FLOTATION COSTS

Flotation Costs from Inception to Date

Date	Shares Issued	Market Price	Offering Price	Underwriting Discount	Offering Expense	Net Proceeds	Total Flotation Costs	Gross Equity Issue before Costs	Net Proceeds	Flotation Cost Percentage
11/16/1949	1,584,238	\$10.750	\$10.250	\$0.124	\$0.137	\$9.989	\$1,205,605	\$17,030,559	\$15,824,953	7.079%
6/4/1952	1,108,966	\$10.500	\$10.500	\$0.098	\$0.162	\$10.240	\$288,331	\$11,644,143	\$11,355,812	2.476%
4/14/1954	1,219,856	\$15.250	\$14.000	\$0.060	\$0.124	\$13.816	\$1,749,274	\$18,602,804	\$16,853,530	9.403%
2/29/1956	670,920	\$17.825	\$16.750	\$0.050	\$0.221	\$16.479	\$903,058	\$11,959,149	\$11,056,091	7.551%
7/22/1959	952,033	\$23.375	\$22.000	\$0.069	\$0.191	\$21.740	\$1,556,574	\$22,253,771	\$20,697,197	6.995%
7/28/1965	772,008	\$35.250	\$33.000	\$0.092	\$0.225	\$32.683	\$1,981,745	\$27,213,282	\$25,231,537	7.282%
1/22/1969	1,080,811	\$29.000	\$27.000	\$0.119	\$0.187	\$26.694	\$2,492,350	\$31,343,519	\$28,851,169	7.952%
10/21/1970	1,729,298	\$23.125	\$21.500	\$0.175	\$0.149	\$21.176	\$3,370,402	\$39,990,016	\$36,619,614	8.4289
7/26/1972	1,902,228	\$25.000	\$23.500	\$0.129	\$0.166	\$23.205	\$3,414,499	\$47,555,700	\$44,141,201	7.180%
10/10/1973	2,092,451	\$25.825	\$24.500	\$0.128	\$0.153	\$24.219	\$3,360,476	\$54,037,547	\$50,677,071	6.2199
11/20/1974	2,300,000	\$17.625	\$17.500	\$0.910	\$0.069	\$16.521	\$2,539,200	\$40,537,500	\$37,998,300	6.2649
8/14/1975	1,750,000	\$23.000	\$23.000	\$0.740	\$0.077	\$22.183	\$1,429,750	\$40,250,000	\$38,820,250	3.5529
6/3/1976	2,000,000	\$24.000	\$24.000	\$0.720	\$0.064	\$23.216	\$1,568,000	\$48,000,000	\$46,432,000	3.2679
5/31/1993	3,041,955	\$44.125	\$43.625	\$1.200	\$0.048	\$42.377	\$5,317,337	\$134,226,264	\$128,908,927	3.9619
9/23/1997	4,500,000	\$49.938	\$49.563	\$1.230	\$0.133	\$48.200	\$7,821,000	\$224,721,000	\$216,900,000	3.4809
9/29/1997	400,000	\$50.500	\$49.563	\$1.230	\$0.133	\$48.200	\$920,000	\$20,200,000	\$19,280,000	4.5549
2/25/2002	20,000,000	\$22.950	\$22.500	\$0.730	\$0.015	\$21.755	\$23,900,000	\$459,000,000	\$435,100,000	5.2079
9/9/2008	17,250,000	\$20.860	\$20.200	\$0.100	\$0.006	\$20.094	\$13,218,352	\$359,835,000	\$346,616,648	3.6739
8/3/2010	21,850,000	\$22.100	\$21.500	\$0.645	\$0.013	\$20.571	\$33,407,927	\$482,885,000	\$449,477,073	6.9189
March 2013	7,757,449	\$29.057	\$29.057	\$0.291	\$0.052	\$28.714	\$2,657,558	\$225,407,642	\$222,750,085	1.1799
June 2014	5,693,946	\$30.663	\$30.663	\$0.307	\$0.030	\$30.326	\$1,915,210	\$174,592,340	\$172,677,130	1.0979
September 2018	4,733,435	\$47.885	\$47.885	\$0.407	\$0.073	\$47.405	\$2,271,040	\$226,661,287	\$224,390,247	1.0029
8/29/2019	9,359,103	\$48.416	\$48.416	\$0.173	\$0.030	\$48.213	\$1,901,526	\$453,132,797	\$451,231,271	0.420
eighted Average Flotation Costs Total Public Issuances								\$3,171,079,321	\$3,051,890,108	3.759
Total Non-Public Issuances (Employee Benefit Plans)								\$1,724,487,000	\$1,724,487,000	0.000
						Total Issuances	\$119,189,213	\$4,895,566,321	\$4,776,377,108	2.435

The flotation adjustment is derived by dividing the dividend yield by 1-F (where F = flotation costs expressed in percentage terms), or by 0.9757, and adding that result to the constant growth rate to determine the cost of equity. Using the formulas shown previously in my testimony, the Constant Growth DCF calculation is modified as follows to accommodate an adjustment for flotation costs:

$$k = \frac{D \times (1 + .5 g)}{P \times (1 - F)} + g$$

Source: Company data.

[1] This issuance was structured as a forward equity sale. The spread between the initial forward sale price (i.e., \$20.855) and the actual forward settle price (i.e., \$20.584) is reflected in the net proceeds.

FLOTATION COST ADJUSTMENT - COMBINATION PROXY GROUP

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Stock Price	Annualized Dividend	Dividend Yield	Expected Dividend Yield	Expected Dividend Yield Adjusted for Flotation Costs	Zacks Earnings Growth	Value Line Earnings Growth	Yahoo! Finance Earnings Growth	Average Growth Estimate	DCF k(e)	Flotation Adjusted DCF k(e)
Ameren Corporation	AEE	\$75.74	\$1.90	2.51%	2.58%	2.65%	6.20%	6.50%	4.70%	5.80%	8.38%	8.45%
CMS Energy Corporation	CMS	\$61.94	\$1.53	2.47%	2.56%	2.62%	6.40%	7.00%	7.50%	6.97%	9.52%	9.59%
Dominion Resources, Inc.	D	\$82.08	\$3.67	4.47%	4.59%	4.70%	4.80%	6.50%	4.41%	5.24%	9.83%	9.94%
DTE Energy Company	DTE	\$124.95	\$3.78	3.03%	3.11%	3.19%	6.00%	5.50%	4.83%	5.44%	8.55%	8.63%
NorthWestern Corporation	NWE	\$71.47	\$2.30	3.22%	3.27%	3.35%	2.70%	3.00%	3.20%	2.97%	6.23%	6.31%
Sempra Energy	SRE	\$145.40	\$3.87	2.66%	2.79%	2.86%	7.70%	11.00%	10.05%	9.58%	12.37%	12.44%
Southern Company	so	\$61.84	\$2.48	4.01%	4.07%	4.18%	4.50%	3.50%	1.56%	3.19%	7.26%	7.36%
Wisconsin Energy Corporation	WEC	\$90.40	\$2.36	2.61%	2.69%	2.76%	6.10%	6.00%	6.15%	6.08%	8.77%	8.84%
PROXY GROUP MEAN				3.12%	3.21%	3.29%	5.55%	6.13%	5.30%	5.66%	8.86%	8.94%
MEAN												8.94%
UNADJUSTED CONSTANT GR	OWTH DCF	MEAN										8.86%
DIFFERENCE (FLOTATION CO	ST ADJUST	ΓMENT)									[12]	0.08%

- [1] Source: Bloomberg Professional, equals 30-day average as of November 29, 2019
- [2] Source: Bloomberg Professional
- [3] Equals [2] / [1]
- [4] Equals [3] x (1 + 0.50 x [9]) [5] Equals [4] /(1- [Flotation Cost Percentage]) [6] Source: Value Line
- [7] Source: Yahoo! Finance
- [8] Source: Zacks [9] Equals average ([6], [7], [8])
- [10] Equals [4] + [9]
- [11] Equals [5] + [9]
- [12] Equals [11] [10]

FLOTATION COST ADJUSTMENT - GAS LDC PROXY GROUP

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
						Expected Dividend Yield						
		01 1 5	Annualized	Dividend	Expected Dividend	Adjusted for Flotation	Zacks Earnings	Value Line	Yahoo! Finance	Average Growth	D051()	Flotation Adjusted
		Stock Price	Dividend	Yield	Yield	Costs	Growth	Earnings Growth	Earnings Growth	Estimate	DCF k(e)	DCF k(e)
Ameren Corporation	AEE	\$75.74	\$1.90	2.51%	2.58%	2.65%	6.20%	6.50%	4.70%	5.80%	8.38%	8.45%
CMS Energy Corporation	CMS	\$61.94	\$1.53	2.47%	2.56%	2.62%	6.40%	7.00%	7.50%	6.97%	9.52%	9.59%
Dominion Resources, Inc.	D	\$82.08	\$3.67	4.47%	4.59%	4.70%	4.80%	6.50%	4.41%	5.24%	9.83%	9.94%
DTE Energy Company	DTE	\$124.95	\$3.78	3.03%	3.11%	3.19%	6.00%	5.50%	4.83%	5.44%	8.55%	8.63%
NorthWestern Corporation	NWE	\$71.47	\$2.30	3.22%	3.27%	3.35%	2.70%	3.00%	3.20%	2.97%	6.23%	6.31%
Sempra Energy	SRE	\$145.40	\$3.87	2.66%	2.79%	2.86%	7.70%	11.00%	10.05%	9.58%	12.37%	12.44%
Southern Company	SO	\$61.84	\$2.48	4.01%	4.07%	4.18%	4.50%	3.50%	1.56%	3.19%	7.26%	7.36%
Wisconsin Energy Corporation	WEC	\$90.40	\$2.36	2.61%	2.69%	2.76%	6.10%	6.00%	6.15%	6.08%	8.77%	8.84%
Atmos Energy	ATO	\$109.60	\$2.30	2.10%	2.17%	2.23%	7.00%	7.50%	7.00%	7.17%	9.34%	9.39%
New Jersey Resources	NJR	\$42.73	\$1.25	2.93%	3.01%	3.08%	8.00%	2.50%	6.00%	5.50%	8.51%	8.58%
Northwest Natural Gas	NWN	\$67.58	\$1.91	2.83%	2.99%	3.07%	5.00%	27.00%	3.75%	11.92%	14.91%	14.99%
OneGas Inc	OGS	\$90.25	\$2.00	2.22%	2.29%	2.34%	6.00%	8.00%	5.00%	6.33%	8.62%	8.68%
South Jersey Industries, Inc.	SJI	\$31.15	\$1.15	3.69%	3.84%	3.93%	8.50%	10.50%	4.60%	7.87%	11.70%	11.80%
Southwest Gas	SWX	\$81.59	\$2.18	2.67%	2.79%	2.86%	8.50%	9.00%	8.20%	8.57%	11.35%	11.42%
Spire, Inc.	SR	\$81.25	\$2.37	2.92%	2.98%	3.06%	5.50%	5.50%	2.37%	4.46%	7.44%	7.51%
PROXY GROUP MEAN				2.95%	3.05%	3.12%	6.19%	7.93%	5.29%	6.47%	9.52%	9.60%
												0.0004
MEAN												9.60%
UNADJUSTED CONSTANT GR												9.52%
DIFFERENCE (FLOTATION CO	ST ADJUST	ΓMENT)									[12]	0.08%

[1] Source: Bloomberg Professional, equals 30-day average as of November 29, 2019

[2] Source: Bloomberg Professional

[2] Source: Bloomberg Professional
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [9])
[5] Equals [4] /(1- [Flotation Cost Percentage])
[6] Source: Value Line
[7] Source: Yahoo! Finance
[8] Source: Zacks

[9] Equals average ([6], [7], [8]) [10] Equals [4] + [9]

[11] Equals [5] + [9]

[12] Equals [11] - [10]