12.45%	2.22%
6/22/1981	16.00%	12.57%	3.43%
6/25/1981	14.75%	12.59%	2.16%
7/2/1981	14.00%	12.64%	1.36%
7/10/1981	16.00%	12.68%	3.32%
7/14/1981	16.90%	12.71%	4.19%
7/21/1981	15.78%	12.77%	3.01%
7/27/1981	13.77%	12.82%	0.95%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
7/27/1981	15.50%	12.82%	2.68%
7/31/1981	13.50%	12.86%	0.64%
7/31/1981	14.20%	12.86%	1.34%
8/12/1981	13.72%	12.93%	0.79%
8/12/1981	13.72%	12.93%	0.79%
8/12/1981	14.41%	12.93%	1.48%
8/25/1981	15.45%	13.01%	2.44%
8/27/1981	14.43%	13.04%	1.39%
8/28/1981	15.00%	13.05%	1.95%
9/23/1981	14.34%	13.23%	1.11%
9/24/1981	16.25%	13.25%	3.00%
9/29/1981	14.50%	13.30%	1.20%
9/30/1981	15.94%	13.32%	2.62%
10/2/1981	14.80%	13.35%	1.45%
10/12/1981	16.25%	13.42%	2.83%
10/20/1981	15.25%	13.49%	1.76%
10/20/1981	16.50%	13.49%	3.01%
10/20/1981	17.00%	13.49%	3.51%
10/23/1981	15.50%	13.53%	1.97%
10/26/1981	13.50%	13.55%	-0.05%
10/29/1981	16.50%	13.59%	2.91%
11/4/1981	15.33%	13.62%	1.71%
11/6/1981	15.17%	13.63%	1.54%
11/12/1981	15.00%	13.64%	1.36%
11/25/1981	15.25%	13.66%	1.59%
11/25/1981	16.10%	13.66%	2.44%
11/25/1981	16.10%	13.66%	2.44%
11/30/1981	16.75%	13.65%	3.10%
12/1/1981	15.70%	13.65%	2.05%
12/1/1981	16.00%	13.65%	2.35%
12/15/1981	15.81%	13.68%	2.13%
12/17/1981	14.75%	13.70%	1.05%
12/22/1981	15.70%	13.71%	1.99%
12/22/1981	16.00%	13.71%	2.29%
12/30/1981	16.00%	13.74%	2.26%
12/30/1981	16.25%	13.74%	2.51%
1/4/1982	15.50%	13.74%	1.76%
1/14/1982	11.95%	13.80%	-1.85%
1/25/1982	16.25%	13.84%	2.41%
1/27/1982	16.84%	13.85%	2.99%
1/31/1982	14.00%	13.85%	0.15%
2/2/1982	16.24%	13.86%	2.38%
2/8/1982	15.50%	13.87%	1.63%
2/9/1982	14.95%	13.88%	1.07%
2/9/1982	15.75%	13.88%	1.87%
2/11/1982	16.00%	13.89%	2.11%
3/1/1982	15.96%	13.91%	2.05%
3/3/1982	15.00%	13.91%	1.09%
3/8/1982	17.10%	13.91%	3.19%
3/26/1982	16.00%	13.96%	2.04%
3/31/1982	16.25%	13.97%	2.28%
4/1/1982	16.50%	13.98%	2.52%
4/6/1982	15.00%	13.98%	1.02%
4/9/1982	16.50%	13.99%	2.51%
4/12/1982	15.10%	13.98%	1.12%
4/12/1982	16.70%	13.98%	2.72%
4/18/1982	14.70%	13.98%	0.72%
4/27/1982	15.00%	13.97%	1.03%
5/10/1982	14.57%	13.94%	0.63%
5/14/1982	15.80%	13.92%	1.88%
5/20/1982	15.82%	13.91%	1.91%
5/21/1982	15.50%	13.90%	1.60%
5/25/1982	16.25%	13.90%	2.35%
6/2/1982	14.50%	13.87%	0.63%
6/7/1982	16.00%	13.86%	2.14%
6/23/1982	15.50%	13.81%	1.69%
6/25/1982	16.50%	13.81%	2.69%
7/1/1982	15.55%	13.80%	1.75%
7/1/1982	16.00%	13.80%	2.20%
7/2/1982	15.10%	13.79%	1.31%
7/13/1982	16.80%	13.76%	3.04%
7/22/1982	14.50%	13.72%	0.78%
7/28/1982	16.10%	13.69%	2.41%
7/30/1982	14.82%	13.67%	1.15%
8/4/1982	15.58%	13.65%	1.93%
8/6/1982	16.50%	13.63%	2.87%
8/11/1982	17.11%	13.62%	3.49%
8/25/1982	16.00%	13.58%	2.42%
8/30/1982	16.25%	13.58%	2.67%
9/3/1982	15.50%	13.56%	1.94%
9/9/1982	16.04%	13.55%	2.49%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
9/15/1982	16.04%	13.52%	2.52%
9/17/1982	15.25%	13.51%	1.74%
9/29/1982	14.50%	13.43%	1.07%
9/30/1982	14.74%	13.42%	1.32%
9/30/1982	15.50%	13.42%	2.08%
9/30/1982	16.50%	13.42%	3.08%
9/30/1982	16.70%	13.42%	3.28%
10/1/1982	16.50%	13.41%	3.09%
10/8/1982	15.00%	13.34%	1.66%
10/15/1982	15.90%	13.26%	2.64%
10/19/1982	15.90%	13.23%	2.67%
10/27/1982	17.00%	13.13%	3.87%
10/28/1982	14.75%	13.11%	1.64%
11/2/1982	16.25%	13.08%	3.17%
11/4/1982	15.75%	13.04%	2.71%
11/5/1982	14.73%	13.02%	1.71%
11/17/1982	16.00%	12.87%	3.13%
11/23/1982	15.50%	12.79%	2.71%
11/24/1982	14.50%	12.78%	1.72%
11/24/1982	16.02%	12.78%	3.24%
11/30/1982	12.98%	12.73%	0.25%
11/30/1982	15.50%	12.73%	2.77%
11/30/1982	15.50%	12.73%	2.77%
11/30/1982	15.65%	12.73%	2.92%
11/30/1982	16.00%	12.73%	3.27%
11/30/1982	16.10%	12.73%	3.37%
12/3/1982	15.33%	12.68%	2.65%
12/8/1982	15.75%	12.64%	3.11%
12/13/1982	16.00%	12.59%	3.41%
12/14/1982	16.40%	12.57%	3.83%
12/17/1982	16.25%	12.53%	3.72%
12/20/1982	15.00%	12.51%	2.49%
12/21/1982	15.70%	12.50%	3.20%
12/28/1982	15.25%	12.43%	2.82%
12/28/1982	15.25%	12.43%	2.82%
12/29/1982	16.25%	12.41%	3.84%
12/29/1982	16.25%	12.41%	3.84%
1/11/1983	15.90%	12.26%	3.64%
1/12/1983	15.50%	12.25%	3.25%
1/18/1983	15.00%	12.19%	2.81%
1/24/1983	15.50%	12.14%	3.36%
1/24/1983	16.00%	12.14%	3.86%
1/28/1983	14.90%	12.09%	2.81%
1/31/1983	15.00%	12.07%	2.93%
2/10/1983	15.00%	11.98%	3.02%
2/25/1983	15.70%	11.85%	3.85%
3/2/1983	15.25%	11.80%	3.45%
3/16/1983	16.00%	11.64%	4.36%
3/21/1983	14.96%	11.58%	3.38%
3/23/1983	15.40%	11.54%	3.86%
3/23/1983	16.10%	11.54%	4.56%
3/24/1983	15.00%	11.53%	3.47%
4/12/1983	13.25%	11.31%	1.94%
4/29/1983	15.05%	11.11%	3.94%
5/3/1983	15.40%	11.08%	4.32%
5/9/1983	15.50%	11.01%	4.49%
5/19/1983	14.85%	10.90%	3.95%
5/31/1983	14.00%	10.85%	3.15%
6/2/1983	14.50%	10.83%	3.67%
6/7/1983	14.50%	10.81%	3.69%
6/9/1983	14.85%	10.80%	4.05%
6/20/1983	14.15%	10.74%	3.41%
6/20/1983	16.50%	10.74%	5.76%
6/27/1983	14.50%	10.72%	3.78%
6/30/1983	14.80%	10.71%	4.09%
6/30/1983	15.90%	10.71%	5.19%
7/1/1983	14.80%	10.70%	4.10%
7/5/1983	15.00%	10.70%	4.30%
7/8/1983	15.50%	10.69%	4.81%
7/19/1983	15.00%	10.71%	4.29%
7/19/1983	15.10%	10.71%	4.39%
8/18/1983	15.30%	10.81%	4.49%
8/19/1983	15.79%	10.82%	4.97%
8/29/1983	16.00%	10.85%	5.15%
8/31/1983	14.75%	10.86%	3.89%
8/31/1983	15.25%	10.86%	4.39%
9/8/1983	14.75%	10.89%	3.86%
9/16/1983	15.51%	10.93%	4.58%
9/26/1983	14.50%	10.96%	3.54%
9/28/1983	14.25%	10.97%	3.28%
9/30/1983	16.15%	10.98%	5.17%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
9/30/1983	16.25%	10.98%	5.27%
10/1/1983	16.25%	10.98%	5.27%
10/13/1983	15.52%	11.02%	4.50%
10/19/1983	15.20%	11.04%	4.16%
10/26/1983	14.75%	11.06%	3.69%
10/27/1983	14.88%	11.07%	3.81%
10/27/1983	15.33%	11.07%	4.26%
11/9/1983	14.82%	11.10%	3.72%
11/9/1983	16.51%	11.10%	5.41%
11/9/1983	16.51%	11.10%	5.41%
12/1/1983	14.50%	11.17%	3.33%
12/8/1983	15.90%	11.20%	4.70%
12/9/1983	15.30%	11.21%	4.09%
12/12/1983	14.50%	11.21%	3.29%
12/12/1983	15.50%	11.21%	4.29%
12/20/1983	15.40%	11.26%	4.14%
12/20/1983	16.00%	11.26%	4.74%
12/22/1983	15.75%	11.27%	4.48%
12/29/1983	15.00%	11.29%	3.71%
12/30/1983	15.00%	11.30%	3.70%
1/10/1984	15.90%	11.34%	4.56%
1/13/1984	15.50%	11.36%	4.14%
1/18/1984	15.53%	11.38%	4.15%
1/26/1984	15.90%	11.41%	4.49%
2/14/1984	14.25%	11.50%	2.75%
2/28/1984	14.50%	11.58%	2.92%
3/20/1984	16.00%	11.69%	4.31%
3/23/1984	15.50%	11.72%	3.78%
4/9/1984	15.20%	11.81%	3.39%
4/18/1984	16.20%	11.85%	4.35%
4/27/1984	15.85%	11.90%	3.95%
5/15/1984	13.35%	11.99%	1.36%
5/16/1984	15.00%	12.00%	3.00%
5/22/1984	14.40%	12.03%	2.37%
6/13/1984	15.50%	12.18%	3.32%
7/10/1984	16.00%	12.36%	3.64%
8/7/1984	16.69%	12.50%	4.19%
8/9/1984	15.33%	12.51%	2.82%
8/17/1984	14.82%	12.53%	2.29%
8/21/1984	14.64%	12.54%	2.10%
8/27/1984	14.52%	12.56%	1.96%
8/28/1984	14.75%	12.56%	2.19%
8/30/1984	15.60%	12.57%	3.03%
9/12/1984	15.60%	12.60%	3.00%
9/12/1984	15.90%	12.60%	3.30%
9/25/1984	16.25%	12.61%	3.64%
10/2/1984	14.80%	12.62%	2.18%
10/9/1984	14.75%	12.63%	2.12%
10/10/1984	15.50%	12.63%	2.87%
10/18/1984	15.00%	12.64%	2.36%
10/24/1984	15.50%	12.64%	2.86%
11/7/1984	15.00%	12.64%	2.36%
11/20/1984	15.92%	12.62%	3.30%
11/30/1984	15.50%	12.60%	2.90%
12/18/1984	15.00%	12.55%	2.45%
12/20/1984	15.00%	12.53%	2.47%
12/28/1984	15.75%	12.51%	3.24%
12/28/1984	16.25%	12.51%	3.74%
1/2/1985	16.00%	12.50%	3.50%
1/31/1985	14.75%	12.37%	2.38%
2/7/1985	14.85%	12.33%	2.52%
2/15/1985	15.00%	12.28%	2.72%
2/20/1985	14.50%	12.26%	2.24%
2/22/1985	14.86%	12.26%	2.60%
3/14/1985	15.50%	12.17%	3.33%
3/28/1985	14.80%	12.09%	2.71%
4/9/1985	15.50%	12.03%	3.47%
4/16/1985	15.70%	11.97%	3.73%
6/10/1985	15.75%	11.59%	4.16%
6/26/1985	14.82%	11.47%	3.35%
7/9/1985	15.00%	11.39%	3.61%
7/26/1985	14.50%	11.27%	3.23%
8/29/1985	14.50%	11.12%	3.38%
8/30/1985	14.38%	11.11%	3.27%
9/12/1985	15.25%	11.07%	4.18%
9/23/1985	15.30%	11.04%	4.26%
9/25/1985	14.50%	11.03%	3.47%
9/26/1985	13.80%	11.02%	2.78%
9/26/1985	14.50%	11.02%	3.48%
10/25/1985	15.25%	10.92%	4.33%
11/8/1985	12.94%	10.86%	2.08%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
11/20/1985	14.90%	10.81%	4.09%
11/25/1985	13.30%	10.79%	2.51%
12/6/1985	12.00%	10.72%	1.28%
12/11/1985	14.90%	10.69%	4.21%
12/20/1985	14.88%	10.60%	4.28%
12/20/1985	15.00%	10.60%	4.40%
12/20/1985	15.00%	10.60%	4.40%
12/30/1985	15.75%	10.53%	5.22%
12/31/1985	14.00%	10.52%	3.48%
12/31/1985	14.50%	10.52%	3.98%
1/17/1986	14.50%	10.38%	4.12%
2/11/1986	12.50%	10.21%	2.29%
2/12/1986	15.20%	10.20%	5.00%
3/11/1986	14.00%	9.98%	4.02%
4/2/1986	12.90%	9.77%	3.13%
4/28/1986	13.01%	9.47%	3.54%
5/21/1986	13.25%	9.19%	4.06%
5/28/1986	14.00%	9.12%	4.88%
5/29/1986	13.90%	9.11%	4.79%
6/2/1986	13.00%	9.08%	3.92%
6/11/1986	14.00%	8.98%	5.02%
6/13/1986	13.55%	8.95%	4.60%
6/27/1986	11.88%	8.78%	3.10%
7/14/1986	12.60%	8.60%	4.00%
7/30/1986	13.30%	8.39%	4.91%
8/14/1986	13.50%	8.23%	5.27%
9/5/1986	13.30%	8.03%	5.27%
9/23/1986	12.75%	7.91%	4.84%
10/30/1986	13.00%	7.68%	5.32%
10/31/1986	13.75%	7.67%	6.08%
11/10/1986	14.00%	7.62%	6.38%
11/19/1986	13.75%	7.57%	6.18%
11/25/1986	13.15%	7.54%	5.61%
12/22/1986	13.80%	7.48%	6.32%
12/30/1986	13.90%	7.47%	6.43%
1/20/1987	12.75%	7.47%	5.28%
1/23/1987	13.55%	7.47%	6.08%
1/27/1987	12.16%	7.47%	4.69%
2/13/1987	12.60%	7.47%	5.13%
2/24/1987	12.00%	7.47%	4.53%
3/30/1987	12.20%	7.46%	4.74%
3/31/1987	13.00%	7.46%	5.54%
5/5/1987	12.85%	7.60%	5.25%
5/28/1987	13.50%	7.72%	5.78%
6/15/1987	13.20%	7.80%	5.40%
6/30/1987	12.60%	7.85%	4.75%
7/10/1987	12.90%	7.88%	5.02%
7/27/1987	13.50%	7.93%	5.57%
8/25/1987	11.40%	8.08%	3.32%
9/18/1987	13.00%	8.27%	4.73%
10/20/1987	12.60%	8.54%	4.06%
10/20/1987	12.98%	8.54%	4.44%
11/12/1987	12.75%	8.67%	4.08%
11/13/1987	12.75%	8.68%	4.07%
11/24/1987	12.50%	8.73%	3.77%
12/8/1987	12.50%	8.81%	3.69%
12/22/1987	12.00%	8.90%	3.10%
12/31/1987	12.85%	8.93%	3.92%
12/31/1987	13.25%	8.93%	4.32%
1/15/1988	13.15%	8.98%	4.17%
1/20/1988	12.75%	8.99%	3.76%
1/29/1988	13.20%	8.99%	4.21%
2/4/1988	12.60%	8.99%	3.61%
3/23/1988	13.00%	8.94%	4.06%
5/27/1988	13.18%	9.02%	4.16%
6/14/1988	13.50%	9.00%	4.50%
6/17/1988	11.72%	8.99%	2.73%
6/24/1988	11.50%	8.97%	2.53%
7/1/1988	12.75%	8.95%	3.80%
7/8/1988	12.00%	8.94%	3.06%
7/18/1988	12.00%	8.91%	3.09%
7/20/1988	13.40%	8.90%	4.50%
8/8/1988	12.74%	8.90%	3.84%
9/20/1988	12.90%	8.93%	3.97%
9/26/1988	12.40%	8.93%	3.47%
9/27/1988	13.65%	8.93%	4.72%
9/30/1988	13.25%	8.94%	4.31%
10/13/1988	13.10%	8.93%	4.17%
10/21/1988	12.80%	8.93%	3.87%
10/25/1988	13.25%	8.94%	4.31%
10/26/1988	13.50%	8.94%	4.56%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
10/27/1988	12.95%	8.94%	4.01%
10/28/1988	13.00%	8.94%	4.06%
11/15/1988	12.00%	8.97%	3.03%
11/29/1988	12.75%	9.01%	3.74%
12/19/1988	13.00%	9.05%	3.95%
12/21/1988	12.90%	9.05%	3.85%
12/22/1988	13.50%	9.05%	4.45%
1/26/1989	12.60%	9.06%	3.54%
1/27/1989	13.00%	9.06%	3.94%
2/8/1989	13.37%	9.05%	4.32%
3/8/1989	13.00%	9.04%	3.96%
5/4/1989	13.00%	9.04%	3.96%
6/8/1989	13.50%	8.96%	4.54%
7/19/1989	11.80%	8.84%	2.96%
7/25/1989	12.80%	8.82%	3.98%
7/31/1989	13.00%	8.80%	4.20%
8/14/1989	12.50%	8.76%	3.74%
8/22/1989	12.80%	8.73%	4.07%
8/23/1989	12.90%	8.73%	4.17%
9/21/1989	12.10%	8.63%	3.47%
10/6/1989	13.00%	8.58%	4.42%
10/17/1989	12.41%	8.54%	3.87%
10/18/1989	13.25%	8.54%	4.71%
10/20/1989	12.90%	8.53%	4.37%
10/31/1989	13.60%	8.50%	5.10%
11/3/1989	12.93%	8.48%	4.45%
11/5/1989	13.20%	8.48%	4.72%
11/9/1989	12.60%	8.46%	4.14%
11/9/1989	13.00%	8.46%	4.54%
11/28/1989	12.75%	8.37%	4.38%
12/7/1989	13.25%	8.33%	4.92%
12/15/1989	13.00%	8.28%	4.72%
12/20/1989	12.90%	8.26%	4.64%
12/21/1989	12.80%	8.26%	4.54%
12/21/1989	12.90%	8.26%	4.64%
12/27/1989	12.50%	8.24%	4.26%
1/9/1990	13.00%	8.19%	4.81%
1/18/1990	12.50%	8.17%	4.33%
1/26/1990	12.10%	8.15%	3.95%
3/21/1990	12.80%	8.15%	4.65%
3/28/1990	13.00%	8.16%	4.84%
4/5/1990	12.20%	8.17%	4.03%
4/12/1990	13.25%	8.19%	5.06%
4/30/1990	12.45%	8.24%	4.21%
5/31/1990	12.40%	8.31%	4.09%
6/15/1990	13.20%	8.33%	4.87%
6/27/1990	12.90%	8.34%	4.56%
6/29/1990	13.25%	8.34%	4.91%
7/6/1990	12.10%	8.35%	3.75%
7/19/1990	11.70%	8.38%	3.32%
8/31/1990	12.50%	8.52%	3.98%
8/31/1990	12.50%	8.52%	3.98%
9/13/1990	12.50%	8.58%	3.92%
9/18/1990	12.75%	8.60%	4.15%
9/20/1990	12.50%	8.61%	3.89%
10/2/1990	13.00%	8.65%	4.35%
10/17/1990	11.90%	8.68%	3.22%
10/31/1990	12.95%	8.70%	4.25%
11/9/1990	13.25%	8.70%	4.55%
11/19/1990	13.00%	8.70%	4.30%
11/21/1990	12.10%	8.70%	3.40%
11/21/1990	12.50%	8.70%	3.80%
11/28/1990	12.75%	8.70%	4.05%
11/29/1990	12.75%	8.70%	4.05%
12/18/1990	13.10%	8.68%	4.42%
12/20/1990	12.50%	8.67%	3.83%
12/21/1990	12.50%	8.67%	3.83%
12/21/1990	13.00%	8.67%	4.33%
12/21/1990	13.60%	8.67%	4.93%
1/3/1991	13.02%	8.66%	4.36%
1/16/1991	13.25%	8.64%	4.61%
1/25/1991	11.70%	8.61%	3.09%
2/15/1991	12.70%	8.56%	4.14%
2/15/1991	12.80%	8.56%	4.24%
4/3/1991	13.00%	8.51%	4.49%
4/30/1991	12.45%	8.48%	3.97%
4/30/1991	13.00%	8.48%	4.52%
6/25/1991	11.70%	8.35%	3.35%
6/28/1991	12.50%	8.34%	4.16%
7/1/1991	11.70%	8.34%	3.36%
7/19/1991	12.10%	8.31%	3.79%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
7/19/1991	12.30%	8.31%	3.99%
7/22/1991	12.90%	8.31%	4.59%
8/15/1991	12.25%	8.28%	3.97%
8/29/1991	13.30%	8.26%	5.04%
9/27/1991	12.50%	8.23%	4.27%
9/30/1991	12.40%	8.23%	4.17%
10/3/1991	11.30%	8.22%	3.08%
10/9/1991	11.70%	8.21%	3.49%
10/15/1991	13.40%	8.20%	5.20%
11/1/1991	12.90%	8.20%	4.70%
11/8/1991	12.75%	8.20%	4.55%
11/26/1991	11.60%	8.18%	3.42%
11/26/1991	12.00%	8.18%	3.82%
11/27/1991	12.70%	8.18%	4.52%
12/6/1991	12.70%	8.16%	4.54%
12/10/1991	11.75%	8.16%	3.59%
12/19/1991	12.60%	8.14%	4.46%
12/19/1991	12.80%	8.14%	4.66%
12/30/1991	12.10%	8.11%	3.99%
1/22/1992	12.84%	8.05%	4.79%
1/31/1992	12.00%	8.03%	3.97%
2/20/1992	13.00%	8.00%	5.00%
2/27/1992	11.75%	7.99%	3.76%
3/18/1992	12.50%	7.95%	4.55%
5/15/1992	12.75%	7.87%	4.88%
6/24/1992	12.20%	7.85%	4.35%
6/29/1992	11.00%	7.85%	3.15%
7/14/1992	12.00%	7.83%	4.17%
7/22/1992	11.20%	7.82%	3.38%
8/10/1992	12.10%	7.79%	4.31%
8/26/1992	12.43%	7.75%	4.68%
9/30/1992	11.60%	7.72%	3.88%
10/6/1992	12.25%	7.72%	4.53%
10/13/1992	12.75%	7.71%	5.04%
10/23/1992	11.65%	7.71%	3.94%
10/28/1992	12.25%	7.71%	4.54%
10/29/1992	12.75%	7.71%	5.04%
10/30/1992	11.40%	7.70%	3.70%
11/9/1992	10.60%	7.70%	2.90%
11/25/1992	11.00%	7.68%	3.32%
11/25/1992	12.00%	7.68%	4.32%
12/3/1992	11.85%	7.67%	4.18%
12/16/1992	11.90%	7.64%	4.26%
12/22/1992	12.30%	7.63%	4.67%
12/22/1992	12.40%	7.63%	4.77%
12/30/1992	12.00%	7.61%	4.39%
12/31/1992	12.00%	7.61%	4.39%
1/12/1993	12.00%	7.59%	4.41%
1/12/1993	12.00%	7.59%	4.41%
2/2/1993	11.40%	7.53%	3.87%
2/22/1993	11.60%	7.48%	4.12%
4/23/1993	11.75%	7.27%	4.48%
5/3/1993	11.50%	7.25%	4.25%
5/3/1993	11.75%	7.25%	4.50%
6/3/1993	12.00%	7.20%	4.80%
6/7/1993	11.50%	7.20%	4.30%
6/22/1993	11.75%	7.16%	4.59%
7/21/1993	11.78%	7.07%	4.71%
7/21/1993	11.90%	7.07%	4.83%
7/23/1993	11.50%	7.06%	4.44%
7/29/1993	11.50%	7.03%	4.47%
8/12/1993	10.75%	6.98%	3.77%
8/24/1993	11.50%	6.92%	4.58%
8/31/1993	11.90%	6.88%	5.02%
9/1/1993	11.25%	6.88%	4.37%
9/1/1993	11.47%	6.88%	4.59%
9/27/1993	10.50%	6.74%	3.76%
9/29/1993	11.00%	6.73%	4.27%
9/30/1993	11.60%	6.72%	4.88%
10/8/1993	11.50%	6.68%	4.82%
10/14/1993	11.20%	6.65%	4.55%
10/15/1993	11.75%	6.65%	5.10%
10/25/1993	11.55%	6.60%	4.95%
10/28/1993	11.50%	6.58%	4.92%
10/29/1993	10.10%	6.58%	3.52%
10/29/1993	10.20%	6.58%	3.62%
10/29/1993	11.25%	6.58%	4.67%
11/2/1993	10.80%	6.56%	4.24%
11/12/1993	11.80%	6.53%	5.27%
11/23/1993	12.50%	6.51%	5.99%
11/26/1993	11.00%	6.50%	4.50%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/1/1993	11.45%	6.49%	4.96%
12/16/1993	10.60%	6.46%	4.14%
12/16/1993	11.20%	6.46%	4.74%
12/21/1993	11.30%	6.45%	4.85%
12/22/1993	11.00%	6.44%	4.56%
12/23/1993	10.10%	6.44%	3.66%
1/5/1994	11.50%	6.41%	5.09%
1/10/1994	11.00%	6.40%	4.60%
1/25/1994	12.00%	6.37%	5.63%
2/2/1994	10.40%	6.35%	4.05%
2/9/1994	10.70%	6.34%	4.36%
4/6/1994	11.24%	6.35%	4.89%
4/25/1994	11.00%	6.39%	4.61%
6/16/1994	10.50%	6.63%	3.87%
6/23/1994	10.60%	6.67%	3.93%
7/19/1994	10.70%	6.83%	3.87%
9/29/1994	10.90%	7.20%	3.70%
9/29/1994	11.00%	7.20%	3.80%
10/7/1994	11.87%	7.25%	4.62%
10/18/1994	11.50%	7.31%	4.19%
10/18/1994	11.50%	7.31%	4.19%
10/24/1994	11.00%	7.35%	3.65%
11/22/1994	12.12%	7.52%	4.60%
11/29/1994	11.30%	7.55%	3.75%
12/1/1994	11.00%	7.56%	3.44%
12/8/1994	11.50%	7.59%	3.91%
12/8/1994	11.70%	7.59%	4.11%
12/12/1994	11.82%	7.60%	4.22%
12/14/1994	11.50%	7.61%	3.89%
12/19/1994	11.50%	7.62%	3.88%
4/19/1995	11.00%	7.71%	3.29%
9/11/1995	11.30%	7.16%	4.14%
9/15/1995	10.40%	7.13%	3.27%
9/29/1995	11.50%	7.06%	4.44%
10/13/1995	10.76%	6.99%	3.77%
11/7/1995	12.50%	6.87%	5.63%
11/8/1995	11.10%	6.86%	4.24%
11/8/1995	11.30%	6.86%	4.44%
11/17/1995	10.90%	6.81%	4.09%
11/20/1995	11.40%	6.80%	4.60%
11/27/1995	13.60%	6.77%	6.83%
12/14/1995	11.30%	6.68%	4.62%
12/20/1995	11.60%	6.65%	4.95%
1/31/1996	11.30%	6.46%	4.84%
3/11/1996	11.60%	6.40%	5.20%
4/3/1996	11.13%	6.41%	4.72%
4/15/1996	10.50%	6.41%	4.09%
4/17/1996	10.77%	6.41%	4.36%
4/26/1996	10.60%	6.40%	4.20%
5/10/1996	11.00%	6.41%	4.59%
5/13/1996	11.25%	6.41%	4.84%
7/3/1996	11.25%	6.49%	4.76%
7/22/1996	11.25%	6.54%	4.71%
10/3/1996	10.00%	6.77%	3.23%
10/29/1996	11.30%	6.84%	4.46%
11/26/1996	11.30%	6.86%	4.44%
11/27/1996	11.30%	6.86%	4.44%
11/29/1996	11.00%	6.85%	4.15%
12/12/1996	11.96%	6.85%	5.11%
12/17/1996	11.50%	6.85%	4.65%
1/22/1997	11.30%	6.83%	4.47%
1/27/1997	11.25%	6.83%	4.42%
1/31/1997	11.25%	6.83%	4.42%
2/13/1997	11.00%	6.82%	4.18%
2/13/1997	11.80%	6.82%	4.98%
2/20/1997	11.80%	6.81%	4.99%
3/27/1997	10.75%	6.79%	3.96%
4/29/1997	11.70%	6.80%	4.90%
7/17/1997	12.00%	6.77%	5.23%
10/29/1997	10.75%	6.70%	4.05%
10/31/1997	11.25%	6.70%	4.55%
12/24/1997	10.75%	6.53%	4.22%
4/28/1998	10.90%	6.11%	4.79%
4/30/1998	12.20%	6.10%	6.10%
6/30/1998	11.00%	5.94%	5.06%
8/26/1998	10.93%	5.82%	5.11%
9/3/1998	11.40%	5.80%	5.60%
9/15/1998	11.90%	5.77%	6.13%
10/7/1998	11.06%	5.70%	5.36%
10/30/1998	11.40%	5.63%	5.77%
12/10/1998	12.20%	5.52%	6.68%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/17/1998	12.10%	5.49%	6.61%
2/19/1999	11.15%	5.32%	5.83%
3/1/1999	10.65%	5.31%	5.34%
3/1/1999	10.65%	5.31%	5.34%
6/8/1999	11.25%	5.35%	5.90%
11/12/1999	10.25%	5.92%	4.33%
12/14/1999	10.50%	5.99%	4.51%
1/28/2000	10.71%	6.16%	4.55%
2/17/2000	10.60%	6.20%	4.40%
5/25/2000	10.80%	6.19%	4.61%
6/19/2000	11.05%	6.18%	4.87%
6/22/2000	11.25%	6.18%	5.07%
7/17/2000	11.06%	6.15%	4.91%
7/20/2000	12.20%	6.14%	6.06%
8/11/2000	11.00%	6.11%	4.89%
9/27/2000	11.25%	6.01%	5.24%
9/29/2000	11.16%	6.00%	5.16%
10/5/2000	11.30%	5.98%	5.32%
11/28/2000	12.90%	5.87%	7.03%
11/30/2000	12.10%	5.87%	6.23%
2/5/2001	11.50%	5.76%	5.74%
3/15/2001	11.25%	5.67%	5.58%
5/8/2001	10.75%	5.61%	5.14%
10/24/2001	10.30%	5.54%	4.76%
10/24/2001	11.00%	5.54%	5.46%
1/9/2002	10.00%	5.50%	4.50%
1/30/2002	11.00%	5.47%	5.53%
1/31/2002	11.00%	5.47%	5.53%
4/17/2002	11.50%	5.44%	6.06%
4/29/2002	11.00%	5.45%	5.55%
6/11/2002	11.77%	5.48%	6.29%
6/20/2002	12.30%	5.47%	6.83%
8/28/2002	11.00%	5.49%	5.51%
9/11/2002	11.20%	5.45%	5.75%
9/12/2002	12.30%	5.45%	6.85%
10/28/2002	11.30%	5.35%	5.95%
10/30/2002	10.60%	5.34%	5.26%
11/1/2002	12.60%	5.34%	7.26%
11/7/2002	11.40%	5.33%	6.07%
11/8/2002	10.75%	5.33%	5.42%
11/20/2002	10.00%	5.30%	4.70%
11/20/2002	10.50%	5.30%	5.20%
12/4/2002	10.75%	5.27%	5.48%
12/30/2002	11.20%	5.19%	6.01%
1/6/2003	11.25%	5.17%	6.08%
2/28/2003	12.30%	5.01%	7.29%
3/7/2003	9.96%	4.99%	4.97%
3/12/2003	11.40%	4.97%	6.43%
3/20/2003	12.00%	4.95%	7.05%
4/3/2003	12.00%	4.93%	7.07%
5/2/2003	11.40%	4.88%	6.52%
5/15/2003	11.05%	4.87%	6.18%
6/26/2003	11.00%	4.80%	6.20%
7/1/2003	11.00%	4.80%	6.20%
7/29/2003	11.71%	4.78%	6.93%
8/22/2003	10.20%	4.82%	5.38%
9/17/2003	9.90%	4.84%	5.06%
9/25/2003	10.25%	4.85%	5.40%
10/17/2003	10.54%	4.87%	5.67%
10/22/2003	10.46%	4.87%	5.59%
10/22/2003	10.71%	4.87%	5.84%
10/30/2003	11.00%	4.88%	6.12%
10/31/2003	10.20%	4.88%	5.32%
10/31/2003	10.75%	4.88%	5.87%
11/10/2003	10.60%	4.89%	5.71%
12/9/2003	10.50%	4.93%	5.57%
12/18/2003	10.50%	4.94%	5.56%
12/19/2003	12.00%	4.94%	7.06%
12/19/2003	12.00%	4.94%	7.06%
1/13/2004	10.25%	4.95%	5.30%
1/13/2004	12.00%	4.95%	7.05%
2/9/2004	11.25%	4.98%	6.27%
3/16/2004	10.90%	5.05%	5.85%
3/16/2004	10.90%	5.05%	5.85%
5/25/2004	10.00%	5.06%	4.94%
6/2/2004	11.22%	5.07%	6.15%
6/30/2004	10.50%	5.10%	5.40%
7/8/2004	10.00%	5.10%	4.90%
7/22/2004	10.25%	5.10%	5.15%
8/26/2004	10.50%	5.10%	5.40%
8/26/2004	10.50%	5.10%	5.40%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
9/9/2004	10.40%	5.10%	5.30%
9/21/2004	10.50%	5.09%	5.41%
9/27/2004	10.30%	5.09%	5.21%
9/27/2004	10.50%	5.09%	5.41%
10/20/2004	10.20%	5.08%	5.12%
11/30/2004	10.60%	5.08%	5.52%
12/8/2004	9.90%	5.09%	4.81%
12/21/2004	11.50%	5.09%	6.41%
12/22/2004	11.50%	5.09%	6.41%
12/28/2004	10.25%	5.09%	5.16%
2/18/2005	10.30%	4.95%	5.35%
3/29/2005	11.00%	4.86%	6.14%
4/13/2005	10.60%	4.84%	5.76%
4/28/2005	11.00%	4.80%	6.20%
5/17/2005	10.00%	4.77%	5.23%
6/8/2005	10.18%	4.71%	5.47%
6/10/2005	10.90%	4.71%	6.19%
7/6/2005	10.50%	4.65%	5.85%
7/19/2005	11.50%	4.63%	6.87%
8/11/2005	10.40%	4.60%	5.80%
9/19/2005	9.45%	4.53%	4.92%
9/30/2005	10.51%	4.52%	5.99%
10/4/2005	9.90%	4.52%	5.38%
10/4/2005	10.75%	4.52%	6.23%
10/14/2005	10.40%	4.52%	5.88%
10/31/2005	10.25%	4.53%	5.72%
11/2/2005	9.70%	4.53%	5.17%
11/30/2005	10.00%	4.54%	5.46%
12/9/2005	9.70%	4.53%	5.17%
12/12/2005	11.00%	4.53%	6.47%
12/20/2005	10.13%	4.53%	5.60%
12/21/2005	10.40%	4.53%	5.87%
12/21/2005	11.00%	4.53%	6.47%
12/22/2005	10.20%	4.53%	5.67%
12/22/2005	11.00%	4.53%	6.47%
12/28/2005	10.00%	4.52%	5.48%
1/5/2006	11.00%	4.52%	6.48%
1/25/2006	11.20%	4.52%	6.68%
1/25/2006	11.20%	4.52%	6.68%
2/3/2006	10.50%	4.52%	5.98%
2/15/2006	9.50%	4.53%	4.97%
4/26/2006	10.60%	4.65%	5.95%
7/24/2006	9.60%	4.86%	4.74%
7/24/2006	10.00%	4.86%	5.14%
9/20/2006	11.00%	4.93%	6.07%
9/26/2006	10.75%	4.93%	5.82%
10/20/2006	9.80%	4.96%	4.84%
11/2/2006	9.71%	4.96%	4.75%
11/9/2006	10.00%	4.97%	5.03%
11/21/2006	11.00%	4.98%	6.02%
12/5/2006	10.20%	4.97%	5.23%
1/5/2007	10.40%	4.95%	5.45%
1/9/2007	11.00%	4.94%	6.06%
1/11/2007	10.90%	4.94%	5.96%
1/19/2007	10.80%	4.93%	5.87%
1/26/2007	10.00%	4.92%	5.08%
2/8/2007	10.40%	4.91%	5.49%
3/14/2007	10.10%	4.86%	5.24%
3/20/2007	10.25%	4.85%	5.40%
3/21/2007	11.35%	4.84%	6.51%
3/22/2007	10.50%	4.84%	5.66%
3/29/2007	10.00%	4.83%	5.17%
6/13/2007	10.75%	4.81%	5.94%
6/29/2007	9.53%	4.84%	4.69%
6/29/2007	10.10%	4.84%	5.26%
7/3/2007	10.25%	4.85%	5.40%
7/13/2007	9.50%	4.86%	4.64%
7/24/2007	10.40%	4.87%	5.53%
8/1/2007	10.15%	4.88%	5.27%
8/29/2007	10.50%	4.91%	5.59%
9/10/2007	9.71%	4.91%	4.80%
9/19/2007	10.00%	4.91%	5.09%
9/25/2007	9.70%	4.91%	4.79%
10/8/2007	10.48%	4.92%	5.56%
10/19/2007	10.50%	4.91%	5.59%
10/25/2007	9.65%	4.91%	4.74%
11/15/2007	10.00%	4.89%	5.11%
11/20/2007	9.90%	4.89%	5.01%
11/27/2007	10.00%	4.88%	5.12%
11/29/2007	10.90%	4.88%	6.02%
12/14/2007	10.80%	4.87%	5.93%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/18/2007	10.40%	4.86%	5.54%
12/19/2007	9.80%	4.86%	4.94%
12/19/2007	9.80%	4.86%	4.94%
12/19/2007	10.20%	4.86%	5.34%
12/21/2007	9.10%	4.86%	4.24%
1/8/2008	10.75%	4.83%	5.92%
1/17/2008	10.75%	4.81%	5.94%
1/17/2008	10.75%	4.81%	5.94%
2/5/2008	9.99%	4.78%	5.21%
2/5/2008	10.19%	4.78%	5.41%
2/13/2008	10.20%	4.76%	5.44%
3/31/2008	10.00%	4.63%	5.37%
5/28/2008	10.50%	4.53%	5.97%
6/24/2008	10.00%	4.52%	5.48%
6/27/2008	10.00%	4.52%	5.48%
7/31/2008	10.70%	4.50%	6.20%
7/31/2008	10.82%	4.50%	6.32%
8/27/2008	10.25%	4.50%	5.75%
9/2/2008	10.25%	4.50%	5.75%
9/19/2008	10.70%	4.48%	6.22%
9/24/2008	10.68%	4.48%	6.20%
9/24/2008	10.68%	4.48%	6.20%
9/24/2008	10.68%	4.48%	6.20%
9/30/2008	10.20%	4.48%	5.72%
10/3/2008	10.30%	4.47%	5.83%
10/8/2008	10.15%	4.47%	5.68%
10/20/2008	10.06%	4.47%	5.59%
10/24/2008	10.60%	4.46%	6.14%
10/24/2008	10.60%	4.46%	6.14%
11/21/2008	10.50%	4.42%	6.08%
11/21/2008	10.50%	4.42%	6.08%
11/21/2008	10.50%	4.42%	6.08%
11/24/2008	10.50%	4.42%	6.08%
12/3/2008	10.39%	4.37%	6.02%
12/24/2008	10.00%	4.26%	5.74%
12/26/2008	10.10%	4.24%	5.86%
12/29/2008	10.20%	4.23%	5.97%
1/13/2009	10.45%	4.14%	6.31%
2/2/2009	10.05%	4.04%	6.01%
3/9/2009	10.30%	3.90%	6.40%
3/25/2009	10.17%	3.84%	6.33%
4/2/2009	10.75%	3.81%	6.94%
5/5/2009	10.75%	3.71%	7.04%
5/15/2009	10.20%	3.70%	6.50%
5/29/2009	9.54%	3.70%	5.84%
6/3/2009	10.10%	3.71%	6.39%
6/22/2009	10.00%	3.73%	6.27%
6/29/2009	10.21%	3.74%	6.47%
6/30/2009	9.31%	3.74%	5.57%
7/17/2009	9.26%	3.75%	5.51%
7/17/2009	10.50%	3.75%	6.75%
10/16/2009	10.40%	4.09%	6.31%
10/26/2009	10.10%	4.11%	5.99%
10/28/2009	10.15%	4.11%	6.04%
10/28/2009	10.15%	4.11%	6.04%
10/30/2009	9.95%	4.12%	5.83%
11/20/2009	9.45%	4.18%	5.27%
12/14/2009	10.50%	4.24%	6.26%
12/16/2009	10.75%	4.25%	6.50%
12/17/2009	10.30%	4.25%	6.05%
12/18/2009	10.40%	4.26%	6.14%
12/18/2009	10.40%	4.26%	6.14%
12/18/2009	10.50%	4.26%	6.24%
12/22/2009	10.20%	4.27%	5.93%
12/22/2009	10.40%	4.27%	6.13%
12/28/2009	10.85%	4.29%	6.56%
12/29/2009	10.38%	4.29%	6.09%
1/11/2010	10.24%	4.34%	5.90%
1/21/2010	10.23%	4.37%	5.86%
1/21/2010	10.33%	4.37%	5.96%
1/26/2010	10.40%	4.37%	6.03%
2/10/2010	10.00%	4.39%	5.61%
2/23/2010	10.50%	4.40%	6.10%
3/9/2010	9.60%	4.40%	5.20%
3/24/2010	10.13%	4.42%	5.71%
3/31/2010	10.70%	4.43%	6.27%
4/1/2010	9.50%	4.43%	5.07%
4/2/2010	10.10%	4.44%	5.66%
4/8/2010	10.35%	4.44%	5.91%
4/29/2010	9.19%	4.46%	4.73%
4/29/2010	9.40%	4.46%	4.94%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
4/29/2010	9.40%	4.46%	4.94%
5/17/2010	10.55%	4.46%	6.09%
5/24/2010	10.05%	4.46%	5.59%
6/3/2010	11.00%	4.46%	6.54%
6/16/2010	10.00%	4.45%	5.55%
6/18/2010	10.30%	4.45%	5.85%
8/9/2010	12.55%	4.41%	8.14%
8/17/2010	10.10%	4.40%	5.70%
9/16/2010	9.60%	4.31%	5.29%
9/16/2010	10.00%	4.31%	5.69%
9/16/2010	10.00%	4.31%	5.69%
9/16/2010	10.30%	4.31%	5.99%
10/21/2010	10.40%	4.20%	6.20%
11/2/2010	9.75%	4.18%	5.57%
11/2/2010	9.75%	4.18%	5.57%
11/3/2010	10.75%	4.17%	6.58%
11/19/2010	10.20%	4.15%	6.05%
12/1/2010	10.00%	4.13%	5.87%
12/6/2010	9.56%	4.12%	5.44%
12/6/2010	10.09%	4.12%	5.97%
12/9/2010	10.25%	4.12%	6.13%
12/14/2010	10.33%	4.12%	6.21%
12/17/2010	10.10%	4.11%	5.99%
12/20/2010	10.10%	4.11%	5.99%
12/23/2010	9.92%	4.11%	5.81%
1/6/2011	10.35%	4.09%	6.26%
1/12/2011	10.30%	4.09%	6.21%
1/13/2011	10.30%	4.09%	6.21%
3/10/2011	10.10%	4.16%	5.94%
3/31/2011	9.45%	4.20%	5.25%
4/18/2011	10.05%	4.23%	5.82%
5/26/2011	10.50%	4.31%	6.19%
6/21/2011	10.00%	4.36%	5.64%
6/29/2011	8.83%	4.37%	4.46%
8/1/2011	9.20%	4.41%	4.79%
9/1/2011	10.10%	4.33%	5.77%
11/14/2011	9.60%	3.93%	5.67%
12/13/2011	9.50%	3.76%	5.74%
12/20/2011	10.00%	3.72%	6.28%
12/22/2011	10.40%	3.70%	6.70%
1/10/2012	9.06%	3.60%	5.46%
1/10/2012	9.45%	3.60%	5.85%
1/10/2012	9.45%	3.60%	5.85%
1/23/2012	10.20%	3.53%	6.67%
1/31/2012	10.00%	3.49%	6.51%
4/24/2012	9.50%	3.16%	6.34%
4/24/2012	9.75%	3.16%	6.59%
5/7/2012	9.80%	3.13%	6.67%
5/22/2012	9.60%	3.10%	6.50%
5/24/2012	9.70%	3.09%	6.61%
6/7/2012	10.30%	3.06%	7.24%
6/15/2012	10.40%	3.05%	7.35%
6/18/2012	9.60%	3.05%	6.55%
7/2/2012	9.75%	3.04%	6.71%
10/24/2012	10.30%	2.92%	7.38%
10/26/2012	9.50%	2.92%	6.58%
10/31/2012	9.30%	2.92%	6.38%
10/31/2012	9.90%	2.92%	6.98%
10/31/2012	10.00%	2.92%	7.08%
11/1/2012	9.45%	2.92%	6.53%
11/8/2012	10.10%	2.91%	7.19%
11/9/2012	10.30%	2.91%	7.39%
11/26/2012	10.00%	2.89%	7.11%
11/28/2012	10.40%	2.88%	7.52%
11/28/2012	10.50%	2.88%	7.62%
12/4/2012	10.00%	2.87%	7.13%
12/4/2012	10.50%	2.87%	7.63%
12/20/2012	9.50%	2.84%	6.66%
12/20/2012	10.10%	2.84%	7.26%
12/20/2012	10.25%	2.84%	7.41%
12/20/2012	10.30%	2.84%	7.46%
12/20/2012	10.40%	2.84%	7.56%
12/20/2012	10.50%	2.84%	7.66%
12/26/2012	9.80%	2.83%	6.97%
2/22/2013	9.60%	2.86%	6.74%
3/14/2013	9.30%	2.89%	6.41%
3/27/2013	9.80%	2.91%	6.89%
4/23/2013	9.80%	2.95%	6.85%
5/10/2013	9.25%	2.96%	6.29%
6/13/2013	9.40%	3.01%	6.39%
6/18/2013	9.28%	3.02%	6.26%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
6/18/2013	9.28%	3.02%	6.26%
6/25/2013	9.80%	3.04%	6.76%
9/23/2013	9.60%	3.32%	6.28%
11/6/2013	10.20%	3.42%	6.78%
11/13/2013	9.84%	3.44%	6.40%
11/14/2013	10.25%	3.44%	6.81%
11/22/2013	9.50%	3.47%	6.03%
12/5/2013	10.20%	3.50%	6.70%
12/13/2013	9.60%	3.52%	6.08%
12/16/2013	9.73%	3.52%	6.21%
12/17/2013	10.00%	3.53%	6.47%
12/18/2013	9.08%	3.53%	5.55%
12/23/2013	9.72%	3.54%	6.18%
12/30/2013	10.00%	3.57%	6.43%
1/21/2014	9.65%	3.65%	6.00%
1/22/2014	9.18%	3.66%	5.52%
2/20/2014	9.30%	3.71%	5.59%
2/21/2014	9.85%	3.71%	6.14%
2/28/2014	9.55%	3.72%	5.83%
3/16/2014	9.72%	3.73%	5.99%
4/21/2014	9.50%	3.73%	5.77%
4/22/2014	9.80%	3.73%	6.07%
5/8/2014	9.10%	3.71%	5.39%
5/8/2014	9.59%	3.71%	5.88%
6/6/2014	10.40%	3.66%	6.74%
6/12/2014	10.10%	3.66%	6.44%
6/12/2014	10.10%	3.66%	6.44%
6/12/2014	10.10%	3.66%	6.44%
7/7/2014	9.30%	3.63%	5.67%
7/25/2014	9.30%	3.60%	5.70%
7/31/2014	9.90%	3.59%	6.31%
9/4/2014	9.10%	3.51%	5.59%
9/24/2014	9.35%	3.46%	5.89%
9/30/2014	9.75%	3.45%	6.30%
10/29/2014	10.80%	3.37%	7.43%
11/6/2014	10.20%	3.35%	6.85%
11/14/2014	10.20%	3.33%	6.87%
11/14/2014	10.30%	3.33%	6.97%
11/26/2014	10.20%	3.31%	6.89%
12/3/2014	10.00%	3.29%	6.71%
1/13/2015	10.30%	3.16%	7.14%
1/21/2015	9.05%	3.13%	5.92%
1/21/2015	9.05%	3.13%	5.92%
4/9/2015	9.50%	2.88%	6.62%
5/11/2015	9.80%	2.82%	6.98%
6/17/2015	9.00%	2.79%	6.21%
8/21/2015	9.75%	2.78%	6.97%
10/7/2015	9.55%	2.82%	6.73%
10/13/2015	9.75%	2.83%	6.92%
10/15/2015	9.00%	2.83%	6.17%
10/30/2015	9.80%	2.86%	6.94%
11/19/2015	10.00%	2.89%	7.11%
12/3/2015	10.00%	2.91%	7.09%
12/9/2015	9.60%	2.92%	6.68%
12/11/2015	9.90%	2.92%	6.98%
12/18/2015	9.50%	2.93%	6.57%
1/6/2016	9.50%	2.96%	6.54%
1/6/2016	9.50%	2.96%	6.54%
1/28/2016	9.40%	2.97%	6.43%
2/10/2016	9.60%	2.95%	6.65%
2/16/2016	9.50%	2.94%	6.56%
2/29/2016	9.40%	2.92%	6.48%
4/29/2016	9.80%	2.83%	6.97%
5/5/2016	9.49%	2.82%	6.67%
6/1/2016	9.55%	2.80%	6.75%
6/3/2016	9.65%	2.79%	6.86%
6/15/2016	9.00%	2.77%	6.23%
6/15/2016	9.00%	2.77%	6.23%
9/2/2016	9.50%	2.57%	6.93%
9/23/2016	9.75%	2.52%	7.23%
9/27/2016	9.50%	2.51%	6.99%
9/29/2016	9.11%	2.50%	6.61%
10/28/2016	9.70%	2.47%	7.23%
11/9/2016	9.80%	2.47%	7.33%
11/18/2016	10.00%	2.49%	7.51%
12/9/2016	10.10%	2.52%	7.58%
12/15/2016	9.00%	2.53%	6.47%
12/15/2016	9.00%	2.53%	6.47%
12/22/2016	9.50%	2.54%	6.96%
1/24/2017	9.00%	2.59%	6.41%
3/1/2017	9.25%	2.65%	6.60%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
4/11/2017	9.50%	2.77%	6.73%
4/20/2017	8.70%	2.79%	5.91%
Average:			4.57%
Count:			1,054

Small Size Premium

	[1]	[2]
	Customers (Mil)	(\$Mil)
Northern Utilities ME Equity	0.031	\$67.98
Median Market to Book for Comp Group		2.28
Northern Utilities ME Implied Market Cap		\$154.76

Company Name	Ticker	[3] Customers (Mil)	[4] Market Cap (\$Mil)	[5] Market to Book Ratio
Black Hills Corporation	BKH	1.0	\$3,584.90	2.22
CenterPoint Energy, Inc.	CNP	3.4	\$12,039.71	3.48
Sempra Energy	SRE	6.8	\$27,969.17	2.15
Vectren Corporation	VVC	1.0	\$4,878.36	2.76
Atmos Energy Corporation	ATO	3.2	\$8,432.73	2.28
Chesapeake Utilities Corporation	CPK	0.1	\$1,145.08	2.56
Northwest Natural Gas Company	NWN	0.7	\$1,705.73	2.00
Southwest Gas Corporation	SWX	2.0	\$3,980.14	2.39
Spire Inc	SR	1.7	\$3,225.77	1.73
Median		1.7	\$3,980.14	2.28
Mean		2.2	\$7,440.18	2.40

Market Capitalization (\$Mil)				
[6]				
Decile	Low	High	Size Premium	
2	\$ 9,618.053	\$ 21,809.433	0.57%	
3	\$ 5,205.841	\$ 9,611.187	0.86%	
4	\$ 3,195.898	\$ 5,199.952	0.99%	
5	\$ 2,090.566	\$ 3,187.480	1.49%	
6	\$ 1,400.931	\$ 2,083.642	1.63%	
7	\$ 845.509	\$ 1,400.208	1.62%	
8	\$ 448.502	\$ 844.475	2.04%	
9	\$ 209.880	\$ 448.079	2.54%	
10	\$ 1.963	\$ 209.406	5.60%	

Proxy Group Median	\$ 3,980.139	0.99%
10th Decile Size Premium	\$ 154.760	5.60%
Difference from Proxy Group Median		4.61%

Notes:

- [1] 2016 Form F-16 G, at 40A
[2] Schedule RevReq 5 and RevReq 6
[3] Source: SNL Financial
[4] Source: SNL Financial, 30-day average as of April 28, 2017
[5] Source: SNL Financial, 30-day average as of April 28, 2017
[6] Source: Duff & Phelps, 2016 Valuation Handbook, Appendix 3

Flotation Cost Adjustment

Two most recent open market common stock issuances per company, if available

Company	Date	Shares Issued	Offering Price	Underwriting Discount	Offering Expense	Net Proceeds Per Share	Total Flotation Costs	Gross Equity Issue Before Costs	Net Proceeds	Flotation Cost Percentage
Unitil Corporation	5/10/2012	2,760,000	\$25.25	\$1.2625	\$544,460	\$23.79	\$4,028,960	\$69,690,000	\$65,661,040	5.781%
Unitil Corporation	5/20/2009	2,700,000	\$20.00	\$1.0500	\$500,000	\$18.76	\$3,335,000	\$54,000,000	\$50,665,000	6.176%
Black Hills Corp.	11/19/2015	6,325,000	\$40.25	\$1.4088	\$1,200,000	\$38.65	\$10,110,344	\$254,581,250	\$244,470,906	3.971%
Black Hills Corp.	12/7/2010	4,413,519	\$29.75	\$1.0413	\$276,650	\$28.65	\$4,872,227	\$131,302,190	\$126,429,964	3.711%
CenterPoint Energy	6/9/2010	25,300,000	\$12.90	\$0.4515	\$390,000	\$12.43	\$11,812,950	\$326,370,000	\$314,557,050	3.619%
CenterPoint Energy	9/10/2009	24,150,000	\$12.00	\$0.4200	\$345,000	\$11.57	\$10,488,000	\$289,800,000	\$279,312,000	3.619%
Sempra Energy	10/9/2003	16,500,000	\$28.00	\$0.8400	\$500,000	\$27.13	\$14,360,000	\$462,000,000	\$447,640,000	3.108%
Vectren Corporation	2/20/2007	5,290,000	\$28.33	\$0.9900	\$425,000	\$27.26	\$5,662,100	\$149,865,700	\$144,203,600	3.778%
Vectren Corporation	7/31/2003	7,475,000	\$22.81	\$0.7980	\$300,000	\$21.97	\$6,265,050	\$170,504,750	\$164,239,700	3.674%
Atmos Energy Corporation	2/11/2014	9,200,000	\$44.00	\$1.5400	\$350,000	\$42.42	\$14,518,000	\$404,800,000	\$390,282,000	3.586%
Atmos Energy Corporation	12/7/2006	6,325,000	\$31.50	\$1.1025	\$400,000	\$30.33	\$7,373,313	\$199,237,500	\$191,864,188	3.701%
Chesapeake Utilities Corporation	9/22/2016	960,488	\$62.26	\$2.3300	\$157,000	\$59.77	\$2,394,937	\$59,799,983	\$57,405,046	4.005%
Chesapeake Utilities Corporation	11/16/2006	690,345	\$30.10	\$1.1250	\$225,000	\$28.65	\$1,001,638	\$20,779,385	\$19,777,746	4.820%
Northwest Natural Gas Company	11/10/2016	1,012,000	\$54.63	\$2.0500	\$250,000	\$52.33	\$2,324,600	\$55,285,560	\$52,960,960	4.205%
Northwest Natural Gas Company	3/30/2004	1,290,000	\$31.00	\$1.0100	\$175,000	\$29.85	\$1,477,900	\$39,990,000	\$38,512,100	3.696%
Spire Inc.	5/13/2016	2,185,000	\$63.05	\$2.0491	\$300,000	\$60.86	\$4,777,284	\$137,764,250	\$132,986,967	3.468%
Spire Inc.	6/5/2014	10,350,000	\$46.25	\$1.7113	\$1,000,000	\$44.44	\$18,711,438	\$478,687,500	\$459,976,063	3.909%
Mean							\$7,265,514	\$194,379,886	WEIGHTED AVERAGE FLOTATION COSTS: 3.738%	

Constant Growth Discounted Cash Flow Model Adjusted for Flotation Costs - 30 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield Current	Adjusted for Flot. Costs	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Value Line Retention Growth	Average Earnings Growth	DCF k(e)	Flotation Adjusted DCF k(e)
Black Hills Corporation	BKH	\$1.78	\$67.07	2.65%	2.75%	2.85%	5.00%	10.38%	7.50%	5.41%	7.07%	9.82%	9.93%
CenterPoint Energy, Inc.	CNP	\$1.07	\$27.94	3.83%	3.94%	4.09%	5.00%	6.06%	6.00%	4.98%	5.51%	9.44%	9.60%
Sempra Energy	SRE	\$3.29	\$111.49	2.95%	3.06%	3.18%	8.70%	9.87%	8.00%	2.73%	7.32%	10.38%	10.50%
Vectren Corporation	VVC	\$1.68	\$58.79	2.86%	2.95%	3.06%	5.70%	5.57%	7.00%	6.46%	6.18%	9.13%	9.24%
Atmos Energy Corporation	ATO	\$1.80	\$80.11	2.25%	2.33%	2.42%	7.00%	6.90%	6.00%	8.67%	7.14%	9.47%	9.56%
Chesapeake Utilities Corporation	CPK	\$1.22	\$70.37	1.73%	1.81%	1.88%	6.00%	6.00%	8.00%	14.38%	8.60%	10.40%	10.47%
Northwest Natural Gas Company	NWN	\$1.88	\$59.56	3.16%	3.23%	3.35%	4.30%	4.50%	6.00%	3.46%	4.57%	7.79%	7.92%
Southwest Gas Corporation	SWX	\$1.98	\$83.71	2.37%	2.43%	2.53%	5.00%	4.00%	6.50%	8.02%	5.88%	8.31%	8.41%
Spire Inc	SR	\$2.10	\$68.14	3.08%	3.16%	3.29%	4.10%	4.05%	8.00%	5.24%	5.35%	8.51%	8.63%
PROXY GROUP MEAN												9.25%	9.36%

Notes:

The proxy group DCF result is adjusted for flotation costs by dividing each company's expected dividend yield by (1 - flotation cost). The flotation cost adjustment is derived as the difference between the unadjusted DCF result and the DCF result adjusted for flotation costs.

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [10])

[5] Equals [4] / (1 - 3.738%)

[6] Source: Zacks

[7] Source: Yahoo! Finance

[8] Source: Value Line

[9] Source: Exhibit RBH-3, Value Line

[10] Equals Average([6], [7], [8], [9])

[11] Equals [4] + [10]

[12] Equals [5] + [10]

[13] Equals average [12] - average [11]

DCF Result Adjusted For Flotation Costs: 9.36%
 DCF Result Unadjusted For Flotation Costs: 9.25%
 Difference (Flotation Cost Adjustment): 0.11% [13]

Proxy Group Capital Structure

Company	Ticker	% Common Equity								Average
		2017Q1	2016Q4	2016Q3	2016Q2	2016Q1	2015Q4	2015Q3	2015Q2	
Black Hills Corporation	BKH	34.23%	33.42%	33.28%	33.14%	31.91%	44.16%	45.32%	45.72%	37.65%
CenterPoint Energy, Inc.	CNP	28.95%	28.79%	28.98%	28.45%	29.26%	28.39%	32.06%	34.76%	29.95%
Sempra Energy	SRE	46.52%	45.77%	46.12%	45.55%	45.97%	45.68%	45.91%	45.67%	45.90%
Vectren Corporation	VVC	51.09%	50.78%	50.25%	49.82%	49.62%	48.53%	50.60%	51.05%	50.22%
Atmos Energy Corporation	ATO	59.92%	59.06%	58.68%	58.54%	57.66%	57.13%	56.72%	56.88%	58.07%
Chesapeake Utilities Corporation	CPK	75.61%	74.95%	73.80%	70.88%	70.35%	69.37%	68.16%	67.98%	71.39%
Northwest Natural Gas Company	NWN	54.86%	54.17%	56.69%	57.35%	57.57%	56.75%	55.29%	55.87%	56.07%
Southwest Gas Corporation	SWX	51.89%	50.97%	49.74%	52.67%	53.47%	50.37%	49.84%	50.16%	51.14%
Spire Inc	SR	49.44%	46.45%	46.06%	49.33%	47.76%	46.36%	45.94%	46.97%	47.29%
Mean		50.28%	49.37%	49.29%	49.52%	49.29%	49.64%	49.98%	50.56%	49.74%

Company	Ticker	% Long-Term Debt								Average
		2017Q1	2016Q4	2016Q3	2016Q2	2016Q1	2015Q4	2015Q3	2015Q2	
Black Hills Corporation	BKH	65.77%	66.58%	66.72%	66.86%	68.09%	55.84%	54.68%	54.28%	62.35%
CenterPoint Energy, Inc.	CNP	71.05%	71.21%	71.02%	71.55%	70.74%	71.61%	67.94%	65.24%	70.05%
Sempra Energy	SRE	53.48%	54.23%	53.88%	54.45%	54.03%	54.32%	54.09%	54.33%	54.10%
Vectren Corporation	VVC	48.91%	49.22%	49.75%	50.18%	50.38%	51.47%	49.40%	48.95%	49.78%
Atmos Energy Corporation	ATO	40.08%	40.94%	41.32%	41.46%	42.34%	42.87%	43.28%	43.12%	41.93%
Chesapeake Utilities Corporation	CPK	24.39%	25.05%	26.20%	29.12%	29.65%	30.63%	31.84%	32.02%	28.61%
Northwest Natural Gas Company	NWN	45.14%	45.83%	43.31%	42.65%	42.43%	43.25%	44.71%	44.13%	43.93%
Southwest Gas Corporation	SWX	48.11%	49.03%	50.26%	47.33%	46.53%	49.63%	50.16%	49.84%	48.86%
Spire Inc	SR	50.56%	53.55%	53.94%	50.67%	52.24%	53.64%	54.06%	53.03%	52.71%
Mean		49.72%	50.63%	50.71%	50.48%	50.71%	50.36%	50.02%	49.44%	50.26%

Source: SNL Financial

Cost of Long-Term Debt Comparison

Issue	Initial Offering	Date of Offering	Date of Maturity	Years to Maturity	Coupon	Issuance Costs	Net Proceeds	Yield	Bloomberg Fair Value Curve		
									BFV Term	Utility A-Rated	Utility BBB-Rated
Issue											
Senior Notes	\$30,000,000	12/3/2008	12/4/2018	10	6.95%	\$266,834	\$29,733,166	7.07%	10	7.08%	7.69%
Senior Notes	\$50,000,000	12/3/2008	12/4/2038	30	7.72%	\$435,899	\$49,564,101	7.80%	30	7.26%	7.77%
Senior Notes	\$25,000,000	3/2/2010	3/2/2020	10	5.29%	\$368,866	\$24,631,134	5.48%	10	5.02%	5.39%
Senior Notes	\$50,000,000	10/15/2014	10/15/2044	30	4.42%	\$482,981	\$49,517,019	4.48%	30	4.16%	4.54%
TOTAL											
	\$155,000,000				Weighted Averages:	6.11%		6.21%		5.86%	6.33%

Notes:

Sources: Exhibit RevReq 6-4 and Bloomberg Professional. Weighted average cost of debt does not include underwriting fees or other amortized costs. Bloomberg Fair Value Curve yields are 30-day averages.