

Industry Observations – September 30, 2018

Power and Utilities Industry

Select Power and Utility Public Company Industry Data As of September 30, 2018

(USD in millions, except per shaw	re data)			Market 1	Data			LTM Operating Data			ata	Forwa	Forward Estimates		
		Price at	% of 52 Week				Debt / Total	Total			ΓМ	LTM	CY 2017 Revenue	CY 2017 EBITDA	
Company Name	Ticker	09/30/18	High	Equity Value]	Enterprise Value	Capital	Assets		Reve	enue	EBITDA	Estimate	Estimate	
Independent Power Produ	cers														
The AES Corporation	AES	\$ 14.00	99.2%	\$ 9,263.6	\$	29,266.6	77.1%	\$ 32,48	9.0	\$ 10	0,757.0	\$ 3,457.0	\$11,678.92	\$3,832.56	
Atlantic Power Corporation	ATP	\$ 2.15	84.5%	\$ 239.4	\$	1,125.9	80.5%	\$ 1,05	8.6	\$	311.6	\$ 123.3	\$283.37	\$179.55	
Central Pattana Public	CPN	\$ 2.57	95.1%	\$ 11,527.3	\$	11,921.4	16.6%	\$ 3,72	21.8	\$	1,038.6	\$ 556.2	\$34,874.01	\$18,694.56	
Company Limited Vistra Energy Corp.	VST	\$ 24.88	98.7%	\$ 12,903.2	\$	24,119.2	58.0%	\$ 25,88	88.0	\$	7,524.0	\$ 1,451.0	\$9,220.99	\$2,859.77	
NRG Energy, Inc.	NRG	\$ 37.40	99.9%	\$ 11,316.1	\$	28,619.1	114.5%	\$ 11,45	0.0	\$ 1	1,178.0	\$ 2,714.0	\$9,829.47	\$1,992.87	
Ormat Technologies, Inc.	ORA	\$ 54.11	76.6%	\$ 2,739.6	\$	3,995.4	46.1%	\$ 3,05	9.6	\$	695.2	\$ 308.3	\$710.48	\$364.97	
Pattern Energy Group	PEGI	\$ 19.87	79.7%	\$ 1,952.7	\$	5,106.1	52.3%	\$ 5,37	2.1	\$	470.1	\$ 265.6	\$500.06	\$390.33	
Inc.															
Electric Utilities															
American Electric Power Company, Inc.	AEP	\$ 70.88	90.8%	\$ 34,939.2	\$	59,285.6	56.7%	\$ 67,61	7.4	\$ 1	6,205.0	\$ 5,105.8	\$15,186.63	\$5,319.83	
ALLETE, Inc.	ALE	\$ 75.01	92.3%	\$ 3,852.6	\$	5,249.6	41.8%	\$ 5,10	3.3	\$	1,388.2	\$ 332.2	\$1,458.08	\$450.55	
Spark Energy, Inc.	SPKE	\$ 8.25	53.9%	\$ 110.5	\$	365.6	38.5%	\$ 48	31.3	\$	1,012.2	\$ 97.8	\$1,011.18	\$79.71	
Duke Energy Corporation	DUK	\$ 80.02	87.2%	\$ 57,002.6	\$	112,748.6	56.9%	\$ 143,10	55.0	\$ 2	3,810.0	\$ 10,238.0	\$24,281.03	\$9,604.38	
PG&E Corporation	PCG	\$ 46.01	66.0%	\$ 23,794.1	\$	42,784.1	49.6%	\$ 71,38	35.0	\$ 1	6,771.0	\$ 5,443.0	\$17,155.15	\$4,770.65	
El Paso Electric Company	EE	\$ 57.20	88.9%	\$ 2,327.5	\$	3,781.2	54.0%	\$ 3,64	4.2	\$	908.9	\$ 332.5	\$917.81	\$274.11	
Edison International	EIX	\$ 67.68	81.2%	\$ 22,050.9	\$	38,768.9	50.9%	\$ 53,50	3.0	\$ 13	2,868.0	\$ 4,194.0	\$12,653.01	\$4,371.71	
Entergy Corporation	ETR	\$ 81.13	92.2%	\$ 14,672.8	\$	31,939.2	68.2%	\$ 48,47	1.2	\$ 1	1,120.8	\$ 3,014.4	\$11,324.27	\$3,286.66	
Exelon Corporation	EXC	\$ 43.66	96.9%	\$ 42,171.5	\$	79,779.5	52.2%	\$ 119,48	35.0	\$ 3.	5,521.0	\$ 10,035.0	\$32,977.32	\$8,875.78	
FirstEnergy Corp.	FE	\$ 37.17	96.9%	\$ 18,065.4	\$	37,228.4	73.9%	\$ 39,44	3.0	\$ 1:	3,931.0	\$ 4,226.0	\$11,345.53	\$3,995.12	
IDACORP, Inc.	IDA	\$ 99.23	97.8%	\$ 5,000.5	\$	6,656.4	43.6%	\$ 6,28	88.6	\$	1,364.5	\$ 469.0	\$1,351.68	\$460.92	
Evergy, Inc.	EVRG	\$ 54.92	92.6%	\$ 14,921.1	\$	22,414.4	43.8%	\$ 26,07	5.2	\$:	3,670.9	\$ 1,503.3	\$4,526.46	\$1,630.07	
Hawaiian Electric Industries, Inc.	HE	\$ 35.59	91.9%	\$ 3,875.0	\$	5,767.2	48.7%	\$ 12,91	1.6	\$:	2,757.8	\$ 576.7	\$2,550.17	\$549.61	
ITC Limited	ITC	\$ 4.10	92.2%	\$ 50,245.1	\$	48,439.6	0.1%	\$ 9,87	9.2	\$ (5,676.7	\$ 2,527.2	\$430,860.60	\$168,105.50	
PPL Corporation	PPL	\$ 29.26	75.9%	\$ 21,054.6	\$	42,579.6	65.0%	\$ 43,04	2.0	\$ '	7,772.0	\$ 4,344.0	\$7,648.63	\$4,084.72	
NextEra Energy, Inc.	NEE	\$ 167.60	95.4%	\$ 79,040.9	\$	114,279.9	46.6%	\$ 98,60	3.0	\$ 1	6,361.0	\$ 8,089.0	\$17,707.88	\$9,444.28	
OGE Energy Corp.	OGE	\$ 36.32	96.2%	\$ 7,254.2	\$	10,454.6	43.8%	\$ 10,70	3.0	\$:	2,260.4	\$ 808.7	\$2,306.56	\$798.73	
Otter Tail Corporation	OTTR	\$ 47.90	96.3%	\$ 1,899.9	\$	2,510.0	45.5%	\$ 2,02	7.4	\$	902.0	\$ 209.1	\$872.50	\$0.00	
PNM Resources, Inc.	PNM	\$ 39.45	85.8%	\$ 3,142.3	\$	6,091.2	60.9%	\$ 6,84	9.0	\$	1,425.5	\$ 545.3	\$1,491.46	\$591.33	
Pinnacle West Capital	PNW	\$ 79.18	85.6%	\$ 8,866.1	\$	14,397.5	48.7%	\$ 17,67	2.0	\$:	3,694.5	\$ 1,489.5	\$3,612.66	\$1,375.79	
Portland General Electric	POR	\$ 45.61	91.0%	\$ 4,070.2	\$	6,448.2	49.4%	\$ 7,97	5.0	\$	1,982.0	\$ 745.0	\$2,006.02	\$738.13	
PPL Corporation	PPL	\$ 29.26	75.9%	\$ 21,054.6	\$	42,579.6	65.0%	\$ 43,04	2.0	\$	7,772.0	\$ 4,344.0	\$7,648.63	\$4,084.72	
The Southern Company	SO	\$ 43.60	81.5%	\$ 44,216.3	\$	95,317.3	62.3%	\$ 111,71	7.0	\$ 2:	3,786.0	\$ 8,009.0	\$22,798.80	\$8,287.33	
UIL Energy Limited	UIL	\$ 0.03	76.4%	\$ 7.0	\$	6.2	0.0%	\$	7.8	\$	0.0	\$ (0.7)	N/A	N/A	
Unitil Corporation	UTL	\$ 50.90	95.9%	\$ 756.7	\$	1,185.8	57.6%	\$ 1,20	4.5	\$	433.9	\$ 118.1	\$426.16	\$117.99	
Xcel Energy Inc.	XEL	\$ 47.21	90.4%	\$ 24,034.0	\$	40,539.0	57.6%	\$ 44,83	55.0	\$ 1	1,452.0	\$ 3,743.0	\$11,785.86	\$3,711.98	

The material contained in this publication is meant to provide general information regarding valuation topics. This publication does not constitute investment advice with respect to the securities of any company discussed herein, is not intended to provide information upon which to base an investment decision, and should not be construed as such. Professional advice should be obtained before taking any action based on the information contained herein. Publicly available information utilized in this publication has been obtained from sources deemed to be reliable. Houlihan does not guarantee the accuracy or completeness of the information provided within this publication. The material presented reflects information known to the authors at the time this publication was written and this information is subject to change.

Select Power and Utility Public Company Industry Data As of September 30, 2018

Gas Utilities													
AmeriGas Partners, L.P.	APU	\$ 39.51	81.7%	\$ 3,673.5	\$ 6,468.0	79.7%	\$ 3,926.3	\$	2,801.2	\$	634.5	\$2,885.17	\$633.0
Atmos Energy	ATO	\$ 93.91	98.6%	\$ 10,442.9	\$ 13,810.8	43.3%	\$ 11,874.4	\$	3,115.5	\$	1,084.2	\$3,200.95	\$1,089.5
Corporation													
Chesapeake Utilities Corporation	CPK	\$ 83.90	92.3%	\$ 1,374.2	\$ 1,856.5	50.5%	\$ 1,505.6	\$	696.7	\$	135.0	\$671.10	\$134.60
Ferrellgas Partners, L.P.	FGP	\$ 2.21	42.3%	\$ 214.7	\$ 2,188.3	191.1%	\$ 1,363.3	\$	2,073.1	\$	207.2	\$1,846.80	\$235.78
Spire Inc.	SR	\$ 73.55	88.8%	\$ 3,726.7	\$ 6,097.3	50.6%	\$ 6,584.9	\$	1,984.5	\$	463.8	\$2,001.18	\$468.85
National Fuel Gas	NFG	\$ 56.06	93.6%	\$ 4,818.4	\$ 6,590.7	52.4%	\$ 6,036.5	\$	1,592.7	\$	728.0	\$1,687.53	\$731.30
ONE Gas, Inc.	OGS	\$ 82.28	99.0%	\$ 4,321.2	\$ 5,687.3	42.2%	\$ 5,153.0	\$	1,631.7	ş	448.2	\$1,605.77	\$437.74
New Jersey Resources Corporation	NJR	\$ 46.10	96.3%	\$ 4,069.6	\$ 5,386.0	47.6%	\$ 3,977.4	\$	2,804.3	\$	287.3	\$2,856.97	\$288.30
Northwest Natural Holding Company	NWN	\$ 66.90	95.1%	\$ 1,926.8	\$ 2,723.8	55.2%	\$ 3,081.4	\$	725.2	\$	234.2	\$741.64	\$211.43
South Jersey Industries, Inc.	SJI	\$ 35.27	97.5%	\$ 3,007.8	\$ 6,101.1	72.1%	\$ 5,914.5	\$	1,397.5	\$	340.8	\$1,445.21	\$205.10
Suburban Propane Partners, L.P.	SPH	\$ 23.53	87.0%	\$ 1,444.9	\$ 2,703.6	68.6%	\$ 2,131.5	\$	1,348.6	\$	286.6	\$1,391.61	\$288.99
Strabag SE	STR	\$ 39.50	91.9%	\$ 4,053.0	\$ 2,690.0	24.9%	\$ 12,592.2	ş	16,558.6	\$	800.6	\$14,164.02	\$867.29
Southwest Gas Holdings,	SWX	\$ 79.03	91.0%	\$ 3,883.0	\$ 5,940.0	52.9%	\$ 6,654.6	\$	2,833.8	\$	587.9	\$1,346.45	\$684.8
Inc.				 	 			_		_			
UGI Corporation	UGI	\$ 55.48	99.2%	\$ 9,645.9	\$ 14,129.8	51.4%	\$ 11,876.7	\$	7,492.0	\$	1,619.4	\$7,708.54	\$1,499.80

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt); EBITDA (camings before interest, taxes, depreciation and amortization)
Source: Capital IQ

Trading Multiples

Select Power and Utility Public Company Valuation Metrics As of September 30, 2018

I TM Operating Statistics

(USD in millions, except per share data)

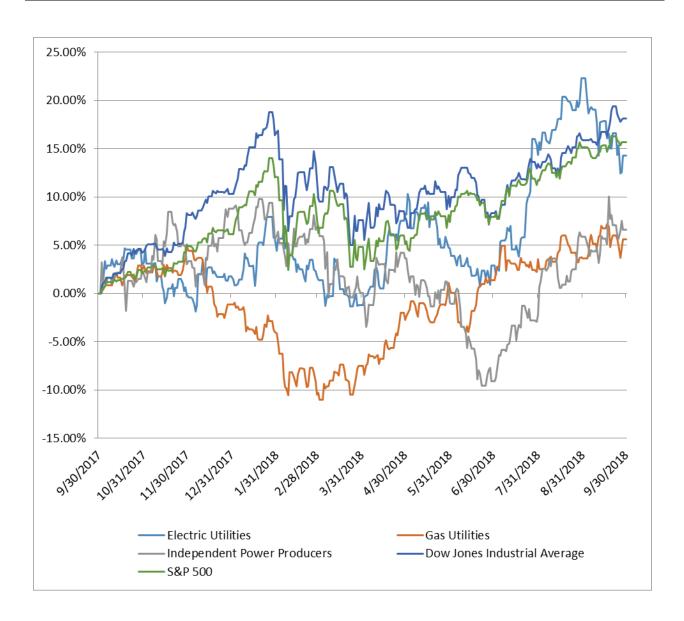
			I	LTM Operat	ting Statistics	3					
		Return	Return	Return				TEV/	TEV/	TEV/	TEV/
		On	On	On	Revenue	EBITDA	EBITDA	LTM	CY 2017	LTM	CY 2017
Company Name	Ticker	Assets	Equity	Capital	Growth	Growth	Margin	Revenue	Revenue	EBITDA	EBITDA
Independent Power Pr	oducers										
The AES Corporation	AES	4.2%	9.4%	5.6%	32.4%	1.8%	32.1%	2.7x	2.5x	8.5x	7.6x
Atlantic Power	ATP	1.4%	-13.9%	1.6%	-26.6%	-35.3%	39.6%	3.6x	4.0x	9.1x	6.3x
Corporation											
Central Pattana Public	CPN	6.9%	23.9%	10.6%	10.7%	5.7%	53.6%	11.5x	0.3x	21.4x	0.6x
Company Limited											
Vistra Energy Corp.	VST	0.7%	-5.9%	0.9%	32.5%	2.9%	19.3%	3.2x	2.6x	16.6x	8.4x
NRG Energy, Inc.	NRG	5.6%	-74.4%	7.6%	8.4%	28.2%	24.3%	2.6x	2.9x	10.5x	14.4x
Ormat Technologies,	ORA	3.9%	11.6%	4.5%	0.3%	-3.4%	44.4%	5.7x	5.6x	13.0x	10.9x
Inc.											
Pattern Energy Group	PEGI	0.4%	-3.1%	0.4%	23.5%	33.2%	56.5%	10.9x	10.2x	19.2x	13.1x
Inc.	3.6	2.20/	T 50/	4.50/	44.60/	4.70/	20.59/		4.0	444	0.0
	Mean	3.3%	-7.5%	4.5%	11.6%	4.7%		5.7x	4.0x	14.1x	8.8x
	Median	3.9%	-3.1%	4.5%	10.7%	2.9%	39.6%	3.6x	2.9x	13.0x	8.4x
C. Harry											
Gas Utilities AmeriGas Partners, L.P.	APU	6.9%	25.8%	7.9%	16.6%	19.7%	22.7%	2.3x	2.2x	10.2x	10.2x
Timenous Fartners, Est.	711 0	0.770	25.070	7.270	10.070	17.770	22.770	2.54	2.2A	10.24	10.24
Atmos Energy	ATO	4.0%	13.9%	5.7%	12.9%	3.6%	34.8%	4.4x	4.3x	12.7x	12.7x
Change In Italia	CPK	3.8%	13.3%	5.7%	20.3%	4.7%	19.4%	2.7x	2.8x	13.7x	13.8x
Chesapeake Utilities	CPK	3.870	13.370	5./70	20.570	4./70	19.4%	2./X	2.8X	13./X	13.6X
Corporation Ferrellgas Partners, L.P.	FGP	4.4%	NM	5.3%	7.4%	-2.8%	10.0%	1.1x	1.2x	10.6x	9.3x
reneigas i aitheis, L.i .	roi	4.470	INIVI	3.370	7.470	-2.0 /0	10.070	1.11	1.2x	10.0x	9.JX
Spire Inc.	SR	2.9%	10.4%	4.1%	12.7%	0.4%	23.4%	3.1x	3.0x	13.1x	13.0x
National Fuel Gas	NFG	5.0%	21.5%	7.5%	0.8%	-6.3%	45.7%	4.1x	3.9x	9.1x	9.0x
Company											
ONE Gas, Inc.	OGS	3.6%	8.8%	5.4%	7.5%	2.1%	27.5%	3.5x	3.5x	12.7x	13.0x
New Jersey Resources	NJR	2.9%	15.6%	4.2%	27.4%	-10.7%	10.2%	1.9x	1.9x	18.7x	18.7x
Corporation	J										
Northwest Natural	NWN	2.4%	-7.9%	4.5%	-3.3%	-10.4%	32.3%	3.8x	3.7x	11.6x	12.9x
Holding Company											
South Jersey Industries,	SJI	2.7%	-2.0%	3.6%	13.9%	40.9%	24.4%	4.4x	4.2x	17.9x	29.7x
Inc.											
Suburban Propane	SPH	4.6%	12.6%	5.4%	17.1%	23.4%	21.3%	2.0x	1.9x	9.4x	9.4x
Partners, L.P.											
Strabag SE	STR	1.9%	10.9%	4.4%	11.4%	24.0%	4.8%	0.2x	0.2x	3.4x	3.1x
Southwest Gas	SWX	3.4%	11.4%	5.5%	15.7%	2.9%	20.7%	2.1x	4.4x	10.1x	8.7x
Holdings, Inc.											
UGI Corporation	UGI	6.3%	20.2%	8.6%	25.2%	20.8%	21.6%	1.9x	1.8x	8.7x	9.4x
-	Mean	3.9%	11.9%	5.6%	13.3%	8.0%	22.8%	2.7x	2.8x	11.6x	12.3x
	Median	3.7%	12.6%	5.4%	13.4%			2.5x	2.9x		11.4x
	MCGIAII	J.1 /0	14.0/0	J. + /0	1.3.4/0	J.4 /0	<i>△</i> ∠.1 /0	2.3x	2.9X	11.1X	11.4

Notes: LTM (latest twelve months); NTM (next twelve months); EBITDA (earnings before interest, taxes, depreciation and amortization); TEV (total enterprise value) Source: Capital IQ

Select Power and Utility Public Company Valuation Metrics As of September 30, 2018

Electric Utilities											
American Electric Power	AEP	2.9%	10.6%	4.6%	5.2%	3.3%	31.5%	3.7x	3.9x	11.6x	11.12
Company, Inc.											
ALLETE, Inc.	ALE	2.1%	7.4%	3.0%	-2.4%	-22.2%	23.9%	3.8x	3.6x	15.8x	11.7x
Spark Energy, Inc.	SPKE	9.3%	25.4%	13.7%	38.3%	5.2%	9.7%	0.4x	0.4x	3.7x	4.6x
Duke Energy Corporation	DUK	2.6%	6.8%	3.7%	3.6%	4.4%	43.0%	4.7x	4.6x	11.0x	11.7x
PG&E Corporation	PCG	2.2%	0.7%	4.0%	-5.5%	-14.6%	32.5%	2.6x	2.5x	7.9x	9.0x
El Paso Electric Company	EE	3.2%	9.1%	4.5%	0.0%	-2.4%	36.6%	4.2x	4.1x	11.4x	13.8x
Edison International	EIX	2.6%	3.0%	5.0%	7.4%	5.7%	32.6%	3.0x	3.1x	9.2x	8.9x
Entergy Corporation	ETR	1.8%	5.0%	3.3%	0.2%	-14.1%	27.1%	2.9x	2.8x	10.6x	9.7x
Exelon Corporation	EXC	2.6%	12.2%	4.6%	7.5%	6.4%	28.3%	2.2x	2.4x	8.0x	9.0x
FirstEnergy Corp.	FE	4.0%	-24.9%	6.0%	24.0%	15.2%	30.3%	2.7x	3.3x	8.8x	9.3x
IDACORP, Inc.	IDA	3.0%	10.4%	4.6%	2.0%	0.6%	34.4%	4.9x	4.9x	14.2x	14.4x
Evergy, Inc.	EVRG	3.2%	7.7%	4.5%	42.1%	43.7%	41.0%	6.1x	5.0x	14.9x	13.8x
Hawaiian Electric Industries, Inc.	HE	1.6%	8.6%	5.0%	9.7%	3.9%	20.9%	2.1x	2.3x	10.0x	10.5x
ITC Limited	ITC	15.9%	23.1%	19.1%	1.6%	6.7%	37.9%	7.3x	0.1x	19.2x	0.3x
PPL Corporation	PPL	4.7%	13.3%	6.1%	5.7%	6.8%	55.9%	5.5x	5.6x	9.8x	10.4x
NextEra Energy, Inc.	NEE	3.4%	23.3%	5.0%	-3.1%	-3.4%	49.4%	7.0x	6.5x	14.1x	12.1x
OGE Energy Corp.	OGE	3.0%	17.4%	4.5%	-1.3%	2.1%	35.8%	4.6x	4.5x	12.9x	13.1x
Otter Tail Corporation	OTTR	4.2%	12.2%	6.4%	7.5%	7.1%	23.2%	2.8x	3.3x	12.0x	9.3x
PNM Resources, Inc.	PNM	2.5%	5.5%	3.6%	-1.6%	-11.7%	38.3%	4.3x	4.9x	11.2x	14.4x
Pinnacle West Capital Corporation	PNW	3.0%	9.8%	5.0%	4.2%	-3.4%	40.3%	3.9x	5.0x	9.7x	13.8x
Portland General Electric Company	POR	3.0%	8.4%	4.8%	-1.8%	4.8%	37.6%	3.3x	0.1x	8.7x	0.3x
PPL Corporation	PPL	4.7%	13.3%	6.1%	5.7%	6.8%	55.9%	5.5x	5.6x	9.8x	10.4x
The Southern Company	SO	2.5%	9.2%	3.7%	5.3%	43.7%	33.7%	4.0x	6.5x	11.9x	12.1x
Unitil Corporation	UTL	3.5%	10.3%	5.5%	9.8%	0.3%	27.2%	2.7x	N/A	10.0x	N/A
Xcel Energy Inc.	XEL	2.9%	10.5%	4.6%	0.4%	-1.4%	32.7%	3.5x	4.5x	10.8x	13.1x
	Mean	3.8%	9.5%	5.6%	6.6%	3.7%	34.4%	3.9x	3.7x	11.1x	10.3x
	Median	3.0%	9.8%	4.6%	4.2%	3.9%	33.7%	3.8x	4.0x	10.8x	10.8x

Power and Utility Public Company LTM Equity Performance As of September 30, 2018



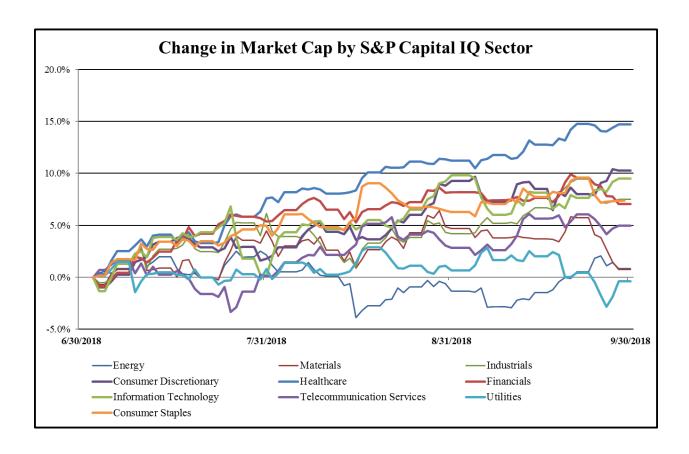
Note: The indices are derived from the equity performance of the previously listed companies. Source: Capital IQ

Recent M&A Activity in the Power and Utility Industry September 30, 2017 to September 30, 2018 (USD in millions)

Close Date	Target	Acquirer	Target Company Primary Industry	Implied Enterprise Value
3/9/2018	Energy Future Holdings Corp.	Sempra Energy	Independent Power Producers	\$18,800.00
3/8/2018	Calpine Corporation	Canada Pension Plan Investment Board; Access Industries,	Independent Power Producers	\$17,315.89
4/9/2018	Dynegy Inc.	Vistra Energy Corp.	Independent Power Producers	\$10,475.15
6/4/2018	Great Plains Energy Incorporated	Westar Energy, Inc. (nka:Evergy, Inc.)	Electric Utilities	\$9,789.74
7/6/2018	WGL Holdings, Inc.	AltaGas Ltd.	Gas Utilities	\$6,634.53
7/1/2018	Elizabethtown Gas Company	South Jersey Industries, Inc.	Gas Utilities	\$1,690.00
6/19/2018	8point3 Energy Partners LP	Capital Dynamics, Inc.	Renewable Electricity	\$1,666.28
12/28/2017	TerraForm Global, Inc.	Orion US Holdings 1 L.P.	Renewable Electricity	\$1,651.77
8/31/2018	Clearway Energy Group LLC	Global Infrastructure Partners; Global Infrastructure	Electric Utilities	\$1,348.00
11/8/2017	Gainesville Renewable Energy Center LLC	Gainesville Regional Utilities	Renewable Electricity	\$750.00
6/1/2018	Assets of Hunterstown CCGT Facility And Related	Platinum Equity, LLC; Platinum Equity Capital Partners	Electric Utilities	\$520.00
11/9/2017	Sharyland Distribution and Transmission Services, L.L.C.,	Oncor Electric Delivery Company LLC	Electric Utilities	\$401.00
6/29/2018	Canal Facilities	Stonepeak Infrastructure Partners	Electric Utilities	\$320.00
3/27/2018	Certain Generation & Related Assets of AES Ohio	Kimura Power, LLC	Renewable Electricity	\$241.00
4/24/2018	U.S. Geothermal Inc.	Ormat Nevada, Inc.	Renewable Electricity	\$219.12
6/1/2018	XOOM Energy, LLC	NRG Retail LLC	Electric Utilities	\$204.00
7/29/2018	Southern Company - Oleander LLC/Southern Company -	700 Universe, LLC	Renewable Electricity	\$195.00
3/13/2018	Recurrent Energy, LLC, 309 Megawatt Utility Solar Project	Korea Electric Power Corporation; Hanwha Investment &	Renewable Electricity	\$188.15
5/9/2018	Columbia Energy LLC, Columbia Energy Center Plant	South Carolina Electric & Gas Company	Electric Utilities	\$180.00
1/10/2018	Public Service Company of New Hampshire, Fossil	Castleton Commodities International LLC; Atlas Holdings	Electric Utilities	\$175.00
3/30/2018	Buckthorn Solar Project of NRG Energy, Inc.	NRG Yield, Inc. (nka:Clearway Energy, Inc.)	Renewable Electricity	\$173.30
12/18/2017	McKeesport Wastewater System	Pennsylvania-American Water Company, Inc.	Water Utilities	\$159.00
6/30/2018	Water Solutions facilities and related assets	NGL Energy Partners LP	Water Utilities	\$125.90
7/2/2018	Phoebe Photovoltaic Solar Project of Longroad Energy	Innergex Renewable Energy Inc.	Renewable Electricity	\$105.00
11/1/2017	NRG Energy Inc., 38 MW Solar Portfolio and Other	Clearway Energy Operating LLC	Renewable Electricity	\$100.00
8/27/2018	Nine Hydroelectric Facilities and 12.5% Stake in	Hull Street Energy, LLC	Renewable Electricity	\$83.00
8/1/2018	Boston Energy Trading and Marketing LLC	Diamond Energy Trading and Marketing, LLC	Electric Utilities	\$70.00
6/13/2018	Pentex Alaska Natural Gas Company, LLC	Interior Gas Utility	Gas Utilities	\$55.50
9/18/2018	Palm Beach Resource Recovery Corporation	Covanta Pasco, Inc.	Electric Utilities	\$45.00
12/1/2017	92 MWp IS-42 Photovoltaic Project in North Carolina	Falck Renewables S.p.A.	Renewable Electricity	\$43.43
10/31/2017	Strata Solar LLC, Four Solar Projects in North Carolina	Dominion Energy, Inc.	Renewable Electricity	\$40.00
11/16/2017	Texas Water Alliance Limited	Guadalupe-Blanco River Authority	Water Utilities	\$31.00
7/27/2018	Koma Kulshan Hydro Project	Atlantic Power Corporation	Renewable Electricity	\$26.40
12/21/2017	Georgia Mountain Community Wind, LLC	Greenbacker Renewable Energy Company LLC	Renewable Electricity	\$25.10
3/1/2018	Outstanding U.S. Retail Power Contracts Of TransCanada	EDF Energy Services, LLC	Electric Utilities	\$23.00
6/4/2018	9.7 Megawatt (MW) Wind Farm in Two Dot, Montana of	NorthWestern Corporation	Renewable Electricity	\$18.50
4/18/2018	Tulare Fuel Cell Project of FuelCell Energy Inc.	NRG Yield, Inc. (nka:Clearway Energy, Inc.)	Renewable Electricity	\$11.00
7/1/2018	Elkton Gas Company	South Jersey Industries, Inc.	Gas Utilities	\$10.00
12/13/2017	7 MW-dc Solar Energy Facility of BayWa r.e. Solar Projects		Renewable Electricity	\$10.00
1/29/2018	Amec Foster Wheeler plc, Nuclear Operations in North	Kinectrics Inc.	Electric Utilities	\$7.84
3/28/2018	Wastewater System of Village of Fisher	Illinois American Water Company	Water Utilities	\$6.80
2/1/2018	Propane Distribution Assets and the Fuels and Lubricants	Superior Plus Energy Services, Inc.	Gas Utilities	\$6.40
10/20/2017	230 MW Roanoke Valley Power Project	N/A	Electric Utilities	\$5.00
11/1/2017	REP Energy, LLC	Summer Energy Holdings, Inc.	Electric Utilities	\$4.68
7/21/2018	Sharyland Utilities, L.P., Certain of the Electricity	Oncor Electric Delivery Company LLC	Electric Utilities	\$3.86
4/5/2018	Farmington Water System	Illinois American Water Company	Water Utilities	\$3.75
5/30/2018	Turner Ranches Water and Sanitation Company	Global Water Resources, Inc.	Water Utilities	\$2.80
2/16/2018	Assets Related To Welding Supply And Gas Distribution	MagneGas Corporation (nka:MagneGas Applied	Gas Utilities	\$2.50
5/18/2018	Sundale Utilities, Inc.	Illinois American Water Company	Water Utilities	\$2.00
4/3/2018	Enertrade Electric LLC (nka:Zenergy Power & Gas, Inc.)	Zenergy Power & Gas, Inc.	Electric Utilities	\$1.89
9/27/2018	EnterSolar LLC	EDF Renewable Energy, Inc.	Renewable Electricity	NA
9/24/2018	40 MW Idaho Solar 1 Project In Kuana County, Idaho	Sustainable Power Group, LLC	Renewable Electricity	NA
9/21/2018	Portfolio of Solar Energy Projects in Massachusetts	Ameresco, Inc.; Renewable Power Group of Goldman	Renewable Electricity	NA
9/19/2018	Six Solar Projects in New York of US Light Energy	Standard Solar, Inc.	Renewable Electricity	NA
9/13/2018	Solar Power Generating Station in Nipton, California	American Green, Inc.; CannAwake Corporation	Renewable Electricity	NA
9/11/2018	13.3 MW Community Solar Portfolio of ReneSola Ltd	Virgo Investment Group, L.P.	Renewable Electricity	NA
9/10/2018	A Utility-Scale Solar Plus Storage Project	Eolus North America Inc.	Renewable Electricity	NA
9/4/2018	Blue Mountain Facility In Nevada	Cyrq Energy, Inc.	Renewable Electricity	NA
	and the second of the second o	-/ 1 - 0/,		- 1111

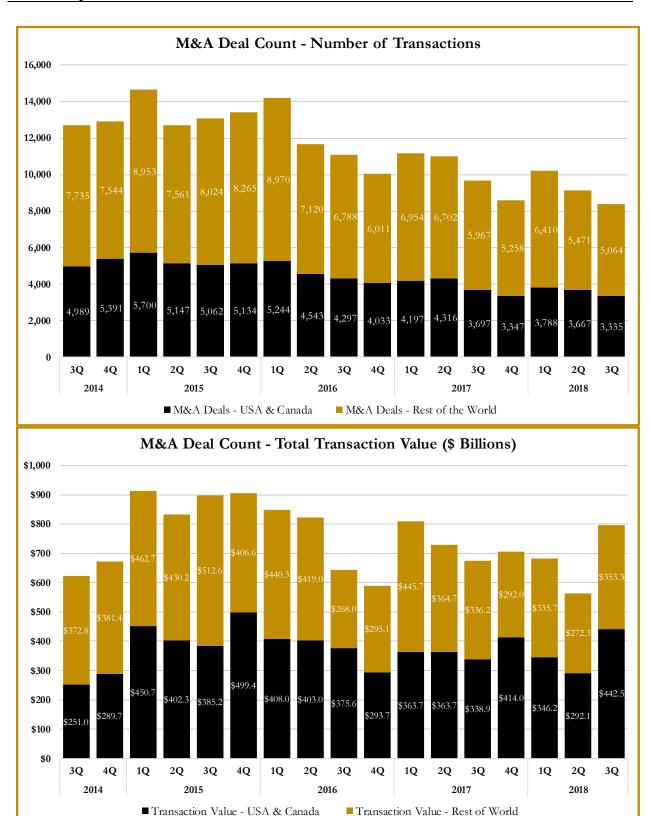
Source: Capital IQ

S&P Capital IQ - Sector Last 3 Month Equity Performance As of September 30, 2018

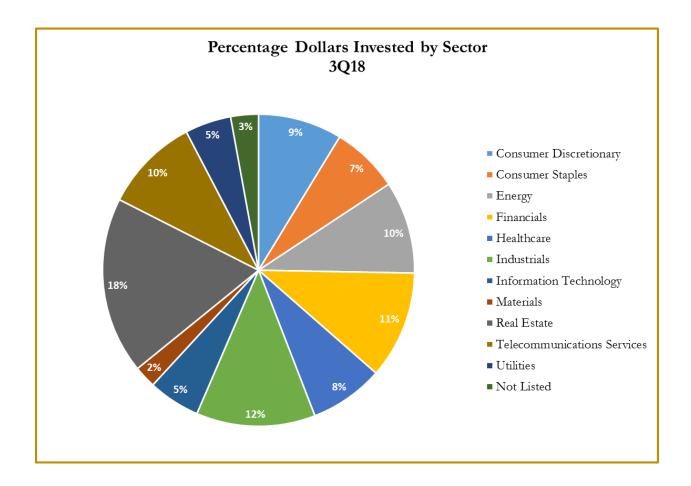


Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

M&A Deal Flow Statistics by S&P Capital IQ Sector As of September 30, 2018



M&A Deal Flow Statistics by S&P Capital IQ Sector As of September 30, 2018





About Us

Houlihan Capital is a leading, solutions-driven valuation, financial advisory and boutique investment banking firm. We pride ourselves on being thought leaders in an ever-changing landscape.

Houlihan Capital is SOC-compliant, a FINRA and SIPC member and committed to the highest levels of professional ethics and standards.

Valuation & Financial Advisory

We provide an array of services that include enterprise valuations, portfolio valuation, valuation of carried interest, transaction opinions, tax and financial reporting compliance, purchase price allocations, and a wide variety of consulting services through our Financial Advisory Group.

Investment Banking

Through our Investment Banking Group, we offer sell side/buy side advisory and capital raises. Through our Special Situations desk, we provide services that fit outside the archetypal verticals, including liquidity solutions, transactional advisory, and secondary market advisory and trading.

Litigation Support

Our team provides support for a wide variety of situations including commercial and shareholder disputes, derivatives and structured finance litigation, and fraudulent conveyance.

> For additional information about our industry expertise and services, visit:

> > www.houlihancapital.com

Andrew Smith asmith@houlihancapital.com 312.450.8610

Paul Clark pclark@houlihancapital.com 312.450.8656

Michael Norton 312.450.8628

Monica Blocker mnorton@houlihancapital.com mblocker@houlihancapital.com 312.450.8699