

# Utilities – U.S.

## Outlook 2023

Defensive Growth with a Clean Energy IRA Boost



Source: thirdway.org

Tab



#### **US Utilities- Outlook 2023**

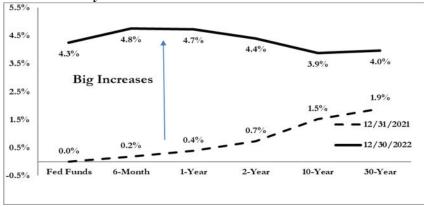
In 2022, the S&P Utility Index returned a modest 2%, but outperformed the negative (18%) return from the S&P 500. In the face of dramatic increases in inflation, interest rates, and energy prices as well as recession fears, utility stocks benefited from their defensive appeal, earnings stability and energy infrastructure growth opportunities. The negative earnings impact of higher costs was mitigated by utility customer bill adjustments and other measures. See Table 1.

ole 1 Utili	ties Over the	e Past Seve	eral Period	ls	
As of December 30, 2022	2022A	2021A	2020A	3-Year	5-Year
	Total	Total	Total	Total	Total
	<u>Return</u>	<u>Return</u>	Return	<u>Return</u>	Return
S&P 500 Utilities	1.6%	17.7%	0.5%	20.1%	58.0%
S&P 500 Index	-18.1	28.7	18.4	24.8	56.9
10-Year Treasury Yield (Beginning of Period)	1.52	0.92	1.92	1.92	2.40
10-Year Treasury Yield (End of Period)	3.88	1.52	0.92	3.88	3.88

Source: Thomson One

Despite five consecutive rate hikes (current overnight target of 4.25-4.5%), the Fed believes inflation remains too strong. In addition, the US and Europe face an ongoing energy dilemma, including higher prices and supply shortages, driven by the transformation from fossil fuel dependency to clean energy. On the other hand, the US treasury yield curve is inverted (Exhibit 1) and indicates a developing recession, which would likely lead to lower inflation and lower interest rates. Under either a recessionary or strong growth economy, utilities would expect to deliver positive earnings and dividend growth. In addition, the August 2022 Inflation Reduction Act (IRA) provides significant incentives for accelerated clean energy investment for decades to come. That said, we believe investors are better served owning higher quality, financially strong utilities which can better absorb ongoing inflationary pressures.

Exhibit 1 US Treasury Yield Curve Rises and Inverts On Recession Fears



Source: US Department of Treasury

#### The "Top Ten Reasons to Consider Utility Stocks" are outlined below:

- 1) Defensive profile including fuel and inflation cost-recovery
- 2) Reasonable valuation of 18x 2023 P/E multiple, down from 23x (Table 3 & Appendix on page 22-23)
- 3) Competitive current return of 3.4% compared to the 10-year treasury yield of 3.8%.
- 4) Above historical average earnings and dividend growth potential
- 5) Electrification to enhance electric demand (Electric vehicle charging stations, heat pumps)
- 6) Renewable and net-zero carbon standards create long runway of rate base investment
- 7) Improving ESG profiles (great power transformation)
- 8) Financial engineering, including ongoing consolidation and simplification
- 9) Possibility interest rates have peaked and US is in recessionary environment
- 10) Inflation Reduction Act to drive clean energy investment for decades

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#### **S&P 500 Sector Performance**

GABELL FUNDS	Ι

Sector	Percent Change
Energy	65.7 %
Utilities	1.6
Consumer Staples	-0.6
Healthcare	-2.0
Financials	-10.5
Materials	-11.7
S&P 500	-18.1
Industrials	-19.4
Real Estate	-26.8
Info Tech	-28.2
Consmer Discretionary	-37.0
Communications	-39.9

Source: Thomson One

#### **Performance & Valuation**

The S&P utility sector was one of the top performing sectors in 2022 only lagging the S&P 500 Energy sector, which benefitted from significantly increased oil and gas prices as well as investor sentiment. Other strong performers were the defensive Healthcare and Consumer staples sectors. In 2022, our universe of 45 electric utilities returned a median 4%, 14 gas utilities 3% and 9 water utilities -7%. Please see Table 3 for Utility Subgroup Metrics and appendix on pages 21-23 for more complete financial metrics of our utility universe.

- Electric utility valuation multiples have declined from 23x forward earnings in early 2020 to 18x forward earnings (2023) estimates. Over the past twenty-five years, utility forward multiples have ranged between 10x and 23x earnings with a median of 17.1x.
- The gas utility performance reflects recovered investor sentiment partially offset by greater challenges to maintain earnings outlooks. Gas utilities currently trade at 18x 2023 earnings estimates. The median multiples had declined to as low as 15x forward earnings during the period from September 2019 through September 2021 when natural gas fell from favor given its carbon emissions.
- The water utility under-performance reflects the impact of higher interest rates on higher multiples stocks. Water
  utilities trade at the highest multiples due to their scarcity, small size, takeover premium, ESG value, and longterm growth potential through consolidation and privatization.
- The six Canadian electric and gas utilities under-performed, including Algonquin (AQN-6.84-down 50%). The regulatory environments are more challenging than many US utility jurisdictions.

Table 3

#### **Utility Subgroup Statistics**

	Total	Total									One-Year	EV/EBITDA
	Return	Return	Pri	ce/Earning	ŗs	E	PS Growth	l	CAGR	Current	Dividend	Multiple
<u>Utility Subgroup</u>	2022A	2021A	2022E	2023P	2024P	2022E	2023P	2024P	2021-2024	Return	Growth	2022
US Electric	3%	14%	19.1X	18.2X	17.1X	5.9%	5.3%	6.1%	5.2%	3.3%	5.1%	12.4X
Power Developers	-8	-13	17.6	22.0	18.7	8.0	9.0	9.0	10.0	4.4	6.0	10.6
Canadian Electric	-11	22	15.2	14.7	14.0	5.9	6.1	5.3	5.7	4.7	4.5	12.0
US Gas Utilities	3	19	18.7	17.6	16.4	4.1	9.0	7.0	6.8	3.5	5.6	12.0
Water Utilities	-7	21	34.1	31.7	29.5	11.2	7.4	6.0	7.2	1.8	5.0	18.4

Source: Thomson, First Call, Gabelli Funds Estimates

#### **Top Performers**

In 2022, the top performing utility stocks were Constellation Energy (CEG), South Jersey Industries (SJI), PG&E (PCG), New Jersey Resources (NJR) and Sempra Energy(SRE). CEG, the sector's only pure-play merchant nuclear generators, was opportunistically spun-off from Exelon amidst high power prices and demand for zero-carbon baseload generation. On February 24, 2022, SJI agreed to be acquired by an Infrastructure Fund for a 53% premium. PCG continues to rebuild its reputation and earnings power after emerging wildfire-related bankruptcy. As discussed earlier, energy companies benefitted from higher gas prices gas utilities, including



Sempra Energy, which is an electric and gas utility but also owns and develops LNG export facilities (Cameron in LA and Port Arthur in TX). See Table 4.

Table 4 Best and Worst Performers
Best Utility Stock Performers in 2022

		2022 YTD	2021A	12-Mont	hs (mos)
Symbol	<b>Price</b>	Return (%)	Return (%)	<u>High</u>	Low
CEG	86.21	108	NA	98	38
SJI	35.53	41	27	\$36	\$23
PCG	16.26	35	-3	16	10
NJR	49.62	25	20	51	38
SRE	154.54	21	7	176	130
AES	28.76	21	6	30	19
	CEG SJI PCG NJR SRE	CEG 86.21 SJI 35.53 PCG 16.26 NJR 49.62 SRE 154.54	Symbol         Price         Return (%)           CEG         86.21         108           SJI         35.53         41           PCG         16.26         35           NJR         49.62         25           SRE         154.54         21	Symbol         Price         Return (%)         Return (%)           CEG         86.21         108         NA           SJI         35.53         41         27           PCG         16.26         35         -3           NJR         49.62         25         20           SRE         154.54         21         7	Symbol         Price         Return (%)         Return (%)         High           CEG         86.21         108         NA         98           SJI         35.53         41         27         \$36           PCG         16.26         35         -3         16           NJR         49.62         25         20         51           SRE         154.54         21         7         176

#### Worst Utility Stock Performers in 2022

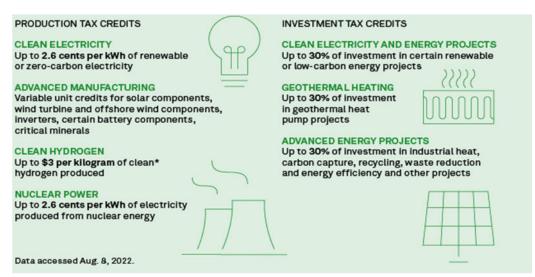
			YTD	2021A	12-Mont	hs (mos)
Electric & Gas Utility	Symbol	<b>Price</b>	Return (%)	Return (%)	<u>High</u>	Low
Algonquin	$\mathbf{AQN}$	6.52	-50	-8	\$16	\$6
NRG Energy	NRG	31.82	-22	19	48	31
Atalntica Sustainable	$\mathbf{AY}$	25.90	-22	-1	37	24
Dominion Energy	$\mathbf{D}$	61.32	-18	8	89	57
Chesapeake Utilities	CPK	118.18	-16	37	146	106

Source: Thomson One

#### **Game-Changing Incentives Provides Tailwinds for the Next Decade**

In August 2022, the Inflation Reduction Act (IRA) was signed into law and established significant financial incentives for clean energy. IRA solidified, expanded and extended 30%-investment tax credits (ITC's) and 2.6 cent production tax credits (PTC's) for existing wind (on-shore and offshore) and solar generation and established new credits for nuclear, geothermal, storage, carbon capture, hydrogen as well as others. The ITC's can be increased to 40% based on domestic content and certain other conditions. The credits are in place for at least ten years and phase out in 2032 but only if electric sector emissions fall by 75% compared to 2022 levels. Further, the credits are marketable and can be bought and sold, which simplifies the previous complex tax equity structures.

Exhibit 2 Selected Benefits of the IRA



Source: S&P Global Market Intelligence

Most utilities consider IRA to offer "game-changing" incentives and plan to accelerate already ambitious infrastructure plans. The tax credits allow the utilities to lower the development, construction and operating costs of renewable energy generation, which means lower future customer bill increases. The increased rate base investment will help achieve ambitious carbon-reduction plans and aid earnings growth.



#### **Utilities Target Above-Historical Average Earnings Growth**

Based on Thomson One consensus EPS estimates, our universe of 70 electric, gas and water utility stocks are forecast to grow 5.9% in 2022 (year-end earnings reports are expected in late January/February 2023) over 2021 and another 5.3% in 2023. The outlook follows 5.5% annual EPS growth over the past three years (2018-2021). Many utilities guide investors to targeted EPS growth ranges, which currently range between 4-8%, (median range is 5-7% and stronger utilities target 6-8%). Growth rates have increased over the past several years driven by growing investment in rate base. (Table 5).

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Table 5         Carbon Targets and EPS Growth Rates For Selected Utilities										
						Consensus	Management	Phase 1	Scope 1	S&P
		2021A	2022E	2023P	2024P	2021-24	Target	Target GHG	Net	Credit
Company	Symbol	EPS	EPS	EPS	EPS	CAGR	CAGR	Reduction	Zero	Rating
		\$	\$	\$	\$	%	%			
AES Corp	AES	1.52	1.64	1.75	1.91	7.9	7-9%		2040	BBB-
ALLETE, Inc.	ALE	3.23	3.78	3.95	4.13	8.5	5-7%	70% by 2030	2050	ввв
Alliant Energy Corporation	LNT	2.63	2.79	2.89	3.08	5.4	5-7%	50% by 2030	2050	Α-
Ameren Corporation	AEE	3.84	4.07	4.36	4.68	6.8	6-8%	50% by 2030	2050	BBB+
American Electric Power	AEP	4.74	5.02	5.30	5.65	6.0	6-7%	80% by 2030	2050	Α-
Avangrid Inc.	AGR	2.18	2.33	2.28	2.42	3.5	6-7%	50% by 2032	2035	BBB+
Avista Corporation	AVA	2.10	1.89	2.34	2.45	5.3	5%	30% by 2030	2045	ввв
American Water Works	AWK	3.98	4.46	4.78	5.17	9.1	7-9%	40% by 2025	2050	BBB+
Black Hills Corporation	вкн	3.74	4.04	4.18	4.41	5.6	5-7%	70% by 2040	2050	BBB+
CenterPoint Energy, Inc.	CNP	1.64	1.38	1.49	1.61	-0.6	6-8%	80% y 2025	2035	BBB+
CMS Energy Corporation	CMS	2.65	2.88	3.11	3.38	8.4	6-8%	60% by 2025	2040	BBB+
Consolidated Edison, Inc.	ED	4.39	4.52	4.80	5.11	5.2	5-7%	70% by 2030	2040	A-
Constellation Energy Group	CEG	_	2.31	4.59	5.82	_	_	95% by 2030	2040	BBB-
Dominion Energy	D	3.86	4.12	4.20	4.41	4.5	6.5%	55% by 2035	2050	BBB+
DTE Energy Company	DTE	5.99	6.02	6.27	6.69	3.7	6-8%	50% by 2028	2050	BBB+
Duke Energy Corporation	DUK	5.24	5.30	5.67	6.02	4.7	5-7%	50% by 2030	2050	BBB+
Edison International	EIX	4.59	4.58	4.81	5.15	3.9	5-7%	80% by 2030	2045	ввв
Entergy Corporation	ETR	6.02	6.38	6.76	7.22	6.2	5-7%	50% by 2030	2050	BBB+
Evergy	EVRG	3.54	3.57	3.67	3.98	4.0	6-8%	70% by 2030	2045	A-
Eversource Utilities	ES	3.86	4.10	4.37	4.69	6.7	5-7%	100% by 2030	2030	A-
Exelon Corporation	EXC	2.82	2.26	2.36	2.51	-3.8	6-8%	50% by 2030	2050	BBB+
FirstEnergy Corp.	FE	2.60	2.44	2.49	2.68	1.0	6-8%	30% by 2030	2050	BBB-
Hawaiian Electric Industries	HE	2.25	2.15	2.25	2.54	4.1	4-5%	70% by 2040	2045	BBB-
IDACORP, Inc.	IDA	4.85	5.12	5.20	5.45	4.0	_	35% by 2025	2045	BBB
MDU Resources	MDU	1.87	1.77	2.12	2.31	7.3	5-8%	45% by 2030	2050	BBB+
MGE Energy, Inc.	MGEE	2.60	3.17	3.45	3.80	13.5	4.6%	65% by 2030	2050	A-
NextEra Energy, Inc.	NEE	2.55	2.87	3.09	3.38	9.8	6-8%	67% by 2025	Real Zero 2045	A-
NiSource	NI	1.37	1.45	1.54	1.67	6.8	6-8%	90% by 2030	2050	BBB+
Northwestern Corporation	NWE	3.21	3.28	3.50	3.64	4.3	3-6%	90% by 2045	2050	BBB
OGE Energy Corp.	OGE	2.27	2.07	2.04	2.17	-1.5	5-7%	50% by 2030	2050	BBB+
One Gas	OGS	3.85	4.07	4.12	4.30	3.7	6-8%	33% by 2024	2050	A-
Otter Tail Corporation	OTTR	4.23	6.62	3.90	3.45	-6.6	5-7%	50% by 2025	2050	BBB
PG&E Corporation	PCG	1.08	1.10	1.22	1.35	7.7	10.0%	60% by 2030	2045	BBB
Pinnacle West Capital	PNW	5.47	4.24	4.20	4.60	-5.6	5-7%	65% by 2030	2050	BBB+
PNM Resources, Inc.	PNM	2.45	2.60	2.64	2.71	3.4	5%	03 78 By 2030	2040	BBB
								900/ h 2020		BBB+
Portland General Electric	POR PPL	2.72	2.79 1.40	2.75	3.02	3.5 17.6	5-7% 6-8%	80% by 2030	2040	
PPL Corporation		1.05		1.60	1.71	17.6	6-8%	70% by 2035	2050	A-
Public Service Enterprise Group	PEG SRE	3.65	3.46	3.49	3.82	1.5	5-7%	80% by 2045	2050	BBB+ BBB+
Sempra Energy		8.43	9.04	9.64	10.50	7.6	6-8%	50% by 2030	2050	
Southern Company	SO	3.41	3.58	3.75	4.07	6.1	5-7%	50% by 2030	2050	BBB+
Unitil Corp.	UTL	2.35	2.58	2.72	2.88	7.0	6.5 - 8.5%	50% by 2030	2050	BBB+
WEC Energy Group, Inc.	WEC	4.11	4.39	4.61	4.92	6.2	6.5-7.0%	80% by 2030	2050	A-
Xcel Energy, Inc.	XEL	2.96	3.17	3.38	3.61	6.8	5-7%	80% by 2030	2050	A-

Source: Company documents, Thomson One, and Gabelli FUnds.

We favor utilities with strong EPS growth potential based on the following characteristics: Constructive regulatory environment, affordable customer bills, economically healthy service area, customer growth, and clear path toward satisfying clean energy goals. As a guide, we provide state PUC rankings, electric rate rankings, EPS growth outlook and ESG goals.



#### How do higher debt costs, gas prices, and inflation impact utility earnings growth?

State public utility commissions (PUCs) have an obligation to keep utility rates affordable, but also allow a utility to recognize costs and earn a fair return on prudent infrastructure investment. All state PUCs authorize fuel adjustment mechanisms where fuel costs are immediately recovered and various adjustments for other items like property taxes, pension, healthcare, and bad debt expense. All prudent investment, costs and customer/sales changes are updated during general rate cases. The successful formula driving the strong earnings outlook remains the same: Investment Opportunities + Constructive Regulation = Earnings Growth.

• Interest Rates: Higher interest rates raise a utility's cost of debt, which results in rate adjustments to recognize the utility's cost-of-capital. Allowed ROEs increase (decrease) as interest rates rise (fall), while debt costs are fully recovered. For example, assume a utility is capitalized with 50% debt/50% equity, allowed ROEs are 10% and debt costs are 4.0%. The cost of capital would be 7.0%.

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(50\% * debt cost of 4.0\%) + (50\% * equity cost of 10\%) = 7.0\% cost of capital.
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Should rates rise by 100-basis points

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(50\% * debt cost of 5.0\%) + (50\% * equity cost of 11\%) = 8.0\% cost of capital.
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However, utility earnings are impacted in between rate cases due to the "regulatory lag" (higher costs between rates cases). In addition, holding company debt is not regulated and impacts earnings. Utilities generally finance with 10-30 year maturities, which also minimizes impacts. In addition, utilities carry a minimal amount of short-term or variable rate debt.

- Natural gas prices: Natural gas prices have risen from \$3.00 MMBtu to well over \$5.00/MMBtu and have been much higher in certain regions of the US. As regulated energy conduits, electric and gas utilities pass-through higher fuel costs through automatic adjustments on customer bills (margin neutral). On a positive note, high natural gas and power prices help make renewable power more economical on a relative basis.
- Economic slow-down: In 2022, US GDP was roughly flat through the first three quarters of 2022 and growth likely flat in fourth quarter. Most utilities have yet to see a decline in commercial or industrial sales and many jurisdictions have revenue decoupling mechanisms, which mitigates the negative impact of lower sales. Finally, the prospect of electric vehicle (EV) adoption represents the first potential secular spur to power demand since air conditioning. EEI projects that there will be nearly 22 million EVs on U.S. roads in 2030. Given growth in EVs, we estimate that more than 100,000 EV fast charging ports will be needed and could boost load by 1% annually over the next few decades

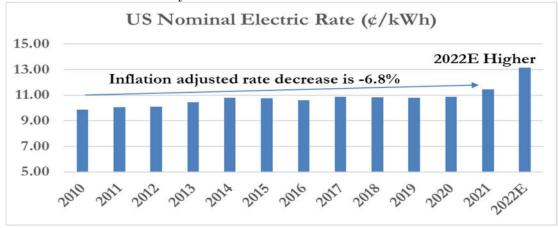
#### After Decade of Real Rate Declines, Rates Rise

We view rising customer bills as a concern to the utility investment thesis, but the fears are partially offset by political and public support of clean energy and reliability. In 2022, national electric and gas utility rates (customer bills) have risen significantly, including as much as 30-50% in some regions (data not yet available), and will likely rise further in 2023 given the various cost-pass-through mechanisms, including fuel costs. PUCs feel political and public pressure to keep rate increases to a minimum. Fuel clause and inflation-related increases reduce the "head-room" available for rate base and earnings growth.



Over the past decade, customers enjoyed the benefits of declining interest rates, low natural gas prices and benign inflation. These factors served to put downward pressure on rates and created customer bill headroom to recognize capital investment/rate base growth. As a result, utility infrastructure investment has been rewarded with constructive returns and higher earnings growth. In 2021, the average US retail price of electricity per kWh rose 5.1% on a nominal basis to \$0.1144 per KWh, which is the highest nominal increase in over ten years. Inflation-adjusted electric prices rose 0.9% in 2021. Over the past 5 (2016-2021) and 10 years (2011-2021), real electric rates decreased -3.9% and -6.8%, respectively. See Exhibit 3 below:

**Exhibit 3** Real Electric Utility Rates Declined Over Past 5- and 10-Years



We believe electric utilities with more affordable electric rates could face less regulatory challenges. Electricity prices paid by ultimate customers vary widely on a geographic basis, with customers in Hawaii paying the highest prices, at 30 cents/kWh in 2021. Customer bills are also relatively high in California and the Northeast, including New York, Connecticut and Massachusetts. The lowest prices at the state level were in Oklahoma, Texas, Louisiana, and Minnesota. Please find a list of the highest and lowest cost electric utilities below in Table 6. (Full list in appendix).

Table 6 Highest and Lowest Cost Electric Utilities (2021 Ultimate/Retail Rate)

LOW	EST COST		HIGHEST COST					
COMPANY		RATE (¢/kWh)	COMPANY	_	RATE (¢/kWh)			
IDACORP	IDA	8.22	HAWAIIAN ELEC	HE	30.35			
OGE ENERGY	OGE	8.27	SEMPRA ENERGY	SRE	27.13			
ENTERGY	ETR	8.44	CONSOL EDISON	ED	24.56			
OTTER TAIL	OTTR	8.65	PG&E	PCG	23.64			
ALLETE	ALE	8.97	EVERSOURCE	ES	20.50			
MDU RESOURCES	MDU	9.23	EDISON INTL	EIX	19.05			
AVISTA	AVA	9.26	UNITIL	UTL	15.71			
AMEREN	AEE	9.47	PS ENT GP	PEG	15.10			
DUKE ENERGY	DUK	9.53	AVANGRID	AGR	14.85			
DOMINION ENERGY	D	9.65	CMS ENERGY	CMS	14.41			
XCEL ENERGY	XEL	10.03	DTE ENERGY	DTE	13.31			
AES CORP	AES	10.05	EXELON	EXC	12.93			
AMERICAN ELEC	AEP	10.17	BLACK HILLS	BKH	12.73			
EVERGY	EVRG	10.19	MGE ENERGY	MGEE	12.51			
NEXTERA	NEE	10.29	CENTERPOINT	CNP	12.02			
Source: Public Data								

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#### State Public Utility Commissions As Important As Ever For EPS Growth

State political and regulatory environments are as important as ever in determining the performance of individual utility stocks. Utility regulation generally remains supportive of investment, but some PUCs are more constructive than others. Many jurisdictions have adopted changes to rate design, such as forward test years, rate mechanisms and adjustment clauses to allow timely recovery and return on costs associated with various capital investment programs (environmental, pipe replacement) and weather normalization. See Exhibit 4.

#### Exhibit 4

#### **State PUC Regulatory Rankings**

## RRA State Regulatory Evaluations — Energy\* (By category, jurisdictions to watch highlighted)

Above Average/1	Above Average/2	Above Average/3	Average/1	Average/2	Average/3	Below Average/1	Below Average/2	Below Average/3
Alabama	Florida	Iowa	Arkansas	Hawaii	Delaware	Alaska	Dist. of Columbia	Arizona
	Georgia	Michigan	California	Idaho	Louisiana - NOCC	Connecticut	New Mexico	
	Pennsylvania	Mississippi	Colorado	Illinois	Maine	Kansas	West Virginia	
	Wisconsin	North Carolina	Indiana	Kentucky	Maryland	Montana		
		Tennessee	Nebraska	Louisiana — PSC	Missouri	New Jersey		
			North Dakota	Massachusetts	Ohio			
			Texas — RRC	Minnesota	South Carolina			
			Virginia	Nevada	Texas — PUC			
				New Hampshire	Vermont			
				New York	Washington			
				Oklahoma				
				Oregon				
				Rhode Island				
				South Dakota				
				Utah				
				Wyoming				

Data compiled Dec. 28, 2022.

Source: Regulatory Research Associates (Part of S&P Global Market Intelligence SPGMI)

#### **Selected Recent Constructive Rates Case Decisions**

- Southern Company (SO): On December 20, 2022, the Georgia Public Service Commission (GPSC) approved annual rate increases \$216 million in 2023, \$377 million in 2024 and \$403 million in 2025. Higher rates are based on an ROE baseline of 10.5% and 56% equity ratio. Should Georgia Power earn over an 11.9% ROE, a customer sharing mechanism is triggered.
- NextEra Energy (NEE): In mid-2022, Florida Power & Light's mid-point allowed ROE was raised to 10.8%, from 10.6%, to reflect higher interest rates. FP&L's new 4-year rate plan is based on a 10.6% allowed ROE (range of 9.7-11.7%) and called for a \$692 million revenue increase on January 1, 2022, another \$560 million on January 1, 2023, and \$140 million in 2024 and 2025. The plan allows amortization of \$1.45 billion of depreciation reserve surplus, a storm recovery framework, and an ROE adjustment.
- EverSource (ES): On November 30, 2022, the MA DPU authorized a \$64.3 million for NSTAR's electric distribution base rate increase in conjunction with the adoption of a five-year performance based rate (PBR) plan (1/1/2023-2027). The plan is based upon a 9.80% ROE (75%-sharing above 10.8%) and 53.21% equity ratio and allows up to 5% annual inflationary rate adjustments.

#### **ROEs Constructive (Higher Equity Ratios) Relative to Interest Rates**

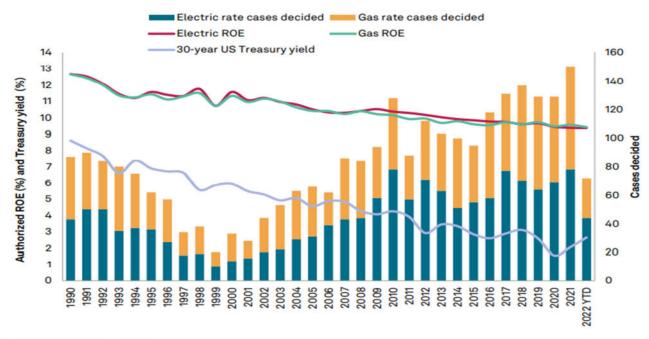
Rate case activity for US investor-owned electric and gas utilities has been at elevated levels in recent years and but allowed ROEs authorized through the first nine-months of 2022 remain near all-time lows. According to RRA, the average allowed ROE was 9.37% for the first nine months of 2022, and 9.36% for the 12-month period ending on September 30, 2022.



Allowed ROEs appear to have flat-lined over the past few years, after declining over the past 30-years as U.S. Treasury yields declined. Importantly, the spread between the allowed-ROE and the 10-year U.S. Treasury yield is currently 600-basis points, and it has ranged between 600-900 basis points over the past few years. During the 1990s, the utility sector averaged a roughly 400-600 basis points spread. When combined with opportunities to invest and earn returns on a growing rate base, we consider the allowed-ROEs to be more than adequate to grow earnings. With interest rates on the rise, we expect allowed ROEs to rise slightly higher in 2023. Although, PUCs historically have taken a gradual and measured approach to changes in authorized ROE levels.

Exhibit 5

Average electric, gas authorized ROEs and total number of rate cases decided



Data compiled Oct. 24, 2022.

YTD = year-to-date, through Sep. 30, 2022.

Sources: Regulatory Research Associates, a group within S&P Global Commodity Insights; U.S. Department of the Treasury.



#### Capital Investment (Rate Base) Continues to Rise and Drive Earnings Growth

In 2023, EEI member electric utilities forecast capital investment of nearly \$160 billion, which would mark the tenth consecutive year of record investment. This compares to an estimated 2022 record investment of \$155 billion (\$134 billion in 2021) in utility infrastructure, including distribution (\$51 billion, or 33%), generation (\$37 billion, or 24%), transmission (\$32 billion, or 20%), gas-related (\$22 billion, or 14%) and other (\$13 billion, or 8%). We expect increasing utility capital needs for the following:

- Clean energy transformation (coal retirements, wind (on/off-shore), solar, and storage)
- Electric transmission and distribution (grid modernization, hardening, undergrounding)
- Electrification, EV charging, efficiency, etc
- Natural gas infrastructure (pipeline expansion and replacement, green hydrogen, and carbon capture)

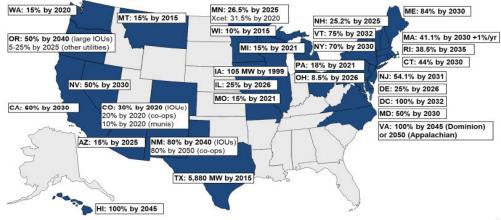


The utility sector remains well-positioned to finance record capital programs given strong balance sheets, reasonable payout ratios, healthy valuations over book value, and the industry's high investment grade credit-rating (BBB+). The industry has maintained an S&P Credit rating of BBB+ average since increasing from a BBB average in 2014.

#### **Political Support for Rate Base Growth**

The global and US economy is in the early stages of a long-term power transformation. All of the US electric and gas utilities target ambitious carbon reductions and renewable energy standards, and publish sustainability reports.

Exhibit 7 30 With State Renewable Standards



Source: Berkelev Lab



Many call for carbon neutrality by 2050, and 100% renewable energy by 2035-2040. Many US states have set renewable energy standards, including 100% renewable energy in New York (by 2040), California (2045), Hawaii (2045), New Mexico (2045) and New Jersey (2045). Please see Exhibit 7 above. Further, many major investors, activists, lending institutions, political groups, and corporations are calling on all of society to make the environmental pledge.

#### **The Great Power Transformation**

In 2021, the US electric fuel mix was 38% gas, 22% coal, 19% nuclear, 14% renewable, and 7% hydro, which means 60% fossil-fuel fired and 40% zero carbon. In the mid-1980's, US power generation was nearly 60% coal-fired. Over the past decade, coal and less-efficient nuclear and gas power plants have been shut-down and replaced with renewables and highly efficient natural gas plants. In the US, all new power generation under construction or in development is and will be renewable, renewable/battery-storage and/or natural gas-fired (excluding the 2.2 GWs Vogtle nuclear expansion scheduled for 2023-24). In 2021, the decade-long declining trend for coal generation (and carbon emissions) experienced a "hiccup" driven by high natural gas prices and renewable intermittency. (See Exhibit 8).

100% 80% 70% 50% 40% 20% 10% 2010 2011 2012 2019 2020 2021 2013 2014 2015 2016 2017 2018 natural gas ■ nuclear ■ renewables petroleum and other

Exhibit 8 Fuel Mix Changes; Coal Drops to 20% in 2021, and Gas Rises to 38%

Source: EIA

EIA's December 2022 *Short-Term Energy Outlook* forecasts that renewable energy (wind, solar, hydro, and battery storage) will provide 22% of U.S. generation in 2022 and 24% in 2023. Coal will decline to 20% in 2022 and to 19% in 2023. U.S. natural gas generation will average 39% in 2022 and 37% in 2023. Over the next 10-20 years, most expect dramatic changes in favor of net-zero generation.

#### De-carbonization of the US Economy Requires \$4 Trillion of Capital Investment

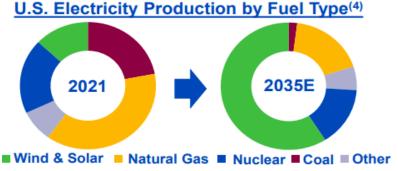
To achieve the ambitious goals of 100% renewable power and a net-zero carbon economy requires massive investment and significant technological advancements. A Wood Mackenzie study estimated that the cost of transforming the U.S. to renewable energy in the next 10-20 years would be \$4.5 trillion (translates to \$300 billion annually over 15 years) given current technology. In addition, the 100% renewable target requires the building of 1,600 GW of new wind and solar generation and a nearly doubling of high voltage transmission (HVT). NextEra Energy forecasts that decarbonization of US economy by 2050 would require \$4 trillion of investment in clean energy infrastructure.

- According to NEE, de-carbonization of the US power sector requires the addition of 3,550 GW's of wind, solar and storage at a cost of \$2 trillion. The US currently has ~1,200 GWs of power capacity; including 200 GW's of renewables.
- Over 2022-2025, NEE forecasts the demand for 160-GW's of US renewables, which includes 30-50 GWs per year. Over 2026-2030, the US requires 70-100 GWs per annum and 100-140 GWs per annum over 2031-2035.
- Full de-carbonization of the US economy requires another \$2 trillion investment including in the transportation, industrial and agricultural sectors through electrification and low-carbon fuels largely being powered by renewables.



- By 2042, SPGMI expects the US to be 79% carbon free. The consulting firm/data provider expects 117 GWs of retirements (70% coal and inefficient gas) and the addition of 354 GWs of solar and 325 GWs of wind. The forecast results in a 60% reduction in carbon emissions by 2042, which is short of the 75% IRA goal.
- According to EEI, the U.S. renewable pipeline totals more than 365 GWs of utility-scale wind and solar power capacity through 2026, including 191 GWs of solar and 97 GWs of wind.
- NextEra Energy (NEE) expects a more dramatic change in fuel mix, including nearly 60% renewable (75% zero carbon) by 2035. See Exhibit 9.

Exhibit 9 US Electric Fuel Mix Forecast to Be Over 50% Renewables By 2035



Source: NextEra Energy Presentation

NextEra Energy is the largest renewable developer in the US, followed by privately held Apex Clean Energy and privately-owned Invenergy. See Table 7 below:

Table 7 Largest US wind and Solar Developers (1,000 MW's = 1 GW)

	Expected 2022-27 in MW's						
Developers	Solar	Wind	Total				
NextEra Energy	15,070	5,388	20,458				
Apex Clean Energy	3,309	8,642	11,951				
Invenergy	8,076	3,546	11,622				
EDF Group	8,198		8,198				
Canada Pension Plan		7,011	7,011				

Source: SPMGI

The development of large utility scale projects has been challenged by higher interest costs, inflation, tariff and supply chain issues as well as integrating into the existing transmission system. At least one large offshore wind project has abandoned its output contract due to higher construction costs. Much of the transmission system was not designed for massive renewable additions needs to be upgraded and expanded to accommodate the intermittency of renewables,

Developers face clogged interconnection queues, permitting delays and a congested transmission system. Many regulated utilities have more recently opted to monetize non-regulated renewable businesses, including Consolidated Edison, Eversource, Duke Energy and American Electric Power (discussed later). Motives primarily relate to favorable demand and reinvesting in the regulated business. All regulated electric utilities with generation have plans to add significant renewable capacity, but often contract with developers to build and/or buy projects given the need for competitive resources planning process.

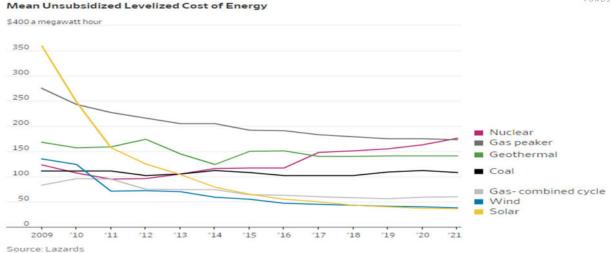
#### Renewable Development Costs Are Now Economical and Represent Rate Base Growth

Regardless of policy incentives, utilities benefit from adding renewable generation due to cost declines that have made new wind and solar generation more economical than older fossil-fired and nuclear generation. From 2010-2020, the leveled costs of wind and solar power have declined materially. While inflation has pressured development/construction costs recently (2022 data not yet available), the demand and economics for renewables becomes greater as natural gas prices rise.

#### Exhibit 10

#### **Declining Renewable Costs Relative to Other Fuel Types**





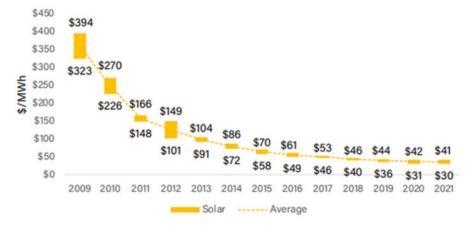
At its June 14, 2022 Analyst Day, NEE also outlined its estimate of the economics of power generation by fuel type. At \$4.50/MMBtu gas, wind is the most economical at \$25-32/MWh; followed by solar (\$30-37/MWh), existing gas (\$35-47 MWh), existing nuclear (\$34-49/MWh), existing coal (443-74/MWh), and new gas combined cycle (\$56-69 MWh). See Exhibit 11 below.

**Exhibit 11** Renewables Competitive Relative to Other Fuel Types



Source: Nextera Energy Presentation

Exhibit 12 Declining Solar Costs



Source: American CleanPower Association

#### Offshore Wind Rapid Growth in US Wind Capacity to Accelerate With Offshore Development

Offshore wind is becoming an increasingly important form of renewable generation primarily due to geography and NIMBY limitations as well as improved economics. Offshore wind is a key element to many European and Asian nations clean energy strategies and expected to play a major role in the US Northeast. The US operates two small offshore wind farms totaling 42 MWs compared to over 25 GWs (25,000 MWs) operating across Europe.



The US has laid out plans to achieve 30 GWs of operating offshore wind capacity by 2030, and state targets total over 74 GWs by 2050. The states with the largest requirements are New York at 9 GWs by 2035, North Carolina at 8 GWs by 2040, and New Jersey at 7.5 GWs by 2035. Other states with requirements include Connecticut (2 GWs), Massachusetts (4 GWs), Maryland, and Virginia. The California Coast has deeper water and targets 3 GWs of floating offshore wind by 2030. As can be seen, on and offshore wind costs have declined significantly, but remain relatively expensive.

**Exhibit 13** Wind Costs Decline, But Offshore Wind Remains High



Source: American CleanPower Assocation

There are currently 14 projects along the Northeast Coast in various stages of development, totaling 15.2 GWs. The largest is the 2.4-GW Beacon Offshore Wind Project (Equinor and BP PLC) off the coast of MA. There are two major projects (Vineyard Wind and South Fork) under construction. In September 2022, AGR and Copenhagen Infrastructure Partners (CIP) began construction of Vineyard Wind I (VW1; 800 MWs) with COD expected in 2024 (Table 11). However, AGR is attempting to restructure a contract with the state of Massachusetts for its 1,200-MW Commonwealth project given rising costs associated with inflation and interest rates.

In February 2022, BOEM's offshore wind lease auction for the New York Bight's 500,000 acres across six lease areas totaled \$4.4 billion (\$8,951/acre), while the May 2022 Carolina Long Bay auction for two lease areas covering 110,000 totaled \$315 million (\$2,861/acre). On December 7, 2022, the state of California awarded \$787 million of lease areas covering over 370,000 acres (\$2,028/acre) off the coasts of central and northern California to five companies. BOEM estimates the areas could generate some 4.6 GWs of offshore wind energy. The winning bids included RWE, Equinor, and Invenergy.



Table 7

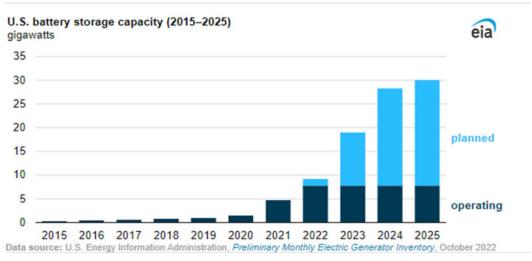
Project	Size (MW's)	<u>Date</u>	<u>Buyer</u>	<u>Owners</u>	<u>Turbines</u>
Block Island Wind	30	2016	Rhode Island/Connecticut	Deepwater Wind	GE Haliade 6-MW
South Fork Wind	131	2023	New York	EverSource/Orsted	SG 8-MW
Revolution Wind	704	2025	Rhode Island/Connecticut	EverSource/Orsted	SG 8-MW
Sunrise Wind	924	2025	New York	EverSource/Orsted	G 8-MW
Beacon Wind	1,230	2028	New York	Equinor/BP	
Empire Wind	816	2024	New York	Equinor	
Empire Wind 2	1,260	2026	New York	Equinor	
Vineyard Wind	800	2024	Massachusetts	Avangrid	GE Haliade 13-MW
Commonwealth Wi	ir 1,232	2028	Massachusetts	Avangrid	Avangrid/Copenhagan I.P.
Mayflower Wind	804	2025	Massachusetts	Shell/EDP Renewables	
Mayflower Wind II	400	2027	Massachusetts	Shell/EDP Renewables	
Atlantic Shores	<b>1,51</b> 0	2028	New Jersey	Shell/EDF	
Ocean Wind	1,100	2025	New Jersey	Orsted/PSEG	GE Halidae 13-MW
Ocean Wind 2	1,148	2027	New Jersey	Orsted	
Garden State Wind	1,000	2026	New Jersey	Orsted/PSEG	
Skipjack Wind	120	2026	Maryland	Orsted	GE Halidae 12-MW
MarWin Wind	270	2025	Maryland	Toto Holding (Renexia)	
Park City Wind	804	2025	Connecticut	Avangrid	
<b>Constitution Wind</b>	400	2025	Connecticut	EverSource/Orsted	
Bay State Wind	2,000	2028	TBD	EverSource/Orsted	
Kitty Hawk	2,500	2030	North Carolina	Avangrid/Iberdrola	
Virginia Beach	2,600	2026	Virginia	Dominion Energy	SGR 14-222

#### Adding Wind and Solar is Not Enough; Battery Storage is the Key to Aggressive Renewable Goals.

Carbon reduction targets will require not only significant investment, but technological breakthroughs in batteries, green hydrogen, carbon sequestration and fuel cells. We see the potential for the US natural gas industry to reinvent itself using green hydrogen, renewable natural gas, and carbon capture. Existing infrastructure can be upgraded to blend hydrogen and RNG with natural gas in increasingly higher levels.

• Battery Storage: According to EEI, 56 GWs of storage capacity is expected to come online from 2022-2026. As of December 2022, US utility-scale battery storage totaled just over 9 GWs compared to near-zero in 2019. Over the long-term, we expect widespread utility scale battery usage and growing efficiencies as larger batteries piggyback the auto industry. Developers have scheduled more than 23 large-scale battery projects, ranging from 250 MW to 650 MW, to be deployed by 2025. The IRA now offers stand-alone storage credits and existing wind and solar projects can be retrofitted to include new utility scale batteries.

Exhibit 14





- Renewable Natural Gas (RNG) is a pipeline quality gas captured from dairies, animal/food waste, wastewater treatment plants, and landfills. Most natural gas utilities are investing in RNG and requesting PUC permission to blend with existing natural gas supply to serve customers. In addition, many are investing in non-regulated RNG production. According to the American Gas Association (AGA), the US currently operates 189 RNG production facilities, and there are 146 under current construction, along with 96 planned for future construction. RNG can be compressed (CNG) for truck and bus vehicle fleets and for liquefied natural gas (LNG).
- Green Hydrogen: Hydrogen can be burned as a zero-carbon fuel in hydrogen-compatible turbines to produce electricity, power fuel cells to drive passenger vehicles, heavy-duty trucks, ships and even airplanes, and to heat and light buildings. Importantly, hydrogen can be blended with natural gas and transported through existing gas infrastructure. Hydrogen technology appears to be a promising pathway to enabling longer-term storage of renewable power and decarbonizing industry and transportation. The November 2021 Infrastructure Investment and Jobs Act allocates \$8 billion over five years for the DOE to develop at least four clean hydrogen hubs, a network of regional suppliers and consumers, and the infrastructure necessary to connect them. IRA provides a \$3/kg hydrogen credit and 2021 bill allocates \$1 billion for a program to improve and reduce the costs of electrolysis.
- Carbon Capture Utilization and Storage (CCUS) directly reduces emissions and removes CO2. CCUS technologies will play an important role in meeting net zero targets, including natural gas pipelines, midstream and power generation, as well as heavy industry. Major oil companies like Exxon, Chevron, Marathon, Dow, and Phillips 66 among others are investing heavily, which could make technologies economically viable.

#### **FERC-Regulated Transmission**

In 2022, EEI member utilities invested \$31.7 billion in electric transmission compared with \$29.7 billion in 2021. Over the next few years, we expect FERC to solidify numerous policy directives and incentives, including ROE methodology, transmission planning and the interconnect process, as well as the need to alleviate the clean energy logjam, and gas pipelines. On July 25, 2022, the Midwest Independent System Operator (MISO) approved Tranche 1 of its \$100 billion long-term planning projects, which included 18 transmission projects, totaling \$10.3 billion and spanning IA, IL, IN, MI, MN, MO and WI. Winning bidders, included:

- Ameren (AEE) (\$1.7-1.8 billion),
- Fortis (FTS)\$1.0-1.5 billion),
- WEC Energy Group (\$800 million), and
- XEL (\$1-2 billion)

The projects are expected to be in-service in 2028-30's. LRTP projects are significant because they will help accommodate the influx of renewables needed to meet state and utility clean energy goals.



#### Corporate Strategies Simplifying, Transforming, and "Greening"

Since 1995, the US electric utility sector has experienced over 145 acquisition announcements and over 120 completed deals. From 2016-2020, 23 deals were announced. M&A activity declined during the pandemic-impaired 2020-21 COVID-19 era to its slowest pace in two decades. On February 24<sup>th</sup>, 2022, South Jersey Industries (SJI) agreed to be acquired by Infrastructure Investment Fund (IFF) for \$8.1 billion in enterprise value, or \$36.00 per share. The price represented a 53% premium and a 21.7X P/E multiple on consensus 2022 earnings and ~15X EV/EBITDA multiple. The transaction is expected to close in early 2023 pending regulatory approvals including the NJ Board of Public Utilities. The electric and gas utility sector remains fragmented and we expect ongoing consolidation.

<b>Utilities Transactions</b>

Announced	Target Entity	<u>Acquirer</u>	(\$ Millions)	Paid (%)	Closed
2/24/2022	South Jersey Industries	Infrastructure Invt Fund	8,100	53%	Pendng
11/7/2021	First Energy Transmission (20%)	Brookfield Infra. Ptrs.	2,375	NA	5/31/2022
10/26/2021	AEP's Kentucky subsy	Algonquin Power	2,846	NA	Pending
6/14/2021	Hawaii Gas	Argo Infrastructure	514	NA	7/21/2022
	Centerpoint's Arkamsas & OK Gas	Summit Utilities	2,050	NA	1/10/2022
3/18/2021	Narragansett Electric	PPL Corp	5,270	NA	5/25/2022
	Duke Energy-Indiana (20%)	GIC Partners	2,050	NA	9/8/2021
1/13/2021	Corning Gas	Argo Infrastructure	130	44	7/6/2022
	PNM Resources	Avangrid	8,300	10 15	Pending
6/3/2019	Pattern Energy Bermuda Electric	Canadian Pension Algonquin Pwr & Utilities	6,100 366	NA	3/16/2020 11/9/2020
6/3/2019	El Paso Electric	JP Morgan	4,300	17	7/29/2020
	Peoples Gas	Essential Utilities (AquaAmeric	•	NA	
	•	` *			2/3/2020
10/18/2018		Sempra Energy	1,275	18	5/16/2019
	Gulf Power	NextEra Energy	5,800	NA 17	12/31/2018
	Vectren	Centerpoint Energy	8,100	17	2/1/2019
1/3/2018	SCANA	Dominion Energy	14,600	42	12/31/2018
	Dynegy, Inc.	Vistra Energy	11,100	12	4/9/2018
8/18/2017	Calpine	Energy Capital Partners	5,600	23	3/12/2018
8/21/2017	Oncor	Sempra Energy	18,800	NA	03/09/18
7/19/2017	Avista	Hydro One	5,300	24	Terminated
7/6/2017	Oncor	Berkshire Energy	18,500	NA	Terminated
	Delta Gas	Steel River	258	17	09/20/17
1/25/2017	WGL Holdings	AltaGas	6,400	12	07/06/18
10/10/16	Gas Natural	First Reserve	196	39	08/04/17
07/29/16	Oncor	NextEra Energy	18,400	NA	Terminated
06/03/16	Talen Energy	Riverstone Partners	5,200	56	12/06/16
05/31/16	Westar Energy	Great Plains Energy	12,200	13	06/04/18
04/26/16	Energy South	Spire	344	NA	09/12/16
02/08/16	Empire Distric Electric	Algonquin Power & Utilities	2,370	21	01/03/17
02/08/16	ITC Holdings	Fortis Inc.	11,300	14	10/14/16
01/29/16	Questar Corp.	Dominion Resources Inc.	6,000	22	09/16/16
10/26/15	Piedmont Natural Gas Company	Duke Energy Group	6,700	42	10/03/16
09/04/15	TECO Energy	Emera Inc.	10,400	31	07/01/16
08/24/15	AGL Resources	Southern Company	12,000	38	07/01/16
07/12/15	SourceGas Holdings	Black Hills Corp	1,890	NA	02/12/16
02/25/15	UIL Holdings Corp.	Iberdrola S.A.	4,700	25	12/17/15
12/03/14	Hawaiian Electric Industries	NextEra Energy	4,300	21	Terminated
10/20/14	CLECO Corp	Macquarie	4,700	15	04/13/16
06/23/14	Integrys Energy Group	Wisconsin Energy	9,100	17	06/29/15
05/01/14	AltaLink L.P.	Berkshire Hathaway	5,900	NA	12/01/14
04/30/14	PEPCO Holdings, Inc.	Exelon	11,900	20	03/23/16
04/07/14	Alabama Gas Corporation	Laclede Group	1,600	NA	08/26/14
03/03/14	Philadelphia Gas Works	UIL Holdings Corp	1,860	NA	Terminated
12/11/13	UNS Energy	Fortis	4,300	31	08/15/14
05/29/13	NVE Energy	Mid-American	5,600	23	12/19/13
05/28/13	New Mexico Gas	TECO Energy	950	NA	09/03/14
02/11/13	New England Gas Company	Algonquin Power	74	NA	12/20/13
12/20/12	EQT Distribution Assets	Peoples Natural Gas	1,080	NA	12/17/13
12/17/12	Missouri Gas & New England Gas	Laclede Group	1,020	NA	09/01/13
07/22/12	GenON	NRG Energy Inc	3,400	21	12/14/12
02/21/12	CH Energy Group	Fortis	1,267	10.5	06/27/13
10/16/11	El Paso Corporation	Kinder Morgan	38,000	37	05/24/12
07/19/11	Southern Union Gas (a)	Energy Transfer Equity	9,232	57	03/26/12
06/23/11	Southern Union Gas	Williams Cos	9,201	56	Terminated
Source: Public	Data				



Another ongoing theme is simplification and focus on the core business. Over the past few years, many utilities have restructured, including sales of fossil generation assets, natural gas midstream operations, international operations, and non-utility subsidiaries, and the spin-off of competitive generation. Some have been the subject of activists including Jeff Ubben through Value Act and Inclusive Capital, Elliott Management (EVRG), Bluescape (EVRG), and Carl Icahn (First Energy and Southwest Gas). More recently, private infrastructure funds and investors, have taken advantage of the opportunity by buying gas utilities and gas infrastructure.

- On December 15, 2022, Southwest Gas (SWX) announced plans to sell 100% of its Mountainwest Pipeline (MW) to Williams (WMB) for \$1.5 billion in total enterprise value (8x EV to \$188 million 2023 EBITDA) and spin-off non-regulated Centuri to existing shareholders. Upon completion of both transactions, SWX would be a fully regulated gas utility operating in AZ, CA and NV. The transaction is expected to close in 2023. Icahn was influential in getting four (of 11) new board members and lobbying for the sale of MW.
- On December 15, 2022, FERC denied American Electric Power's (AEP) sale of its Kentucky utility operations to Algonquin's (AQN) Liberty Utilities. AEP agreed to reduce the sales price to Liberty Utilities by 7.5%, to \$2.65 billion, from \$2.85 billion, and delay the sale to January 2023.
- AEP also expects to close on the sale of 1,365 MWs of unregulated wind and solar assets early in the second quarter of 2023. The sale is part of an ongoing simplification program to focus on the regulated utilities.
- In November of 2022, Duke Energy (DUK) announced that it plans to sell its renewable energy business, which includes 3.4 GWs of wind and just under 1.7 GWs of solar, in early 2023.
- In October 2022, Consolidated Edison agreed to sell its Clean Energy Businesses (4 GWs of renewables) to RWE Renewables Americas for \$6.8 billion. The sale is expected to close in the first half of 2023,
- ES expects to complete the strategic review (announced May 4, 2022) of its offshore wind program, which includes the potential sale of all or part of its 50% interest in JV with Orsted, by year-end 2022. The JV includes three contracted projects totaling 1,758 MWs, and 175,000 acres available for development. The projects are located on the same 250-square mile tract; 30-miles east of Long Island's Montauk Point.
- On May 31, 2022, First Energy (FE) completed the sale of a 19.9% stake in its transmission businesses to Brookfield Asset Management Inc. for \$2.4 billion.
- On May 25, 2022, PPL completed the \$6.8 billion acquisition of The Narragansett Electric Company, Rhode Island's primary electric and gas utility, from National Grid for \$5.3 billion. The transaction represented roughly 1.9x the US rate base of \$2.8 billion and 25x 2021 adjusted earnings. In June 2021, PPL completed the sale of its U.K. utility business, Western Power Distribution (WPD), to National Grid plc for £7.8 billion, £14.4 billion EV, or \$10.6 billion and \$19.4 billion, respectively. The transaction represented roughly 1.6x the UK regulatory asset value (RAV), or rate base, of \$11.4 billion and 10.6x 2021 earnings.
  - In February 2022, Exelon (EXC) spun off its 32 GWs power generation business, Constellation Energy Group (CEG). CEG owns 20 GWs of nuclear (13 stations/21 reactors) in IL, MD, NY and PA and 6 GWs of natural gas and 3.6 GWs of hydro, wind, and solar plans.
- In February 2022, PSE&G (PEG) sold its 6.75 GW fossil generation portfolio (13 plants in NJ, CT, MD, and NY) to ArcLight for \$1.9 billion. PEG retained the nuclear fleet.
- On January 10, 2022, CenterPoint Energy (CNP) sold its Arkansas and Oklahoma LDC's to privately-owned Summit Utilities for \$2.15 billion cash. Advertised multiples were 38x 2020 earnings and 2.5x rate base.



#### Oil Majors Forced to Invest in Clean Energy

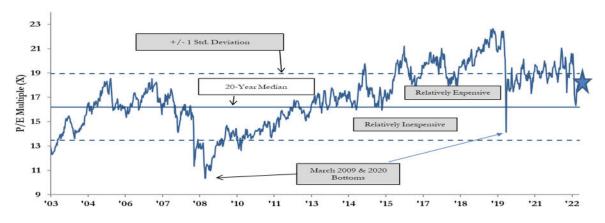
The major oil companies and large midstream pipelines face growing political and investor pressure to develop emission reduction strategies and will likely be forced to reinvent themselves. BP, Shell, Total Energies, Chevron, and Equinor have all invested in offshore wind projects. From 2009 through today, Copenhagen, Denmark-based Orsted completely reinvented itself from Danish Oil and Gas. Orsted is currently the global leader in offshore wind and wind development with 90% of its business from clean energy and a 2025 net zero pledge.

#### Utility Valuations Reasonable Relative to Interest Rates Valuation Multiples

Over the past twenty years, electric utility multiples climbed from roughly 10x forward earnings to over 23x, driven by improving fundamentals and higher growth rates (Exhibit 15). Electric utilities trade at 18.2x consensus 2023 earnings estimates which is modestly above the historical median. We consider the multiple reasonable considering higher utility earning growth rates and strong fundamentals.

Exhibit 15

Absolute P/E Multiple Range

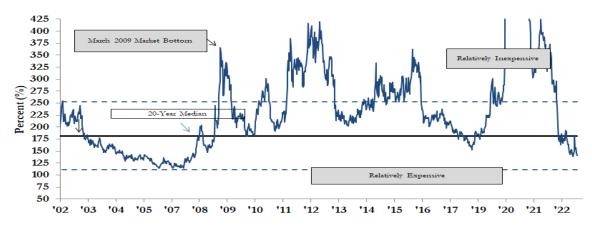


Source: Thomson One, Company documents, Gabelli Funds estimates

Given that long-term interest rates (specifically the 10-year and 30-year Treasury yields) have risen dramatically to nearly 4.0% following a long-term secular decline since the late 1980's, we measure the earnings yield (1/P/E) as a percent of the 10-Year T-Bond Yield to gauge interest rate adjusted valuations. As can be seen in Exhibit 16, the current ratio of 140% indicates the sector P/E is moderately expensive when compared with its historical relationship with the 10-Year T-Bond Yield.

**Exhibit 16** 

#### Utility Earnings Yield as a Percent of 10-Year T-Bond Yield



Source: Thomson One, Company documents, Gabelli Funds estimates



#### Interest Rates and the Fed

While utility stocks are not bond proxies, and share prices are a function of earnings and dividend growth rates, higher (lower) rates negatively (positively) impact equities, given that future cash flows are impacted by the assumed discount rate. In addition, current utility dividend returns become less compelling when returns on other investments increase, including Treasury yields. The current 6-month and 12-month Treasuries yield over 4.5% and US Treasuries hold even greater defensive appeal than utilities. However, we highlight that utility stocks out-performed this past year despite the dramatic increases in short- and long-term interest rates. The factors below mitigate the negative impact of higher rates.

- Annual dividend hikes: Utilities target annual dividend increases, which serve to mitigate the negative impact of higher rates. In 2022, electric utilities increased the annual dividend by a median of 5.1%.
- ROE is set based on interest rates: A utility's cost-of-capital, including equity returns (ROEs), is set by state PUCs and increases (decreases) as interest rates rise (fall).
- Annual riders minimize inflation risk: State PUCs and FERC regulatory principles have improved to include more frequent rate adjustments, which mitigate inflation risk.
- Utility stocks pay higher dividends than other sectors: The present value of a higher near term dividend stream is less impacted by changes in interest rates than a lower near term dividend stream.

While utility dividend yields and 10-year U.S. Treasury yields are highly correlated and will likely remain so in the future, utility dividends have risen over time (most on annual basis) while the Treasury yield remains fixed. Utility stock prices, unlike Treasury bond prices, are likely to rise should earnings and dividends grow over time.

#### Conclusion

The utility sector offers a 3.4% current return and many utility managements target 5-7% annual earnings and dividend growth. The utility business model represents a safe-haven in the face of recession and/or inflation fears. In addition, the transformation of the utility sector from fossil fuel-fired to renewables provides the environment for strong annual earnings and dividend growth. We believe that the combination of strong utility fundamentals, and the potential for escalating geopolitical volatility and/or domestic economic slow-down bode well for the relative performance of utilities.



Table 13 Ranking of 2021 Average Price To Ultimate Customers (c/kWh)

		_	Average	price (cents/k	Wh)		2021	
						% I	Revenue to	
	-	Ultimate	Residential	Commercial	Industrial		customers	
-						R	C	I
Rank	State	2021	2021	2021	2021	%	9/0	%
1	IDACORP	8.22	10.36	7.59	6.53	46	25	29
2	OGE ENERGY	8.27	10.75	8.32	5.41	45	35	20
3	ENTERGY CORP.	8.44	11.03	9.65	5.89	41	29	30
4	OTTER TAIL CORP.	8.65	11.05	8.74	5.60	33	53	14
5	ALLETE	8.97	12.83	11.84	7.82	17	19	65
6	MDU RESOURCES	9.23	10.52	9.20	6.85	40	46	14
7	AVISTA CORPORATION	9.26	10.05	10.49	5.94	46	39	15
8	AMEREN	9.47	10.90	8.60	6.84	54	38	8
9	DUKE ENERGY	9.53	11.86	8.81	6.35	52	33	15
10	DOMINION ENERGY	9.65	12.63	8.16	6.66	49	43	8
11	XCEL ENERGY	10.03	12.94	10.58	6.60	38	41	21
12	AES CORP	10.05	10.71	11.37	8.66	52	17	32
13	AMERICAN ELECTRIC POWER	10.17	12.78	10.08	7.04	51	26	23
14	EVERGY	10.19	12.40	9.79	6.97	45	41	14
15	NEXTERA	10.29	11.45	9.06	7.03	61	37	3
16	NISOURCE	10.34	16.01	14.51	5.99	35	34	31
17	SOUTHERN COMPANY	10.36	13.54	11.04	6.63	43	35	22
18	PPL CORPORATION	10.64	12.33	10.81	6.72	55	31	14
19	PORTLAND GENERAL ELECTRIC	10.89	13.24	10.30	6.96	53	34	13
20	EL PASO ELECTRIC	10.91	11.83	10.34	8.12	49	48	3
21	ALLIANT	10.94	15.15	12.12	7.64	40	28	32
22	FIRSTENERGY	10.97	12.15	10.89	6.08	72	19	9
23	UGI UTILITIES	11.17	11.36	10.62	9.73	77	22	1
24	WEC ENERGY GROUP	11.46	15.36	11.13	7.74	43	36	21
25	NORTHWESTERN CORP.	11.46	12.02	11.66	8.33	44	48	8
26	PNM RESOURCES	11.46	14.51	11.86	5.90	46	42	12
27	PINNACLE WEST CAPITAL	11.96	13.45	10.94	8.20	55	40	5
28	VECTREN CORPORATION	12.02	16.10	13.97	8.05	41	30	29
29	MGE ENERGY	12.51	16.45	11.20	7.51	37	60	3
30	BLACK HILLS CORP.	12.73	16.37	13.18	8.70	36	43	21
31	EXELON CORP.	12.73	13.45	11.75	8.21	77	22	1
32	DTE ENERGY	13.31	17.86	11.75	7.41	53	36	11
33	CMS ENERGY	14.41	18.13	13.89	8.59	52	35	14
34					11.68	79	20	14
	AVANGRID	14.85	15.40	13.20				
35	PUBLIC SERVICE ENTERPRISE GRC	15.10	17.40	12.64	7.99	65 72	32	2
36	UNITIL CORPORATION	15.71	15.84	15.56	14.71	72	23	5
37	EDISON INTERNATIONAL	19.05	21.53	17.77	14.71	45	49	6
38	EVERSOURCE	20.50	21.55	17.42	16.60	80	19	1
39	PG&E CORPORATION	23.64	25.86	25.13	20.09	44	26	30
40	CONSOLIDATED EDISON	24.56	26.21	22.59	11.82	60	40	0
41	SEMPRA ENERGY	27.13	30.65	25.68	19.04	56	33	10
42	HAWAIIAN ELECTRIC INDUSTRIES	30.35	33.86	31.24	26.88	34	32	34
	Industry average/Total	11.56	14.03	11.17	7.48	52	34	15

Source: S&P Global Market Intelligence



## Appendix 1: Large, Small/Mid Cap & Canadian Utilities Select Statistics

			2022	Equity	Enterprise	Annual	Current	Payout	EPS	EPS	EPS	EPS	EPS 3-Year	2022	2023	2024	EV/
Company Name	<u>SYM</u>	<b>Price</b>	<b>YTD</b>	Cap	<u>Value</u>	<u>Dividend</u>	Return	<u>2023E</u>	2021A	<u>2022E</u>	2023P	2024P	<u>CAGR</u>	P/E	P/E	P/E	<b>EBITDA</b>
		\$	%	\$	\$	\$	%	%	\$	\$	\$	\$	9/0	X	X	X	X
AES Corp	AES	28.76	21	19,210	42,968	0.66	2.3%	38%	1.52	1.64	1.75	1.91	7.9%	17.5	16.4	15.1	11.7
Alliant Energy	LNT	55.21	-6	13,854	22,121	1.71	3.1%	59%	2.63	2.79	2.89	3.08	5.4%	19.8	19.1	17.9	13.5
Ameren Energy	AEE	88.92	4	22,988	38,056	2.36	2.7%	54%	3.84	4.07	4.36	4.68	6.8%	21.8	20.4	19.0	13.4
American Electric Po	AEP	94.95	11	48,791	85,998	3.32	3.5%	63%	4.74	5.02	5.30	5.65	6.0%	18.9	17.9	16.8	12.5
Avangrid	AGR	42.98	-9	16,617	26,006	1.76	4.1%	77%	2.18	2.33	2.28	2.42	3.5%	18.4	18.9	17.8	13.8
CMS Energy	CMS	63.33	3	18,382	32,757	1.84	2.9%	59%	2.65	2.88	3.11	3.38	8.4%	22.0	20.4	18.7	13.2
Consolidated Edison	ED	95.31	17	33,822	58,719	3.16	3.3%	66%	4.39	4.52	4.80	5.11	5.2%	21.1	19.9	18.7	11.8
Constellation Energy	CEG	86.21		28,192	30,052	0.56	0.7%	12%	-0.63	2.31	4.59	5.82		37.3	18.8	14.8	11.5
Dominion Energy	D	61.32	-18	51,096	96,040	2.67	4.4%	64%	3.86	4.12	4.20	4.41	4.5%	14.9	14.6	13.9	13.2
DTE Energy	DTE	117.53	3	22,770	42,191	3.81	3.2%	61%	5.99	6.02	6.27	6.69	3.7%	19.5	18.7	17.6	12.9
Duke Energy	DUK	102.99	3	79,309	155,393	4.02	3.9%	71%	5.24	5.30	5.67	6.02	4.7%	19.4	18.2	17.1	13.0
Edison Internatioanl	EIX	63.62	-1	24,295	58,271	2.95	4.6%	64%	4.59	4.50	4.60	4.80	1.5%	14.1	13.8	13.3	10.6
Entergy	ETR	112.50	5	22,892	49,812	4.28	3.8%	63%	6.02	6.38	6.76	7.22	6.2%	17.6	16.6	15.6	12.2
EverSource	ES	83.84	-4	29,202	51,170	2.55	3.0%	58%	3.86	4.10	4.37	4.69	6.7%	20.4	19.2	17.9	13.7
Exelon	EXC	43.23	8	42,959	80,432	1.35	3.1%	57%	2.82	2.26	2.36	2.51	-3.8%	19.1	18.3	17.2	11.5
First Energy	FE	41.94	5	23,979	45,424	1.56	3.7%	63%	2.60	2.44	2.49	2.68	1.0%	17.2	16.8	15.6	11.7
Iberdrola	IBE-MC	10.93	9	74,419	117,642	0.45	4.2%	76%	0.50	0.65	0.60	0.65	9.1%	16.9	18.2	16.8	9.2
National Grid	NGG	60.32	-10	44,155	94,676	4.28	7.1%	100%	4.19	5.66	4.30	4.75	5.3%	10.7	14.0	12.7	12.9
Nextera Energy	NEE	83.60	-8	166,127	235,130	1.70	2.0%	55%	2.55	2.87	3.09	3.38	9.8%	29.1	27.1	24.7	19.2
PG&E	PCG	16.26	35	40,088	90,612	0.00	0.0%	0%	1.08	1.10	1.22	1.35	7.7%	14.8	13.3	12.0	11.9
PPL Corp	PPL	29.22	2	21,515	34,963	0.90	3.1%	56%	1.05	1.40	1.60	1.71	17.6%	20.9	18.3	17.1	11.4
PS E&G	PEG	61.27	-4	30,571	49,966	2.16	3.5%	62%	3.65	3.46	3.49	3.82	1.5%	17.7	17.6	16.0	13.3
Sempra Energy	SRE	154.54	21	48,577	77,576	4.58	3.0%	51%	8.43	8.85	9.04	9.64	4.6%	17.5	17.1	16.0	14.0
Southern Company	SO	71.41	9	77,742	134,989	2.72	3.8%	73%	3.41	3.58	3.75	4.07	6.1%	19.9	19.0	17.5	14.5
WEC Energy Group	WEC	93.76	1	29,575	45,898	3.12	3.3%	68%	4.11	4.39	4.61	4.92	6.2%	21.4	20.3	19.1	14.6
Xcel Energy	XEL	70.11	8	38,368	61,983	1.95	2.8%	58%	2.96	3.17	3.38	3.61	6.8%	22.1	20.7	19.4	12.9
Group Median			3				3.3%	61%	2.0%	6.0%	5.3%	8.0%	6.0%	19.3	18.3	17.1	12.9

			2022	Equity	Enterprise	Annual	Current	Payout	EPS	EPS	EPS	EPS	EPS 3-Year	2022	2023	2024	EV/
Company Name	<u>SYM</u>	Price	YTD	Cap	<u>Value</u>	Dividend	Return	2023E	2021A	2022E	2023P	2024P	<b>CAGR</b>	P/E	P/E	P/E	<b>EBITDA</b>
		\$	%	\$	\$	\$			\$	\$	\$	\$		X	X	X	X
Allete	ALE	64.51	2	3,688	6,274	2.60	4.0%	66%	3.23	3.78	3.95	4.13	8.5%	17.1	16.3	15.6	13.3
Avista	AVA	44.34	9	3,271	5,862	1.76	4.0%	75%	2.10	1.50	2.34	2.60	7.4%	29.6	18.9	17.1	12.9
Black Hills Corp	BKH	70.34	4	4,578	9,286	2.50	3.6%	67%	3.74	3.60	3.75	3.95	1.8%	19.5	18.8	17.8	12.8
Centerpoint Energy	CNP	29.99	12	18,880	34,673	0.76	2.5%	51%	1.64	1.39	1.49	1.61	-0.6%	21.6	20.1	18.6	12.0
Evergy	EVRG	62.93	-4	14,445	26,091	2.45	3.9%	67%	3.54	3.57	3.66	3.98	4.0%	17.6	17.2	15.8	11.3
Hawaiian Electric	HE	41.85	5	4,581	7,496	1.40	3.3%	60%	2.25	2.14	2.32	2.30	0.7%	19.6	18.0	18.2	12.3
IdaCorp	IDA	107.85	-1	5,453	7,367	3.16	2.9%	61%	4.85	5.12	5.20	5.45	4.0%	21.1	20.7	19.8	14.4
MDU Resources	MDU	30.34	2	6,170	9,184	0.89	2.9%	42%	1.87	1.77	2.12	2.31	7.3%	17.1	14.3	13.1	10.3
MG&E	MGEE	70.40	-11	2,546	3,208	1.63	2.3%	49%	2.60	3.17	3.33	3.49	10.4%	22.2	21.2	20.1	14.2
NiSource	NI	27.42	4	11,136	23,740	0.94	3.4%	61%	1.37	1.45	1.54	1.67	6.8%	18.9	17.8	16.4	11.4
Northwestern	NWE	59.34	9	3,429	5,966	2.48	4.2%	67%	3.21	3.50	3.70	3.90	3.7%	17.0	16.0	15.2	12.6
NRG Energy	NRG	31.82	-22	7,331	5,050	1.40	4.4%	57%	8.93	0.25	2.45	2.55	-34.1%	127.3	13.0	12.5	2.6
OGE Energy	OGE	39.55	9	7,918	12,010	1.66	4.2%	81%	2.27	2.07	2.04	2.17	-1.5%	19.1	19.4	18.2	11.2
Otter Tail Power	OTTR	58.71	-14	2,444	3,195	1.65	2.8%	42%	4.23	6.62	3.90	3.45	-6.6%	8.9	15.1	17.0	6.4
Pinnacle West	PNW	76.04	14	8,603	16,552	3.46	4.6%	82%	5.47	4.24	4.20	4.60	-5.6%	17.9	18.1	16.5	11.2
PNM Resources	PNM	48.79	11	4,188	8,408	1.47	3.0%	56%	2.45	2.60	2.64	2.71	3.4%	18.8	18.5	18.0	11.6
Portland Gneral	POR	49.00	-2	4,374	7,954	1.81	3.7%	66%	2.72	2.79	2.75	3.02	3.5%	17.6	17.8	16.2	9.4
Unitil	UTL	51.36	16	824	1,389	1.56	3.0%	57%	2.35	2.58	2.72	2.88	7.0%	19.9	18.9	17.8	9.5
Vistra Energy	VST	23.20	9	9,233	13,690	0.77	3.3%	26%	-2.69	1.50	3.02	2.61		15.5	7.7	8.9	4.4
SMID Cap Median			4				3.4%	61%		5.0%	6.5%	4.2%	3.6%	18.9	18.0	17.0	11.4
Electric Universe M	ledian		4				3.3%	61%		5.9%	5.0%	6.1%	5.2%	19.1	18.2	17.1	12.3

Canadian Utilities	<u>SYM</u>	Price \$	2022 <u>YTD</u> %	Equity <u>Cap</u> \$	Enterprise Value	Annual Dividend	Current Return	Payout 2023E	EPS 2021A \$	EPS 2022E \$	EPS 2023P \$	EPS 2024P \$	EPS 3-Year CAGR	2022 <u>P/E</u> X	2023 <u>P/E</u> X	2024 <u>P/E</u> X	EV/ EBITDA X
Emera	EMA-T	51.75	-13	10,300	32,662	2.76	5.3%	86%	2.81	2.98	3.22	3.35	6.0%	17.4	16.1	15.4	12.5
Fortis	FTS	40.04	-12	19,232	42,943	1.67	4.2%	56%	2.59	2.55	2.98	3.14	6.6%	15.7	13.4	12.8	13.0
Algnoquin	AQN	6.52	-50	4,392	14,068	0.72	11.1%	90%	0.66	0.67	0.80	0.90	10.9%	9.7	8.2	7.2	11.4
Alta-Gas	ALA-T	23.38	-11	4,894	16,433	1.06	4.5%	54%	1.76	1.86	1.97	2.06	5.4%	12.6	11.9	11.3	10.9
Canadian Utilities	CU-T	36.65	6	7,279	20,397	1.78	4.8%	78%	2.17	2.51	2.29	2.42	3.7%	14.6	16.0	15.1	10.3
Hydro-One	H-T	36.27	14	16,027	36,298	1.12	3.1%	63%	1.61	1.71	1.77	1.85	4.7%	21.2	20.5	19.6	13.2
			-11				4.7%	70%		5.9%	6.1%	5.3%	5.7%	15.2	14.7	14.0	11.9

Source: Public data, Gabelli Funds estimates



## **Appendix 2: Clean, Independent Power, Gas & Water Selected Statistics**

			2022	Equity	Enterprise	Annual	Current	Payout	<b>EPS</b>	EPS	EPS	EPS	EPS 3-Year	2022	2023	2024	EV/
Clean Power IPP's	<u>SYM</u>	<b>Price</b>	<b>YTD</b>	Cap	<u>Value</u>	<u>Dividend</u>	Return	2023E	2021A	<u>2022E</u>	2023P	2024P	<b>CAGR</b>	P/E	P/E	P/E	<b>EBITDA</b>
		\$	%	\$	\$	\$			\$	\$	\$	\$		X	X	X	X
Ormat	ORA	86.48	11	4,847	6,523	0.48	0.6%	26%	1.39	1.37	1.87	2.36	19.3%	63.1	46.2	36.6	15.0
NextEra Energy Parti	NEP	70.09	-13	6,063	19,770	3.15	4.5%	124%	1.77	4.35	2.54	3.09	-	16.1	27.6	22.7	12.0
Brookfield Renewable	BEP	25.34	-25	10,261	51,183	1.28	5.1%	1422%	-0.69	-0.52	0.09	0.34	-	-48.7	281.6	74.5	24.6
Constellation Energy	CEG	86.21		28,192	30,052	0.56	0.7%	12%	-0.63	2.31	4.59	5.82	-	37.3	18.8	14.8	11.5
Atlantica Sustainable	AY	25.90	-22	2,918	7,730	1.78	6.9%	342%	-0.26	-0.14	0.52	0.53	-	-185.0	49.8	48.9	9.6
Boralex	BLX-T	40.02	20	3,035	7,286	0.66	1.6%	59%	0.16	0.70	1.11	1.04	86.5%	57.2	36.1	38.5	13.1
Canadian Solar	CSIQ	30.90	-3	1,986	4,303	0.00	0.0%	0%	1.13	2.60	4.36	4.87	62.7%	11.9	7.1	6.3	8.6
Clearway Energy	CWEN	31.87	-7	6,201	13,859	1.47	4.6%	-	-	-	-	-	-	-	-	-	-
Innergex Renewable	INE-T	16.20	-8	2,441	9,117	0.72	4.4%	147%	-0.04	0.10	0.49	0.29	-	162.0	33.1	55.9	13.2
Vistra Energy	VST	23.20	9	9,233	13,690	0.77	3.3%	26%	-2.69	1.21	3.02	2.61		19.2	7.7	8.9	4.4
TransAlta Renewable	RNW-T	11.25	-36	2,216	3,739	0.94	8.4%	127%	0.52	0.37	0.74	0.79	14.9%	30.4	15.2	14.2	7.6
Group Median			-8		•	•	4.4%	44%						17.6	23.2	18.7	10.5

			2022		Enterprise	Annual	Current	Payout	EPS	EPS	EPS	EPS	EPS 3-Year	2022	2023	2024	EV/
Midstream Gas Co'	<u>SYM</u>	<b>Price</b>	<b>YTD</b>	<u>Cap</u>	<u>Value</u>	<u>Dividend</u>	Return	2023E	2021A	<u>2022E</u>	2023P	2024P	<u>CAGR</u>	P/E	P/E	P/E	<b>EBITDA</b>
		\$	%	\$	\$	\$			\$	\$	\$	\$		X	X	X	X
TransAlta	TAC	8.97	-17	2,417	5,466	0.16	1.8%	18%	-2.13	0.63	0.92	0.25		14.2	9.8	35.9	5.1
Williams	WMB	32.90	33	40,072	65,045	1.70	5.2%	94%	1.36	1.64	1.80	1.80	9.8%	20.1	18.3	18.3	10.3
Enbridge	ENB	39.10	9	79,171	146,022	2.62	6.7%	86%	2.74	2.16	3.05	3.09	4.1%	18.1	12.8	12.7	12.8
TC Energy Corp	TRP	39.86	-9	40,572	83,852	2.66	6.7%	62%	4.27	3.15	4.27	4.44	1.3%	12.7	9.3	9.0	11.7
ONEOK	OKE	65.70	19	29,365	43,120	3.74	5.7%	84%	3.35	3.86	4.44	4.70	11.9%	17.0	14.8	14.0	11.9
Kinder Morgan	KMI	18.08	21	40,639	72,842	1.11	6.1%	100%	1.32	1.16	1.11	1.15	-4.5%	15.6	16.3	15.7	9.7
			14				5.4%	85%					6.9%	18.1	15.2	15.7	10.4

			2022		Enterprise	Annual	Current	Payout	EPS	EPS	EPS	EPS	EPS 3-Year	2022	2023	2024	EV/
Gas Utilities	<u>SYM</u>	<b>Price</b>	YTD	<u>Cap</u>	<u>Value</u>	Dividend	Return	2023E	2021A	<u>2022E</u>	2023P	2024P	<u>CAGR</u>	P/E	P/E	P/E	EBITDA
		\$	%	\$	\$	\$			\$	\$	\$	\$		X	X	X	X
Atmos Energy	ATO	112.07	12	15,804	23,874	2.96	2.6%	46%	5.60	5.99	6.43	6.87	7.0%	18.7	17.4	16.3	13.4
Black Hills Corp	BKH	70.34	4	4,578	9,286	2.50	3.6%	67%	3.74	3.60	3.75	3.95	1.8%	19.5	18.8	17.8	12.8
Chesapeake Utilities	CPK	118.18	-16	2,097	2,867	2.14	1.8%	40%	4.73	4.98	5.40	5.75	6.7%	23.7	21.9	20.6	13.7
MDU Resources	MDU	30.34	2	6,170	9,184	0.89	2.9%	42%	1.87	1.77	2.12	2.31	7.3%	17.1	14.3	13.1	10.3
National Fuel Gas	NFG	63.30	3	5,791	8,346	1.90	3.0%	25%	5.88	6.89	7.54	8.26	12.0%	9.2	8.4	7.7	5.9
NiSource	NI	27.42	4	11,136	23,740	0.94	3.4%	61%	1.37	1.45	1.54	1.67	6.8%	18.9	17.8	16.4	11.4
Northwest Natural G	NWN	47.59	3	1,670	2,966	1.94	4.1%	72%	2.56	2.55	2.71	2.81	3.2%	18.7	17.6	16.9	10.4
NJ Resources	NJR	49.62	25	4,785	7,649	1.56	3.1%	57%	2.50	2.49	2.73	2.55	0.7%	19.9	18.2	19.5	14.2
OneGas	OGS	75.72	2	4,100	7,192	2.48	3.3%	60%	3.85	4.07	4.15	4.35	4.1%	18.6	18.2	17.4	12.9
SJI Industries	SJI	35.53	41	4,351	7,924	1.24	3.5%	69%	1.62	1.72	1.81	1.92	5.8%	20.7	19.6	18.5	14.9
RGC Resources	RGCO	22.05	-3	217	348	0.79	3.6%	68%	1.01	0.90	1.17	1.35	10.1%	24.5		16.3	
Southwest Gas	SWX	61.88	-8	4,150	10,378	2.48	4.0%	59%	3.65	3.47	4.18	4.85	9.9%	17.8	14.8	12.8	10.8
Spire	SR	68.86	12	3,618	8,144	2.88	4.2%	66%	3.86	4.13	4.36	4.63	6.2%	16.7	15.8	14.9	11.8
UGI	UGI	37.07	-15	7,774	13,610	1.44	3.9%	43%	2.90	2.98	3.34	3.56	7.1%	12.4	11.1	10.4	8.1
Group Median			3				3.5%	60%		4.1%	9.0%	7.0%	6.8%	18.7	17.6	16.4	11.8

			2022	Equity	Enterprise	Annual	Current	Payout	EPS	EPS	EPS	EPS	EPS 3-Year	2022	2023	2024	EV/
Water Utilities	<u>SYM</u>	<b>Price</b>	<b>YTD</b>	<u>Cap</u>	<u>Value</u>	<u>Dividend</u>	Return	<u>2023E</u>	2021A	<u>2022E</u>	2023P	2024P	<u>CAGR</u>	P/E	P/E	P/E	<b>EBITDA</b>
		\$	%	\$	\$	\$	%	%	\$	\$	\$	\$	%	X	X	X	X
American States Wate	AWR	92.55	-7	3,421	4,100	1.59	1.7%	58%	2.55	2.47	2.72	2.95	5.0%	37.5	34.0	31.4	21.9
American Water Worl	AWK	152.42	-17	27,714	39,452	2.62	1.7%	55%	3.98	4.46	4.78	5.17	9.1%	34.2	31.9	29.5	19.7
AquaAmerica	WTRG	47.73	-8	12,519	19,033	1.15	2.4%	60%	1.67	1.79	1.90	2.06	7.2%	26.7	25.1	23.2	19.2
Artesian Water	ARTNA	58.58	29	551	737	1.11	1.9%	70%	1.45	1.93	1.60	1.70	5.4%	30.4	-	-	
California Water Serv	CWT	60.64	-12	3,325	4,346	1.00	1.6%	51%	1.96	1.70	1.98	2.17	3.4%	35.7	30.6	27.9	16.7
Consolidated Water	CWCO	14.80	47	226	183	0.34	2.3%	39%	0.06	0.49	0.88	0.70	126.6%	30.2	16.8	21.1	12.8
Global Water Resourc	GWRS	13.28	-21	317	412	0.30	2.2%	119%	0.13	0.23	0.25	0.20	24.0%	57.7	53.1	-	18.6
SJW Corp	SJW	81.19	15	2,462	4,106	1.44	1.8%	57%	2.03	2.38	2.53	2.75	10.6%	34.1	32.1	29.5	17.5
York Water	YORW	44.98	-7	642	766	0.81	1.8%	57%	1.30	1.38	1.43	1.45	3.7%	32.6	31.5	31.0	
			-7				1.8%	57%		11.2%	7.4%	6.0%	7.2%	34	32	29	19

Source: Public data, Gabelli Funds estimates



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