



Edison Electric
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2022 Industry Financial Highlights

February 21, 2023

This document is comprised of Q4 2022 Financial Updates for Stock Performance, Dividends, and Credit Ratings from EEI's Finance Department.

These quarterly updates and other EEI Finance Department materials can be found at: www.eei.org/QFU.

About EEI

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. In addition to our U.S. members, EEI has more than 60 international electric companies, with operations in more than 90 countries, as International Members, and hundreds of industry suppliers and related organizations as Associate Members. Organized in 1933, EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums.

About EEI's Quarterly Financial Updates

EEI's quarterly financial updates present industry trend analyses and financial data covering 44 U.S. investor-owned electric utility companies. These 44 companies include 39 electric utility holding companies whose stocks are traded on major U.S. stock exchanges and five electric utilities who are subsidiaries of non-utility or foreign companies. Financial updates are published for the following topics:

- Stock Performance
- Dividends
- Credit Ratings
- Rate Review

EEI Finance Department material can be found online at www.eei.org/QFU.

For EEI Member Companies

The EEI Finance and Accounting Division maintains current year and historical data sets that cover a wide range of industry financial and operating metrics. We look forward to serving as a resource for member companies who wish to produce customized industry financial data and trend analyses for use in:

- Investor relations studies and presentations
- Internal company presentations
- Performance benchmarking
- Peer group analyses
- Annual and quarterly reports to shareholders

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We Welcome Your Feedback

EEI is interested in ensuring that our publications and industry data sets best address the needs of member companies and the regulatory and financial communities. We welcome your comments, suggestions and inquiries.

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Future EEI Finance Meetings

58th EEI Financial Conference
November 12-14, 2023
JW Marriott Desert Ridge
Phoenix, Arizona

For more information about future EEI Finance Meetings, please contact Aaron Cope, Jr. at (202) 508-5128 or acope@eei.org.

The 44 U.S. Investor-Owned Electric Utilities

The companies listed below all serve a regulated distribution territory. Other utilities, such as transmission provider ITC Holdings, are not shown below because they do not serve a regulated distribution territory. However, their financial information is included in relevant EE data sets, such as transmission-related construction spending.

ALLETE, Inc. (ALE)
Alliant Energy Corporation (LNT)
Ameren Corporation (AEE)
American Electric Power Company, Inc. (AEP)
AVANGRID, Inc. (AGR)
Avista Corporation (AVA)
Berkshire Hathaway Energy
Black Hills Corporation (BKH)
CenterPoint Energy, Inc. (CNP)
Cleco Corporation
CMS Energy Corporation (CMS)
Consolidated Edison, Inc. (ED)
Dominion Resources, Inc. (D)
DPL, Inc.
DTE Energy Company (DTE)
Duke Energy Corporation (DUK)
Edison International (EIX)
Entergy Corporation (ETR)
Eversource Energy (ES)
Exelon Corporation (EXC)
FirstEnergy Corp. (FE)
Hawaiian Electric Industries, Inc. (HE)
IDACORP, Inc. (IDA)
IPALCO Enterprises, Inc.

MDU Resources Group, Inc. (MDU)
MGE Energy, Inc. (MGEE)
NextEra Energy, Inc. (NEE)
NiSource Inc. (NI)
NorthWestern Corporation (NWE)
OGE Energy Corp. (OGE)
Otter Tail Corporation (OTTR)
PG&E Corporation (PCG)
Pinnacle West Capital Corporation (PNW)
PNM Resources, Inc. (PNM)
Portland General Electric Company (POR)
PPL Corporation (PPL)
Public Service Enterprise Group Inc. (PEG)
Puget Energy, Inc.
Sempra Energy (SRE)
Southern Company (SO)
Unitil Corporation (UTL)
WEC Energy Group, Inc. (WEC)
Xcel Energy, Inc. (XEL)

Note: Companies shown in italics are not listed on U.S. stock exchanges for one of the following reasons — they are subsidiaries of an independent power producer; they are subsidiaries of foreign-owned companies; or they were acquired by other investment firms.

Companies Listed by Category

(Based on Business Segmentation Data as of 12/31/2021)

Please refer to the Quarterly Financial Updates webpage for previous years' lists.

Given the diversity of utility holding company corporate strategies, no single company categorization approach will be useful for all EEI members and utility industry analysts. Nevertheless, we believe the following classification provides an informative framework for tracking industry financial trends.

Regulated 80% or more of total assets are regulated
Mostly Regulated Less than 80% of total assets are regulated

Categorization is based on year-end business segmentation data presented in SEC 10-K filings, supplemented by discussions with and information provided by parent company IR departments.

The EEI Finance and Accounting Division continues to evaluate our approach to company categorization and business segmentation. In addition, we can produce customized categorization and peer group analyses in response to member company requests. We welcome comments, suggestions and feedback from EEI member companies and the financial community.

Regulated (36 of 44)

Alliant Energy Corporation
Ameren Corporation
American Electric Power Company, Inc.
Avista Corporation
Black Hills Corporation
CenterPoint Energy, Inc.
Cleco Corporation
CMS Energy Corporation
Consolidated Edison, Inc.
Dominion Energy, Inc.
DPL Inc.
DTE Energy Company
Duke Energy Corporation
Edison International
Entergy Corporation
Eversource Energy
FirstEnergy Corp.

IDACORP, Inc.
IPALCO Enterprises, Inc.
MGE Energy, Inc.
NiSource Inc.
NorthWestern Corporation
OGE Energy Corp.
Otter Tail Corporation
PG&E Corporation
Pinnacle West Capital Corporation
PNM Resources, Inc.
Portland General Electric Company
PPL Corporation
Puget Energy, Inc.
Semptra Energy
Southern Company
Unitil Corporation
WEC Energy Group, Inc.
Xcel Energy Inc.

Mostly Regulated (8 of 44)

ALLETE, Inc.
AVANGRID, Inc.
Berkshire Hathaway Energy
Exelon Corporation
Hawaiian Electric Industries, Inc.
MDU Resources Group, Inc.
NextEra Energy, Inc.
Public Service Enterprise Group Incorporated

Note: Companies shown in italics are not listed on U.S. stock exchanges for one of the following reasons — they are subsidiaries of an independent power producer; they are subsidiaries of foreign-owned companies; or they were acquired by other investment firms.

Stock Performance

HIGHLIGHTS

- The EEI Index returned 8.8% in Q4 and 1.2% for the full year. Electric utilities gave investors a relative safe haven and positive return in 2022's market weakness.
- Surging inflation and higher energy costs are a global phenomenon impacting electric utilities. EIA data shows the average cost of natural gas for electricity generation rose 110% year-to-year in Q2 and 86% in Q3. The average coal cost rose 16% in Q2 and 22% in Q3. Natural gas prices eased in Q4 but the average coal cost increased 22.0% in October and 25.9% in November.
- This year's autumn investor conference season produced discussion of inflation, higher interest rates, higher fuel costs, pension costs pressures, and regulatory concern over customer bills.
- Analyst research in Q4 examined the modest cuts in 2023 earnings guidance or longer-term growth outlooks that occurred at several utilities, but research coverage also affirmed that the industry's fundamental growth picture remains robust.

COMMENTARY

Major market indices rebounded in Q4 after three straight quarters of losses. The Dow Jones Industrial Average, a composite of 30 underlying large-capitalization companies, gained 15.8% while the more broadly diversified S&P 500 Index gained 7.3%. The tech-heavy Nasdaq, the epicenter of late 2021's market froth, edged down a modest 1.6%. Utilities were right in the middle; the EEI Index gained 8.8% for the quarter.

The full-year 2022 picture shows utilities far ahead of major indices on a relative basis. The Dow Jones Industrial

I. Index Comparison (% Return)

Index	2016	2017	2018	2019	2020	2021	2022
EEI Index	17.4	11.7	3.7	25.8	-1.2	17.1	1.2
Dow Jones Ind.	16.5	28.1	-3.5	25.3	9.7	21.0	-7.0
S&P 500	12.0	21.8	-4.4	31.5	18.4	28.7	-18.3
Nasdaq Comp.^	7.5	28.2	-3.9	35.2	43.6	21.4	-33.5

Calendar year returns shown for all periods, except where noted.
^Price gain/loss only. Other indices show total return.

Source: EEI Finance Department, S&P Global Market Intelligence

II. Category Comparison (% Return)

U.S. Investor-Owned Electric Utilities

Index	2016	2017	2018	2019	2020	2021	2022
All Companies	22.2	11.6	4.3	23.1	-8.1	17.6	2.7
Regulated	21.2	11.7	4.5	24.6	-9.0	16.7	3.6
Mostly Regulated	24.6	11.3	3.6	17.9	-4.9	21.1	-1.1
Diversified	25.6	n/a**	n/a**	n/a**	n/a**	n/a**	n/a**

Calendar year returns shown for all periods except where noted.

Returns shown here are unweighted averages of constituent company returns.

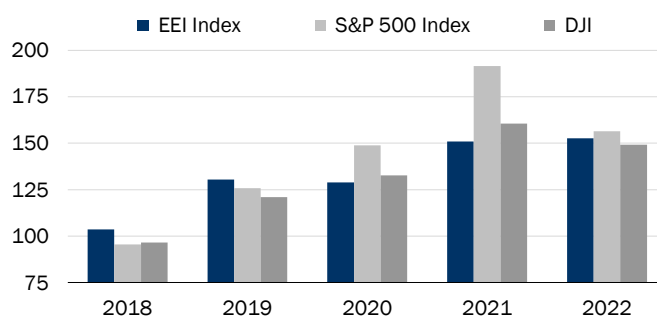
The EEI Index return shown in Table I above is cap-weighted.

**Diversified category eliminated in 2017 due to lack of constituent companies.

Source: EEI Finance Department, S&P Global Market Intelligence and company reports

III. Total Return Comparison

Value of \$100 invested at close on 12/31/2017



Source: EEI Finance Department, S&P Global Market Intelligence

IV. 10-Year Treasury Yield — Monthly

Average Monthly Yield, 1/1/1980 through 12/31/2022



Source: U.S. Federal Reserve

V. 10-Year Treasury Yield — Weekly

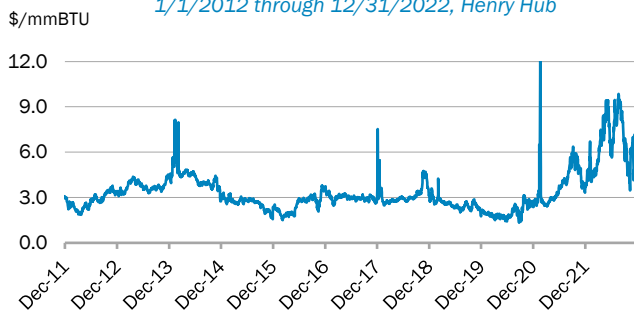
Weekly Yield, 1/1/2008 through 12/31/2022



Source: U.S. Federal Reserve

VI. Natural Gas Spot Prices

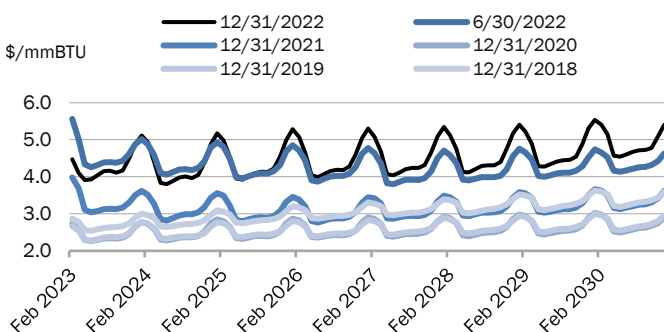
1/1/2012 through 12/31/2022, Henry Hub



Source: S&P Global Market Intelligence

VII. NYMEX Natural Gas Futures

2/2023 through 12/2030, Henry Hub



Source: S&P Global Market Intelligence

VIII. Returns by Quarter

U.S. Investor-Owned Electric Utilities

Index	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
EEl Index	-13.6	1.8	5.6	6.5	3.0	-0.7	1.4	12.9	4.8	-4.9	-6.7	8.8
Dow Jones Industrial	-22.7	18.5	8.2	10.7	8.3	5.1	-1.5	7.9	-4.0	-10.9	-6.2	15.8
S&P 500	-19.6	20.5	8.9	12.2	6.2	8.6	0.6	11.0	-4.6	-16.1	-4.9	7.3
Nasdaq Comp. ^A	-14.2	30.6	11.0	15.4	2.8	9.5	-0.4	8.3	-9.0	-23.0	-3.5	-1.6

Category*	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
All Companies	-15.8	-1.0	1.3	8.8	6.0	0.3	-0.7	11.5	5.2	-3.8	-8.3	10.7
Regulated	-15.0	-1.3	-0.1	8.6	4.8	0.3	-0.7	11.9	6.4	-3.6	-8.2	10.0
Mostly Regulated	-18.3	0.2	6.2	9.3	10.6	0.3	-0.8	10.1	0.0	-5.0	-9.0	14.3

^APrice gain/(loss) only. Other indices show total return. / * Returns shown here are unweighted averages of constituent company returns. The EEl Index return shown above is cap-weighted. Source: EEl Finance Department, S&P Global Market Intelligence

IX. Sector Comparison, Trailing 3 mo. Total Return

For the three-month period ending 12/31/2022

Sector	Total Return
Oil & Gas	18.9%
Basic Materials	16.7%
Industrials	13.3%
Financials	11.4%
Healthcare	10.9%
Telecommunications	8.9%
EEl Index	8.8%
Utilities	7.9%
Technology	-0.6%
Consumer Services	-0.8%
Consumer Goods	-3.0%

Note: Sector Comparison page based on the Dow Jones U.S. Indexes, which are market-capitalization-weighted indices.

Source: EEl Finance Dept., Dow Jones & Company, Google Finance, Y Charts

X. Sector Comparison, Trailing 12 mo. Total Return

For the twelve-month period ending 12/31/2022

Sector	Total Return
Oil & Gas	61.5%
Utilities	2.9%
EEl Index	1.2%
Healthcare	-4.7%
Telecommunications	-6.5%
Basic Materials	-6.9%
Financials	-13.3%
Industrials	-13.5%
Consumer Goods	-23.2%
Consumer Services	-30.6%
Technology	-34.9%

Note: Sector Comparison page based on the Dow Jones U.S. Indexes, which are market-capitalization-weighted indices.

Source: EEl Finance Dept., Dow Jones & Company, Google Finance, Y Charts

XI. Market Capitalization at December 31, 2022 (in \$ Millions)

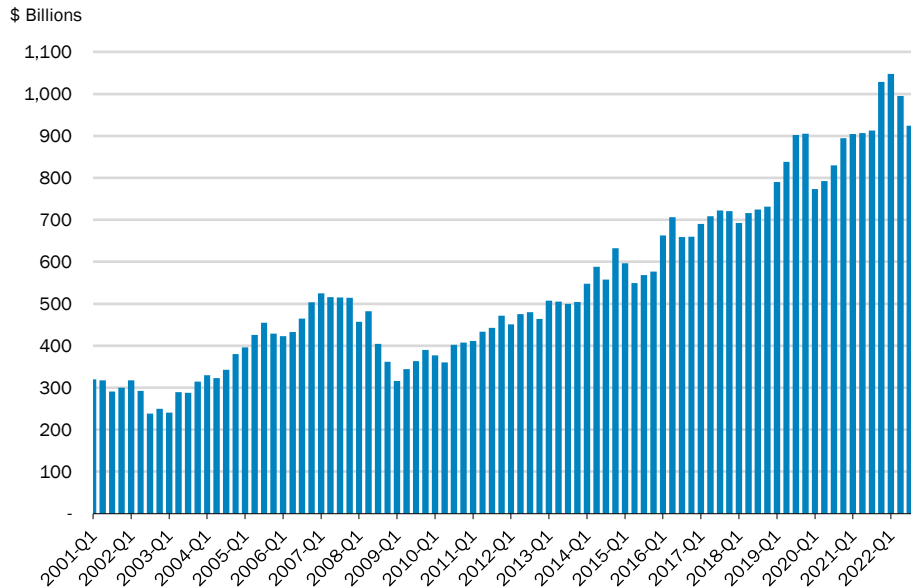
U.S. Investor-Owned Electric Utilities

Company	Stock Symbol	\$ Market Cap	% Total	Company	Stock Symbol	\$ Market Cap	% Total
NextEra Energy, Inc.	NEE	164,901	16.49%	CMS Energy Corporation	CMS	18,340	1.83%
Duke Energy Corporation	DUK	79,302	7.93%	AVANGRID, Inc.	AGR	16,622	1.66%
Southern Company	SO	77,266	7.73%	Eergy, Inc.	EVRG	14,468	1.45%
Dominion Energy, Inc.	D	51,055	5.11%	Alliant Energy Corporation	LNT	13,858	1.39%
American Electric Power Co., Inc.	AEP	48,779	4.88%	NiSource Inc.	NI	11,146	1.11%
Sempra Energy	SRE	48,637	4.86%	Pinnacle West Capital Corp.	PNW	8,609	0.86%
Exelon Corporation	EXC	42,711	4.27%	OGE Energy Corp.	OGE	7,918	0.79%
Xcel Energy Inc.	XEL	38,420	3.84%	MDU Resources Group, Inc.	MDU	6,170	0.62%
Consolidated Edison, Inc.	ED	33,797	3.38%	IDACORP, Inc.	IDA	5,465	0.55%
PG&E Corporation	PCG	32,309	3.23%	Hawaiian Electric Industries, Inc.	HE	4,581	0.46%
Public Service Enter. Group Inc.	PEG	30,451	3.05%	Black Hills Corporation	BKH	4,563	0.46%
WEC Energy Group, Inc.	WEC	29,572	2.96%	Portland General Electric Co.	POR	4,374	0.44%
Eversource Energy	ES	29,117	2.91%	PNM Resources, Inc.	PNM	4,201	0.42%
Edison International	EIX	24,303	2.43%	ALLETE, Inc.	ALE	3,684	0.37%
FirstEnergy Corp.	FE	23,948	2.40%	NorthWestern Corporation	NWE	3,341	0.33%
Ameren Corporation	AEE	22,977	2.30%	Avista Corporation	AVA	3,247	0.32%
Entergy Corporation	ETR	22,888	2.29%	MGE Energy, Inc.	MGEE	2,546	0.25%
DTE Energy Company	DTE	22,683	2.27%	Otter Tail Corporation	OTTR	2,442	0.24%
PPL Corporation	PPL	21,513	2.15%	Unitil Corporation	UTL	822	0.08%
CenterPoint Energy, Inc.	CNP	18,879	1.89%	Total Industry		999,904	100.00%

Source: EEI Finance Dept., S&P Global Market Intelligence

XII. EEI Index Market Capitalization (at Period End)

U.S. Investor-Owned Electric Utilities



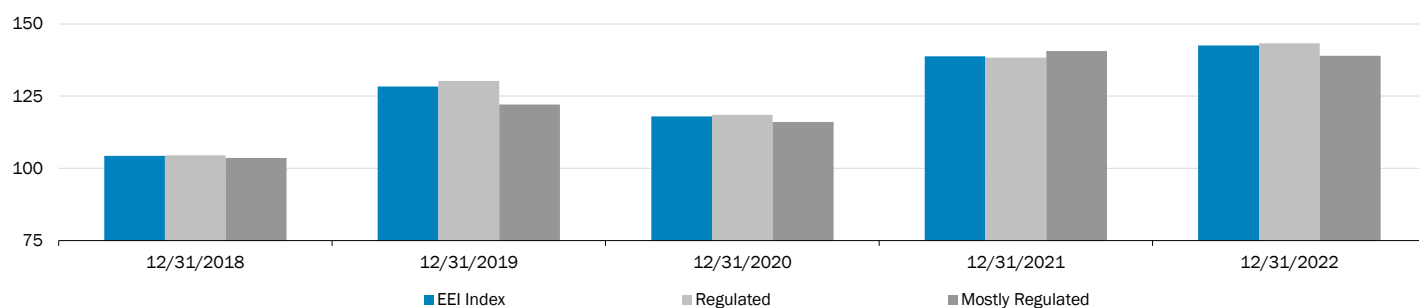
EEI Index Market Cap (in \$ Billions)			
2007-Q1	525	2015-Q1	597
2007-Q2	516	2015-Q2	549
2007-Q3	515	2015-Q3	568
2007-Q4	514	2015-Q4	577
2008-Q1	457	2016-Q1	663
2008-Q2	482	2016-Q2	706
2008-Q3	404	2016-Q3	659
2008-Q4	362	2016-Q4	660
2009-Q1	316	2017-Q1	690
2009-Q2	344	2017-Q2	708
2009-Q3	363	2017-Q3	722
2009-Q4	390	2017-Q4	720
2010-Q1	377	2018-Q1	692
2010-Q2	360	2018-Q2	716
2010-Q3	402	2018-Q3	725
2010-Q4	407	2018-Q4	731
2011-Q1	411	2019-Q1	790
2011-Q2	433	2019-Q2	838
2011-Q3	442	2019-Q3	902
2011-Q4	472	2019-Q4	905
2012-Q1	451	2020-Q1	773
2012-Q2	475	2020-Q2	792
2012-Q3	480	2020-Q3	830
2012-Q4	464	2020-Q4	894
2013-Q1	507	2021-Q1	905
2013-Q2	505	2021-Q2	907
2013-Q3	500	2021-Q3	913
2013-Q4	504	2021-Q4	1,028
2014-Q1	548	2022-Q1	1,047
2014-Q2	588	2022-Q2	995
2014-Q3	557	2022-Q3	924
2014-Q4	632	2022-Q4	1000

Note: Change in EEI Index market capitalization reflects the impact of buyout and spin-off activity in addition to stock market performance.

Source: EEI Finance Dept., S&P Global Market Intelligence

XIII. Comparative Category Total Annual Returns

U.S. Investor-Owned Electric Utilities, Value of \$100 invested at close on 12/31/2017



	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
EEI Index Annual Return (%)		4.28	23.06	(8.07)	17.62	2.74
EEI Index Cumulative Return (\$)	100.00	104.28	128.32	117.96	138.74	142.55
Regulated EEI Index Annual Return		4.55	24.56	(9.01)	16.72	3.59
Regulated EEI Index Cumulative Return	100.00	104.55	130.22	118.49	138.30	143.26
Mostly Regulated EEI Index Annual Return		3.62	17.87	(4.95)	21.09	(1.15)
Mostly Regulated EEI Index Cumulative Return	100.00	103.62	122.14	116.09	140.58	138.97

Calendar year returns shown, except where noted.
Diversified category eliminated in 2017 due to lack of constituent companies.
Returns are unweighted averages of constituent company returns.

Average returned -7.0% in 2022, the S&P 500 returned -18.3% and the Nasdaq fell deep into a bear market with a 33.5% decline.

Economic Growth Rebounds After Weak First Half

Markets in Q4 were powered higher in part by evidence that economic strength rebounded from weakness in 2022's first half. In late October, the Bureau of Economic Analysis (BEA) released its first estimate of Q3 2022 real GDP at positive 2.6%; this compared to -1.6% in Q1 and -0.6% for Q2. The Q3 figure was revised upward to 2.9% in the late November release and higher again to 3.2% in the BEA's third estimate, released on December 22.

Headline Inflation Moderates in Q4

Investor sentiment was also lifted by hints that inflation may be moderating. Inflation measured by the headline consumer price index (CPI) for urban consumers peaked in June at 8.9% and held above 8% in July, August and September. Data released in Q4 showed a steady decline to 7.8% in October, 7.1% in November and 6.4% in December. The CPI excluding volatile food and energy (which economists often cite as a more meaningful inflation metric) hovered near 6% all year and peaked in September at 6.6%, yet it too eased in Q4 to a December reading of 5.7%.

Fed Hikes but Bond Yields Ease

Persistently sticky inflation data was enough to cause the U.S. Federal Reserve to extend its 2022 rate hike campaign

EEI Q4 2022 Financial Update

XIV. EEI Index Top Ten Performers

For the twelve-month period ending 12/31/2022

Company	% Return	Category
PG&E Corporation	33.9	R
Sempra Energy	20.3	R
Consolidated Edison, Inc.	15.6	R
Unitil Corporation	15.1	R
Pinnacle West Capital Corporation	12.9	R
American Electric Power Company, Inc.	10.4	R
PNM Resources, Inc.	10.2	R
CenterPoint Energy, Inc.	10.1	R
Avista Corporation	8.8	R
NorthWestern Corporation	8.5	R

Note: Return figures include capital gains and dividends.
R = Regulated, MR = Mostly Regulated
Source: EEI Finance Department

into Q4, hiking the overnight federal funds rate by 75 basis points on November 2 and 50 basis points on December 14. The Fed's seven rate hikes in 2022 took the fed funds rate from near 0% in March to 4.3% in late December, making for one of the steepest rate-hike campaigns in modern history.

Bond markets spent Q4 wondering how to react to Fed hikes and cooler inflation data. The U.S. 10-year Treasury yield rose in October, reaching 4.2%, but then fell steadily to 3.4% by early December before climbing back to 3.8% at year-end, and corporate bond yields were steady for the

quarter. Falling inflation numbers and steady bond yields gave investors enough confidence to push markets up after three quarters of losses.

Fuel Cost Inflation Drives up Power Prices

While surging inflation and higher energy costs are a global phenomenon, the trend is impacting U.S. electricity costs. Natural gas powers about 38% of generation nationwide and coal about 22%. Natural gas prices have been rising since the middle of 2020 and jumped in 2022 to their highest levels since 2013. Regulated utilities pass fuel costs through to rates under state regulation and have little near-term control over the fuel element of the utility bill. EIA data shows the average cost of natural gas for electricity generation rose 110% year-to-year in Q2 and 86% in Q3. EIA data shows that comparable coal costs rose 11% year-to-year in Q1, 16% in Q2 and 22% in Q3.

Natural gas comparisons eased in tandem with CPI inflation in Q4, echoed by the decline in spot gas prices seen in Chart VI. The average cost of natural gas for electric generation rose only 5.0% in October and was unchanged year-to-year in November. However, inflation in the average cost of coal for electricity generation remained high, at 22.0% in October and 25.9% in November.

While electricity rates in aggregate nationwide were mostly flat from 2008 through 2019, the average retail price of electricity nationwide according to EIA data rose 7% year-to-year in 2022's Q1, more than 12% in Q2 and almost 17% in Q3. Cost pressures continued in Q4 with year-to-year increases at 14.0% in October at 11.8% in November.

Utility managements and Wall Street analysts are closely watching rate reviews and regulators' reactions to integrated resource plans to see if cost pressures on utility bills spoil consumers' or regulators' support for the clean energy capex that drives earnings growth.

Conference Season and "Non-Linearities"

Each Q4 Wall Street analysts produce considerable reporting on utility management presentations at the investment conferences that populate the fall season. EEI's Financial Conference in November is one of these. In recent years, Wall Street's take has been consistently upbeat, focusing on the virtuous cycle that enabled low natural gas prices, stable customer bills, growing public support for clean energy and for CO₂ emissions cuts, federal clean renewable energy tax incentives, and operations and maintenance (O&M) cost savings from smart-grid investments to fund the growing capital spending that translates into earnings growth. Projected secular earnings growth rates analysts cited for utilities steadily edged higher over the past decade from 4%-5% up to 5%-7% and 6%-8% in some cases.

This year's conference season produced widespread discussion of inflation, higher interest rates, higher fuel costs, pension costs pressures, regulatory concern over the impacts of aggressive capex on customer bills, and the stability of long-term earnings growth rates across the industry. Several analyst reports used the phrase "non-linearities" to reference the modest cuts in 2023 earnings guidance or longer-term growth outlooks that came out of Q3 earnings calls and conference presentations by a handful of utilities. The phrase was also a buzzword for investors' new scrutiny of company outlooks for risks of earnings speed bumps or downshifts to expected growth rates.

Secular Tailwinds

Yet despite scattered earnings outlook cuts, Q4's Wall Street research coverage also affirmed the industry's fundamental growth picture remains robust.

The Inflation Reduction Act of 2022 (IRA) offers broad support to the nation's clean energy agenda and may add to pre-existing rate base growth opportunities for electric utilities. In EEI's view, the IRA places the United States at the forefront of global efforts to drive down carbon emissions, especially when paired with the historic funding included in the bipartisan infrastructure law. It also provides much-needed certainty to electric utilities over the next decade, as they work to deploy clean energy and carbon-free technologies.

Analysts noted that, despite regulatory scrutiny of customer bill pressures in some regions, there is little evidence that commissions are generally any less supportive of the nation's clean energy agenda and the economic stimulus that clean energy and reliability-related capex brings to service territories. The potential boost to secular load growth from widespread adoption of electric vehicles also remains a possibly strong tailwind. Several utilities have cited the onshoring of U.S. manufacturing and economic development as drivers of strong load growth in their service territories. A few cited electricity demand from large data centers.

Long-term growth rarely occurs without occasional setbacks and challenges. And utilities offered investors a relative safe haven and a positive total return in 2022's market weakness — that's more or less what they're expected to do. It's impossible to predict what inflation and interest rates will do in 2023, but as the year begins it seems reasonable to believe the nation's clean energy revolution is still in the early innings with investor-owned utilities as key players in the game. ■

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Q4 2022 Dividends

HIGHLIGHTS

- Thirty-four companies increased or reinstated their dividend in 2022 compared to 32 in 2021 and 34 in 2020. There was one dividend reduction compared to zero in 2021 and two in 2020.
- Thirty-eight of the 39 utilities in the EEI Index were paying a common stock dividend as of December 31, 2022.
- The average dividend increase in 2022 was 5.2%, with a range of 1.0% to 12.2% and a median increase of 5.6%.
- The industry's dividend payout ratio was 69.4% for the twelve months ended September 30, 2022, higher than all other U.S. business sectors,
- The industry's average dividend yield was 3.4% on December 31, 2022, leading all U.S. business sectors.

I. Sector Comparison, Dividend Payout Ratio

Last Twelve Months

Sector	Payout Ratio (%)
EEI Index Companies*	69.4%
Utilities	59.3%
Consumer Staples	54.3%
Industrial	34.5%
Financial	29.1%
Materials	29.0%
Consumer Discretionary	27.6%
Energy	26.7%
Health Care	26.1%
Technology	23.0%

*For this table, EEI (1) sums dividends and (2) sums earnings of all index companies and then (3) divides to determine the comparable DPR.

EEI Index Companies payout ratio based on LTM common dividends paid and income before nonrecurring and extraordinary items.

S&P sector payout ratios based on 2022E dividends and earnings per share (estimates as of 12/31/2022).

For more information on constituents of each S&P sector see www.sectorspdr.com.
Source: AltaVista Research, S&P Global Market Intelligence, EEI Finance Department.

II. Sector Comparison, Dividend Yield

at 12/31/2022

Sector	Yield (%)
EEI Index Companies	3.4%
Energy	3.2%
Utilities	3.0%
Consumer Staples	2.5%
Financial	2.1%
Materials	2.1%
Industrial	1.7%
Health Care	1.6%
Technology	1.1%
Consumer Discretionary	1.0%

*EEI Index Companies' yield based on last announced, annualized dividend rates (as of 12/31/2022); S&P sector yields based on 2022E cash dividends (estimates as of 12/31/2022).

For more information on constituents of each S&P sector see www.sectorspdr.com.
Source: AltaVista Research, S&P Global Market Intelligence, EEI Finance Department.

COMMENTARY

The investor-owned electric utility industry continued its long-term trend of widespread dividend increases in 2022. A total of 34 companies increased or reinstated their dividend compared to 32 in 2021, 34 in 2020, 37 in 2019, 39 in 2018 and 36 to 40 companies annually from 2012 through 2017. There was one dividend reduction compared to zero in 2021 and two in 2020.

The percentage of companies that raised or reinstated their dividend in 2022 was 87%, up from 82% in 2021 and aligned with the 85% to 93% range seen from 2015 through 2020. By contrast, only 27 of the 65 utilities tracked by EEI increased their dividend in 2003, just prior to the passage of legislation that reduced dividend tax rates. The percentages noted above are drawn from a dataset that begins in 1988. Mergers and acquisitions reduced the number of publicly

III. Dividend Patterns 2001–2022

U.S. Investor-Owned Electric Utilities																
	Raised	No Change	Lowered	Omitted	Reinstated	Not Paying	Total	Dividend Payout Ratio*								
2001	21	40	3	2	0	3	69	64.1%								
2002	26	27	6	3	0	3	65	67.5%								
2003	26	24	7	2	1	5	65	63.7%								
2004	35	22	1	0	0	7	65	67.9%								
2005	34	22	1	1	2	5	65	66.5%								
2006	41	17	0	0	0	6	64	63.5%								
2007	40	15	0	0	3	3	61	62.1%								
2008	36	20	1	0	1	1	59	66.8%								
2009	31	23	3	0	0	1	58	69.6%								
2010	34	22	0	0	0	1	57	62.0%								
2011	31	22	0	1	1	0	55	62.8%								
2012	36	14	0	0	1	0	51	64.2%								
2013	36	12	1	0	0	0	49	61.5%								
2014	38	9	1	0	0	0	48	60.4%								
2015	39	7	0	0	0	0	46	67.0%								
2016	40	4	0	0	0	0	44	62.9%								
2017	38	4	0	1	0	0	43	64.0%								
2018	39	1	1	0	0	1	42	63.9%								
2019	37	2	0	0	0	1	40	62.6%								
2020	34	2	2	0	0	1	39	65.3%								
2021	32	6	0	0	0	1	39	61.6%								
2022	34	3	1	0	0	1	39	69.1%								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Avg. Increase	7.4%	9.4%	7.2%	8.2%	6.8%	7.2%	5.3%	5.7%	5.8%	5.6%	5.6%	5.7%	5.1%	5.1%	5.1%	5.2%
Avg. Decrease	NA	45.7%	46.4%	NA	100%	NA	41.0%	34.5%	NA	NA	NA	79.8%	NA	40.6%	NA	51.8%

Note: Only one action per company per year is counted. If a company raised its dividend twice, this counts as one in the Raised column. / *2022 figures reflect dividend changes (raised, lowered, etc.) through 12/31/2022 and earnings and dividends through 9/30/2022 (payout ratio).

Source: AltaVista Research, S&P Global Market Intelligence, EEI Finance Department.

IV. Category Comparison, Dividend Payout Ratio

Last Twelve Months

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
EEI Index	61.5	60.4	67.0	62.9	64.0	63.9	62.6	65.3	61.6	69.1
Regulated	60.5	59.4	68.7	61.1	68.7	60.1	62.1	65.3	59.5	66.6
Mostly Reg.	64.7	63.8	62.6	68.0	53.3	72.8	64.1	65.2	69.0	79.6
Diversified	44.7	56.4	64.9	64.6	--	--	--	--	--	--

Regulated: 80% or more of total assets are regulated

Mostly Regulated: Less than 80% of total assets are regulated

Diversified: Prior to 2017, less than 50% of total assets are regulated

*2022 figures reflect earnings and dividends through 9/30/2022.

Source: EEI Finance Department, S&P Global Market Intelligence and company reports.

traded utilities included in the EEI Index from 65 in 2003 to 39 at year-end 2022.

As shown in Table III, 38 of the 39 publicly traded utilities in the EEI Index were paying a common stock dividend as of December 31, 2022. Each company is limited to one action per year in the table. For example, if a company raised its dividend twice during a year that counts as one in the Raised column. Electric utilities generally use the same quarter each year for dividend changes, with Q1 being the most common.

V. Category Comparison, Dividend Yield

at 12/31/2022

Category	Dividend Yield (%)
EEI Index	3.4
Regulated	3.4
Mostly Regulated	3.3

Regulated: 80% or more of total assets are regulated

Mostly Regulated: Less than 80% of total assets are regulated

Source: EEI Finance Department, S&P Global Market Intelligence and company reports.

2022 Increases Average 5.2%

The average dividend increase in 2022 was 5.2%, with a range of 1.0% to 12.2% and a median increase of 5.6%. PNM Resources (12.2% including both its Q1 and Q4 raises), CenterPoint Energy (11.8% including both its Q3 and Q4 increases) and NextEra Energy (+10.4% in Q1) posted the largest percentage increases for the full year.

PNM Resources, headquartered in Albuquerque, New Mexico, raised its quarterly dividend from \$0.3275 to \$0.3475 and then to \$0.3575 per share. The increases are

VI. Dividend Summary

U.S. Investor-Owned Electric Utilities (at 12/31/2022)

Company Name	Ticker	Category	Annual Dividend Rate	Payout Ratio	Dividend Yield	Last Action	To	From	Announced
ALLETE, Inc.	ALE	MR	\$2.60	99.4%	4.0%	Raised	\$2.60	\$2.52	2022 Q1
Alliant Energy Corporation	LNT	R	\$1.71	62.6%	3.1%	Raised	\$1.71	\$1.61	2022 Q1
Ameren Corporation	AEE	R	\$2.36	57.5%	2.7%	Raised	\$2.36	\$2.20	2022 Q1
American Electric Power Co., Inc.	AEP	R	\$3.32	61.9%	3.5%	Raised	\$3.32	\$3.12	2022 Q4
AVANGRID, Inc.	AGR	MR	\$1.76	81.0%	4.1%	Raised	\$1.76	\$1.73	2018 Q3
Avista Corporation	AVA	R	\$1.76	98.6%	4.0%	Raised	\$1.76	\$1.69	2022 Q1
Black Hills Corporation	BKH	R	\$2.50	57.2%	3.6%	Raised	\$2.50	\$2.38	2022 Q4
CenterPoint Energy, Inc.	CNP	R	\$0.76	NM	2.5%	Raised	\$0.76	\$0.72	2022 Q4
CMS Energy Corporation	CMS	R	\$1.84	69.5%	2.9%	Raised	\$1.84	\$1.74	2022 Q1
Consolidated Edison, Inc.	ED	R	\$3.16	58.1%	3.3%	Raised	\$3.16	\$3.10	2022 Q1
Dominion Resources, Inc.	D	R	\$2.67	68.8%	4.4%	Raised	\$2.67	\$2.52	2022 Q1
DTE Energy Company	DTE	R	\$3.81	63.6%	3.2%	Raised	\$3.81	\$3.54	2022 Q4
Duke Energy Corporation	DUK	R	\$4.02	78.8%	3.9%	Raised	\$4.02	\$3.94	2022 Q3
Edison International	EIX	R	\$2.95	41.1%	4.6%	Raised	\$2.95	\$2.80	2022 Q4
Entergy Corporation	ETR	R	\$4.28	81.9%	3.8%	Raised	\$4.28	\$4.04	2022 Q4
Eversource Energy	ES	R	\$2.55	59.7%	3.0%	Raised	\$2.55	\$2.41	2022 Q1
Exelon Corporation	EXC	MR	\$1.35	56.0%	3.1%	Raised	\$1.35	N/A	2020 Q1
FirstEnergy Corp.	FE	R	\$1.56	62.5%	3.7%	Raised	\$1.56	\$1.52	2019 Q4
Hawaiian Electric Industries, Inc.	HE	MR	\$1.40	65.5%	3.3%	Raised	\$1.40	\$1.36	2022 Q1
IDACORP, Inc.	IDA	R	\$3.16	60.8%	2.9%	Raised	\$3.16	\$3.00	2022 Q4
MDU Resources Group, Inc.	MDU	MR	\$0.89	52.2%	2.9%	Raised	\$0.89	\$0.87	2022 Q4
MGE Energy, Inc.	MGEE	R	\$1.63	55.1%	2.3%	Raised	\$1.63	\$1.55	2022 Q3
NextEra Energy, Inc.	NEE	MR	\$1.70	105.7%	2.0%	Raised	\$1.70	\$1.54	2022 Q1
NiSource Inc.	NI	R	\$0.94	60.1%	3.4%	Raised	\$0.94	\$0.88	2022 Q1
NorthWestern Corporation	NWE	R	\$2.52	81.3%	4.2%	Raised	\$2.52	\$2.48	2022 Q1
OGE Energy Corp.	OGE	R	\$1.66	103.7%	4.2%	Raised	\$1.66	\$1.64	2022 Q3
Otter Tail Corporation	OTTR	R	\$1.65	23.1%	2.8%	Raised	\$1.65	\$1.56	2022 Q1
PG&E Corporation	PCG	R	\$0.00	0.0%	0.0%	Lowered	\$0.00	\$2.12	2017 Q4
Pinnacle West Capital Corporation	PNW	R	\$3.46	68.2%	4.6%	Raised	\$3.46	\$3.40	2022 Q4
PNM Resources, Inc.	PNM	R	\$1.47	62.8%	3.0%	Raised	\$1.47	\$1.39	2022 Q4
Portland General Electric Company	POR	R	\$1.81	62.5%	3.7%	Raised	\$1.81	\$1.72	2022 Q2
PPL Corporation	PPL	R	\$0.90	132.5%	3.1%	Raised	\$0.90	\$0.80	2022 Q2
Public Service Enterprise Group Inc.	PEG	MR	\$2.16	97.3%	3.5%	Raised	\$2.16	\$2.04	2022 Q1
Sempra Energy	SRE	R	\$4.58	50.1%	3.0%	Raised	\$4.58	\$4.40	2022 Q1
Southern Company	SO	R	\$2.72	69.4%	3.8%	Raised	\$2.72	\$2.64	2022 Q2
Unitil Corporation	UTL	R	\$1.56	60.4%	3.0%	Raised	\$1.56	\$1.52	2022 Q1
WEC Energy Group, Inc.	WEC	R	\$2.91	63.6%	3.1%	Raised	\$2.91	\$2.71	2022 Q1
Xcel Energy Inc.	XEL	R	\$1.95	59.3%	2.8%	Raised	\$1.95	\$1.83	2022 Q1
Industry Average				69.1%	3.4%				

Categories – R = Regulated (80% or more of total assets are regulated), MR = Mostly Regulated (Less than 80% of total assets are regulated); based on assets at 12/31/2021.

Dividend Per Share – Per share amounts are annualized declared figures as of 12/31/2022.

Dividend Payout Ratio – Dividends paid for 12 months ended 9/30/2022 divided by net income before nonrecurring and extraordinary items for 12 months ended 9/30/2022.

Dividend Yield – Annualized Dividends Per Share at 12/31/2022 divided by stock price at market close on 12/31/2022.

NM applies to companies with negative earnings or payout ratios greater than 200%. / N/A = Not Applicable

consistent with the company's target to pay out 55% of annual ongoing earnings.

CenterPoint Energy, based in Houston, Texas, increased its quarterly dividend from \$0.17 to \$0.18 and then to \$0.19 per share. The increases align the company for an annual dividend growth rate of 9% in 2023 when compared to dividends paid in 2022.

NextEra Energy, based in Juno Beach, Florida, increased its quarterly dividend from \$0.385 to \$0.425 per share during the first quarter. The increase is consistent with its plan, announced in 2020, to target roughly 10% annual growth in dividends per share through at least 2022, off a 2020 base. NextEra recorded the industry's highest percentage increases in 2021 (+10.0%), 2020 (+12.0%) and

VII. Free Cash Flow

U.S. Investor-Owned Electric Utilities

(\$ Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net Cash Provided by Oper. Activities	82.9	77.7	84.4	84.0	87.1	89.0	101.6	98.3	101.2	100.0	95.3	67.7	82.4
— Capital Expenditures	(77.6)	(74.2)	(78.6)	(90.3)	(90.3)	(96.1)	(104.0)	(112.5)	(113.1)	(119.5)	(123.8)	(132.7)	(134.1)
— Div. Paid to Common Shares	(17.1)	(18.0)	(19.3)	(20.5)	(20.8)	(21.1)	(22.5)	(23.8)	(25.5)	(25.6)	(27.9)	(29.3)	(30.3)
Free Cash Flow	(11.8)	(14.4)	(13.5)	(26.8)	(24.0)	(28.2)	(24.8)	(38.0)	(37.5)	(44.7)	(56.4)	(94.4)	(81.9)

Source: S&P Global Market Intelligence and EEI Finance Department.

2019 (+12.6%), which followed the second-highest percentage increase in 2018 (+13.0%) and the largest percentage increases in both 2017 (+12.9%) and 2016 (+13.0%, along with Edison International and DTE Energy).

The industry's average and median increases have been relatively consistent in recent years. The average was 4.8% in 2021 and ranged between 5.1% and 5.7% from 2016 through 2020. The median increase was 5.4% in 2021 and ranged between 4.9% and 5.5% from 2017 through 2020.

PPL reduced its quarterly dividend from \$0.415 to \$0.20 in Q1 as part of a strategic repositioning and dividend reset. The company completed a targeted \$1 billion share repurchase program on December 31, 2021, which returned value to existing shareholders in a different manner than dividends. During 2022, PPL completed the sale of its U.K. business (Western Power Distribution) and purchased Narragansett Electric Company, which is Rhode Island's primary electric and gas utility. PPL subsequently increased its dividend by 12.5% during Q2 2022 to a quarterly rate of \$0.225 per share.

Payout Ratio and Dividend Yield

The industry's dividend payout ratio was 69.4% for the twelve months ended September 30, 2022, higher than all other U.S. business sectors (see Table 1). The industry's payout ratio was 69.1% when measured as an un-weighted average of individual company ratios; 69.4% represents an aggregate figure. From 2000 through 2021, the industry's annual payout ratio ranged from 60.4% to 69.6%.

While the industry's net income has fluctuated from year to year, its payout ratio has remained relatively consistent after eliminating non-recurring and extraordinary items from earnings. We use the following approach when calculating the industry's dividend payout ratio:

1. Non-recurring and extraordinary items are eliminated from earnings.
2. Companies with negative adjusted earnings are eliminated.
3. Companies with a payout ratio in excess of 200% are eliminated.

The industry's average dividend yield was 3.4% on December 31, 2022, leading all U.S. business sectors. The yield

reached 3.8% on June 30, 2020 and has since fallen due to a rise in utility stock prices and consistent dividend activity. The market cap-weighted EEI Index had a total return of 17.1% in 2021 and 1.2% in 2022. The industry's year-end dividend yield was 3.3% in 2021, 3.6% in 2020, 3.0% in 2019 and 3.4% in each of the three previous years.

We calculate the industry's average dividend yield using an un-weighted average of the yields of EEI Index companies paying a dividend. The strong yields prevalent among most electric utilities have helped support their share prices over the past decade, particularly given the period's historically low interest rates. The Tax Cuts and Jobs Act, signed into law in December 2017, maintained the pre-existing and equal tax rates for dividends and capital gains. This parity is crucial to avoid a capital raising disadvantage for high-dividend companies.

Business Category Comparison

The Regulated category's dividend payout ratio was 66.6% for the 12 months ended September 30, 2022, compared to 79.6% for the Mostly Regulated category. Among these two categories, the Regulated group produced the higher annual payout ratio in 2020, 2017, 2015, 2011, 2010 and in each year from 2003 through 2008.

The Regulated and Mostly Regulated average dividend yields were 3.4% and 3.3% on December 31, 2022, compared to 3.3% and 3.0% at year-end 2021, 3.6% and 3.4% at year-end 2020, 3.0 and 3.1% at year-end 2019. The dividend yields for both categories at year-end 2018 and 2017 were 3.4%.

Electric Utilities' History of Strong Dividends

The electric utility sector has long been known as a leading dividend payer among U.S. business sectors. This reputation is founded on:

- A steady stream of income from a product that is universally needed and with low elasticity of demand.
- A mostly regulated industry that provides reasonable returns on investment and relatively low investment risk.
- A mature industry comprised of companies with very long track records of maintaining and/or steadily increasing their dividends over time.

These characteristics are especially attractive to an aging population of investors who seek a combination of growth and income. A typical total return model for electric utilities is approximately 4-5% earnings growth and 3-4% dividend yield, which added create 7-9% annual total return potential.

IRA Brings No Change to Dividend Tax Rate

An increase in dividend tax rates for the highest individual tax bracket was considered a potential revenue source for the Biden Administration's Build Back Better Act (BBBA) legislation until BBBA evolved into the passage of the Inflation Reduction Act of 2022 (IRA) in August. Due to the need to significantly reduce the size of this legislation in order to have a chance at success, the IRA passed as a slimmed down version of BBBA, retaining its robust clean energy tax package (that EEI strongly supported) while maintaining current capital gains and dividend tax parity.

The top tax rate for dividends and capital gains is currently 20%, applying to 2022 income thresholds of \$517,200 for couples and \$459,750 for individuals. For taxpayers below these thresholds, dividends and capital gains are currently taxed at rates of 15% or 0%, depending on a filer's income. A 3.8% Medicare tax that was included in 2010 health care legislation is also applied to all investment income for couples earning more than \$250,000 (\$200,000 for singles).

Low dividend tax rates support the industry's ability to attract capital for investment. Maintaining parity between dividend and capital gains tax rates is crucial to avoid a disadvantage for companies that rely on a strong dividend to attract investors. The Tax Cuts and Jobs Act, which was signed into law in December of 2017, also maintained pre-existing tax rates for dividends and capital gains. ■

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Credit Ratings

HIGHLIGHTS

- The industry’s average parent company credit rating in 2022 held at BBB+ for the ninth straight year. Ratings activity remained slow with only 35 total actions — 25 upgrades and 10 downgrades — affecting both parents and subsidiaries. The only S&P ratings change at the parent company level in 2022 was a single downgrade.
- Industry credit quality has improved over the past decade, although it experienced a slight decline, in aggregate, in recent years even as the parent-company average held steady.
- The three major rating agencies stressed similar themes in their outlooks for 2023. The agencies cited inflation, rising interest rates and higher natural gas prices along with related customer bill impacts as key themes they are watching. S&P maintained a negative outlook, Moody's revised its U.S. regulated utility outlook to negative from stable, and Fitch revised its North American utilities outlook to deteriorating from neutral.

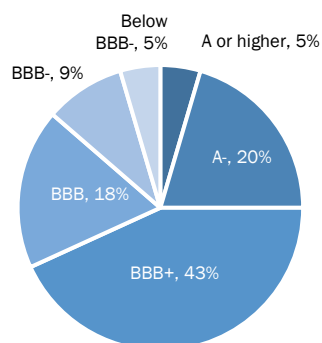
COMMENTARY

The industry’s average parent company credit rating in 2022 remained at BBB+ for the ninth straight year, although one parent-level downgrade caused a slight weakening in aggregate holding company credit quality. There were only 35 total actions — 25 upgrades and 10 downgrades — affecting both parents and subsidiaries. This pace was far below the 73-action annual average of the previous ten calendar years and is the lowest annual total in our historical dataset (back to 2000).

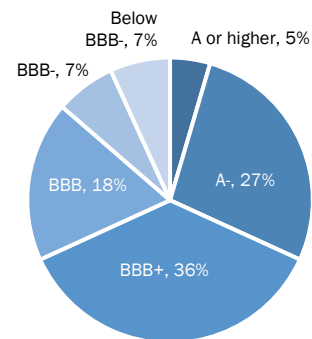
On December 31, 2022, 77.3% of parent company ratings outlooks were “stable”, 9.1% were “positive” or “watch-positive”, and 2.3% were “developing”. Only 11.4% of out-

I. S&P Utility Credit Ratings Distribution

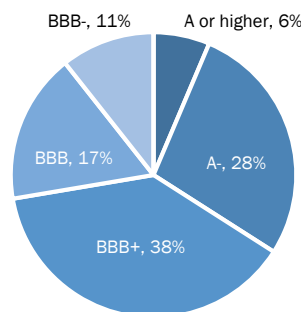
U.S. Investor-Owned Electric Utilities (parent level only)



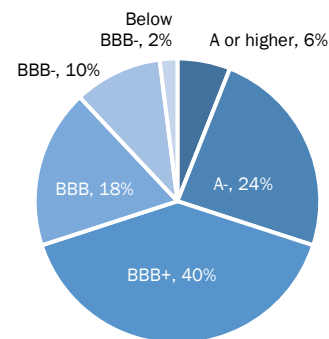
At 12/31/2022



At 12/31/2020



At 12/31/2018

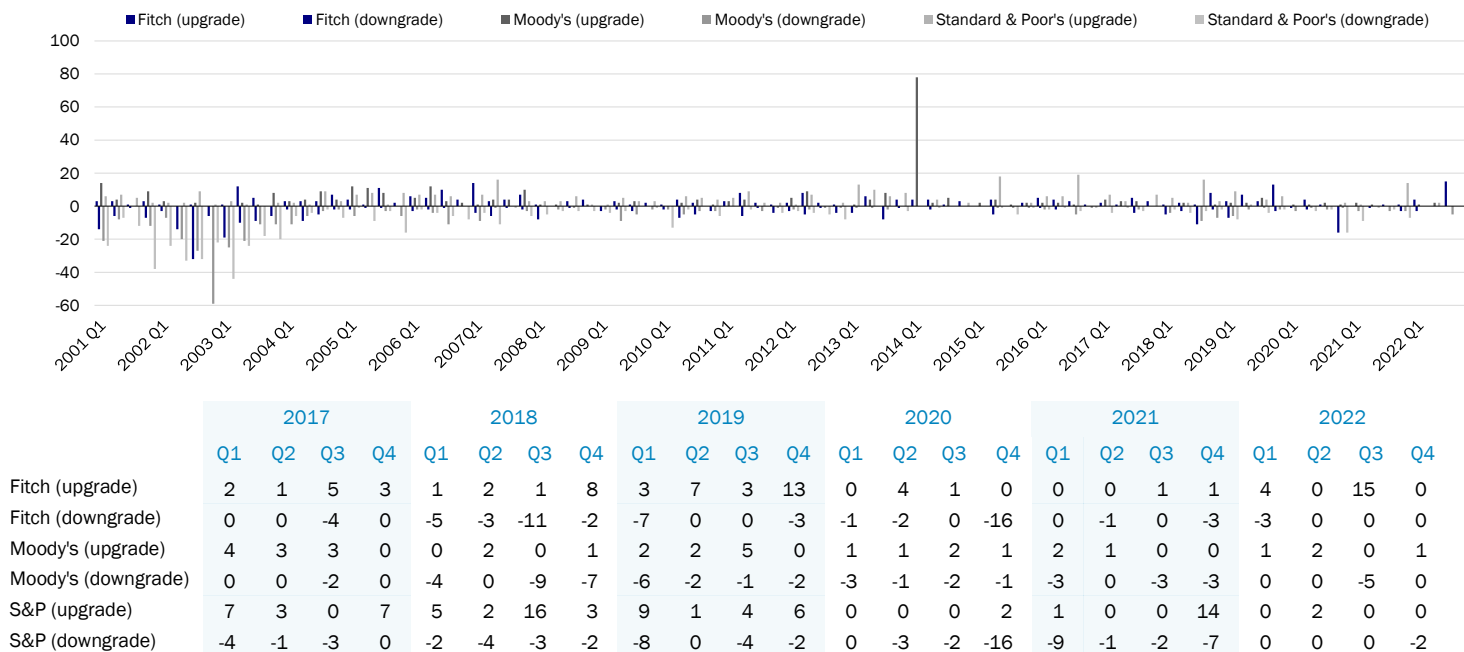


At 12/31/2016

Note: Rating applies to utility holding company entity.
Source: Standard & Poor’s, S&P Global Market Intelligence, and EEI Finance Dept.

II. Credit Rating Agency Upgrades and Downgrades

U.S. Investor-Owned Electric Utilities (parent and subsidiary companies)



Note: Chart depicts the number of upgrades / downgrades for all rated companies, including subsidiaries, during the quarter.
Source: S&P Global Market Intelligence and EEI Finance Dept.

III. Total Ratings Actions

U.S. Investor-Owned Electric Utilities (parent and subsidiary companies)

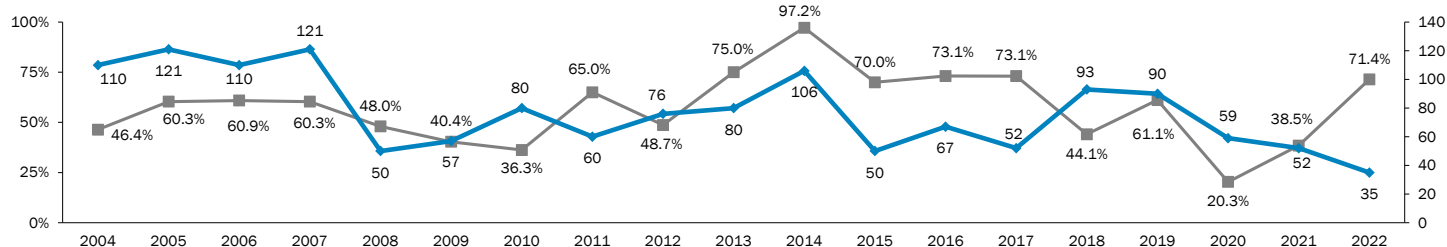
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fitch	34	22	31	41	17	14	24	25	26	23	14	11	16	15	33	36	24	6	22
Moody's	42	46	39	32	6	23	20	11	20	17	85	12	13	12	23	20	12	12	9
S&P	34	53	40	48	27	20	36	24	30	40	7	27	38	25	37	34	23	34	4
Total	110	121	110	121	50	57	80	60	76	80	106	50	67	52	93	90	59	52	35

Source: S&P Global Market Intelligence and EEI Finance Dept.

IV. Direction of Ratings Actions

U.S. Investor-Owned Electric Utilities (parent and subsidiary companies)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Upgrades	51	73	67	73	24	23	29	39	37	60	103	35	49	38	41	55	12	20	25
Downgrades	59	48	43	48	26	34	51	21	39	20	3	15	18	14	52	35	47	32	10
% Upgrades	46.4%	60.3%	60.9%	60.3%	48.0%	40.4%	36.3%	65.0%	48.7%	75.0%	97.2%	70.0%	73.1%	73.1%	44.1%	61.1%	20.3%	38.5%	71.4%
Total Actions	110	121	110	121	50	57	80	60	76	80	106	50	67	52	93	90	59	52	35



Source: Fitch Ratings, Moody's, Standard & Poor's

looks were “negative” or “watch-negative”; that was down from 22.7% at year-end 2021 and the lowest negative share at any quarter end since Q4 2013.

Electric utility industry credit quality generally improved over the past decade. The industry’s average parent level rating has held at BBB+ since increasing from BBB in 2014. A closer look at the underlying calculation of this average shows a steady strengthening from 2013 through 2018, followed by a slight decline in 2019, 2020, 2021, and 2022. Across the larger universe that includes both parents and subsidiaries, the five-year period 2013 through 2017, along with 2022, produced the six highest upgrade percentages in our 23 years of historical data. Moreover, upgrades outnumbered downgrades in seven of the past ten calendar years with an annual average upgrade percentage of 62% over the decade.

EEl captures upgrades and downgrades at both the parent and subsidiary levels. The industry’s average credit rating and outlook are the unweighted averages of all Standard & Poor’s (S&P) parent holding company ratings and outlooks. However, our upgrade/downgrade totals reflect all actions by the three major ratings agencies including both parent holding companies as well as individual subsidiaries. Our universe of 44 U.S. parent company electric utilities on December 31, 2022 included 39 that are publicly traded and 5 that are either a subsidiary of an independent power producer, a subsidiary of a foreign owned company, or owned by an investment firm.

The three major rating agencies stressed similar themes in their outlooks for 2023. S&P maintained a negative outlook, Moody’s revised its U.S. regulated utility outlook to negative from stable, and Fitch revised its North American utilities outlook to deteriorating from neutral. All three agencies cited higher natural gas prices, inflation, rising interest rates, and increased capital spending as key concerns. While the agencies noted regulatory relations are broadly constructive, all said that utilities’ efforts to manage the regulatory risk associated with residential customer affordability issues will be a key area of scrutiny.

Credit Actions at Parent Level

Parent-level ratings actions in 2022 by S&P included only one downgrade. By comparison, there were three downgrades and one upgrade in 2021, three downgrades, one upgrade and one reinstatement in 2020, and five downgrades and one upgrade in 2019.

On December 21, S&P downgraded DPL Inc. and subsidiary Dayton Power and Light (DP&L) to BB from BB+. Dayton Power & Light received an order from the Public Utilities Commission of Ohio (PUCO) that authorized it to increase its distribution rates by \$75 million. However, the increase will not go into effect until the company has a new Electric Security Plan (ESP) in place, which is not anticipated until mid-2023. S&P said the companies will be adversely impacted by cash flow pressures due to the delay.

Ratings Activity Remains Slow in 2022

The 35 rating changes during 2022 (upgrades plus downgrades), 17 fewer than in 2021, was the lowest total of any year back to our dataset’s inception in 2000. By comparison, there were 59 actions in 2020, 90 in 2019, and an annual average of 73 over the previous decade. The industry’s 25 upgrades in 2022 versus 10 downgrades produced an upgrade percentage of 71.4%, up from 38.5% in 2021 and 20.3% in 2020. Upgrades outnumbered downgrades in seven of the past ten calendar years, with an annual average upgrade percentage of 62%.

The Credit Rating Agency Upgrades and Downgrades table presents quarterly activity by all three ratings agencies. Following are full-year totals for 2022:

- Fitch (19 upgrades, 3 downgrades)
- Moody’s (4 upgrades, 5 downgrades)
- Standard & Poor’s (2 upgrades, 2 downgrades)

Upgrades in 2022

Many of the year’s upgrades came after favorable regulatory outcomes or strengthened financial metrics under new ownership. Upgrades were also driven by the use of asset sale proceeds to reduce parent company debt.

On January 14, Fitch upgraded Pepco Holdings, Pepco, and Atlantic City Electric to BBB+ from BBB due to improved credit profiles from supportive regulatory decisions.

On January 28, Moody’s upgraded Entergy Texas to Baa2 from Baa3, following improved legislative and regulatory support. Moody’s cited as reasons for the upgrade a recent authorization to securitize \$250 million of storm costs, expedited cost recovery for a combined-cycle plant that recently began operations, and an upcoming rate case proceeding.

On March 30, Fitch upgraded Public Service Company of North Carolina (PSNC) to A- from BBB+ citing its strengthened financial condition as a result of equity contributions under Dominion’s ownership since 2019 and a favorable recent rate case outcome. The North Carolina commission approved a settlement with an ROE of 9.6% and equity capitalization of 51.6%. This was the first PSNC rate case under Dominion ownership. Fitch also cited strong service territory customer growth that support improved credit metrics.

On May 27, S&P upgraded PPL Electric Utilities (PPLU), the Pennsylvania transmission and distribution subsidiary of PPL, to A from A-. The upgrade reflects S&P’s view that PPLU’s financial performance, funding arrangements and operational independence are sufficient to support this rating.

On June 2, S&P Global Ratings raised the issuer credit rating of Narragansett Electric Co. (NECO) by one notch to A-. S&P cited the resolution of legal issues in Rhode Is-

V. S&P Utility Credit Rating Distribution by Company Category

U.S. Investor-Owned Electric Utilities (parent level only)

	12/31/2017		12/31/2018		12/31/2019		12/31/2020		12/31/2021		12/31/2022	
REGULATED												
A or higher	2	6%	1	3%	1	3%	1	3%	1	3%	1	3%
A-	12	34%	11	32%	11	31%	11	32%	8	23%	8	22%
BBB+	10	29%	11	32%	11	31%	10	29%	14	40%	15	42%
BBB	7	20%	7	21%	8	23%	7	21%	7	20%	7	19%
BBB-	4	11%	4	12%	2	6%	2	6%	3	9%	3	8%
Below BBB-	0	0%	0	0%	2	6%	3	9%	2	6%	2	6%
Total	35	100%	34	100%	35	100%	34	100%	35	100%	36	100%
MOSTLY REGULATED												
A or higher	1	7%	2	15%	1	10%	1	10%	1	11%	1	13%
A-	2	14%	2	15%	1	10%	1	10%	1	11%	1	13%
BBB+	7	50%	7	54%	7	70%	6	60%	5	56%	4	50%
BBB	2	14%	1	8%	0	0%	1	10%	1	11%	1	13%
BBB-	1	7%	1	8%	1	10%	1	10%	1	11%	1	13%
Below BBB-	1	7%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	14	100%	13	100%	10	100%	10	100%	9	100%	8	100%

Sources: Standard & Poor's, S&P Global Market Intelligence, and EEI Finance Dept.

land that cleared the way for PPL to finalize its acquisition of Narragansett Electric. S&P assessed NECO's business risk profile as excellent due to supportive regulatory mechanisms in Rhode Island as well as electric transmission assets that benefit from a very supportive FERC regulatory framework.

On June 6, Moody's upgraded PPL Corporation to Baa1 from Baa2, based on its improved business risk profile; PPL reduced parent company debt by \$3.5 billion using proceeds from the sale in 2021 of its U.K. utility business, Western Power Distribution, to National Grid for net cash proceeds of \$10.4 billion. Moody's stable outlook reflects PPL's new business mix with its four U.S. utilities all operating in supportive regulatory environments. Moody's also upgraded Narragansett Electric Company to A3 from Baa1.

On July 22, Fitch upgraded FirstEnergy (FE) to BBB from BB+ based on FE's completed sale in May 2022 of a 20% ownership interest in FirstEnergy Transmission for \$2.4 billion, FE's issuance of \$1 billion of new equity, and a regulatory settlement in Ohio that provide rate certainty through May 2024. FirstEnergy used proceeds from its asset sales and equity issuance to paydown \$2.4 billion of parent company debt. Fitch also raised the rating for fourteen subsidiaries.

On December 15, Moody's upgraded Dominion Energy South Carolina (DESC) to Baa1 from Baa2. The upgrade followed a series of rate orders by the South Carolina Public Service Commission (SCPSC) in 2022 that will help DESC recover higher costs, including under-recovered fuel balanc-

es, and improve cash flow. The SCPSC approved a settlement in December between DESC and various intervenors that provides \$167 million of additional revenue to improve DESC's fuel cost recovery.

Downgrades in 2022

Many downgrades focused on increased debt and cash flow pressures that impacted credit metrics. Slow recovery of planned capital expenditures also drove several downgrades. Project delays related to a large nuclear project were cited too.

On January 14, Fitch downgraded Exelon to BBB from BBB+ due to higher leverage after the company's separation from its unregulated generation subsidiary, despite a resulting improved risk profile. Fitch observed that an expected equity issuance will not offset the loss of cash from the generation subsidiary and will result in increased parent debt.

On February 22, Fitch downgraded Georgia Power Company to BBB from BBB+ following an announced three- to six-month delay of the projected in-service dates for Vogtle nuclear units 3 and 4. The downgrade reflects continued uncertainty regarding the completion schedule and remaining costs for these nuclear generating facilities, with Georgia Power bearing a larger portion of cost increases under a 2018 modified co-owner agreement.

On March 24, Fitch downgraded NorthWestern Corporation to BBB from BBB+, primarily due to weaker credit metrics from expected regulatory lag during a period of extensive capital expenditures. The company's credit metrics

are being pressured by a challenging regulatory framework, which is largely backward-looking, and a series of unfavorable rulings by the Montana commission that deny or delay recovery of expenses.

On July 6, Moody's downgraded IDACORP to Baa2 from Baa1 and subsidiary Idaho Power Company (IPC) to Baa1 from A3. Approximately 90% of IDACORP's cash flow is generated by IPC. Moody's observed that credit metrics would improve with more timely rate relief through riders or cost tracking mechanisms, quicker asset recovery via depreciation rates, and more frequent rate case filings. IPC's last rate increase under a general rate review occurred in 2011.

On August 22, Moody's downgraded AEP subsidiary Ohio Power Company to Baa1 from A3. Moody's cited weakened credit metrics from increased debt used to finance Ohio Power's significant investments in transmission and distribution infrastructure. Ohio Power's cash flow has also been negatively impacted by the expiration of legacy riders associated with the transition to competition in Ohio.

On September 13, Moody's downgraded the ratings of First Energy subsidiaries Cleveland Electric Illuminating Company (to Baa3 from Baa2) and Toledo Edison (to Baa2 from Baa1). Moody's said the companies will be adversely impacted by cash flow pressures caused by customer refunds stipulated in a 2021 regulatory settlement in Ohio. Both companies are expected to file rate cases by May 2024, when their current Electric Security Plans (ESP) expire.

Ratings by Company Category

Table V, S&P Utility Credit Ratings Distribution by Company Category, shows the distribution of credit ratings over time by company category (Regulated, Mostly Regulated and Diversified) for the investor-owned electric utilities. The Diversified category was eliminated in 2017 due to its dwindling number of companies.

Ratings are based on S&P's long-term issuer ratings at the holding company level, with only one rating assigned per company. On December 31, 2022, the average rating for both the Regulated and Mostly Regulated categories was BBB+.

Rating Agency Credit Outlooks

The three major ratings agencies held similar utility industry credit outlooks as 2023 began. S&P maintained a negative outlook, Moody's revised its U.S. regulated utility outlook to negative from stable, and Fitch revised its North American utilities outlook to deteriorating from neutral. The agencies cited inflation, rising interest rates and higher natural gas prices and related customer bill impacts as key themes they are watching. It should be noted that the groups of underlying companies vary slightly across the three agency outlooks.

VI. Credit Ratings Distribution

Investment Grade	Moody's	S&P	Fitch
	Aaa	AAA	AAA
	Aa1	AA+	AA+
	Aa2	AA	AA
	Aa3	AA-	AA-
	A1	A+	A+
	A2	A	A
	A3	A-	A-
	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-
Speculative Grade	Moody's	S&P	Fitch
	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
	B1	B+	B+
	B2	B	B
	B3	B-	B-
	Caa1	CCC+	CCC+
	Caa2	CCC	CCC
	Caa3	CCC-	CCC-
	Ca	CC	CC
	C	C	C
Default	Moody's	S&P	Fitch
	C	D	D

Source: Fitch Ratings, Moody's, Standard & Poor's

Standard & Poor's (S&P)

Published in late January 2023, S&P's report "Industry Top Trends 2023 – North America Regulated Utilities" maintained the agency's negative industry outlook. The report noted that downgrades outpaced upgrades for the third consecutive year. While the percentage of negative outlooks decreased to 12% from 20% at year-end 2021, S&P stated that prolonged inflation or a deeper-than-expected recession could harm the industry's credit quality in 2023. Only 7% of the industry had a positive outlook.

S&P's base case assumes inflation will moderate during 2023 and the industry's credit measures will generally remain stable. However, persistent inflation could put additional pressure on customer bills and decrease regulatory support.

The report also cited potential risks related to the industry's aggressive reduction of greenhouse gas (GHG) emissions. S&P noted industry capital spending in 2022 reached an all-time high with an even higher total expected in 2023 with future investment focused on renewables and related infrastructure. As bills increase, regulators may ask the industry to slow the pace of the energy transition, possibly delaying the achievement of net-zero carbon emissions. In addition, large renewable projects (such as offshore wind) could become more challenging as timelines and budgets are affected by supply chain delays and rising interest rates. While much of the S&P report focused on the increased regulatory scrutiny that often accompanies higher customer bills, it also noted the average electric bill represents only about 2.5% of after-tax household income.

Moody's

In its "2023 Outlook – Regulated Electric and Gas Utilities – US" (released November 2022), Moody's revised its outlook for the sector to negative from stable. The report cited risks related to inflation, rising interest rates and higher natural gas prices as areas of concern. These developments could lead to customer affordability challenges and increased uncertainty related to the timely recovery of fuel and purchased power costs. The report also stated that capital spending and dividends will likely be sustained at a steady rate, possibly weighing on near-term credit metrics. The sector's aggregate industry funds from operations (FFO) to debt ratio will likely be 14% in 2023, according to the report, but may fall below this level if cost recovery is delayed.

Moody's listed several factors that could change its outlook back to stable: 1) if the sector's regulatory support remains intact, 2) if natural gas prices settle at a level that allows most utilities to fully recover fuel and purchased power costs within 12 months, 3) if inflation moderates and interest rates stabilize, and 4) if the sector's aggregate FFO-to-debt ratio remains between 14% and 15%. Factors that

could change its outlook to positive were: 1) if utility regulation turns broadly more credit supportive resulting in quicker cash flow recovery, and 2) if the sector's aggregate FFO-to-debt ratio rises above 17% on a sustained basis.

Fitch Ratings

In its "North American Utilities, Power & Gas Outlook 2023" (released December 2022), Fitch Ratings revised its outlook for the sector to deteriorating from neutral. The move primarily reflects growing cost pressures for utilities due to higher commodity prices, inflation, and rising interest rates. These factors, combined with high capital expenditures and storm restoration costs from extreme weather, are driving customer bills higher. Fitch noted that deferred fuel balances are increasing, which may affect credit metrics as utilities try to spread the recovery of these costs over an extended time period to mitigate the impact on customer bills.

The report also noted positive tailwinds that could offset these concerns. Retail electricity sales continue to show resilience and remain above pre-pandemic levels. Fitch expects authorized ROEs to start trending up in reaction to the recent rise in interest rates. Many utilities are increasingly using tools such as securitization for under-recovered fuel balances. The Inflation Reduction Act provides tax incentives for clean generation that may offset inflationary bill pressures. Finally, many companies are using asset monetization, such as the sale of non-regulated renewable businesses and the partial or full sale of regulated subsidiaries, to replace equity needs.

With 88% of companies at a stable ratings outlook, Fitch expects little ratings movement in 2023. The agency noted that higher-than-expected natural gas prices remains the largest risk to credit metrics since increases in deferred fuel balances can impair the timely recovery of capital expenditures. ■