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# BEFORE THE ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS & ELECTRIC COMPANY FOR APPROVAL OF A GENERAL CHANGE IN RATES AND TARIFFS

DOCKET NO. 16-052-U

# DIRECT EXHIBITS

OF

# REGIS POWELL RATE CASE ANALYST FINANCIAL ANALYSIS SECTION

# ON BEHALF OF THE GENERAL STAFF OF THE ARKANSAS PUBLIC SERVICE COMMISSION

JANUARY 31, 2017

# **DIRECT EXHIBIT RP-1**

# Oklahoma Gas and Electric Company Requested Cost of Capital Per Application

				After-Tax	Pre-Tax
Component	Amount	Proportion	Rate	Wtd Cost	Wtd Cost
Long-Term Debt	2,883,269,587	35.04%	5.47%	1.92%	1.92%
Common Equity	3,265,773,741	39.69%	10.25%	4.07%	6.71%
ADIT	1,714,085,478	20.83%	0.00%	0.00%	0.00%
Pre-1971 ADITC	-	0.00%	0.00%	0.00%	0.00%
Post-1970 ADITC - LT Debt	1,075,076	0.01%	5.47%	0.00%	0.00%
Post-1970 ADITC - ST Debt	-	0.00%	0.76%	0.00%	0.00%
Post-1970 ADITC - Equity	1,217,685	0.01%	10.25%	0.00%	0.00%
Customer Deposits	77,441,663	0.94%	1.47%	0.01%	0.01%
Short-Term / Interim Debt	-	0.00%	0.76%	0.00%	0.00%
CAOL	276,746,751	3.36%	0.00%	0.00%	0.00%
Other Capital Items	9,610,200	0.12%	7.38%	0.01%	0.01%
Totals	8,229,220,181	100.00%		6.01%	8.65%

Revenue Conversion Factor

1.6490

#### Source:

Application Schedule D-1.3 Application Schedule A-1

External Capital	Balance	Requested Proportions
Long-Term Debt	2.883.269.587	47%
Short-Term / Interim Debt	-	<b>H</b> 770
Common Equity	3,265,773,741	53%
	6,149,043,328	100%

## **DIRECT EXHIBIT RP-2**

# Oklahoma Gas and Electric Company Test Year Ending June 30, 2016

Component	Amount	Proportion	Rate
Long-Term Debt	2,545,795,630	29.65%	5.68%
Common Equity	3,175,571,011	36.99%	10.25%
ADIT	2,112,951,717	24.61%	0.00%
Pre-1971 ADITC	-	0.00%	0.00%
Post-1970 ADITC - Long Term Debt	1,072,233	0.01%	5.68%
Post-1970 ADITC - Short Term Debt	(3,369)	0.00%	0.76%
Post-1970 ADITC - Equity	1,337,404	0.02%	10.25%
Customer Deposits	77,441,663	0.90%	1.50%
Short-Term / Interim Debt	(8,173,166)	-0.10%	0.76%
CAOL	670,999,789	7.82%	0.00%
Other Capital Items	8,909,839	0.10%	7.38%
Totals	8,585,902,752	100.00%	

# Source:

Application Schedule D-1.2

## **DIRECT EXHIBIT RP-3**

# Oklahoma Gas and Electric Company Requested Pro Forma Adjustments

Component	Test Year	Adjustments	Pro Forma
Long-Term Debt	2,545,795,630	337,473,957	2,883,269,587
Common Equity	3,175,571,011	90,202,730	3,265,773,741
ADIT	2,112,951,717	(398,866,239)	1,714,085,478
Pre-1971 ADITC	-		-
Post-1970 ADITC - Long Term Debt	1,072,233	2,842	1,075,075
Post-1970 ADITC - Short Term Debt	(3,369)	3,369	0
Post-1970 ADITC - Equity	1,337,404	(119,719)	1,217,685
Customer Deposits	77,441,663	-	77,441,663
Short-Term / Interim Debt	(8,173,166)	8,173,166	0
CAOL	670,999,789	(394,253,038)	276,746,751
Other Capital Items	8,909,839	700,361	9,610,200
Totals	8,585,902,752	(356,682,571)	8,229,220,181

# Source:

Application Schedule D-1.3

**DIRECT EXHIBIT RP-4** 

#### OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-085 Docket No. 16-052-U

Date Requested: 12/19/2016 Date Required: 1/3/2017 Requested by: Regis Powell

# 85.01 Please refer to Schedule D-2.3, line numbers 17 and 18. Please provide the date the Tinker Loans 1 and 2 will mature/expire in the pro forma year.

Response\*: Tinker loans 1 and 2 will not mature/expire in the pro forma year. Tinker loan 1 matures/expires on 8/31/2062 and Tinker loan 2 matures/expires on 8/31/2017.

These loans were removed from Schedule D-2.3 because they are associated with a special contract with Tinker Air Force base which is directly assigned to Oklahoma.

Response provided by: Response provided on: Contact & Phone No:

Chelsea Sexton January 3, 2017 Jason Bailey (405) 553-3406

\*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

**DIRECT EXHIBIT RP-5** 

# OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-029

Docket No. 16-052-U

Date Requested: 10/6/2016 Date Required: 10/21/2016 Requested by: William Matthews

- 29.01 Please provide a detailed monthly schedule beginning January 1, 2015 through the present and update as new information becomes available, in Excel format, of all AFUDC calculations and amounts by project, plant and FERC account. Additionally, please provide the calculations used to determine the AFUDC rate(s) used along with the calculations used to determine the reduction percentage for the Arkansas limit.
- Response\*: Please see attachment **APSC 29.01\_Att1** and **APSC 29.01\_Att2** for all AFUDC calculations January 1, 2015 through September 30, 2016 which were used to determine rates and the reduction percentage for the Arkansas limit.

Please see attachment **APSC 29.01\_Att3** and **APSC 29.01\_Att4** for AFUDC amounts by Project, Plant and Ferc account beginning January 1, 2015 through September 30, 2016.

Response provided by:	Carla Chupik
Response provided on:	October 21, 2016
Contact & Phone No:	Jason Bailey (405) 553-3406

\*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

### **DIRECT EXHIBIT RP-6**

# Reported short-term debt balance the Company used in determining its AFUDC rates

			Total Daily Balance	Current Monthly	
Month	Days		per Month	Interest	
16-Jai	n	31 ACTUAL		0	0
16-Fel	C	28 ACTUAL		0	0
16-Ma	r	31 ACTUAL		0	0
16-Ap	r	30 ACTUAL	76,344,5	98	1,654
16-Ma	у	31 ACTUAL	785,021,9	57	17,012
16-Jui	n	30 ACTUAL	973,717,7	50	21,100
16-Ju	I	31 ACTUAL	559,654,0	84	12,125
16-Au	g	31 ACTUAL	537,595,1	78	11,646
16-Sej	С	30 ACTUAL	35,945,3	95	778
16-Oc	:t	31 ACTUAL		0	0
16-No <sup>,</sup>	V	30 ACTUAL		0	0
16-De	С	31 ESTIMATE	1,028,325,5	52	22,289
Total			3,996,604,5	14	86,604

### Source:

Excerpt of APSC-029.01 Attachment 2, Supplement 2, which was provided in Staff Data Request APSC-029, initiated to verify the Company's AFUDC rate calculations. See Direct Exhibits RP-5.

### Note:

(1) Total Daily Balance represents the summation of each day's short-term debt balance.

(2) AFUDC is an accounting practice whereby the costs of debt and equity used to finance construction are credited on the income statement and charged to construction in progress on the balance sheet. To determine its maximum allowable rates, the Company uses FERC formula for calculating maximum allowable AFUDC rates, which determines short-term debt as the first source of construction funding before higher costs funds such as long-term debt and equity are used.

**DIRECT EXHIBIT RP-7** 

# OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-034

Docket No. 16-052-U

Date Requested: 10/13/2016 Date Required: 10/28/2016 Requested by: Bill Taylor

# 34.01 Please provide a trial balance by natural account for each month from June 2015 through most current month available in the pro forma year.

Response\*: Please see attachment **APSC 034.01\_Att** for the Trial balance by natural account from June 2015 through June 2016. The update for pro forma year is in process and will be provided through August 2016 within 2 weeks. The update after that will be provided on a monthly basis.

Response provided by:	Malini Gandhi
Response provided on:	October 27, 2016
Contact & Phone No:	Jason Bailey (405) 553-3406

\*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

**DIRECT EXHIBIT RP-7** 

## OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-034 Docket No. 16-052-U

Date Requested: 10/13/2016 Date Required: 10/28/2016 Requested by: Bill Taylor

### 34.02 Please update monthly throughout the pro forma year.

Response\*: The information will be updated monthly as it becomes available.

Response provided by: Response provided on: Contact & Phone No:

Malini Gandhi
October 27, 2016
Jason Bailey (405) 553-3406

\*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

**DIRECT EXHIBIT RP-8** 

# 13-Month Average of the Company's Accounts Payable to Associated Companies

Month/Year	FERC Account 234
6/15	(23,850,032)
7/15	(62,250,748)
8/15	(69,651,461)
9/15	(35,968,083)
10/15	(63,187,324)
11/15	(53,801,028)
12/15	(8,394,088)
1/16	(51,483,980)
2/16	(23,877,376)
3/16	(18,647,826)
4/16	(50,605,818)
5/16	(24,522,728)
6/16	(6,932,789)
Average	(37,936,406)

# Source:

Excerpt of APSC-034.01\_Att\_Supplement 1, which provided Staff with the Company's Natural Trial Balance for the test year. See Direct Exhibit RP-7 **Note:** 

Parentheses indicates debit balance

OKLAH	OMA GAS AND ELECTRIC COMPANY			WP D-1-1
	DF CAPITAL - SHORT TERM DEBT			<u></u>
	ED FOR ACTUALS TEST YEAR ENDING JUNE 30, 2016			
DOCKE	T NO. 16-052-U			
Line			FERC	
<u>No.</u>	Description	<u>Ref.</u>	<u>Account</u>	<u>Amount</u>
1	Notes Payable	(a)	231	-
2	Notes Payable to Associated Companies	(a)	233	-
3	Accounts Payable to Associated Companies	(B)	234	(6,932,789)
4	Less Accounts Payable to Associated Companies*		234	(1,240,377)
5	Less Income Taxes Payable - Affiliates		234	-
6	,	(A)		(8,173,166)
		(- )		(0, 0, )
	* This amount is Accounts Payable - Affiliates which is non-inte	erest bearing		
	and should not be included in Short-Term Debt for the Cost of	•	n.	
		,		
Source:	Application Workpaper D-1-1			

**DIRECT EXHIBIT RP-10** 

# OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-086

Docket No. 16-052-U

Date Requested: 12/19/2016 Date Required: 1/3/2017 Requested by: Regis Powell

86.01 Please provide a detailed breakdown of the calculation components used to determine the total daily balance of short-term debt per month provided in APSC-029, which relates to the computation of AFUDC rates. Specifically, provide the derivation at a natural account level (account number, account name, and daily balance from the beginning of January 2016 through November 2016) for the accounts used to calculate:

	Total
	Daily Balance
Month	per Month
Jan 2016	0
Feb 2016	0
Mar 2016	0
Apr 2016	76,344,598
May 2016	785,021,957
Jun 2016	973,717,750
Jul 2016	559,654,084
Aug 2016	537,595,178
Sep 2016	35,945,395
Oct 2016	0
Nov 2016	0

Response\*: Please see **APSC 086.01\_Att**. All balances are booked in the following account: 223320 0400 N/P to Assoc Co's-OGE Energy

Response provided by:	Chelsea Sexton
Response provided on:	December 27, 2016
Contact & Phone No:	Jason Bailey (405) 553-3406

<sup>\*</sup>By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

# **DIRECT EXHIBIT RP-11**

# **Notes Payable to Associated Companies**

Date Bo		
From	То	Amount
1-Jun-16	2-Jun-16	56,058,090
2-Jun-16	3-Jun-16	53,865,428
3-Jun-16	4-Jun-16	48,999,617
4-Jun-16	5-Jun-16	48,999,617
5-Jun-16	6-Jun-16	48,999,617
6-Jun-16	7-Jun-16	44,116,649
7-Jun-16	8-Jun-16	38,522,826
8-Jun-16	9-Jun-16	36,382,239
9-Jun-16	10-Jun-16	28,418,716
10-Jun-16	11-Jun-16	32,200,982
11-Jun-16	12-Jun-16	32,200,982
12-Jun-16	13-Jun-16	32,200,982
13-Jun-16	14-Jun-16	26,341,689
14-Jun-16	15-Jun-16	23,627,415
15-Jun-16	16-Jun-16	34,253,919
16-Jun-16	17-Jun-16	31,517,783
17-Jun-16	18-Jun-16	29,689,250
18-Jun-16	19-Jun-16	29,689,250
19-Jun-16	20-Jun-16	29,689,250
20-Jun-16	21-Jun-16	26,340,927
21-Jun-16	22-Jun-16	24,678,530
22-Jun-16	23-Jun-16	26,297,544
23-Jun-16	24-Jun-16	18,105,286
24-Jun-16	25-Jun-16	18,882,066
25-Jun-16	26-Jun-16	18,882,066
26-Jun-16	27-Jun-16	18,882,066
27-Jun-16	28-Jun-16	23,661,245
28-Jun-16	29-Jun-16	24,836,403
29-Jun-16	30-Jun-16	26,334,076
30-Jun-16	1-Jul-16	41,043,240

**Source:** Excerpt of APSC 086.01 Attachment, which was provided in Staff Data Request APSC-086, initiated to ascertain the components the Company uses to evaluate short-term debt in its AFUDC calculations. See Direct Exhibit RP-10.

	A GAS AND ELEC												SCHEDULE D-2.2
COST OF L	ONG TERM DEBT	- PROJECTE	D TEST YEAR	(INVESTOR OWI	NED UTILITIES)								
UPDATED F	OR ACTUALS TE	ST YEAR EN	DING JUNE 30	<u>, 2016</u>									
DOCKET NO	<u> 0. 16-052-U</u>												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Unamortized Net			Net Proceeds				Projected	Projected
				Amount	Disc/Prem/Exp,	Net	Adjustments for		Balance Sheet	<b>_</b>	Annual	Amortization	Annual
Line			Maturity	Outstanding per	Gain/Loss on Reac-		Projected Portio		Carrying	Stated	Interest	Net Disc/Prem	
No. Descript	ion of Debt	<u>Date</u>	Date	<u>Books (a)</u>	quired Debt Accts (a)	<u>(Col. 5 +/- Col. 6)</u>	of Test Year	<u>(Col. 7 +/- Col. 8)</u>	Value	Rate %	(Col. 5 x Col. 11)	<u>&amp; Expense</u>	(Col. 12 +/- Col. 13)
1 Senior N	lotes 7/15/2017	7/21/1997	7/15/2017	125,000,000	(620,131)	124,379,869	_	124,379,872	124,993,945	6.50%	8,125,000	595,332	8,720,332
	lotes 7/15/2027	7/21/1997	7/15/2027	124,950,000	(4,356,501)		-	120,593,497	124,950,000	6.65%	8,309,175	394,548	8,703,723
	lotes 4/15/2028	4/16/1998	4/15/2028	100,000,000	(1,891,073)		_	98,108,925	99,383,294	6.50%	6,500,000	160,368	6,660,368
	lotes 1/15/2036	1/9/2006	1/15/2036	110,000,000	(3,312,575)		-	106,687,425	109,704,790	5.75%	6,325,000	169,512	6,494,512
	lotes 2/1/2038	1/28/2008	2/1/2038	200,000,000	(2,244,777)		-	197,755,223	199,224,437	6.45%	12,900,000	104,004	13,004,004
	lotes 9/1/2018	9/1/2008	9/1/2018	250,000,000	(621,808)		-	249,378,194	249.807.707	6.35%	15,875,000	286,992	16,161,992
	lotes 1/15/2019	12/11/2008	1/15/2019	250,000,000	(501,296)		-	249.498.704	249,988,734	8.25%	20,625,000	197,232	20,822,232
	lotes 6/1/2040	6/8/2010	6/1/2040	250,000,000	(3,302,485)		-	246,697,515	248,719,064	5.85%	14,625,000	138,084	14,763,084
9 Senior N	lotes 5/15/2041	5/27/2011	5/15/2041	250,000,000	(3,383,457)	246,616,543	-	246,616,544	248,732,064	5.25%	13,125,000	136,020	13,261,020
10 Senior N	lotes 5/1/2043	5/13/2013	5/1/2043	250,000,000	(2,347,644)	247,652,356	-	247,652,358	249,923,971	3.90%	9,750,000	87,492	9,837,492
11 Senior N	lotes 3/15/2044	3/25/2014	3/15/2044	250,000,000	(8,488,208)	241,511,792	-	241,511,790	249,254,183	4.55%	11,375,000	306,336	11,681,336
12 Senior N	lotes 12/15/2044	12/11/2014	12/15/2044	250,000,000	(6,764,117)	243,235,883	-	243,235,883	245,764,450	4.00%	10,000,000	237,684	10,237,684
13 Pollution	Control Bonds, Ga	1/1/1995	1/1/2025	47,000,000	(86,481)	46,913,519	-	46,913,520	47,000,000	variable	202,100	10,176	212,276
14 Pollution	Control Bonds, Mu	. 1/1/1995	1/1/2025	32,400,000	(76,353)	32,323,647	-	32,323,650	32,400,000	variable	136,080	8,988	145,068
	Control Bonds, Mu		6/1/2027	56,000,000	(1,339,331)		-	54,660,670	56,000,000	variable	235,200	122,688	357,888
	Loan 1 (amortizing			9,838,932	-	9,838,932	-	9,838,932	9,838,932	3.80%	373,879	-	373,879
17 Tinker -	Loan 2 (amortizing	debt)		110,058		110,058	-	110,058	110,058	2.10%	2,311		2,311
18 Totals				2,555,298,990	(39,336,237)	2,515,962,753	-	2,515,962,758	2,545,795,630		138,483,745	2,955,456	141,439,201
19 Credit fa	cility expenses												836,875
	cility amortization												498,766
	Rating Agency Fee												230,970
22 Total lon	ig term debt interes	st expense											143,005,812
23 Embedd	ed Cost Rate (Col.	14 Total / Col	. 9 Total) (A)										5.68%

	MA GAS AND ELECTRIC COMPANY				<u>WP D-1-6</u>
	CAPITAL - OTHER CAPITAL ITEMS				
	D FOR ACTUALS TEST YEAR ENDING JUNE 30, 2016				
DOCKET	<u>NO. 16-052-U</u>				
Line			FERC	1	3-Month
<u>No.</u>	Description	Ref.	Account	Avera	age Balance
			050	•	7 500 045
1 2	Other Def. Credits - KAW Water Storage Agreement		253 253	\$	7,532,045
	Other Def. Credits - OU Spirit Development Fee	( • )	200	¢	2,078,155
3	Pro Forma Amount	(A)		\$	9,610,200
4	Projected Test Year End Balance		253	\$	8,909,839
				<u>+</u>	-,,
5	Pro Forma Adjustment			\$	700,361
	Annual Interest Cost				
6	KAW Water Storage Agreement				611,191
7	OU Spirit Development Fee				98,443
8	Total Interest				709,634
9	Calculation of Interest Rate (Line 8 / Line 3)				7.38%
			]		
	Purpose:				
	To include Other Interest Bearing items not reflected in Long Term Debt.				
			J		
Source:	Application Workpaper D-1-6				

**DIRECT EXHIBIT RP-14** 

# OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-030

Docket No. 16-052-U

Date Requested: 10/6/2016 Date Required: 10/21/2016 Requested by: Bill Taylor

- 30.03 For each entry in each account from June 2015 through August 2016, please provide: (a) the amount(s) and general ledger account and FERC account of the offsetting entry/entries and (b) a detailed explanation and supporting documentation for the entries.
- Response\*: Please see attachment **APSC 030.03\_Att** for a listing of each entry. Also attached are NPV schedules for supporting documentation.

Kaw Water Storage – There are three water storage spaces under this agreement. Monthly entries are booked to debit interest expense and credit the liability account. In April or May there is an annual payment for the agreements. The payment for spaces 1 and 2 are fixed but the payment for space 3 has a variable interest rate. When the payment is made the difference between the actual payment and the payment on the NPV schedule will be credited or debited to interest expense. There are some small variances in the monthly liability balances as compared to the NPV in 2015 and 2016 due to the variable payment and also the timing of the payments.

OU Spirit – Monthly entries are booked to debit interest expense and credit the liability. Annual development fees debit the liability at the time of the payment. All monthly entries should match the NPV schedule provided.

Response provided by: Response provided on: Contact & Phone No:

Carrie Scribner
October 20, 2016
Jason Bailey (405) 553-3406
Juson Duncy (+05/555 5+00

\*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

T

	Staff Recomn	nendation	
Line No.	Balances		Source
1	KAW Water Storage Agreement	6,721,186	RP-15.2, Item A
2	OU Spirit Development Fee	1,361,624	RP-15.3, Item A
3	Pro Forma Balance (Line 1 + Line 2)	8,082,810	
	Interest Cost		Source
4	KAW Water Storage Agreement (Monthly)	51,782	RP-15.2, Item B
5	OU Spirit Development Fee (Annual)	68,081	RP-15.3, Item B
6	KAW Water Storage Agreement (Annual)	621,384	Line 4 multiplied by 12
7	Total Interest (Line 5 + Line 6)	689,465	
7	Calculation of Cost Rate (Line 7 / Line 3)	8.53%	

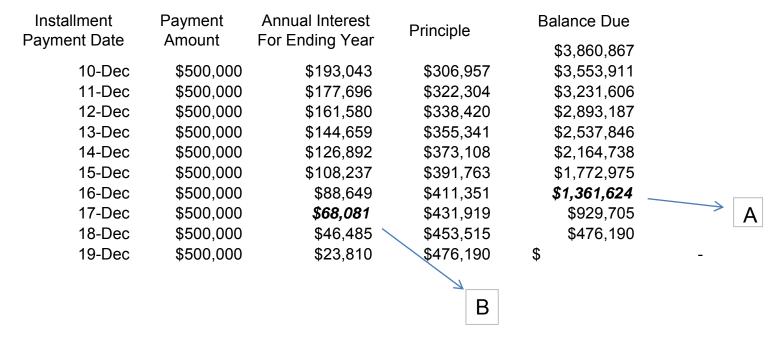
# Staff Decommondation

### DIRECT EXHIBIT RP-15.2

# Oklahoma Gas & Electric Kaw Water Storage Amortization Schedule

	Interest Accrual	Principle Paid	Balance
1/31/2016	55,673.00	-	7,727,387.60
2/29/2016	55,673.00	-	7,783,060.60
3/31/2016	55,673.00	-	7,838,733.60
4/30/2016	55,673.00	909,494.40	6,984,912.20
5/31/2016	53,814.00	-	7,038,726.20
6/30/2016	53,814.00	-	7,092,540.20
7/31/2016	53,814.00	-	7,146,354.20
8/31/2016	53,814.00	-	7,200,168.20
9/30/2016	53,814.00	-	7,253,982.20
10/31/2016	53,814.00	-	7,307,796.20
11/30/2016	53,814.00	-	7,361,610.20
12/31/2016	53,814.00	-	7,415,424.20
1/31/2017	53,814.00	-	7,469,238.20
2/28/2017	53,814.00	-	7,523,052.20
3/31/2017	53,814.00	-	7,576,866.20 🛛 👝 🗛
4/30/2017	53,814.00	909,494.40	6,721,185.80
5/31/2017	51,782.00	-	6,772,967.80 B
6/30/2017	51,782.00	_	6,824,749.80
7/31/2017	51,782.00	-	6,876,531.80
8/31/2017	51,782.00	-	6,928,313.80
9/30/2017	51,782.00	-	6,980,095.80
10/31/2017	51,782.00	-	7,031,877.80
11/30/2017	51,782.00	-	7,083,659.80
12/31/2017	51,782.00	-	7,135,441.80

Source: Excerpt of APSC-030.03 Attachment, provided in Staff Data Request APSC-030, initiated to evaluate the Company's other capital items balance. See Direct Exhibit RP-14



# **OU SPIRIT - NPV OF FUTURE DEVELOPMENT FEE INSTALLMENT PAYMENTS**

Source: Excerpt of APSC-030.03 Attachment, provided in Staff Data Request APSC-030, initiated to evaluate the Company's other capital items balance. See Direct Exhibit RP-14

**DIRECT EXHIBIT RP-16** 

# DTE Ratios from 2011 to 2015

OGE E	nergy
-------	-------

Debt / Equity

2015	45.9%	/	54.1%
2014	48.4%	/	51.6%
2013	50.4%	/	49.6%
2012	52.7%	1	47.3%
2011	51.7%	/	48.3%

**OG&E** Debt / Equity

2015	46.3%	/	53.7%
2014	46.5%	/	53.5%
2013	44.7%	/	55.3%
2012	43.9%	/	56.1%
2011	45.5%	/	54.5%

Source:

OGE Energy (SEC Form 10-K and 10-Q's ), OG&E (FERC Form No.1 and FERC Form 3-Q)

			Equity + Preferred	of Electric Utilit		Equity + Preferred
	LT Debt	ST Debt	Stock	LT Debt	ST Debt	Stock
Alliant Energy Corporation	3,858	208	3,985	47.9%	2.6%	49.5%
Ameren Corporation	6,803	567	7,125	46.9%	3.9%	49.2%
Duke Energy Corporation	41,016	3,111	40,052	48.7%	3.7%	47.6%
Edison International	11,386	654	13,696	44.2%	2.5%	53.2%
El Paso Electric Company	1,239	96	1,026	52.5%	4.1%	43.4%
Entergy Corporation	13,860	680	9,908	56.7%	2.8%	40.5%
Eversource Energy	9,439	858	10,640	45.1%	4.1%	50.8%
lawaiian Electric ndustries, Inc.	1,680	79	2,010	44.6%	2.1%	53.3%
DACORP, Inc.	1,766	18	2,092	45.6%	0.5%	54.0%
G&E Corporation	16,495	1,097	17,074	47.6%	3.2%	49.3%
innacle West Capital	3,999	111	4,793	44.9%	1.2%	53.8%
NM Resources, Inc.	2,250	341	1,745	51.9%	7.9%	40.2%
Portland General Electric Company	2,260	2	2,291	49.7%	0.0%	50.3%
Southern Company	34,289	1,403	23,612	57.8%	2.4%	39.8%
(cel Energy Inc.	13,599	461	10,741	54.8%	1.9%	43.3%
				49.3%	2.9%	47.9%

Source: SEC Form 10-Ks and 10-Qs

#### DIRECT EXHIBIT RP-18

#### OKLAHOMA GAS AND ELECTRIC COMPANY DOCKET NO. 16-052-U DIRECT EXHIBITS OF REGIS POWELL

			Equity + Preferred			Equity + Preferred
	LT Debt	ST Debt	Stock	LT Debt	ST Debt	Stock
ALLETE, Inc.	1,567	1	1,850	45.8%	0.0%	54.1%
Alliant Energy Corporation	3,858	208	3,985	47.9%	2.6%	49.5%
Ameren Corporation	6,803	567	7,125	46.9%	3.9%	49.2%
American Electric Power Company, Inc.	19,393	1,390	17,949	50.1%	3.6%	46.3%
Avista Corporation	1,585	110	1,591	48.3%	3.3%	48.4%
CMS Energy Corporation	9,313	81	4,153	68.7%	0.6%	30.7%
DTE Energy Company	9,352	362	8,913	50.2%	1.9%	47.9%
DACORP, Inc.	1,766	18	2,092	45.6%	0.5%	54.0%
NorthWestern Corporation	1,777	218	1,623	49.1%	6.0%	44.9%
Otter Tail Corporation	534	53	628	44.0%	4.3%	51.7%
Pinnacle West Capital Corporation	3,999	111	4,793	44.9%	1.2%	53.8%
PNM Resources, Inc.	2,250	341	1,745	51.9%	7.9%	40.2%
Portland General Electric Company	2,260	2	2,291	49.7%	0.0%	50.3%
SCANA Corporation	6,292	724	5,556	50.0%	5.8%	44.2%
Kcel Energy Inc.	13,599	461	10,741	54.8%	1.9%	43.3%
Average				49.9%	2.9%	47.2%

Source: SEC Form 10-Ks and 10-Qs

**DIRECT EXHIBIT RP-19** 

#### OKLAHOMA GAS AND ELECTRIC COMPANY Response to Arkansas Public Service Commission Staff Data Request APSC-001 Docket No. 16-052-U

Date Requested: 8/29/2016 Date Required: 9/13/2016 Requested by: Bill Taylor

- **1.12** Please provide a narrative describing any and all of the different types of transactions among and/or between the Company and any of its affiliates. Discuss any expected changes during the pro forma period.
- Response\*: OG&E was incorporated in 1902, and has incurred administrative services such as auditing, accounting, finance, treasury, human resources, risk management, information technology and supply chain services ever since. OGE Energy was formed in August 1995, and has provided those administrative services to its majority owned subsidiaries, OG&E and Enogex, since that time. As of August 2016, the majority of administrative services, historically provided to Enogex/Enable Midstream, have been terminated. The only remaining services are payroll and benefits administration for the remaining 163 employees that are seconded to Enable Midstream, as well as the utilization by Enable Midstream of the OGE Energy information technology infrastructure and network. These remaining services are continuing on a year to year extension term of the existing contract. In May 2013, the joint venture between OG&E's affiliate Enogex and CenterPoint Energy formed a standalone company named Enable Midstream Partners. Enable Midstream will no longer share costs with OG&E as it has in the past. Reimbursements received from Enable Midstream for shared OGE Energy costs will decrease through the end of the pro forma period, causing expense levels for OG&E to increase.

Please also see attachment **APSC 001.12\_Att** which is the Affiliate Report filed May 26, 2016. The attachment can be found at https://secure.oge.com/ARRateCase2/Discovery/APSC-001/.

Response provided by: Response provided on: Contact & Phone No: Scott Forbes September 13, 2016 Jason Bailey (405) 553-3406

\*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

#### **DIRECT EXHIBIT RP-19**

APSC FILED Time: 5/26/2016 10:31:06 AM: Recvd 5/26/2016 10:29:26 AM: Docket 07-118-U-Doc. 15

Oklahoma Gas and Electric Company Annual Report-Affiliate Transaction Rules Arkansas Public Service Commission, Docket 07-118-U Order No. 7 May 26, 2016

Commission a description of each such arrangement involving a public utility and any affiliate having an annual value or amount in excess of \$350,000 and such filing is received within 120 days of the effective date of these rules.

Money Pool Arrangement - OGE Energy has a "money pool" arrangement in which OG&E can borrow or invest short-term funds. Funding requirements are aggregated and short-term external borrowing or investing is based upon the net cash position of the group.

When the net cash position requires external borrowings these requirements are generally satisfied with the issuance of OGE Energy commercial paper or borrowings under its revolving credit facility.

Dividends and Equity Contribution - Periodically OG&E pays dividends to OGE Energy to fund all or a portion of the dividend OGE Energy pays to its shareowners.

OGE Energy makes capital contributions to OG&E as necessary to finance its capital requirements. OGE Energy makes these capital contributions from available funds or by accessing the capital markets issuing OGE Energy common stock.

Business Transactions with Affiliates - In the ordinary course of business inter-company payables and receivables are created monthly. These payables and receivables are net settled monthly in the monthly accounting close process.

VIII C. Each public utility or its public utility holding company shall file an annual report with the Commission in accordance with Rule IX that includes:

- 1. a certification by the president of the public utility that the public utility is in compliance with this section; and,
- 2. all financial information necessary for the Commission to determine the utility is complying with the requirements in Rules VIII.A.

I, R. Sean Trauschke, certify that Oklahoma Gas & Electric Company has met the requirements of Rule VIII for the 2015 calendar year; and, Oklahoma Gas & Electric Company has not engaged in a non-utility business whereby the requirements of Rule VIII.A would be applicable.

R. Sean Trauschke President and Chief Financial Officer

5/25/16 Date

4

**DIRECT EXHIBIT RP-20** 

# OGE Energy Corp. External Capital Components Amounts and Proportions

# 4 Quarter Average Amounts (millions)

	S-T Debt	L-T Debt	Preferred	Common			
Balances 4 Qtr Avg as of 9/30/16	\$171.3	\$2,657.0	\$0.0	\$3,347.8			
	4 Quarter Average Proportions						
	S-T Debt	L-T Debt	Preferred	Common			
Proportions	2.8%	43.0%	0.0%	54.2%			
Total Debt / Total Equity	46	5%	54	%			

Source: 2016 SEC Form 10-K and 10-Qs for the noted quarters ending.

**DIRECT EXHIBIT RP-21** 

WP D-1-2

OKLAHOMA GAS AND ELECTRIC COMPANY
ANALYSIS OF CUSTOMER DEPOSITS
UPDATED FOR ACTUALS TEST YEAR ENDING JUNE 30, 2016
DOCKET NO. 16-052-U
TOTAL AMOUNT OF DEPOSITS EARNING INTEREST:

Sum of Jul 2015 Sum of Aug 2015 Sum of Sep 2015 Sum of Oct 2015 Sum of Nov 2015 Sum of Dec 2015 Sum of Jan 2016 Sum of Feb 2016 Sum of Mar 2016 Sum of Apr 2016 Sum of May 2016 Sum of Jun 2016	Unclassified Dep (6,255) 5,204 10,778 (45,161) 26,628 (794) (2,350) 31,413 (3,475) (25,617) 31,402 (3,017)	AR Dep (5,937,328) (5,920,510) (5,902,435) (5,915,723) (5,948,875) (6,013,233) (6,028,100) (6,045,097) (6,068,021) (6,087,537) (6,146,022) (6,184,727)	<u>OK I</u>	Long Term Dep (48,820,743) (47,482,946) (46,162,261) (44,916,916) (43,843,187) (42,724,963) (46,736,695) (45,607,709) (44,332,200) (50,383,564) (49,047,019) (47,626,998)	OK Short Term Dep (21,075,308) (22,499,533) (23,983,259) (25,468,588) (26,893,569) (28,284,671) (24,395,982) (26,018,378) (27,521,920) (21,200,531) (22,326,837) (23,626,922)	<u>Grand Total</u> (75,839,634) (75,897,784) (76,037,177) (76,346,389) (76,659,004) (77,023,661) (77,163,128) (77,639,771) (77,925,617) (77,997,249) (77,488,476) (77,441,663)
Notes: Unclassified Deposits are a re	sult of timing difference	s between Gene	eral Le	edger and the Cu	istomer billing system.	
AR OK Long Term OK Short Term	0.30% 2.17% 0.37%					
						Interest on Actual
					% of total	Deposits
a) (OK ST / Grand Total (b) ) *			\$	23,627,842	30.511%	87,423
a) (OK LT / Grand Total (b) ) * S			\$	47,628,853	61.503%	1,033,546
a) (AR / Grand Total (b) ) * Sch	nedule E-1, Account 23	AR	\$	6,184,968	7.987%	18,555
		Total Deposits	\$	77,441,663		\$ 1,139,524
				(A)	\$ 0.014715	1
1 Based on 2016 rates. 2016 rate for a	Arkansas is 0.3%. 2016 rate	es for Oklahoma ar	e 0.37°	% (short-term) and 2	2.17% (long-term).	
Supporting Schedules and Work	papers:			(A)	Recap Schedules: Schedule D-1	

Cross check Schedule D1.2

DIRECT EXHIBIT RP-22

		ECTRIC COMP					<u>WP D-1</u>
		NTERIM DEBT F					
		<u>6 TEST YEAR EI</u>	NDING JU	<u>NE 30, 2016</u>			
OCKET	NO. 16-052-U						
			-Term Bor				
		J	une 30, 20	)16			
		Ohard					
		Short	-Term Del	ot Rate			Column 6
				looved		Dringialo	Column 6
Line Ne	Deeler		Data	Issued	Dava	Principle	X Column 7
Line No.	Dealer	CUSIP	Rate	Date	Days	Amount	Column 7
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Wells Fargo	6708K2FA1	0.740%	01-Jun-16	9	\$39,400,000	\$354,600,000
2	Mitsubishi	6708K2FD1	0.740%	02-Jun-16	11	\$39,200,000	\$431,200,000
3	Mizuho	6708K2FE1	0.750%		11	\$70,900,000	\$779,900,000
4	BNY Mellon	6708K2FF1	0.750%	06-Jun-16	9	\$23,200,000	\$208,800,000
5	RBC	6708K2FG1	0.750%		9	\$26,500,000	\$238,500,000
6	Wells Fargo	6708K2FH1	0.750%		9	\$47,500,000	\$427,500,000
7	Mitsubishi	6708K2FL1	0.760%		11	\$37,100,000	\$408,100,000
8	Wells Fargo	6708K2FM1	0.760%	10-Jun-16	11	\$51,300,000	\$564,300,000
9	Mitsubishi	6708K2FN1	0.760%	13-Jun-16	9	\$39,300,000	\$353,700,000
10	Mizuho	6708K2FP1	0.760%	14-Jun-16	9	\$72,000,000	\$648,000,000
11	BNY Mellon	6708K2FQ1	0.740%	15-Jun-16	9	\$46,500,000	\$418,500,000
12	RBC	6708K2FT1	0.740%	16-Jun-16	11	\$26,400,000	\$290,400,000
13	Wells Fargo	6708K2FU1	0.740%	17-Jun-16	11	\$47,400,000	\$521,400,000
14	Mitsubishi	6708K2FV1	0.740%	20-Jun-16	9	\$42,900,000	\$386,100,000
15	Wells Fargo	6708K2FW1	0.740%	21-Jun-16	9	\$52,900,000	\$476,100,000
16	Mitsubishi	6708K2G11	0.770%	22-Jun-16	9	\$33,000,000	\$297,000,000
17	Mizuho	6708K2G51	0.770%	23-Jun-16	12	\$71,600,000	\$859,200,000
18	BNY Mellon	6708K2G61	0.770%	24-Jun-16	12	\$58,600,000	\$703,200,000
19	RBC	6708K2G71	0.770%	27-Jun-16	10	\$45,600,000	\$456,000,000
20	Wells Fargo	6708K2G81	0.760%	28-Jun-16	10	\$48,000,000	\$480,000,000
21	Mitsubishi	6708K2GB1	0.760%	29-Jun-16	12	\$42,700,000	\$512,400,000
22	Wells Fargo	6708K2GC1	0.760%	30-Jun-16	12	\$65,000,000	\$780,000,000
			0.7541%	weighted avera	age based o	n days outstanding	
				weighted avera			
		(A)				n days outstanding	and principle
		. ,		-	-		
	Supporting Sch	edules and Work	kpapers:				Recap Schedules:
	· · · •					(A)	Schedule D-1.3
						(, , ,	

#### Staff Risk-Comparable Sample

### Hevert Risk-Comparable Sample

Company	Electric Retail Revenue	Company	Electric Retail Revenue
Alliant Energy Corporation	74%	ALLETE, Inc.	47%
Ameren Corporation	74%	Alliant Energy Corporation	74%
Duke Energy Corporation	78%	Ameren Corporation	74%
Edison International	97%	American Electric Power Company, Inc.	63%
El Paso Electric Company	84%	Avista Corporation	51%
Entergy Corporation	72%	CMS Energy Corporation	59%
Eversource Energy	80%	DTE Energy Company	40%
Hawaiian Electric Industries, Inc.	90%	IDACORP, Inc.	88%
IDACORP, Inc.	88%	NorthWestern Corporation	66%
PG&E Corporation	76%	Otter Tail Corporation	45%
Pinnacle West Capital Corporation	92%	Pinnacle West Capital Corporation	92%
PNM Resources, Inc.	83%	PNM Resources, Inc.	83%
Portland General Electric Company	90%	Portland General Electric Company	90%
Southern Company	85%	SCANA Corporation	52%
Xcel Energy Inc.	71%	Xcel Energy Inc.	71%
Average	82%	Average	66%

OGE Energy Corp.	85%
OG&E	88%

# Source:

Retail Revenue reported to Energy Information Agency (Form-861), last two full calendar years available, 2014-2015 divided by Recurring Revenue, per SNL Financial, years 2014-2015

## **DIRECT EXHIBIT RP-24**

# Staff Risk-Comparable Sample Price, Dividend, and Yield

	(1) 13 Week	(2) Current	(2) / (1) Dividend
Company	Average Price	Dividend	Yield
Alliant Energy Corporation	\$37.08	1.18	3.18%
Ameren Corporation	\$49.06	1.76	3.59%
Duke Energy Corporation	\$76.17	3.42	4.49%
Edison International	\$72.74	1.92	2.64%
El Paso Electric Company	\$45.49	1.24	2.73%
Entergy Corporation	\$72.42	3.48	4.81%
Eversource Energy	\$53.79	1.78	3.31%
Hawaiian Electric Industries, Inc.	\$29.80	1.24	4.16%
IDACORP, Inc.	\$77.10	2.20	2.85%
PG&E Corporation	\$61.81	1.96	3.17%
Pinnacle West Capital Corporation	\$75.33	2.62	3.48%
PNM Resources, Inc.	\$32.35	0.88	2.72%
Portland General Electric Company	\$42.29	1.28	3.03%
Southern Company	\$50.26	2.24	4.46%
Xcel Energy Inc.	\$41.35	1.36	3.29%

# Source:

(1) Yahoo! Finance

(2) SNL Financial

# Note:

Adjusted stock prices were used.

Duke Energy includes the appropriate 13 weeks after the completion of its acquisition of Piedmont Natural Gas.

#### Staff Risk-Comparable Sample Growth Rates

Company		g1		g2	g3	g4	g5
	(a)	(b)	(c)				
Alliant Energy Corporation	6.0%	6.1%	6.6%	4.5%	7.0%	6.5%	6%
Ameren Corporation	6.0%	6.1%	5.2%	4.0%	-4.0%	-3.0%	-3%
Duke Energy Corporation	4.0%	4.8%	4.4%	3.5%	3.0%	2.5%	NA
Edison International	3.5%	5.3%	2.6%	9.0%	3.5%	4.0%	7%
El Paso Electric Company	2.5%	4.4%	7.0%	5.0%	4.0%	NA	12%
Entergy Corporation	2.0%	-2.3%	-2.1%	3.0%	-3.0%	1.5%	3%
Eversource Energy	6.0%	6.3%	5.7%	6.0%	6.0%	11.0%	10%
Hawaiian Electric Industries, Inc.	4.0%	7.0%	4.0%	1.0%	8.5%	NA	1%
IDACORP, Inc.	3.0%	4.0%	4.0%	7.5%	8.0%	8.0%	10%
PG&E Corporation	12.0%	4.4%	6.0%	7.0%	-5.5%	1.5%	1%
Pinnacle West Capital Corporation	4.0%	4.0%	3.7%	5.0%	8.5%	2.0%	5%
PNM Resources, Inc.	9.0%	7.6%	8.8%	10.0%	14.5%	7.0%	-3%
Portland General Electric Company	5.5%	6.5%	6.9%	6.0%	6.5%	2.5%	7%
Southern Company	4.0%	3.9%	3.2%	3.5%	3.5%	3.5%	3%
Xcel Energy Inc.	5.5%	5.2%	5.3%	6.0%	6.0%	4.5%	5%

#### Notes:

**g1**: (a) Value Line's projected EPS Growth, (b) Zack's projected EPS growth, and (c) Yahoo's projected EPS growth;

- g2: Value Line's projected five-year dividend growth;
- **g3**: Value Line's five-year historic EPS growth;
- g4: Value Line's ten-year historic dividend growth;
- g5: Value Line's ten-year historic EPS growth;

### Staff Risk-Comparable Sample Cost of Equity Results

Company		<b>k</b> 1		k2	k3	k4	k5
	(a)	(b)	(c)				
Alliant Energy Corporation	9.3%	9.4%	9.9%	7.7%	10.3%	10.3%	9.3%
Ameren Corporation	9.7%	9.8%	8.9%	7.7%	NA	NA	NA
Duke Energy Corporation	8.6%	9.4%	8.9%	8.1%	7.6%	NA	NA
Edison International	6.2%	8.0%	NA	11.8%	6.2%	12.3%	9.2%
El Paso Electric Company	NA	7.2%	9.8%	7.8%	6.8%	NA	14.9%
Entergy Corporation	6.9%	NA	NA	7.9%	NA	11.0%	7.9%
Eversource Energy	9.4%	9.7%	9.1%	9.4%	9.4%	13.0%	13.0%
Hawaiian Electric Industries, Inc.	8.2%	11.3%	8.2%	NA	12.8%	NA	NA
IDACORP, Inc.	5.9%	6.9%	6.9%	10.5%	11.0%	5.4%	12.5%
PG&E Corporation	15.4%	7.6%	9.2%	10.3%	NA	NA	NA
Pinnacle West Capital Corporation	7.6%	7.6%	7.3%	8.6%	12.1%	6.0%	8.1%
PNM Resources, Inc.	11.8%	10.4%	11.6%	12.9%	17.4%	NA	NA
Portland General Electric Company	8.6%	9.6%	10.0%	9.1%	9.6%	NA	10.1%
Southern Company	8.6%	8.4%	7.7%	8.0%	8.0%	8.6%	7.5%
Xcel Energy Inc.	8.9%	8.6%	8.6%	9.4%	9.4%	7.4%	8.4%
Cost of Equity Results		8.9%		9.2%	10.1%	9.2%	10.1%
Midpoint	9.5%	_					

Note:

k1 gives 1/3 weighting each to EPS projections of Value Line, Zacks, and Yahoo

The FERC Method for removing outlier estimates was employed, which is based on the risk-return tradeoff, *i.e.*, investors in a utility's equity take on more risk than investors in that utility's debt. Thus equity investors should receive a higher return than the yield on public utility debt, which was 4.35% from June 2016 - Nov. 2016. Any estimates under 1% above recent bond yields were deemed outliers

Discounted Cash Flow Model (Pros & Cons)

Pros

1

1

Most widely employed model by State Commissions and the Federal Energy Regulatory Commission (FERC).

Model inputs are widely available and specific to firms. It is the most company-specific method.

Forward looking and recognizes the time-value of money.

Multi-Stage model is well suited to estimate returns for nascent firms undergoing rapid growth.

Gordon Growth model (i.e. the model Staff uses) is well suited to estimate returns for dividend-paying companies that are relatively insensitive to the business cycle and in a mature growth phase, like utilities.

Cons

The Constant Growth model assumes the dividend payout ratio and price-to-earnings ratio remains constant indefinitely, which is improbable.

The growth rate inputs are subjective, usually short-term in nature, and thus might not be sustainable, whereas the DCF projects cash flows indefinitely.

Risk Premium Models, including the Capital Asset Pricing Model (Pros & Cons)

Pros

The model is easily understood conceptually because equity is recognized as being more risky than debt, and thus equity should receive a premium higher than the returns on debt.

Equity (or Market) Risk Premium estimates can be easily calculated from historical data.

CAPM results can be company or industry specific because beta, which as a modifier to market risk, can be produced for individual companies and industries.

Cons

Considerable disagreement that the equity risk premium is constant over time. Additionally, risk premiums are unobservable, even after the fact, and must be estimated.

Historic risk premiums are plagued by how long a measurement period to use. And forward-looking risk premiums generally require surveying financial experts or employing DCF analysis.

Beta usually does not explain a sufficient amount of company-specific risk to be reliable. Furthermore, Beta may not be stable and cannot be measured ex ante. Therefore, when measuring beta, the historical state of the company may not be an accurate representation of the future state of the company.

In addition to relying on ex post data to estimate beta, using different periods for estimation results in different beta estimates. For example, a three-year beta is unlikely to be the same as a five-year beta, and a beta estimated with daily returns is unlikely to be the same as the beta estimated with monthly returns.

anuary 2011–December 2015				
		Wilshire	Morningstar	
	S&P 500	5000	U.S. Market	
_	Index	Index	Index	
S&P 500 Index	1.000	-	-	
Wilshire 5000 Index	0.997	1.000	-	
Morningstar U.S. Market Index	0.997	1.000	1.000	

Source:

Duff & Phelps' 2016 Valuation Handbook Guide to Cost of Capital

	New York Stock		Nasdaq
Correlation Matrix	Exchange	S&P 500 Index	Composite
New York Stock	1		
Exchange	I	-	-
S&P 500 Index	0.961	1	-
Nasdaq Composite	0.932	0.992	1

Correlation of Returns on Indexes from 1/4/2011 - 12/30/2016 Source: Yahoo! Finance

**DIRECT EXHIBIT RP-29** 

#### **CAPM** Results

Year	2012	2013	2014	2015	2016	Arithmetic Average	Geometric Average	
Total Return on NYSE	15.50%	25.77%	6.30%	-4.43%	11.51%	10.93%	10.47%	
Average Yield on 30 Year								
Treasury from 2012 - 2016:	3.03%	-						
Arithmetic								
Market Risk Premium (Return on NYSE minus Average	x	Beta	+	Risk Free Rate (Average Value Line Projection 2019 - 2020)		=	Cost of	
Treasury Yield)	X	Deta				_	Equity	
7.90%	х	0.67	+		4.10%		=	9.39%
Geometric								
Market Risk Premium (Return				Risk Free F	Rate (Averag	e Value Line		Cost of
on NYSE minus Average Treasury Yield)	х	Beta	+		ection 2019 -		=	Equity
7.45%	х	0.67	+		4.10%		=	9.09%

## **DIRECT EXHIBIT RP-29**

Company Name	Ticker	Beta
Alliant Energy Corporation	LNT	0.70
Ameren Corporation	AEE	0.65
Duke Energy Corporation	DUK	0.60
Edison International	EIX	0.65
El Paso Electric Company	EE	0.70
Entergy Corporation	ETR	0.65
Eversource Energy	ES	0.70
Hawaiian Electric Industries, Inc.	HE	0.70
IDACORP, Inc.	IDA	0.75
PG&E Corporation	PCG	0.65
Pinnacle West Capital Corporation	PNW	0.70
PNM Resources, Inc.	PNM	0.75
Portland General Electric Company	POR	0.70
Southern Company	SO	0.55
Xcel Energy Inc.	XEL	0.60
Average		0.67

# Value Line Data Used in CAPM Results

Source: Value Line, in respective issues

Value Line Projections	2019	2020	Average
Long-Term Treasury Bond Rate (%)	4.00%	4.20%	4.10%

Source: Value Line, Selection & Opinion, December 2, 2016

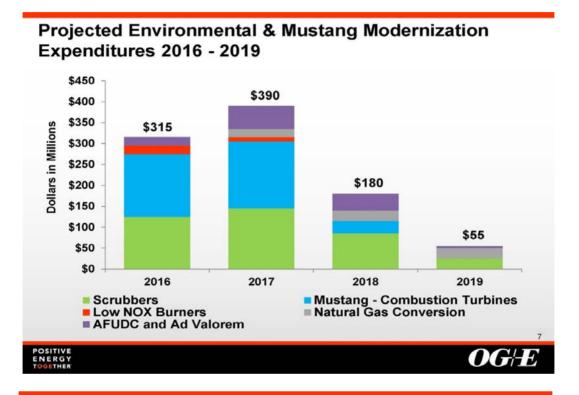
<b>Risk Premium Results From Surrounding Jurisdictions</b>		
20 Rate Cases		Source:
Risk Premium (Treasuries)	6.5%	DIRECT EXHIBIT RP-30.2
		Federal Reserve Bank of
Average Yield on 30-Year Treasuries Since 8/25/2016, Through 1/3/2017	2.7%	St. Louis
Cost of Equity (Recent ROEs using 30 Year Treasuries as risk-free rate)	9.2%	
		Source:
Risk Premium (Public Utility Debt)	4.7%	DIRECT EXHIBIT RP-30.2
Average Yield on Public Utility Debt (Baa) Since 8/25/2016	4.4%	Mergents Bond Record
Cost of Equity (Recent ROEs using Public Utility Debt as risk-free rate)	9.1%	

Company Name	State	Initial Filing Date	Rate Case Completion Date	Authorize d ROE (%)	Average Yield on 30 Year Treasuries	Average Yield on Public Utility Debt	Risk Premium (Treasuries)	Risk Premium (Public Utility Debt)
Southwestern Electric Power Company	LA	7/20/2012	2/27/2013	10.00%	2.90%	4.67%	7.10%	5.33%
Entergy Gulf States Louisiana, L.L.C.	LA	2/15/2013	12/16/2013			Combined	Filing	
Entergy Louisiana, LLC	LA	2/15/2013	12/16/2013	9.95%	3.47%	4.99%	6.48%	4.96%
Entergy Louisiana, LLC	LA	3/28/2013	7/10/2014	9.95%	3.55%	4.99%	6.40%	4.96%
Union Electric Company	MO	7/24/2009	5/28/2010	10.10%	4.44%	6.28%	5.66%	3.83%
KCP&L Greater Missouri Operations Company	MO	6/4/2010	5/4/2011			Combined	Filing	
Kansas City Power & Light Company	MO	6/4/2010	4/12/2011			Combined	Filing	
KCP&L Greater Missouri Operations Company	MO	6/4/2010	5/4/2011	10.00%	4.21%	5.90%	5.79%	4.10%
Union Electric Company	MO	9/3/2010	7/13/2011	10.20%	4.30%	5.86%	5.90%	4.34%
Union Electric Company	MO	2/3/2012	12/12/2012	9.80%	2.91%	4.86%	6.89%	4.94%
Kansas City Power & Light Company	MO	2/27/2012	1/9/2013			Combined	Filing	
KCP&L Greater Missouri Operations Company	MO	2/27/2012	1/9/2013			Combined	Filing	
KCP&L Greater Missouri Operations Company	MO	2/27/2012	1/9/2013	9.70%	2.90%	4.84%	6.80%	4.86%
Union Electric Company	MO	7/3/2014	4/29/2015	9.53%	2.89%	4.62%	6.64%	4.91%
Kansas City Power & Light Company	MO	10/30/2014	9/2/2015	9.50%	2.81%	4.77%	6.69%	4.73%
Entergy Mississippi, Inc.	MS	6/10/2014	12/11/2014	10.07%	3.19%	4.71%	6.88%	5.36%
Public Service Company of Oklahoma	OK	7/9/2010	1/5/2011	10.15%	4.02%	5.76%	6.13%	4.39%
Oklahoma Gas and Electric Company	OK	7/28/2011	7/9/2012	10.20%	3.11%	5.12%	7.09%	5.08%
Public Service Company of Oklahoma	OK	7/1/2015	11/10/2016	9.50%	2.68%	4.95%	6.82%	4.55%
Kingsport Power Company	ΤN	1/4/2016	8/9/2016	9.85%	2.57%	4.84%	7.28%	5.01%
Entergy Texas, Inc.	ΤХ	12/30/2009	12/1/2010	10.13%	4.24%	5.98%	5.89%	4.15%
Entergy Texas, Inc.	ΤХ	11/28/2011	9/13/2012	9.80%	2.95%	4.99%	6.85%	4.81%
Southwestern Electric Power Company	ΤХ	7/27/2012	10/3/2013	9.65%	3.16%	4.81%	6.49%	4.84%
Entergy Texas, Inc.	ΤХ	9/25/2013	5/16/2014	9.80%	3.68%	5.12%	6.12%	4.69%
Southwestern Public Service Company	ТΧ	12/8/2014	12/17/2015	9.70%	2.83%	4.96%	6.87%	4.74%

Source: SNL Financial

Average	6.5%	4.7%
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**DIRECT EXHIBIT RP-31** 



# Projected Capital Expenditures 2016 - 2020

Dollars in millions	20	16	2017	2018	2019	2020
OG&E Base Transmission	\$	50	\$ 30	\$ 30	\$ 30	\$ 30
OG&E Base Distribution		185	175	175	175	175
OG&E Base Generation		45	75	75	75	75
OG&E Other		40	25	25	25	25
Total OG&E Base T&D, Gen & Other		320	305	305	305	305
OG&E Known and Committed Projects:						
Transmission Projects						
Regionally Allocated Base Projects (1)		45	30	20	20	20
ITP 10-year Projects (2)		20	150	20	-	
Total Transmission Projects		65	180	40	20	20
Other Projects:						
Environmental – Low NO <sub>x</sub> Burners		25	10	-	-	
Environmental – Natural Gas Conversion		-	20	30	25	
Environmental – Dry Scrubbers		80	170	100	25	
Combustion Turbines – Mustang		155	160	25	-	
AFUDC and Ad Valorem		20	55	40		
Total Other Projects		280	415	195	50	
Total Known and Committed Projects		345	595	235	70	2
Total OG&E	\$	665	\$ 900	\$ 540	\$ 375	\$ 325

(1) Typically 100kV to 299kV projects. Approximately 30% of revenue requirement allocated to SPP members other than OG&E. (2) Typically 300kV and above projects. Approximately 85% of revenue requirement allocated to SPP members other than OG&E.

OSITIVE NERGY



13

	Capital Expenditures As A % Of Revenue, Company Estimates (2017)	Capital Expenditures As A % Of Revenue, S&P Capital IQ Estimates (2017)	Capital Expenditures As A % Of Revenue, Company Estimates (2018)	Capital Expenditures As A % Of Revenue, S&P Capital IQ Estimates (2018)
Risk Comparabl e Sample	32%	30%	31%	29%
OGE Energy	39%	35%	23%	21%

_	Company's Forecast Next Two Years	S&P Capital IQ's Forecast Next Two Years
Risk Comparabl e Sample	31%	29%
OGE Energy	31%	28%

Note:

S&P Capital IQ Estimates = S&P Capital IQ's Estimated Capital Expenditures Divided by S&P Capital IQ's Estimated Revenues for the Respective Years.

Company Estimates = Company Estimated Capital Expenditures for 2017 and 2018 divided by Revenue for the Last 12 Months, ending 9/30/2016. Company estimates provided in the companies' respective SEC Form 10-Ks.

able 1	Utility historical and forecast CapEx																	
		Historical capital expenditures (\$M) CAGR (%) Forecast CapEx (\$M) 3-ve									3-year							
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	3-year	5-year	10-year	2016E	2017E	2018E	CAGR (%)
ELECTRIC																		
1 AES CORP.	826	1,460	2,425	2,850	2,520	2,310	2,430	2,108	1,988	2,016	2,308	3.1	0.0	10.8	2,073	1,074	3,607	16.0
2 ALLIANT ENERGY	538	399	542	879	1,203	867	673	1,158	798	903	1,034	-3.7	3.6	6.8	1,165	1,330	1,275	7.2
3 AMEREN	935	992	1,381	1,896	1,710	1,042	881	1,063	1,379	1,785	1,917	21.7	13.0	7.4	2,155	2,234	2,234	5.2
4 AMERICAN ELECTRIC POWER	2,404	3,528	3,556	3,800	2,792	2,345	2,669	3,025	3,624	4,130	4,508	14.2	14.0	6.5	5,062	5,001	5,000	3.5
5 AVANGRID INC.	331	408	444	516	324	593	822	1,789	944	1,030	1,082	-15.4	12.8	12.6	1,900	1,900	1,900	20.6
6 CMS ENERGY	593	670	1,263	792	818	821	882	1,227	1,325	1,577	1,564	8.4	13.8	10.2	1,700	1,700	1,700	2.8
7 CONSOLIDATED EDISON	1,636	1,853	1,934	2,326	2,193	2,029	1,967	2,069	2,538	2,419	3,054	13.9	8.5	6.4	5,281	3,686	3,682	6.4
8 DOMINION RESOURCES	3,358	4,052	3,972	3,554	3,837	3,422	3,652	4,145	4,065	5,345	5,575	10.4	10.3	5.2	6,910	4,852	4,253	-8.6
9 DTE ENERGY	1,065	1,403	1,299	1,373	1,035	1,099	1,484	1,820	1,876	2,049	2,020	3.5	12.9	6.6	2,085	1,876	1,868	-2.6
10 DUKE ENERGY	2,413	3,470	3,216	4,533	4,433	4,855	4,413	5,507	5,607	5,474	7,029	8.5	7.7	11.3	9,220	8,775	8,300	5.7
11 EDISON INTERNATIONAL	1,868	2,536	2,826	2,824	3,282	4,543	4,122	4,149	3,599	3,906	4,225	0.6	-1.4	8.5	3,700	4,400	5,000	5.8
12 EL PASO ELECTRIC CO.	88	103	145	199	210	170	178	202	237	277	281	11.6	10.6	12.3	234	156	182	-13.5
13 ENTERGY	1,458	1,633	1,578	2,212	1,931	1,974	2,040	2,675	2,288	2,119	2,501	-2.2	4.8	5.5	4,021	3,617	3,667	13.6
14 EVERSOURCE ENERGY	775	872	1,115	1,255	908	954	1,077	1,472	1,457	1,604	1,724	5.4	12.6	8.3	2,084	2,546	2,529	13.6
15 EXELON CORP.	2,165	2,418	2,674	3,117	3,273	3,326	4,042	5,789	5,395	6,077	7,624	9.6	18.0	13.4	8,650	8,000	7,225	-1.8
16 FIRSTENERGY	1,208	1,315	1,633	2,888	2,203	1,780	2,129	2,678	2,638	3,312	2,704	0.3	8.7	8.4	2,977	2,799	2,554	-1.9
17 NEXTERA ENERGY	2,546	3,739	5,019	5,236	6,006	5,846	6,628	9,461	6,682	7,017	8,377	-4.0	7.5	12.6	9,145	4,510	3,745	-23.5
18 GREAT PLAINS ENERGY	327	476	512	1,024	841	618	457	610	669	774	677	3.5	1.8	7.5	680	581	541	-7.2
19 IDACORP INC.	193	222	287	244	252	338	338	240	247	274	294	7.0	-2.8	4.3	305	280	297	0.3
20 HAWAIIAN ELECTRIC INDUSTRIES	224	211	218	282	305	182	235	371	389	365	364	-0.6	14.8	5.0	450	480	500	11.2
21 NORTHWESTERN CORP.	81	101	117	125	189	228	189	219	230	270	284	9.0	4.4	13.4	308	324	365	8.8
22 OGE ENERGY	297	487	558	1,185	848	880	1,270	1,151	991	569	548	-21.9	-9.0	6.3	665	900	540	-0.5
23 PG&E CORP.	1,804	2,402	2,769	3,628	3,958	3,802	4,038	4,624	5,207	4,833	5,173	3.8	6.4	11.1	5,569	5,950	5,950	4.8
24 PINNACLE WEST CAPITAL	661	738	960	936	765	748	884	890	1,016	911	1,076	6.6	7.5	5.0	1,205	1,307	1,124	1.5
25 PNM RESOURCES	211	321	456	345	288	281	327	309	348	461	559	21.8	14.7	10.2	568	415	398	-10.7
26 PORTLAND GENERAL ELECTRIC	255	371	455	383	696	450	300	303	656	1,007	598	25.4	5.9	8.9	648	402	318	-19.0
27 PPL CORP.	811	1,394	1,657	1,418	1,225	1,597	2,487	3,105	4,212	3,674	3,533	4.4	17.2	15.9	3,160	3,070	3,040	-4.9
28 PUBLIC SRV. ENT. GROUP	1,053	1,015	1,348	1,771	1,794	2,160	2,083	2,574	2,811	2,820	3,863	14.5	12.3	13.9	4,380	4,100	3,852	-0.1
29 SOUTHERN COMPANY	2,370	2,994	3,546	3,961	4,670	4,086	4,525	4,809	5,331	5,246	5,674	5.7	6.8	9.1	10,500	5,200	5,500	-1.0
30 WESTAR ENERGY	213	345	748	937	556	540	697	810	780	852	700	-4.7	5.3	12.6	1,102	704	703	0.1
31 WEC ENERGY GROUP	745	929	1,212	1,136	815	798	831	707	687	761	1,266	21.4	9.7	5.4	1,974	2,349	2,046	17.3
32 XCEL ENERGY	1,311	1,628	2,097	2,114	1,778	2,216	2,206	2,570	3,395	3,200	3,683	12.7	10.7	10.9	3,060	2,975	3,120	-5.4
Total Electric (\$M)	34,765	44,484	51,961	59.737	57,656	56,902	60,956	73.629	73,410	77.056	85.820	5.2	8.6	9.5	102.936	87,495	87.014	0.5

Note:

A OGE Energy's Forecasted Increase in Capital Expenditures

B Forecasted Average Increase for 32 Electric Utilities

#### Oklahoma Gas and Electric Company Weighted Cost of Capital Staff Recommendation

Component	Amount	Proportion	Rate	Wtd Cost	Pre-tax
Long Term Debt	\$2,793,106,553	34.92%	5.68%	1.98%	1.98%
Short Term Debt	\$167,385,484	2.09%	0.76%	0.02%	0.02%
Common Equity	\$2,770,518,356	34.64%	9.50%	3.29%	5.35%
Customer Deposits	\$77,441,663	0.97%	1.47%	0.01%	0.01%
Accumulated Deferred Income Taxes	\$1,876,827,334	23.46%	0.00%	0.00%	0.00%
Post-1970 ADITC - Long Term Debt	\$1,172,737	0.01%	5.68%	0.00%	0.00%
Post-1970 ADITC - Short Term Debt	\$70,280	0.00%	0.76%	0.00%	0.00%
Post-1970 ADITC - Equity	\$1,163,253	0.01%	9.50%	0.00%	0.00%
Current, Accrued and Other Liabilities	\$302,724,921	3.78%	0.00%	0.00%	0.00%
Other Capital Items	\$8,082,810	0.10%	8.53%	0.01%	0.01%
Totals	\$7,998,493,390	100.00%		5.31%	7.37%

1.6274

#### **Revenue Conversion Factor**

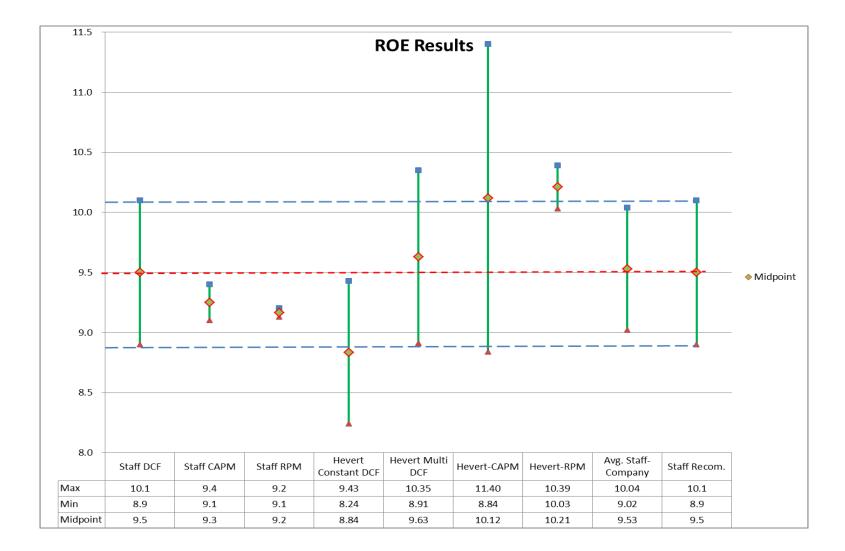
Staff Staff 6/30/16 Recommended Recommended **External Capital** Balances Proportions Balances Long-Term Debt (Gross) 2,555,298,990 49.10% 2,834,009,401 Short-Term Debt 41,043,240 2.90% 167,385,484 Common Equity 3,175,571,011 48.00% 2,770,518,356 5,771,913,241 100.00% 5,771,913,241 L-T Debt Staff Adjusted Amount 2,834,009,401 Net Discount and Premium (\$40,902,848) Total 2,793,106,553 Post-1970 ADITC Components \$2,406,269 Proportions Balances Long Term Debt \$2,793,106,553 48.74% \$1,172,737 Short Term Debt \$167,385,484 2.92% \$70,280 Common Equity \$2,770,518,356 48.34% \$1,163,253 Total \$5,731,010,393 100.00% \$2,406,269

# **DIRECT EXHIBIT RP-35**

# Oklahoma Gas and Electric Company Weighted Cost of Debt

Component	Weighted Cost
Long-term Debt Short-term Debt Customer Deposits ADITC - LT Debt ADITC - ST Debt Other Capital Items	1.98% 0.02% 0.01% 0.00% 0.00% 0.00%
Total	2.02%

Source: Direct Exhibit RP-39



# OKLAHOMA GAS AND ELECTRIC GOMRANY 1/31/2017 9:53:49 AND BECT EXHIBIT RP-37 DOCKET NO. 16-052-U DIRECT EXHIBITS OF REGIS POWELL

**TABLE 9.5** 

	&_ &	S MEASURING RELATIONSHIP RATES AND RISK PREMIUMS	
Study	Period	Indices Compared	Findings <u>1</u> /
Harris (1986)	1982-1984	S&P 500 vs. 20-year T-bonds	(0.51%)
Carleton, Chambers & Lakonishok (1983)	1978-1980	Authorized ROE and market- to-book ratios	(0.33%)
Brigham, Shome & Vinson (1985)	1966-1979 1980-1984	S&P 500 vs. high-grade corporate bonds	0.73% (0.63%)
Harris & Marston (1992)	1982-1984 1985-1987 1988-1971	S&P 500 vs. long-term T-bonds	(0.64%) (0.74%) (0.79%)
Maddox, Pippert & Sullivan (1995)	1980-1993	30 electric utilities vs. 30-year T-bonds	(0.37%)

1/ Indicated change in risk premium resulting from one percentage point increase in interest rates.

The reason cited for this observed inverse relationship is "interest rate risk" (when interest rates rise, bondholders suffer a capital loss) as the driving force in bondholders' decision-making and a firm's earning power as the focus on stockholders' decision-making. Therefore, if bondholder's fear of interest rate risk exceeds stockholders' fear of loss of earning power (as it often does in periods of high inflation) the risk differential will narrow and the risk premium will decline (Morin, 2006, 128).

#### 3. Should risk premiums be measured using nominal or real values?

The third question concerns whether risk premiums should be evaluated net of the effect of inflation. It has long been recognized that inflation's impact on expected returns is not constant over time. Further, there is not a constant relationship between different levels of inflation and interest rates. For example, Gordon and Halpern found "the real rate of return on bonds is an increasing function of the variability of the inflation rate, and not the inflation rate

# OKLAHOMA GAS AND ELECTRIC GOMRANN 1/31/2017 9:53:49 AND BECT EXHIBIT RP-37 DOCKET NO. 16-052-U DIRECT EXHIBITS OF REGIS POWELL

itself' (Gordon and Halpern, 1976, 563). This conclusion questions the use of nominal interest rates in estimating risk premiums and instead suggests use of real rates.

In a related study Carleton, Chambers, and Lakonishok concluded "at least during the 1970's risk premiums were not related to the level of interest rates" (Carleton, Chambers and Lakonishok, 1983, 429). This study, which specifically focused on the cost of capital to utilizes, explicitly concluded that use of nominal interest rates did not accurately estimate risk premiums.

Another study, by Copeland, concluded that in the 1970's the volatility of inflation (rather than the level of inflation) increased the volatility and therefore, the risk of bonds vis a vis stocks. This conclusion also challenged the use of nominal interest rates in estimating risk premiums.

Other academic studies have further challenged the existence of a relationship between nominal risk premiums and interest rates. For example, a 1990 article by Einhorn found that changes in risk premiums over time are not explained simply by changes in nominal interest rates but rather by whether inflation is contained or troublesome. His findings concluded that risk premiums tend to be lower when inflation is contained (Einhorn, 1990). This conclusion also runs directly counter to the presumption of the above-mentioned inverse relationship which assumes that risk premiums are higher when interest rates are lower (which occurs when inflation is lower or contained).

#### Arithmetic vs. Compound Growth Rates

The issue of whether the arithmetic or compound growth rates better depicts investor expectations is frequently in dispute in risk premium studies. This issue has been previously discussed in Chapter 8 (Discounted Cash Flow Methods).

# CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served on all parties of record by electronic mail via the Electronic Filing System this 31st day of January, 2017.

<u>/s/ Justín Hínton</u> Justin Hinton