

2023 Financial Review

Annual Report of the U.S. Investor-Owned Electric Utility Industry



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2023 FINANCIAL REVIEW

ANNUAL REPORT OF THE U.S. INVESTOR-OWNED ELECTRIC UTILITY INDUSTRY

About EEI and the Financial Review

The Edison Electric Institute (EEI) is the association that represents all U.S. investor-owned electric companies. Our U.S. 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 U.S. and contributes 5 percent to the nation's GDP. The 2023 Financial Review is a comprehensive source for critical financial data covering 39 investor-owned electric companies whose stocks are publicly traded on major U.S. stock exchanges. The report also includes data on five additional companies that provide regulated electric service in the United States but are not listed on U.S. stock exchanges because they are owned by holding companies not primarily engaged in the business of providing retail electric distribution services in the United States. These 44 companies are referred to throughout the publication as the U.S. Investor-Owned Electric Utilities. Please refer to page 78 for a list of these companies.



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Highlights of 2023

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

FINANCIAL (\$ Millions)	2023	2022r	% Change
Total Operating Revenues	\$411,173	\$412,757	(0.4%)
Utility Plant (Net)	\$1,507,915	\$1,407,967	7.1%
Total Capitalization	\$1,455,785	\$1,363,510	6.8%
Earnings Excluding Non-Recurring and			
Extraordinary Items	\$61,265	\$49,871	22.8%
Dividends Paid, Common Stock	\$32,980	\$31,016	6.3%

Note: r = revised. Percent changes may reflect rounding.

Abbreviations and Acronyms

AFUDC	Allowance for Funds Used During Construction
BTU	British Thermal Unit
CFTC	Commodity Futures Trading Commission
CPI	Consumer Price Index
DOE	Department of Energy
DOJ	Department of Justice
DPS	Dividends per share
EEI	Edison Electric Institute
EIA	Energy Information Administration
EITF	Emerging Issues Task Force
EPA	Environmental Protection Agency
EPS	Earnings per share
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
GDP	Gross Domestic Product
GW	Gigawatt
GWh	Gigawatt-hour
IPP	Independent Power Producer
IRS	Internal Revenue Service
ISO	Independent System Operator
ITC	Independent Transmission Company

kWh	Kilowatt-hour
M&A	Mergers & Acquisitions
MW	Megawatt
MWh	Megawatt-hour
NARUC	National Association of Regulatory Utility Commissioners
NERC	North American Electric Reliability Corporation
NOx	Nitrogen Oxide
NOAA	National Oceanic & Atmospheric Administration
NRC	Nuclear Regulatory Commission
0&M	Operations and Maintenance
PSC	Public Service Commission
PUC	Public Utility Commission
PUHCA	Public Utility Holding Company Act
PURPA	Public Utility Regulatory Policies Act
ROE	Return on Equity
RTO	Regional Transmission Organization
SEC	Securities and Exchange Commission
SO ₂	Sulfur Dioxide
T&D	Transmission & Distribution

Company Categories

Two categories are used throughout this publication that group companies based on their percentage of total assets that are regulated. These categories are used to provide an informative framework for tracking financial trends:

Regulated: 80% or more of total assets are regulated.

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

Note: In prior editions of the Financial Review, a "Diversified" category was included for companies with less than 50% of total assets that are regulated. Some tables with historical data therefore include a "Diversified" category.

President's Letter

2023 Financial Review

For more than 90 years, EEI has represented America's investorowned electric companies, and we are proud of their steadfast commitment to delivering reliable, affordable, and resilient clean energy to the customers and communities they serve. Today, electricity demand is growing significantly across our nation's economy, and the work that our members do has perhaps never been more significant than it is today.

In January of this year, I was honored to assume the critical role of EEI president and CEO. My predecessor, Tom Kuhn, held this role with distinction for more than 30 years, establishing EEI as one of the most respected energy institutes in the world. I am committed to building on the successes of the past, while adding a new perspective and experience to critical policy debates that will shape the industry's future.

After years of flat demand growth, the Federal Energy Regulatory Commission recently revised its five-year growth projection up to 4.7 percent from 2.6 percent. Grid planners now are preparing for the challenge of meeting peak demand growth of up to 38 gigawatts by 2028. That is an enormous amount of electricity that is going to come on the energy grid in a relatively short amount of time. What we do in the next several years as an organization and as an industry will ultimately determine our country's path for decades to come.

Thanks largely to the leadership of our member companies, we can chart a course for an American energy future that is secure, resilient, and affordable, using cleaner sources of generation in the process. Carbon emissions from the U.S. electric power sector today are as low as they were nearly 50 years ago, while demand for electricity has doubled and continues to grow.

We lead the world in reducing carbon emissions and are enabling the clean energy transition: More than 40 percent of U.S. electricity generation now comes from clean, carbon-free sources. And, since 2005, our sector's carbon emissions are down more than 41 percent.

It's more important than ever that we are able to use all the tools in the energy toolbox to meet demand growth and customer needs, preserving both our nuclear fleet and our ability to utilize natural gas as a partner to integrate renewable energy resources reliably and affordably.

And, we must build new energy infrastructure of all kinds. EEI and



our member companies remain focused on the implementation of the 2021 Bipartisan Infrastructure Law and the 2022 Inflation Reduction Act—which included nearly \$272 billion in clean energy tax credits. Together with the siting and permitting provisions included in the 2023 Fiscal Responsibility Act, this legislation is spurring critical infrastructure investments and technological innovation.

As an industry, we face a growing number of threats, and we continue to work across the sector and with our government and private-sector partners on several fronts, including to enhance our cyber and physical security posture and to strengthen our capabilities for managing weather and wildfire risks. Through our work with the CEOled Task Force on Wildfires and the CEO-led Electricity Subsector Coordinating Council, industry leaders are partnering with the highest levels of government to enhance our industry's collective capability to mitigate and manage risk.

Over the past decade, EEI member companies have invested more than

L Energy security is at the core of everything we do as an industry. We cannot have a robust, prosperous economy without it. We must do all that we can to ensure that the electricity we provide is there when and where our customers need it—and that the infrastructure delivering electricity to homes and businesses across the country is modern, resilient, and secure.

\$1 trillion to make the energy grid smarter, stronger, cleaner, more dynamic, and more secure. Last year alone, more than \$170 billion was invested, with more than \$30 billion of that in adaptation, hardening, and resilience projects to strengthen the nation's transmission and distribution infrastructure for all customers.

Energy security is at the core of everything we do as an industry. We cannot have a robust, prosperous economy without it. We must do all that we can to ensure that the electricity we provide is there when and where our customers need it—and that the infrastructure delivering electricity to homes and businesses across the country is modern, resilient, and secure. EEI continues our advocacy for stable, constructive policies that support our member companies' infrastructure investments. Related to this, we are asking the U.S. Treasury Department to implement the Corporate Alternative Minimum Tax without unduly impacting electricity customers or undermining needed investment in grid infrastructure.

And, as you will see in the Financial Review, EEI's member companies have continued to build upon a strong financial foundation. In 2023, the industry's average credit rating at the parent company level remained at BBB+ for the tenth straight year, having increased from BBB in 2014. This improved credit quality continues to support the electric power industry as the most capital-intensive industry in the country. Total industry capital expenditures were \$171.9 billion in 2023, a record high for the 12th consecutive year.

Our industry extended its long-term trend of widespread and consistent dividend increases last year, with 87 percent of EEI member companies increasing their dividend rate. That percentage aligns with 2022's performance and the 82 percent to 93 percent range seen from 2015 through 2021. As of December 31, 2023, 38 of the 39 companies in the EEI Index were paying a common stock dividend.

We find ourselves at a truly transformational moment in this industry, and I have no doubt that we are up to the challenges that lie before us. It has never been more important for America to maintain its position of leadership as the world enters an increasingly electric and energy-intensive era. The U.S. economy, and, indeed, the global economy, are counting on our industry to meet rising demand. Customer expectations for a resilient clean energy future are higher than ever before.

We truly value the partnership that we share with the financial community and the role that you all play in helping us deliver the future of energy.

Dan Brouillette

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President and CEO Edison Electric Institute

Capital Markets

Stock Performance

Major market indices extended Q3's weakness into late October when the S&P 500's year-to-date gain had eroded to just 7%. But Federal Reserve Chairman Jerome Powell's comments at the Fed's November 1 policy meeting-the second-straight with no rate increase-hinted rate hikes were over. Markets surged in November and December. The S&P 500 gained 11.7% in Q4 to end 2023 with a 26.3% return. The Dow Jones Industrials jumped 13.1% to finish 2023 with a 16.2% return. The red-hot Nasdaq surged 13.4% in the year's last quarter to close the year up 43.3%.

Few market watchers expected anything like this when the year began; recession calls were then widespread while fears that "something will break" from the Fed's rate hikes also kept outlooks muted. The sole bullish theme through much of 2023 was investors' enthusiasm for the commercialization potential of artificial intelligence (AI). Market strength was focused in the socalled "Magnificent Seven" large-cap tech companies-Google, Amazon, Apple, Meta (Facebook), Microsoft, AI chip maker Nvidia and Teslaalong with others seen as agents or

2023 Index Comparison

EEI Index	(8.7)
Dow Jones Industrial Average	16.2
S&P 500	26.3
Nasdaq Composite*	43.3

* Price gain/(loss) only. Other indices show total return.

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

Comparison of the EEI Index, S&P 500, and DJIA Total Return



REFLECTS REINVESTED DIVIDENDS

All returns are annual.

Note: Assumes \$100 invested at closing prices December 31, 2018.

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

EEI Index Top 10 Performers Twelve-month period ending 12/31/2023

Company	Total Return %	Category
Otter Tail Corporation	48.0%	R
Edison International	17.4%	R
PG&E Corporation	10.9%	R
Unitil Corporation	5.7%	R
MGE Energy, Inc.	5.0%	R
Public Service Enterprise Group Inc.	3.6%	R
Southern Company	2.2%	R
NiSource Inc.	0.5%	R
Sempra Energy	0.0%	R
ALLETE, Inc.	-0.7%	MR

Note: Return figures include capital gains and dividends. Source: EEI Finance Department.

	Sector Total Shareholder	r Return 2023
	Sector	Total Return %
	Technology	65.1%
	Consumer Services	34.1%
	Industrials	19.8%
	Financials	16.1%
	Consumer Goods	13.9%
	Basic Materials	11.0%
	Telecommunications	3.5%
	Healthcare	1.9%
	Oil & Gas	-1.0%
	Utilities	-7.2%
	EEI Index	-8.7%
- I		

Source: EEI Finance Dept., Dow Jones & Company.

beneficiaries of AI-driven innovation. Absent those seven names, the S&P 500 would have been 3% lower for the year by late October. But November and December's market gains were broad-based.

The EEI Index returned 8.0% in Q4, lifted by a sudden fall in inter-

est rates and roughly matching the broader Utilities' sector's 8.6% return. However, neither index could fight rising interest rates through most of 2023 or compete with the AI optimism of the "Magnificent Seven", and the EEI index finished the year down about 9%.

Economic Strength Thwarts Recession Fears

Recession fears that colored economic outlooks as the year began melted in the face of surprisingly strong data as 2023 evolved. Estimated Q1 real gross domestic product (GDP) rose from a first estimate of 1.1% to a final reading of 2.2%. Q2 produced 2.1% growth. But it was late October's Q3 GDP report at 4.9% that fueled the bullish spirits spurred by Fed Chairman Powell's perceived pivot.

Economic bears missed their 2023 recession call but took analytical solace in what proved to be an earnings recession. Corporate profits for all S&P 500 companies (according to data compiled by Zacks Investment Research) declined 2.3% year-to-year in Q1 and 6.7% in Q2, marking three quarters of negative comparisons (including Q4 2022's 5.5% decline). As Q4 ended, fullyear 2023 earnings were pegged to be unchanged from 2022. Optimism returned to 2024 and 2025 with projected 10%+ growth. While individual companies and pockets of the market showed good earnings gains, the aggregate picture imbues 2023's market advance with a macro-driven and thematic quality that broad fundamentals don't quite substantiate.

Interest Rates Drop

Utility shares have faced the headwind of rising interest rates since 2020, when the 10-year Treasury yield reached a record low 0.6%. Starting 2023 at 3.7%, the 10year yield rose to nearly 5% by late October, causing much of utilities' 2023 negative return. In addition to Fed rate hikes, Wall Street pundits in



Source: S&P Global Market Intelligence.





Source: S&P Global Market Intelligence.



10-Year Treasury Yield

Source: U.S. Federal Reserve.

Q3 attributed rising yields to bond investors' newfound exhaustion at Washington's big deficits and rising debt, which seem likely to rise further when the economy weakens. Yet after the Fed's November meeting, rates fell steadily from late October's 5.0% to 3.8% as December ended, driving the EEI Index's 8.0% Q4 gain. Interest rates also took direction from inflation data; monthly CPI inflation held in a narrow range of 3.0% to 3.2% through Q4, the lowest levels of the year and down from 5% readings through May.

Fundamental Concerns Color Thinking

During much of 2023, Wall Street's utility research grappled with several factors that weighed on utility stocks in addition to the share price impact of higher interest rates. *Cost of Capital.* Analyst research noted some utilities face the prospect of refinancing maturing debt over the next few years at what may be much higher interest costs. Lower share prices also raise the equity cost of capital for utilities.

Wildfires. Wildfire risk was typically seen as a concern for California utilities. But Hawaii's August fires made headlines and Wall Street's Q3 research noted similar risks in Oregon and Colorado.

Inflation. If inflation raises renewable build-out costs and threatens long-term capex planning, utility growth plans may suffer. Related supply chain bottlenecks may also delay construction.

Regulation. Analysts cited scattered regulatory outcomes in 2023 that disappointed investors. With electric bills rising due to higher capex, Wall Street closely watched rate reviews for signs of waning support for utility investment.

Presentations Convey Steady Outlooks

Wall Street's worry over threats to the industry's fundamental picture took a back seat to parsing the Q3 earnings reports and investor presentations that occurred during Q4.

Utilities release Q3 earnings in October and November each year and hold conference calls with investors to review outlooks. Wall Street's published research in Q4 generally saw Q3 earnings as on target, with several utilities slightly raising earnings guidance. Utilities' Q3 conference call presentations, taken as a whole, presented a cautiously optimistic picture. Several utilities formally raised 5-year capex projections while others noted opportunities not yet included in current outlooks. A few raised load growth forecasts due to economic development in service territories along with record-setting peak loads in 2023. Many noted demand boosts from data centers (one facet of utility exposure to AI-driven innovation) and the "re-shoring" of industrial production. Several Q3 earnings presentations cited favorable regulatory support for clean energy investment. Wall Street said utilities appear to be successfully managing rising interest costs and the impact of inflation on company operations and capex planning. Many companies cited room for additional operations & maintenance (O&M) cost efficiencies, in some

cases from deployment of AI-driven approaches to system monitoring.

EEI's Financial Conference in November, along with other industry conferences, added news flow that Wall Street research analyzed and reported. Constructive themes that were extended from Q3 earnings calls included steady or rising capex outlooks, boosts to demand growth at some utilities, and maintenance of the mid-single-digit, fiveyear earnings growth forecasts that have been a constant for much of the industry in recent years.

Yet Wall Street is paid, in part, to be critical thinkers; analysts also noted industry balance sheets are a bit stretched from aggressive capex financing and remained wary that state regulation may turn less supportive of capex-especially if the economy turns down. For the time being, Wall Street appears in agreement with utilities' general view that state commissions and ratepayers will tolerate 2% to 4% bill inflation, given that's required to fund the nation's clean energy transition and the jobs and local economic development that come with it. But the multi-year trend back to nearly a fully regulated focus makes stateby-state regulatory relations an everpresent Wall Street concern.

Wall Street Turns More Positive on Valuation

Utility stocks have fought rising interest rates since mid-2020 and have lagged a surging, albeit volatile, stock market in four of the last five years. Will utilities get any respect in 2024? If industry news stays positive and outlooks steady the answer

2023 Returns By Quarter

Index	Q1	Q2	Q3	Q4
EEI Index	(2.9)	(3.0)	(10.3)	8.0
Dow Jones Industrial Average	0.9	4.0	(2.1)	13.1
S&P 500	7.5	8.7	(3.3)	11.7
Nasdaq Composite*	16.8	12.8	(4.1)	13.4
Category	Q1	Q2	Q3	Q4
All Companies	(0.5)	(2.7)	(10.5)	8.1
Regulated	(0.0)	(2.5)	(8.7)	8.0
Mostly Regulated	(3.8)	(3.9)	(23.3)	9.2

* Price gain/loss only. Other indices show total return.

For the Category comparison, straight, equal-weight averages are used (i.e., not market-cap-weighted). Source: EEI Finance Department, S&P Global Market Intelligence.

2023 Category Comparison							
Category	Return (%)						
EEI Index	(6.3)						
Regulated	(3.9)						
Mostly Regulate	d (22.5)						

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

Note: For the Category Comparison, straight, equal-weight averages are used (i.e., not market-capitalization-weighted).

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

likely depends on interest rates, although company-specific regulatory outcomes can override macro forces and shape stock moves on a company-by-company basis. Wall Street broadly sees utilities as cheaper than they've been in years and set up to shine should rates fall and earnings outlooks remain steady. In 2023, the Nasdaq 100 had its best year since the 1999 tech bubble. The broader Nasdaq peaked in March 2000 then collapsed; it took 15 years to recover. It's hard to be a bear in a bull market, but long-term investors have reason to like utility stocks in early 2024. The next five years may be very different than the past five.



Comparative Category Total Annual Returns

EEI Index Annual Return (%) EEI Index Cumulative Return (\$)	2019 23.06 123.06	2020 (8.07) 113.12	2021 17.62 133.05	2022 2.74 136.69	2023 (6.30) 128.08
Regulated EEI Index Annual Return	24.56	(9.01)	16.72	3.59	(3.92)
Regulated EEI Index Cumulative Return	124.56	113.33	132.28	137.03	131.67
Mostly Regulated EEI Index Annual Return	17.87	(4.95)	21.09	(1.15)	(22.50)
Mostly Regulated EEI Index Cumulative Return	117.87	112.04	135.67	134.12	103.94

- For the Category Comparison, straight, equal-weight averages are used (i.e., not market-cap-weighted).

- Cumulative Return assumes \$100 invested at closing prices on December 31, 2018.

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

Market Capitalization at December 31, 2023

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Company Name	Ticker	Market Cap.	% of Total	Company Name	Ticker	Market Cap.	% of Total
NextEra Energy, Inc.	NEE	123,381	13.86%	CMS Energy Corporation	CMS	16,898	1.90%
Southern Company	SO	76,571	8.60%	Alliant Energy Corporation	LNT	13,005	1.46%
Duke Energy Corporation	DUK	74,818	8.41%	AVANGRID, Inc.	AGR	12,538	1.41%
Sempra Energy	SRE	47,083	5.29%	Evergy, Inc.	EVRG	12,011	1.35%
American Electric Power Company, Inc.	AEP	42,272	4.75%	NiSource Inc.	NI	10,978	1.23%
Dominion Energy, Inc.	D	39,330	4.42%	Pinnacle West Capital Corporation	PNW	8,151	0.92%
PG&E Corporation	PCG	38,061	4.28%	OGE Energy Corp.	OGE	6,996	0.79%
Exelon Corporation	EXC	35,756	4.02%	IDACORP, Inc.	IDA	4,987	0.56%
Xcel Energy Inc.	XEL	34,174	3.84%	Portland General Electric Company	POR	4,371	0.49%
Consolidated Edison, Inc.	ED	31,385	3.53%	MDU Resources Group, Inc.	MDU	4,032	0.45%
Public Service Enterprise Group Inc.	PEG	30,453	3.42%	Black Hills Corporation	BKH	3,632	0.41%
Edison International	EIX	27,381	3.08%	PNM Resources, Inc.	PNM	3,581	0.40%
WEC Energy Group, Inc.	WEC	26,547	2.98%	Otter Tail Corporation	OTTR	3,542	0.40%
DTE Energy Company	DTE	22,714	2.55%	ALLETE, Inc.	ALE	3,511	0.39%
Eversource Energy	ES	21,584	2.43%	NorthWestern Energy	NWE	3,076	0.35%
Entergy Corporation	ETR	21,398	2.40%	Avista Corporation	AVA	2,742	0.31%
FirstEnergy Corp.	FE	21,006	2.36%	MGE Energy, Inc.	MGEE	2,615	0.29%
PPL Corporation	PPL	19,976	2.24%	Hawaiian Electric Industries, Inc.	HE	1,557	0.17%
Ameren Corporation	AEE	19,011	2.14%	Unitil Corporation	UTL	846	0.10%
CenterPoint Energy, Inc.	CNP	18,033	2.03%				
				Total Industry		890.003	100%

Source: EEI Finance Department and S&P Global Market Intelligence. All dollar amounts presented in millions.



EEI Index Market Capitalization

Note: Results are as of December 31 of each year.

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



EEI Index Market Capitalization by Quarter

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

Dividends

The investor-owned electric utility industry continued its long-term trend of widespread dividend increases in 2023. A total of 34 companies increased or reinstated their dividend for the second straight year; this compares to 32 in 2021, 34 in 2020, 37 in 2019, 39 in 2018 and 36 to 40 companies annually from 2012 through 2017. One company suspended its dividend in 2023. One company reduced its dividend in 2022, zero did so in 2021 and two did in 2020.

The percentage of companies that raised or reinstated their dividend in 2023 was 87% for the second straight year. This was up from 82% in 2021 and in line with the 85% to

Dividend Patterns 1996–2023									
		U.S.	INVESTOR-	OWNED ELE	CTRIC UTILITI	ES			Dividend
	Raised	No Change	Lowered	Omitted*	Reinstated	Not Paying	Total	Pa	yout Ratio
1996	48	44	2	1	1	2	98		70.7%
1997	40	45	6	2	_	3	96		84.2%
1998	40	37	7	_	_	5	89		82.1%
1999	29	45	4	_	3	2	83		74.9%
2000	26	39	3	1	_	2	71		63.9%
2001	21	40	3	2	_	3	69		64.1%**
2002	26	27	6	3	_	3	65		67.5%
2003	26	24	7	2	1	5	65		63.7%
2004	35	22	1	_	_	7	65		67.9%
2005	34	22	1	1	2	5	65		66.5%
2006	41	17	_	_	_	6	64		63.5%
2007	40	15	_	_	3	3	61		62.1%
2008	36	20	1	_	1	1	59		66.8%
2009	31	23	3	_	_	1	58		69.6%
2010	34	22	_	_	_	1	57		62.0%
2011	31	22	_	1	1	_	55		62.8%
2012	36	14	_	_	1	_	51		64.2%
2013	36	12	1	_	_	_	49		61.5%
2014	38	9	1	_	_	_	48		60.4%
2015	39	7	_	_	_	_	46		67.0%
2016	40	4	_	_	_	_	44		62.9%
2017	38	4	_	1	_	_	43		64.0%
2018	39	1	1	_	_	1	42		63.9%
2019	37	2	_	_	_	1	40		62.6%
2020	34	2	2	_	_	1	39		65.3%
2021	32	6	-	_	_	1	39		62.7%
2022	34	3	1	_	_	1	39		70.8%
2023	33	4	-	1	1	_	39		63.7%
		2014 201	5 2016	2017	2018 2	019 2020	2021	2022	2023
Average of the Increased Dividend Actio	ONS***	5.7% 5.89	% 5.6%	5.6%	5.7% 5.	1% 5.1%	4.8%	5.2%	5.1%
Average of the Declining Dividend Actio	Average of the Declining Dividend Actions*** (34.5%) NA NA NA (79.8%) NA (40.6%) NA (51.8%) (100.0%)								

* Omitted in current year. This number is not included in the Not Paying column.

** * Prior to 2000: Total industry dividends/total industry earnings. Starting in 2000: Average of all companies paying dividend.

*** Excludes companies that omitted or reinstated dividends.

2022 current year figures reflect dividend changes (raised, lowered, etc.) through 12/31/2022 and earnings and dividends through 12/31/2022 (payout ratio).

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

CAPITAL MARKETS

93% range 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 traded utilities included in the EEI Index from 65 in 2003 to 39 at year-end 2023.

As shown in the Dividend Patterns table, 38 of the 39 publicly traded utilities in the EEI Index were paying a common stock dividend as of December 31, 2023. 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 the most common.

2023 Increases Average 5.1%

The average dividend increase in 2023 was 5.1%, with a range of 1.0% to 10.0% and a median increase of 5.4%. NextEra Energy (+10.0% in Q1), WEC Energy (+7.2% in Q1), DTE Energy (+7.1% in Q4), Ameren (+6.8% in Q1), Xcel Energy (+6.7% in Q1), PPL Corporation (+6.7% in Q1) and Exelon (+6.7% in Q1) posted the largest percentage increases.

NextEra Energy, headquartered in Juno Beach, Florida, increased its quarterly dividend from \$0.425 to \$0.4675 per share during the first quarter. The increase is consistent with its plan, announced in 2022, to target roughly 10% annual growth in its per-share dividend through at



Source: EEI Finance Department.



2022 Dividend Patterns

Source: EEI Finance Department.

least 2024, off a 2022 base. NextEra recorded the industry's highest percentage increases in 2022 (+10.4%), 2021 (+10.0%), 2020 (+12.0%) and 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).

WEC Energy Group, based in Milwaukee, Wisconsin, raised its quarterly dividend from \$0.7275 to \$0.78 in the first quarter. This marked its 322nd consecutive quarterly common stock dividend, dating back to 1942, and the 20th straight year with a dividend increase. WEC Energy continues to target a dividend payout ratio of 65 to 70 percent of earnings.

DTE Energy, headquartered in Detroit, Michigan, increased its quarterly dividend from \$0.9525 to \$1.02 per share during the fourth quarter. The company noted the move continues its more than 100-year history of issuing a cash dividend.

Ameren, based in St. Louis, Missouri, raised its quarterly dividend from \$0.59 to \$0.63 per share in Q1, marking the tenth consecutive annual increase. The company anticipates dividend growth will be in line with the company's long-term earnings-per-share growth expectations and within a payout ratio of 55% to 70%.

Xcel Energy, headquartered in Minneapolis, Minnesota, increased its quarterly dividend from \$0.4875 to \$0.52 per share during Q1. Since increasing its dividend growth objective in 2015 to a range of 5% to 7% annually, Xcel has delivered average annual dividend increases above 6%.

PPL Corporation, based in Allentown, Pennsylvania, raised its quarterly dividend from \$0.225 to \$0.24 per share in Q1. The company reaffirmed expectations of 6% to 8% annual EPS and dividend growth through at least 2026.

Exelon, headquartered in Chicago, Illinois, increased its quarterly dividend from \$0.3375 to \$0.36 per share during Q1. In February 2022, the company completed the separation of Constellation Energy, Exelon's former power generation and competitive energy business, with Exelon continuing as the parent company for its fully regulated transmission and distribution utilities.

Hawaiian Electric announced in August 2023 that it would suspend its dividend effective Q4 2023 due to the impact from the Maui wildfires. The company's quarterly dividend rate had been \$0.36 per share. Prior to the dividend suspension, Hawaiian Electric's last dividend increase occurred in Q1 2023.

The industry's average and median increases have been relatively consistent in recent years. The average was 5.2% in 2022, 4.8% in 2021, and ranged between 5.1% and 5.7% from 2016 through 2020. The median increase was 5.6% in 2022 and ranged between 4.8% and 5.5% from 2017 through 2021.

PG&E Reinstates Dividend

PG&E in Q4 declared a cash dividend on its common stock for the first time since 2017. The company stated that "reinstating the common dividend reflects Pacific Gas and Electric Company's substantial progress in becoming a safe and stable utility that can now attract more long-term investors. Since 2017, we have reinvested the vast majority of our earnings back into our system and will continue to do so. Our earnings have gone directly into infrastructure projects focused on improving safety and reliability for our customers." The reinstated dividend was set initially at an annual rate of \$0.04 per share.

Payout Ratio and Dividend Yield

The industry's dividend payout ratio was 62.2% for the twelve months ended December 31, 2023, exceeding all other U.S. business sectors. The industry's payout ratio was 63.7% when measured as an un-weighted average of individual company ratios; 62.2% represents an aggregate figure. From 2000 through 2022, the industry's annual payout ratio ranged from 60.4% to 70.8%.

While the industry's net income has fluctuated from year to year, its payout ratio has remained relatively consistent after eliminating nonrecurring 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.

Sector Comparison Dividend Payout Ratio For 12-month period ending 12/31/23

Sector	Payout Ratio (%)
EEI Index Companies*	62.2%
Utilities	59.8%
Consumer Staples	53.8%
Materials	39.6%
Energy	39.4%
Industrial	34.1%
Health Care	33.5%
Financial	27.2%
Technology	25.3%
Consumer Discretionary	21.9%

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

Assumptions:

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

2. S&P sector payout ratios based on 2023E.

For more information on constituents of each S&P sector, see http://www.sectorspdr.com/.

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

Sector Comparison, Dividend Yield As of December 31, 2023

Sector	Dividend Yield (%)
EEI Index Companies	3.8%
Energy	3.6%
Utilities	3.5%
Consumer Staples	2.7%
Materials	2.0%
Financial	1.8%
Health Care	1.6%
Industrial	1.5%
Technology	0.9%
Consumer Discretionary	0.8%

Assumptions:

1. EEI Index Companies' yield based on last announced, annualized dividend rates (as of 12/31/2023); S&P sector yields based on 2023E cash dividends (estimates as of 12/31/2023).

For more information on constituents of each S&P sector, see http://www.sectorspdr.com/.

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

The industry's average dividend yield was 3.8% on December 31, 2023, leading all U.S. business sectors. The industry's average dividend yield was 3.4% at year-end 2022, 3.3% at year-end 2021, 3.6% at year-end 2020, 3.0% for 2019 and 3.4% at each of the three previous year-ends. An overall decline in utility stock prices along with strong dividend activity resulted in a higher yield at year-end 2023; the market cap weighted EEI Index returned -8.7% for the year. We calculate the industry's average dividend yield using an un-weighted average of the yields of EEI Index companies paying a dividend.

Business Category Comparison

The Regulated category's dividend payout ratio was 62.9% for the twelve months ended December 31, 2023, compared to 68.5% for the Mostly Regulated category. 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 3.8% and 3.9%, respectively on December 31, 2023, compared to 3.4% and 3.3% at year-end 2022, 3.3% and 3.0% at year-end 2021, 3.6% and 3.4% at year-end 2020 and 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:

Category Comparison, Dividend Payout Ratio

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*
EEI Index	60.4	67.0	62.9	64.0	63.9	62.6	65.3	61.6	70.8	63.7
Regulated	59.4	68.7	61.1	68.7	60.1	62.1	65.3	59.5	69.2	62.9
Mostly Regulated	63.8	62.6	68.0	53.3	72.8	64.1	65.2	69.0	77.4	68.5
Diversified	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

*2023 figures reflect earnings and dividends through 12/31/2023.

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

- 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% to 6% annual earnings growth and a 3% to 4% dividend yield, producing highly visible and relatively stable 7% to 10% annualized long-term total return potential.

Dividend Tax Rates

The top tax rate for dividends and capital gains in 2023 was 20%, applied at income thresholds of

Category Comparison, Dividend Yield As of December 31, 2023

Category	Dividend Yield
EEI Index	3.8%
Regulated	3.8%
Mostly Regulated	3.9%

Regulated: 80% or more of total assets are regulated **Mostly Regulated:** Less than 80% of total assets are regulated Source: S&P Global Market Intelligence, company reports and EEI Finance Department

\$553,850 for couples and \$492,300 for individuals. Below these thresholds, dividends and capital gains are each taxed at rates of 15% or 0%, depending on the 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).

The Tax Cuts and Jobs Act (TCJA), 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 companies, such as electric utilities, that rely on a strong dividend to attract investors and finance capital spending.

Dividend Summary As of December 31, 2023

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Company Name	Stock	Company Category	Annualized Dividends	Payout Ratio	Yield (%)	Last Action	То	From	Date Announced
ALLETE Inc.	ALE	MR	\$2 71	86.9%	44%	Raised	\$2 71	\$2.60	2023 Q1
Alliant Energy Corporation	LNT	R	\$1.81	64.9%	3.5%	Raised	\$1.81	\$1.71	2023 Q1
Ameren Corporation	AEE	R	\$2.52	57.2%	3.5%	Raised	\$2.52	\$2.36	2023 Q1
American Electric Power Company, Inc.	AEP	R	\$3.52	73.0%	4.3%	Raised	\$3.52	\$3.32	2023 Q4
AVANGRID. Inc.	AGR	MR	\$1.76	100.6%	5.4%	Raised	\$1.76	\$1.73	2018 Q3
Avista Corporation	AVA	R	\$1.84	82.3%	5.1%	Raised	\$1.84	\$1.76	2023 Q1
Black Hills Corporation	BKH	R	\$2.50	62.7%	4.6%	Raised	\$2.50	\$2.38	2022 Q4
CenterPoint Energy, Inc.	CNP	R	\$0.80	52.2%	2.8%	Raised	\$0.80	\$0.76	2023 Q3
CMS Energy Corporation	CMS	R	\$1.95	84.2%	3.4%	Raised	\$1.95	\$1.84	2023 Q1
Consolidated Edison, Inc.	ED	R	\$3.24	66.4%	3.6%	Raised	\$3.24	\$3.16	2023 Q1
Dominion Resources, Inc.	D	R	\$2.67	77.3%	5.7%	Raised	\$2.67	\$2.52	2022 Q1
DTE Energy Company	DTE	R	\$4.08	53.2%	3.7%	Raised	\$4.08	\$3.81	2023 Q4
Duke Energy Corporation	DUK	R	\$4.10	69.9%	4.2%	Raised	\$4.10	\$4.02	2023 Q3
Edison International	EIX	R	\$3.12	48.2%	4.4%	Raised	\$3.12	\$2.95	2023 Q4
Entergy Corporation	ETR	R	\$4.52	38.2%	4.5%	Raised	\$4.52	\$4.28	2023 Q4
Evergy, Inc.	EVRG	R	\$2.57	76.6%	4.9%	Raised	\$2.57	\$2.45	2023 Q4
Eversource Energy	ES	R	\$2.70	52.8%	4.4%	Raised	\$2.70	\$2.55	2023 Q1
Exelon Corporation	EXC	R	\$1.44	59.9%	4.0%	Raised	\$1.44	\$1.35	2023 Q1
FirstEnergy Corp.	FE	R	\$1.64	73.5%	4.5%	Raised	\$1.64	\$1.56	2023 Q3
Hawaiian Electric Industries, Inc.	HE	MR	\$0.00	52.1%	0.0%	Lowered	\$0.00	\$1.44	2023 Q4
IDACORP, Inc.	IDA	R	\$3.32	62.4%	3.4%	Raised	\$3.32	\$3.16	2023 Q4
MDU Resources Group, Inc.	MDU	MR	\$0.50	37.1%	2.5%	Raised	\$0.50	\$0.49	2022 Q4
MGE Energy, Inc.	MGEE	R	\$1.71	51.3%	2.4%	Raised	\$1.71	\$1.63	2023 Q3
NextEra Energy, Inc.	NEE	MR	\$1.87	65.8%	3.1%	Raised	\$1.87	\$1.70	2023 Q1
NiSource Inc.	NI	R	\$1.00	61.1%	3.8%	Raised	\$1.00	\$0.94	2023 Q1
NorthWestern Energy	NWE	R	\$2.56	79.4%	5.0%	Raised	\$2.56	\$2.52	2023 Q1
OGE Energy Corp.	OGE	R	\$1.67	79.9%	4.8%	Raised	\$1.67	\$1.66	2023 Q3
Otter Tail Corporation	OTTR	R	\$1.75	24.8%	2.1%	Raised	\$1.75	\$1.65	2023 Q1
PG&E Corporation	PCG	R	\$0.04	0.0%	0.2%	Raised	\$0.04	\$0.00	2023 Q4
Pinnacle West Capital Corporation	PNW	R	\$3.52	75.4%	4.9%	Raised	\$3.52	\$3.46	2023 Q4
PNM Resources, Inc.	PNM	R	\$1.55	69.8%	3.7%	Raised	\$1.55	\$1.47	2023 Q4
Portland General Electric Company	POR	R	\$1.90	78.5%	4.4%	Raised	\$1.90	\$1.81	2023 Q2
PPL Corporation	PPL	R	\$0.96	54.2%	3.5%	Raised	\$0.96	\$0.90	2023 Q1
Public Service Enterprise Group Inc.	PEG	R	\$2.28	44.2%	3.7%	Raised	\$2.28	\$2.16	2023 Q1
Sempra Energy	SRE	R	\$2.38	41.0%	3.2%	Raised	\$2.38	\$2.29	2023 Q1
Southern Company	SO	R	\$2.80	81.1%	4.0%	Raised	\$2.80	\$2.72	2023 Q2
Unitil Corporation	UTL	R	\$1.62	58.0%	3.1%	Raised	\$1.62	\$1.56	2023 Q1
WEC Energy Group, Inc.	WEC	R	\$3.12	65.2%	3.7%	Raised	\$3.12	\$2.91	2023 Q1
Xcel Energy Inc.	XEL	R	\$2.08	58.1%	3.4%	Raised	\$2.08	\$1.95	2023 Q1
Industry Average				63.7%	3.8%				

NOTES

Business Segmentation: Assets as of 12/31/2022

R = Regulated: 80% or more of total assets are regulated. **MR = Mostly Regulated:** Less than 80% of total assets are regulated.

Dividend Per Share: Per share amounts are annualized declared figures as of 12/31/2023.

Dividend Payout Ratio: Dividends paid for 12 months ended 12/31/2023 divided by net income before nonrecurring and extraordinary items for 12 months ended 12/31/2023. While net income is after-tax, nonrecurring and extraordinary items are pre-tax, as there is no consistent method of gathering these items on a tax adjusted basis under current reporting guidelines. On an individual company basis, the Payout Ratio in the table could differ slightly from what is reported directly by the company.

"NM" applies to companies with negative earnings or payout ratios greater than 200%.

Dividend Yield: Annualized Dividends Per Share at 12/31/2023 divided by stock price at market close on 12/31/2023.

By Business Segment: Average of Dividend Payout Ratios and Dividend Yields for companies within these business segments.

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

Credit Ratings

The industry's average parent company credit rating in 2023 remained at BBB+ for the tenth straight year, although four parent-level downgrades caused a weakening in aggregate holding company credit quality. There were only 43 total actions— 16 upgrades and 27 downgrades affecting both parents and subsidiaries. This pace was far below the 68-action annual average of the previous ten calendar years and is the secondlowest annual total in our historical dataset (back to 2000).

On December 31, 2023, 68% of parent company ratings outlooks were "stable" and 16% were "positive" or "watch-positive". Only 16% of outlooks were "negative" or "watchnegative"; this is an increase over the 11% at year-end 2022, which was the lowest negative share since 2013.

Direction of Rating Actions



U.S. INVESTOR-OWNED ELECTRIC UTILITIES

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



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

	2	019	20	020	20	021	20	122	2	023
	Total	Total								
The state	Upgrades	Downgrades								
Fitch	-	(7)		(4)					-	<u> </u>
Q1	3	(/)	0	(1)	0	0	4	(3)	2	0
Q2	1	0	4	(2)	0	(1)	0	0	2	0
Q3	3	0	1	0	1	0	15	0	5	(2)
Q4	13	(3)	0	(16)	1	(3)	0	0	0	0
Total	26	(10)	5	(19)	2	(4)	19	(3)	9	(2)
Moody's										
Q1	2	(6)	1	(3)	2	(3)	1	0	2	0
02	2	(2)	1	(1)	1	0	2	0	0	0
03	5	(1)	2	(2)	0	(3)	0	(5)	1	(3)
Q4	0	(2)	1	(1)	Ő	(3)	1	0	2	(3)
Total	9	(11)	5	(7)	3	(9)	4	(5)	5	(6)
Total	5	(11)	J	(7)	J	(3)	-	(3)	J	(0)
S&P										
01	9	(8)	0	0	1	(9)	0	0	0	0
02	1	0	0	(3)	0	(1)	2	0 0	0	(2)
03	4	(4)	Ő	(2)	0	(2)	0	0	2	(8)
04	3	(2)	2	(16)	14	(7)	0	(2)	0	(9)
Total	26	(11)		(21)	15	(10)		(2)		(10)
TULAT	20	(11)	2	(21)	15	(19)	2	(2)	2	(19)

Credit Rating Agency Upgrades and Downgrades

Note: Chart depicts the number of occurrences and includes each event, even if multiple downgrades occurred for a single company. Source: Fitch Ratings, Moody's, and Standard & Poor's.

Electric utility industry credit quality has generally improved over the past decade. The industry's average parent-level rating has held at BBB+ since increasing from BBB in 2014. Upgrades have outnumbered downgrades in six of the past ten calendar years with an annual average upgrade percentage of 59% over the decade.

EEI 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 affecting parent holding companies as well as individual subsidiaries. Our universe of 44 U.S. parent company electric utilities on December 31, 2023 included 39 that are publicly traded and five that are either a subsidiary of an independent power producer, a subsidiary of a foreign owned company, or owned by an investment firm.

Credit Actions at Parent Level

The only parent-level ratings actions in 2023 by S&P were four downgrades. By comparison, there was one downgrade and no upgrades in 2022, three downgrades and one upgrade in 2021, and three downgrades, one upgrade and one reinstatement in 2020.

On August 15, S&P Global Ratings downgraded Hawaiian Electric Industries (HE) to BBfrom BBB-. Subsidiaries Hawaiian Electric, Maui Electric, and Hawaii Electric Light were also downgraded to BB- from BBB. The downgrades resulted from the worst wildfires in Hawaii's history, predominantly on the island of Maui, with over 2,200 structures destroyed and many fatalities. S&P noted that the severity of the fires showed that wildfire risk for the utilities was higher than previously expected, and that class action lawsuits related to the event would significantly increase uncertainty and financial risk going forward.

On August 24, S&P Global Ratings again downgraded HE to Bfrom BB- following the announcement that its dividend would be suspended beginning in Q3 as a result of the wildfires. Subsidiaries Hawaiian Electric, Maui Electric, and Hawaii Electric Light were also downgraded to B- from BB-. S&P cited growing concern about the company's access to capital markets due to class action lawsuits.

On November 8, S&P Global downgraded MDU Ratings Resources Group (MDU) to BBB from BBB+ after MDU completed a strategic review and announced the divestiture of its construction services business by year-end 2024. MDU completed a spinoff of its construction materials business, Knife River, in 2023. S&P said the November 8 downgrade reflected the fact that MDU Resources will no longer have the diversification benefit of multiple uncorrelated business lines.

On November 29, S&P Global Ratings downgraded Evergy (EVRG) to BBB+ from A-. Subsidiaries Evergy Kansas Central, Evergy Kansas South, and Evergy Missouri West were also downgraded to BBB+ from A-, while subsidiary Evergy Metro was downgraded to A- from A. S&P cited two recent rate review settlements in Kansas as the primary cause of the downgrades; these were the first rate review decisions in Kansas since the merger between Great Plains Energy and Westar Energy in 2018.

Ratings Activity Remained Slow in 2023

The 43 ratings actions during 2023 (upgrades and downgrades) was the second-lowest total for any year since our dataset's inception in 2000. By comparison, there were 35 actions in 2022, 52 actions in 2021, 59 actions in 2020, and an annual average of 68 over the last decade.

The industry's 16 upgrades in 2023 versus 27 downgrades produced an upgrade percentage of 37.2%, down from 71.4% in 2022 and 38.5% in 2021. Upgrades outnumbered down-

Bond Ratings December 31, 2023 as rated by Standard & Poor's



Bond Ratings December 31, 2022 as rated by Standard & Poor's

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Bond Ratings December 31, 2021 as rated by Standard & Poor's



Bond Ratings December 31, 2001 as rated by Standard & Poor's





grades in six of the past ten calendar years, with an annual average upgrade percentage of 59%.

The Credit Rating Agency Upgrades and Downgrades table presents quarterly activity by all three ratings agencies. Following are full-year totals for 2023:

Fitch (9 upgrades, 2 downgrades)

Moody's (5 upgrades, 6 downgrades)

Standard & Poor's (2 upgrades, 19 downgrades)

Upgrades in 2023

Many of the year's upgrades cited reduced financial uncertainty and reduced regulatory lag due to a more predictable regulatory framework. Other upgrades were driven by improved metrics related to wildfire risk in California, with a significant decline in the number of wildfires linked to utility equipment in the state.

On February 23, Moody's upgraded Edison International (EIX) to Baa2 from Baa3 and its Southern California Edison subsidiary to Baa1 from Baa2. Moody's noted the progress made by Southern California Edison to address wildfire risk, combined with its access to the state's wildfire fund and the legislative reform of the wildfire cost recovery process, has materially improved overall credit quality.

On March 20, Fitch upgraded PG&E (PCG) to BB+ from BB and upgraded subsidiary Pacific Gas & Electric to BB+ from BB. Fitch cited as primary catalyst for the upgrades the significant decline in the number

Rating Agency Activity										
U.S. INVESTOR-OWNED ELECTRIC UTILITIES										
Total Ratings Changes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fitch Moody's	14 85	11 12	16 13	15 12	33 23	36 20	24 12	6 12	22 9	11 11
Standard & Poor's	7	27	38	25	37	34	23	34	4	21
Total	106	50	67	52	93	90	59	52	35	43

Source: Fitch Ratings, Moody's, Standard & Poor's, S&P Global Market Intelligence, and EEI Finance Department.

of wildfires involving PG&E equipment during 2019–2022 compared with 2017–2018, along with lower related liabilities. The upgrades were also driven by California's wildfire-related legislative reforms, by PG&E's ongoing management efforts to reduce wildfire risk, and by Fitch's expectation that credit metrics at the utilities will improve.

On April 28, Fitch upgraded Edison International (EIX) to BBB from BBB- and upgraded subsidiary Southern California Edison to BBB from BBB-. The upgrades mostly reflect the significant decline in wildfires linked to Southern California Edison's equipment after 2018 despite elevated wildfire activity in California in 2020 and 2021, as well as ongoing efforts to enhance system resilience. With the large majority of 2017/2018 wildfire liabilities resolved, Fitch also said it expects EIX's 2023-2026 credit metrics to improve significantly.

On July 24, S&P Global Ratings upgraded Xcel Energy subsidiary Northern States Power to A from A-. The move followed a final order by the Minnesota Public Utility Commission authorizing a \$306 million aggregate rate increase for 2022-2024. S&P Global Ratings cited constructive regulation in Minnesota that includes a multi-year ratemaking framework for electric rates based on forecasted rate-base estimates. The agency noted this reduces regulatory lag, cash flow volatility and uncertainty for the utility and its stakeholders.

On July 26, S&P Global Ratings upgraded Exelon subsidiary Commonwealth Edison to A- from BBB+ due to an improved assessment of governance. The U.S. District Court for the Northern District of Illinois dismissed a bribery charge against the utility following completion of a three-year deferred prosecution agreement that required increased oversight and training related to internal controls.

On July 28, prior to the wildfires in Maui, Fitch upgraded Hawaiian Electric Industries (HE) to BBB+ from BBB and upgraded subsidiary Hawaiian Electric to A- from BBB+. Fitch cited a more predictable regulatory framework implemented in 2021 as the primary reason; regulatory adjustments have improved stability of earnings and cash flow and will moderate the impact of inflation. Fitch also expected Hawaiian Electric to narrow the gap between allowed and earned ROEs over the next few years.

On September 1, Fitch upgraded Southern Company subsidiary Georgia Power to BBB+ from BBB due to the successful start of commercial operation at Vogtle Unit 3. The nuclear unit was placed into service on July 31, 2023. The upgrade also reflects a constructive agreement with the Georgia Public Service Commission (PSC) and other intervenors that allows Georgia Power to recover \$7.6 billion of capital costs and \$1.0 billion of capitalized financing costs associated with construction of the two Vogtle nuclear units.

On September 22, Fitch upgraded utility parent company Otter Tail (OTTR) to BBB from BBB- and upgraded subsidiary Otter Tail Power to BBB+ from BBB. Fitch cited the predictable earnings and cash flow from the company's regulated operations and strong performance at its non-utility manufacturing and plastics business segments. Fitch expects the regulatory environment to remain supportive of credit quality across the company's three state jurisdictions (Minnesota, North Dakota and South Dakota).

On September 26, Moody's upgraded Southern Company subsidiary Mississippi Power to A3 from Baa1 based on an improved Mississippi regulatory environment. Moody's cited the consistency and predictability shown by the Mississippi PSC during the last few years as it approved rate orders in several Mississippi Power regulatory proceedings.

On November 20, Moody's upgraded Consolidated Edison (ED) to Baa1 from Baa2 and upgraded subsidiary Consolidated Edison (CECONY) to A3 from Baa1. Moody's noted better regulatory support as the primary reason, citing recent decisions by the New York PSC that resulted in revenue increases and improved financial metrics. Moody's stated that stakeholder relationships have improved since the last rate order in 2020, with increased political support, more predictable regulatory outcomes and better cost recovery.

Downgrades in 2023

Many of the year's downgrades were related to the Maui wildfires in August 2023. Additional downgrades were related to a terminated acquisition, increased wildfire risk in Oregon, and increased debt from capital investment.

On April 20, S&P Global Ratings downgraded AEP subsidiary Kentucky Power to BBB from BBB+ following cancellation of the planned sale of Kentucky Power to Liberty Utilities. The downgrade was driven by weakening stand-alone financial measures at Kentucky Power. In 2021 and 2022, Kentucky Power's FFO to debt was 11.6% and 11.4%, respectively, significantly below S&P's downgrade threshold of 15%.

On June 20, S&P Global Ratings downgraded Berkshire Hathaway Energy subsidiary PacifiCorp to BBB+ from A following a negative decision in a class action lawsuit related to four Oregon wildfires in 2020. In S&P's view, the verdict that the company contributed to the wildfires significantly increases operating risk for PacifiCorp. S&P also noted that the jury award on a perplaintiff basis was materially above base-case assumptions. The jury also found that a broader absent class affected by the fires could bring more claims against the company.

On August 11, Moody's downgraded DPL to Ba2 from Ba1 and downgraded subsidiary Dayton Power & Light (DP&L) to Baa3 from Baa2. Moody's observed that the pace of DP&L's investments in transmission, distribution and smart-grid improvements is driving a significant increase in debt, which will more than double between 2021 and 2024. While DP&L's Energy Security Plan IV recently became effective in Ohio, allowing it to implement a delayed base-rate increase, Moody's noted DP&L's agreement to not pursue decoupling exposes its cash flow to more volatility.

On August 18, Moody's downgraded Hawaiian Electric Industries subsidiary Hawaiian Electric Company to Ba3 from Baa1 due to the Maui wildfires. Moody's expects significant financial liabilities if the utility is found to be at fault once investigations are complete. Moody's also noted the future regulatory risk related to cost recovery for system rebuilding.

On August 21, Fitch downgraded Hawaiian Electric Industries to B from BBB+ and downgraded subsidiary Hawaiian Electric to B from A-. Fitch also assigned first-time ratings of B to Hawaiian Electric Company's subsidiaries Maui Electric and Hawaii Electric Light. If investigations find that utility equipment caused the August wildfires and the utility is deemed by a court to be negligent, Fitch believes the companies may be subject to large third-party liabilities in a process that could take several years.

On October 27, Moody's downgraded Eversource Energy (ES) to Baa2 from Baa1 and downgraded subsidiary NSTAR Electric to A2 from A1. Moody's cited heightened uncertainty related to the company's pending offshore wind project sale and concerns that additional balance sheet actions would be needed to offset the challenges associated with the wind project transaction. Moody's also noted a challenging regulatory environment in Connecticut.

On November 20, S&P Global Ratings downgraded Berkshire Hathaway Energy (BHE) subsidiaries MidAmerican Energy, Nevada Power, and Sierra Pacific Power to Afrom A. The downgrades were driven by an assessment that BHE will not provide extraordinary support to its subsidiaries under all foreseeable circumstances. S&P said it now ex-

S&P Utility Credit Ratings Distribution by Company Category

		U.S	6. INVEST	FOR-OWN	ED ELEC	TRIC UTIL	ITIES			
	:	2019	:	2020	:	2021	:	2022	2	2023
	#	%	#	%	#	%	#	%	#	%
Regulated										
A or higher	1	3%	1	3%	1	3%	1	3%	1	3%
A-	11	31%	11	32%	8	23%	8	22%	7	18%
BBB+	11	31%	10	29%	14	40%	15	42%	18	47%
BBB	8	23%	7	21%	7	20%	7	19%	7	18%
BBB-	2	6%	2	6%	3	9%	3	8%	3	8%
Below BBB-	2	6%	3	9%	2	6%	2	6%	2	5%
Total	35	100%	34	100%	35	100%	36	100%	38	100%
Mostly Regulated										
A or higher	1	10%	1	10%	1	11%	1	13%	1	17%
A-	1	10%	1	10%	1	11%	1	13%	1	17%
BBB+	7	70%	6	60%	5	56%	4	50%	1	17%
BBB	0	0%	1	10%	1	11%	1	13%	2	33%
	1	10%	1	10%	1	11%	1	13%	0	0%
BBB-	1	10 /0	-							
BBB- Below BBB-	1 0	0%	0	0%	0	0%	0	0%	1	17%

Note: Totals may not equal 100.0% due to rounding.

Refer to page v for category descriptions.

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

pects BHE's extraordinary support for subsidiary PacifiCorp would be limited should PacifiCorp receive further adverse outcomes in a class action lawsuit related to wildfires.

On December 11, Moody's downgraded Alliant Energy subsidiary Wisconsin Power and Light to Baa1 from A3. Moody's stated that WPL's financial metrics have been weak since 2018 largely due to a three-year base rate freeze associated with the 2017 Tax Cuts and Jobs Act and the coronavirus pandemic, additional debt issuance to help finance higher capital expenditures, and under-recovered fuel costs.

Ratings by Company Category

The S&P Utility Credit Ratings Distribution by Company Category table presents the distribution of credit ratings over time by company category (Regulated and Mostly Regulated) for the investor-owned electric utilities. 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, 2023, the average rating for the Regulated category was BBB+ and the average rating for the Mostly Regulated category was BBB.

Rating Agency Credit Outlooks

The three major ratings agencies held divergent utility industry credit outlooks as 2024 began. S&P maintained a stable outlook for regulated utilities. Moody's maintained the stable outlook for regulated utilities that it had revised from negative in late 2023. Fitch retained its deteriorating outlook for North American utilities. The agencies cited increased physical risks to utility infrastructure, elevated capital expenditures and related customer bill impacts, and stability of financial metrics as key themes they are watching. We note that the groups of underlying companies vary slightly across the three rating agency outlooks.

<u>Standard & Poor's (S&P)</u>

Published in January 2024, S&P's report "Industry Credit Outlook 2024—North America Regulated

Long-Term Credit Rating Scales

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

	Moody's	Standard & Poor's	Fitch	
	Aaa	AAA	AAA	
Investment	Aa1 Aa2 Aa3	AA+ AA AA-	AA+ AA AA-	
Grade	A1 A2 A3	A+ A A-	A+ A A-	
	Baa1 Baa2 Baa3	BBB+ BBB BBB-	BBB+ BBB BBB-	

	Moody's	Standard & Poor's	Fitch
Speculative Grade	Ba1 Ba2 Ba3	BB+ BB BB-	BB+ BB BB-
	B1 B2 B3	B+ B B-	B+ B B-
	Caa1 Caa2 Caa3	CCC+ CCC CCC-	+000 000 000-
	Са	CC	CC
	С	С	С

	Moody's	Standard & Poor's	Fitch	
Default	С	D	D	

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

Utilities" maintained the agency's stable industry outlook. However, the report observed that downgrades outpaced upgrades for the fourth consecutive year in 2023. And, given that 28% of the industry has a negative outlook versus 14% with a positive outlook, the agency said it's possible that downgrades may outpace upgrades once again in 2024.

S&P's base case assumes that industry credit quality will remain challenged in 2024. For many utilities, the physical risk to system infrastructure is growing as climate change increases the frequency of extreme weather events such as wildfires. S&P cited industry initiatives that are addressing wildfire risk, including detailed wildfire mitigation plans, system hardening, improved weather forecasting using machine learning, implementation of public safety power shutoffs (PSPS) programs, and vegetation management. S&P also noted that, while the industry's robust capital spending represents necessary investment in safety, reliability, and the nation's energy transition, it is also leading to rising leverage. Consistent access to the capital markets will be necessary for the industry to fund its debt maturities and cash flow deficits.

S&P noted that effective management of regulatory risk will be key to maintaining the industry's credit quality going forward. This will require constructive rate case orders, minimized regulatory lag, and management of customer bill impacts. Timely recovery of capital expenditures and operation and maintenance costs will also be necessary for the industry to maintain credit quality.

Moody's

"Outlook—Regulated In its Electric and Gas Utilities-US" (published in September 2023), Moody's revised its outlook for the sector to stable from negative. Moody's noted that sustained lower natural gas prices, moderating inflation, and continued regulatory support for the recovery of fuel and purchased power costs will improve credit metrics for the industry. The significant decline in natural gas prices since mid-2022 has provided relief to utilities and has eased both affordability pressures and regulatory risk.

The report also stated that interest rates and capital spending will continue to pressure holding company credit metrics. Although the pace and magnitude of interest rate increases have slowed, increased debt and debt refinancing costs will pressure parent company metrics. Moody's expects utilities to maintain high levels of capital spending as they focus on reducing carbon emissions and investing in system resilience and reliability. Moody's noted that, despite many challenges, aggregate sector FFO metrics have been remarkably steady and are likely to remain so. The sector's aggregate industry funds from operations (FFO) to debt ratio will likely stabilize at 14% in 2024, according to the report.

Moody's listed several factors that could change its outlook back to negative: 1) if there is a sustained decline in regulatory support for timely cost recovery, 2) if capital market access becomes less certain or the availability of bank credit facilities becomes constrained, or 3) if the sector's aggregate FFO-to-debt ratio dips materially below 14%. Factors that could change its outlook to positive were: 1) if the regulatory and political environment turns even more credit supportive, and 2) if the sector's aggregate FFOto-debt ratio rises to around 18% on a sustainable basis.

Fitch Ratings

In its "North American Utilities, Power & Gas Outlook 2024" (released December 2023), Fitch Ratings maintained its deteriorating outlook for the sector. Fitch stated that macroeconomic headwinds. elevated capital expenditures, and higher funding costs will continue to pressure utility credit metrics. Fitch noted that customer affordability concerns will persist despite reductions in natural gas prices and inflation. However, with 90% of companies at a stable ratings outlook, Fitch expects little ratings movement in 2024. Fitch expects median leverage metrics for the sector to improve in 2024, driven by the recovery of deferred fuel balances.

Fitch also cited the catastrophic wildfires in Maui to highlight the heightened physical risks faced by electric utilities as a result of climate change. The agency explained that California provides a roadmap for other states to follow regarding the development of comprehensive plans to prevent, mitigate and respond to wildfires. Some other states have begun to address this issue, and Fitch believes that progress on these initiatives could improve utility credit risk.

The report also noted positive tailwinds for the industry. Several electric utilities have begun to see sales growth from data centers, expansion of manufacturing facilities, and electrification trends in oil and gas drilling. Fitch expects weathernormalized total retail sales to be 0.5%-1.0% higher in 2024 compared with 2023. Fitch also expects authorized ROEs to start trending up with the increase in interest rates, although with a lag that could be longer than in previous cycles. Fitch stated that the gap between authorized and earned ROEs continues to narrow. Fitch also views the Inflation Reduction Act as a positive for credit quality since its tax incentives for clean generation will help offset inflationary bill pressures.

Business Strategies

Business Segmentation

The industry's regulated business segments-regulated electric and natural gas distribution-grew their combined assets by \$81.3 billion, or 4.6%, in 2023, extending a multi-year trend and driving a \$95.7 billion, or 4.7%, increase in total industry assets. Regulated assets were 84.9% of the industry total at year-end, unchanged from the same 84.9% total at year-end 2022. The Regulated Electric segment's share of total industry assets increased to 71.9% from 70.9% at year-end 2022; that segment's total assets grew \$91.4 billion, or 6.2%. Natural Gas Distribution assets decreased by \$10.2 billion, or 3.5%, and Competitive Energy assets increased \$6.5 billion, or 4.0%. Assets for the relatively small Natural Gas Pipeline segment decreased by \$182 million, or 0.5%. A record-high \$171.9 billion of capital expenditures in 2023 and generally constructive regulatory relations supported the significant growth in Regulated assets.

Nationwide power demand in 2023 declined 1.6% from 2022's total due to mild weather, and natural gas prices fell sharply from 2022's elevated levels. As a result, the Regulated Electric business segment's revenue increased by only \$1.3 billion, or 0.4%. Natural Gas Distribution revenue decreased \$5.9 billion, or 8.7%. Competitive Energy revenue decreased \$2.0 billion, or 6.1%. Natural Gas Pipeline revenue decreased by \$1.7 billion, or 26.8%. Total industry revenue was \$415.5 billion in 2023, a decline of \$8.9 billion, or 2.1%, versus 2022's \$424.4 billion.

2023 Revenue by Segment

Regulated Electric revenue increased by \$1.3 billion, or 0.4%, to \$311.1 billion from \$309.7 billion in 2022. The segment's share of total industry revenue rose to 73.1% from 71.3% in 2022, remaining well above its level at the start of the industry's

Business Segmentation—Revenues									
U.S. INVESTOR-OWNED ELECTRIC UTILITIES									
(\$ Millions)	2023	2022	\$ Change	% Change					
Regulated Electric	311,077	309,739	1,337	0.4%					
Competitive Energy	30,498	32,480	(1,982)	(6.1%)					
Natural Gas Distribution	61,542	67,426	(5,884)	(8.7%)					
Natural Gas Pipeline	4,772	6,518	(1,745)	(26.8%)					
Other	17,439	18,128	(689)	(3.8%)					
Discontinued Operations	111	0	111	0.0%					
Eliminations/Reconciling Items	(9,943)	(9,863)	(80)	0.8%					
Total Revenues	415,495	424,428	(8,933)	(2.1%)					

r = revised

Note: Difference and percent change columns may reflect rounding. Totals may reflect rounding.

Business Segmentation—Assets					
U.S. INVESTOR-OWNED ELECTRIC UTILITIES					
(\$ Millions)	12/31/23	12/31/22	\$ Change	% Change	
Regulated Electric	1,567,683	1,476,245	91,438	6.2%	
Competitive Energy	167,982	161,501	6,481	4.0%	
Natural Gas Distribution	281,268	291,443	(10,175)	(3.5%)	
Natural Gas Pipeline	35,191	35,373	(182)	(0.5%)	
Other	126,905	117,516	9,389	8.0%	
Eliminations/Reconciling Items	(64,516)	(63,257)	(1,259)	2.0%	
Total Assets	2,114,512	2,018,820	95,691	4.7%	

r = revised

Note: Difference and percent change columns may reflect rounding. Totals may reflect rounding.

two-decade-long migration back to a regulated focus (Regulated Electric's share was only 51.9% in 2005).

Natural Gas Distribution revenue fell \$5.9 billion, or 8.7%, to \$61.5 billion from \$67.4 billion in 2022. Volatile natural gas prices drove revenue gains of 26.1% in 2022 and 18.0% in 2021 for this segment, a decrease of 3.3% in 2020, and increases of 4.4% in 2019, 3.0% in 2018, 17.6% in 2017 and 8.9% in 2016. Revenue growth in 2016 and 2017 was also due to completion in 2016 of four large acquisitions of natural gas distribution businesses.

Total regulated revenue — the sum of the Regulated Electric and Natural Gas Distribution segments — decreased by \$4.5 billion, or 1.2%, to \$372.6 billion in 2023. The industry's focus on state-regulated operations has driven a steady growth in these business segments' share of industry revenue in recent years. Regulated revenue accounted for 87.6% of total industry revenue in 2023 compared to 86.8% in 2022, totals well above 2005's 65.3% share.

Eliminations and reconciling items are added back to total revenue to arrive at the denominator for the segment percentage calculations shown in the graphs *Revenue Breakdown 2023 and Revenue Breakdown 2022*.

2023 Assets by Segment

Regulated Electric assets increased \$91.4 billion, or 6.2%, during 2023. The segment's share of total industry assets was 71.9% at year-end, above its 70.9% share at year-end 2022. Natural Gas Distribution assets decreased by \$10.1 billion, or 3.5%, while Competitive Energy assets increased by \$6.5 billion, or 4.0%. The Natural Gas Pipeline segment's relatively small asset total declined slightly, falling by \$182 million, or 0.5%, to \$35.2 billion at year-end 2023 and representing 1.6% of industry assets.

Total regulated assets (Regulated Electric and Natural Gas Distribution) grew \$81.3 billion, or 4.6% in 2023 for a 84.9% share of total industry assets at year-end; this is identical to the 84.9% share at year-end 2022. This aggregate share measure has risen steadily from 61.6% at year-end 2002, underscoring the significant regulated rate base growth and widespread divestitures of non-core businesses over that 21-year period. Twenty-seven of the industry's 44 constituent companies (61%) either increased regulated assets as a percent of total assets or maintained a 100% regulated structure in 2023.

Regulated Electric

Regulated Electric segment operations include the generation, transmission and distribution of



Source: EEI Finance Department and company annual reports.

Revenue Breakdown 2022

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department and company annual reports.



Source: EEI Finance Department and company annual reports.

Asset Breakdown As of December 31, 2022 U.S. INVESTOR-OWNED ELECTRIC UTILITIES **Natural Gas** Pipeline 1.7% Other 5.6% **Natural Gas** Distribution 14.0% Competitive Energy Regulated 7.8% Electric 70.9%

Source: EEI Finance Department and company annual reports.
electricity under state regulation for residential, commercial and industrial customers. Regulated Electric revenue increased slightly in 2023, rising \$1.3 billion, or 0.4%. Twentyone companies, or 48% of the industry, had higher Regulated Electric revenue in 2023 than in the prior year. Regulated Electric revenue increased by 14.1% in 2022 and 8.0% in 2021, fell by 0.8% in 2020 and by 0.5% in 2019, was unchanged in 2018, and grew by 0.8% in 2017.

Total nationwide electric output decreased 1.6% in 2023 after rising 2.8% in 2022 and in 2021. On a weather-adjusted basis, electric output rose 1.4% in 2023. Electric output has risen in only eight of the past sixteen years. Prior to this period, a year-to-year output decline was a rare event in an industry that typically experienced low single-digit percent demand growth. Energy efficiency initiatives, demand-side management programs, and the off-shoring of formerly U.S.-based manufacturing and heavy industry are all forces that have suppressed the growth of electricity demand since the late 20th century.

Regulated Electric assets increased by \$91.4 billion, or 6.2%, in 2023, representing the largest asset growth in dollar terms of all business segments. The industry's record-high \$171.9 billion of capital expenditures in 2023 and generally constructive regulatory relations supported the increase in regulated assets. The 2023 capital expenditure total was the twelfth consecutive annual record high, with the expansion well represented across the industry's Regulated Electric and Natural Gas Distribution segments over this period. Asset growth is also evident in the industry's net property, plant, and equipment in service, which rose 6.4% from year-end 2022 and 21.6% over the level five years earlier, at year-end 2018. Such robust growth in assets reflects the size of the industry's build-out of new renewable and clean generation, new transmission, reliability-related infrastructure, and other capital projects in recent years.

Competitive Energy

Competitive Energy assets increased by \$6.5 billion, or 4.0%, to \$168.0 billion at year-end 2023 from \$161.5 billion at year-end 2022. Competitive Energy assets fell \$47.4 billion, or 22.7%, in 2022 relative to 2021 due to the spin-off of Constellation Energy, Exelon's power generation and competitive energy business, in February 2022. Competitive Energy revenue decreased by \$2.0 billion, or 6.1%, to \$30.5 billion from \$32.5 billion in 2022. Competitive Energy covers the generation and/or sale of electricity in competitive markets, including both wholesale and retail transactions. Wholesale buyers are typically regional power pools, large industrial customers, and electric utilities looking to supplement generation capacity. Competitive Energy also includes the trading and marketing of natural gas. Of the 16 companies that maintain Competitive Energy operations, seven (44%) grew these assets during 2023 and six (38%) had revenue gains from this segment.

Natural Gas

Natural Gas Distribution assets decreased by \$10.2 billion, or 3.5%, to \$281.3 billion at year-end 2023 from \$291.4 billion at year-end 2022. The segment's revenue decreased by \$5.9 billion, or 8.7%, to \$61.5 billion from \$67.4 billion in 2022 as natural gas prices declined from elevated 2022 levels. Revenue grew 26.1% in 2022 and 18.0% in 2021, as natural gas prices surged. Only eight of the 27 companies that report gas distribution revenue showed a year-to-year increase in 2023 after all companies did in both 2022 and 2021. This followed increases at 26%, 70%, 86% and 93% of reporting companies in 2020, 2019, 2018 and 2017, respectfully. Natural Gas Distribution includes the delivery of natural gas to homes, businesses and industrial customers throughout the United States.

Natural Gas Pipeline assets decreased by \$182 million, or 0.5%, to \$35.2 billion at year-end 2023 from \$35.4 billion at year-end 2022. Three of the six companies that report this segment showed asset growth. This segment's revenue decreased by \$1.7 billion, or 26.8%, to \$4.8 billion in 2023 from \$6.5 billion in 2022, which was somewhat impacted by lower natural gas prices. The Natural Gas Pipeline business concentrates on the transmission and storage of natural gas for local distribution companies, marketers and traders, electric power generators and natural gas producers.

Added together, the Natural Gas Distribution and Natural Gas Pipeline segments decreased assets by \$10.4 billion, or 3.2%, in 2023 and produced revenue of \$66.3 billion, down from \$73.9 billion in 2022. The contribution to total industry revenue from these two natural gas activities decreased to 15.6% in 2023 from 17.0% in 2022.

Strategic Moves Completed in 2023

Several companies completed strategic transactions in 2023 that notably affected their business segmentation reporting.

- Dominion Energy sold its remaining 50% stake in the Cove Point LNG facility to Berkshire Hathaway Energy for \$3.3 billion. As a result, Berkshire Hathaway Energy increased its stake in the terminal operator to 75%, with the remaining 25% held by a subsidiary of Brookfield Infrastructure Partners.
- Con Edison completed the divestiture of its renewables business to RWE Renewables Americas for \$6.8 billion. Con Edison said it will focus on its core utility business and the investments needed to lead New York's clean energy transition.
- NextEra Energy finalized the sale of its Texas Natural Gas Pipeline portfolio to Kinder Morgan for \$1.8 billion.

Strategic Announcements in 2023

In addition to 2023's completed transactions, several announcements were made that, if completed, will impact business segment reporting in 2024 and beyond.

- Dominion intends to sell three gas utilities to Enbridge for \$14.0 billion; these include East Ohio Gas, Public Service Company of North Carolina, and Questar Gas (which distributes gas in Utah, Wyoming, and Idaho). Dominion said it would use after-tax proceeds of \$8.7 billion to reduce parent-company debt.
- Cleco announced the intent to sell its competitive electric business, Cleco Cajun, to private investor group Atlas Capital Resources for \$600 million. Cleco expects to complete the transaction in June 2024.
- FirstEnergy announced an additional 30% divestiture of its transmission business, FirstEnergy Transmission, to Brookfield Partners for \$3.5 billion. In 2022, FirstEnergy sold a 19.9% stake to Brookfield for \$2.4 billion.

2023 Year-End List of Companies by Category

Early each calendar year, EEI updates our list of investor-owned electric utility holding companies organized by business category. The list is based on the prior year-end business segmentation data presented in 10Ks. Our two categories are Regulated (80% or more of holding company assets are regulated) and Mostly Regulated (less than 80% of holding company assets are regulated).

We use assets rather than revenue for determining category membership because we believe assets provide a clearer picture of strategic trends; fluctuating commodity prices for natural gas and power can impact revenue so greatly that a company's strategic approach to business segmentation may be distorted by reliance on revenue data alone. Comparing the list of companies from year to year reveals company migrations between categories and shows the general trend in industry business models. We also base our quarterly category financial data during the year on this list.

There was only one company that migrated across categories in 2023; Otter Tail Corporation moved to the Mostly Regulated category. The company began the year just above the 80% threshold and fell just below this percentage by year-end. Otter Tail is split between its larger regulated Electric segment and its unregulated Manufacturing segment, which includes a metal fabrication company, a custom plastics parts manufacturer, and two PVC pipe manufacturing companies.

The number of parent companies in the EEI universe remained at 44, the same as the year-end 2022 total. (See List of Companies by Category on December 31, 2023).

List of Companies by Category at December 31, 2023

Edison International

Entergy Corporation

Eversource Energy

Exelon Corporation

FirstEnergy Corp.

IPALCO Enterprises, Inc.*

NorthWestern Energy

MGE Energy, Inc.

OGE Energy Corp.

PG&E Corporation

Pinnacle West Capital Corporation

IDACORP, Inc.

NiSource Inc.

Evergy, Inc.

Regulated (37)

Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. Avista Corporation Black Hills Corporation CenterPoint Energy, Inc. *Cleco Corporate Holdings LLC** CMS Energy Corporation Consolidated Edison, Inc. Dominion Energy, Inc. *DPL Inc.** DTE Energy Company Duke Energy Corporation

Mostly Regulated (7)

ALLETE, Inc. AVANGRID, Inc. *Berkshire Hathaway Energy** Hawaiian Electric Industries, Inc. MDU Resources Group, Inc. PNM Resources, Inc.
Portland General Electric Company
PPL Corporation
Public Service Enterprise Group Incorporated *Puget Energy, Inc.**Sempra Energy
Southern Company
Unitil Corporation
WEC Energy Group, Inc.
Xcel Energy Inc.

NextEra Energy, Inc. Otter Tail Corporation

Note:* Non-publicly traded companies.

Mergers & Acquisitions

Utility merger and acquisition (M&A) activity involving whole operating companies with regulated service territories remained slow in 2023. The year's three new announcements were Dominion's move to sell its natural gas distribution utilities to diversified energy company Enbridge, NextEra's sale of Florida City Gas to Chesapeake Utilities, and Entergy's announced sale of its Louisiana natural gas distribution business to a Baton Rouge-based private equity firm. The number of utilities tracked by EEI remained at 39 for the fourth straight year. By contrast, consolidation from the mid-1990s through 2019 reduced the number of holding companies by more than half, from 98 to 40. The reduced number of holding companies alone constrains the opportunity set for new M&A. But industry fundamentals do as well. Most utilities are focused on ambitious investment programs that seek internal growth through expansion of regulated electric rate base focused on clean energy infrastructure. And the Inflation Reduction Act (IRA), passed in August 2022,

provides a strong public policy tailwind for clean energy investment, already incentivized by state renewable portfolio standards, carbon mitigation programs and support from state regulators and the public. Most of the now-smaller group of utilities don't see M&A as a priority, particularly given the well-known challenges steering deals through a complex state and federal regulatory approval process. These challenges were clear in the termination of the two deals pending when 2023 began: AVANGRID cancelled its bid to buy New Mexico-based PNM Resources while AEP and Canadian utility

Status of Mergers & Acquisitions 1995–2023



U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Source: EEI Finance Department.

Algonquin ended their plan to shift ownership of AEP's Kentucky operations to the Canadian utility.

Strategic activity in 2023 focused again on asset sales rather than M&A. The last few years have been active on this front as companies look to simplify corporate structures — generally around regulated utility operations - and reduce risk through the exit of merchant generation and other non-core businesses. Sale proceeds have strengthened balance sheets and reduced the need for external equity, which has become more expensive given the industry's discounted share prices in a world of higher interest rates. Private equity buyers continued to step up in 2023 as a natural home for the merchant renewable generation portfolios regulated utilities sought to sell, and as minority stake venture partners with utilities engaged in aggressive clean power capex programs.

Announced Transactions

Dominion Energy to Sell Natural Gas Businesses

On September 5, 2023, Virginiabased Dominion Energy said it agreed to sell its three natural gas local distribution companies (LDCs) to Canadian diversified energy company Enbridge for \$9.4 billion cash plus debt in a transaction valued at \$14 billion. The three LDCs — East Ohio Gas, Public Service Company of North Carolina, and Questar Gas (with subsidiary Wexpro) — serve three million homes and businesses in Ohio, North Carolina, Utah, Wyoming, and Idaho. Dominion noted the move came from its in-

Status of Mergers & Acquisitions 1995–2023

U.S	5. IN\	/ESTC	R-OWNE	ED ELECT	FRIC U	TILITIES
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Year	Completed	Announced	Withdrawn
1995	2	8	3
1996	1	13	3
1997	13	11	3
1998	9	10	_
1999	10	26	2
2000	23	9	1
2001	6	5	4
2002	5	2	3
2003	1	2	1
2004	1	3	1
2005	1	3	-
2006	3	7	2
2007	6	4	1
2008	6	6	2
2009	1	-	-
2010	2	4	-
2011	2	5	1
2012	4	1	-
2013	2	4	-
2014	4	6	1
2015	2	5	-
2016	9	6	1
2017	1	3	2
2018	2	3	_
2019	3	1	1
2020	2	2	-
2021	-	2	-
2022	2	1	_
2023	1	3	2
Totals	124	155	34

ternal strategic review process, announced in November 2022, which looks to better position the utility to create maximum long-term value for shareholders. Dominion said sale proceeds will be used to reduce debt and strengthen its credit position. The utility is focusing its growth strategy on state-regulated electric infrastructure, noting that data center expansion, bolstered by artificial intelligence (AI), along with electrification and general economic activity in its service territories are driving the most significant electric demand growth in the company's history. It said this demand growth will require considerable regulated capital investment to ensure reliable energy for its nearly 3.5 million electric utility customers.

<u>NextEra Energy Sells</u> <u>Florida City Gas</u>

NextEra Energy on September 26, 2023 said its regulated utility subsidiary Florida Power & Light (FPL) would sell FPL's gas distribution subsidiary Florida City Gas (FCG) to Chesapeake Utilities in a transaction valued at \$923 million, including \$145 million of intercompany debt. NextEra, as the nation's largest utility focused on development of renewable energy infrastructure, noted the transaction supports its strategy of redeploying capital into its core renewables businesses. Chesapeake Utilities, conversely, is a diversified energy company with a commitment to natural gas transmission and distribution. Chesapeake said FCG, which serves about 120,000 residential and commercial natural gas customers, would expand its footprint in the high-growth Florida market. Chesapeake noted Florida offers considerable investment opportunities for natural gas pipeline replacement, expansions to support customer growth, and increased gas transmission capabilities to reach new developments and support increased demand. The transaction was completed on December 1.

<u>Entergy to Sell Gas</u> <u>Distribution Business</u>

On October 30, 2023, Entergy said it agreed to sell its gas distribution business to Bernhard Capital Partners, an infrastructure-focused private equity management firm, for approximately \$484 million in cash. Entergy Louisiana's gas business serves about 200,000 homes and businesses in the Baton Rouge and New Orleans regions. Entergy said net proceeds from the transaction, if it's approved, will be used to strengthen Entergy's credit through the repayment of debt and to support investment needs in its growing electric utility business.

Withdrawn Transactions

<u>AEP/Algonquin Cancel Plan</u> <u>to Sell Kentucky Power</u>

On April 17, 2023, AEP and Algonquin Power & Utilities jointly agreed to end plans to sell AEP's Kentucky operations to Liberty Utilities, a subsidiary of the Canadian utility holding company. Announced in April 2021, the planned sale came after AEP said it would conduct a strategic review of its Kentucky operations. AEP said it planned to use the expected \$1.45 billion cash proceeds to eliminate equity needs and boost investment in regulated renewable energy infrastructure. The deal ran into resistance from the Federal Energy Regulatory Commission (FERC), which rejected the merger in late 2022. The deal also faced resistance from Kentucky state regulators. AEP said it would pursue a renewed strategy for Kentucky that is consistent with the goals of the Kentucky commission, including filing a new base rate review, right-sizing Kentucky's rate base and encouraging economic development in the region.

<u>Avangrid Terminates Plan</u> to Acquire PNM Resources

While not technically a 2023 termination, on January 2, 2024, AVANGRID said it would end its three-year-long effort to buy New Mexico-based PNM Resources. When announced, AVANGRID said the transaction would support its U.S. growth strategy focused on regulated businesses and renewables. PNM, which operates regulated utilities in Texas and New Mexico, called the move a strategic fit that would help the utility invest in clean energy distribution and transmission and expand its position in renewables. Despite widespread stakeholder support and approvals by PNM shareholders, Texas regulators and the FERC, the New Mexico Public Regulation Commission rejected the merger on December 8, 2021. The deal remained in limbo throughout 2022 after media reports said PNM and AVANGRID had appealed the rejection to the New Mexico Supreme Court. In early 2023, news reports said the New Mexico Public Regulation Commission had joined PNM and AVANGRID in requesting the Supreme Court to send the case back to the commission for a "rehearing and reconsideration" following a move by the state's governor to replace the previous five-member commission with a new three-member body. The companies' merger agreement was extended through December 31, 2023, while awaiting a decision from the New Mexico Supreme Court.

Utilities Exit Commercial Renewable Generation

Con Edison completed the sale of its commercial renewables business on March 1, 2023. In October 2022, Con Edison announced it would sell its wholly owned commercial renewables subsidiary, Con Edison Clean Energy Businesses, to RWE Renewables Americas for \$6.8 billion. RWE Renewables Americas is owned by German multinational energy giant RWE AG. Con Edison said it would cancel plans to issue up to \$850 million of common equity in 2022 and focus on its core utility businesses and the investments needed to lead New York's ambitious clean energy transition.

On June 12, 2023, Duke Energy announced it would sell its unregulated utility scale commercial renewables business to Brookfield Renewable, one of the world's largest owners and operators of renewable power assets, for an enterprise value of approximately \$2.8 billion, including non-controlling tax equity interests and the assumption of debt. Duke Energy said it would use the net proceeds to strengthen its balance sheet and avoid more holding company debt issuance. It said this will allow it to focus on investment opportunities in its regulated businesses, including grid reliability and integration of 30,000 megawatts of regulated renewable energy into its system by 2035. Duke said the sale's completion on October 25 marked the last step in its transition to a fully regulated utility.

On February 22, 2023, American Electric Power said it agreed to sell its 1,365-megawatt (MW) unregulated, contracted renewables portfolio to IRG Acquisition Holdings (a partnership owned by Invenergy, CDPQ and funds managed by Blackstone Infrastructure) for an enterprise value of \$1.5 billion including project debt. AEP said it was committed to

Merg	ger Im	pacts 1	995–2023
U.S. INV	ESTOR-C	WNED ELI	ECTRIC UTILITIES
Date	No	o. of Utilit	ties Change
12/31/9	95	98	_
12/31/9	96	98	—
12/31/9	97	91	(7.14%)
12/31/9	98	86	(5.49%)
12/31/9	99	83	(8.79%)
12/31/0	0C	71	(14.46%)
12/31/0	D1	69	(2.82%)
12/31/0	02	65	(5.80%)
12/31/0	03	65	-
12/31/0	04	65	-
12/31/0	05	65	-
12/31/0	06	64	(1.54%)
12/31/0	07	61	(4.69%)
12/31/0	38	59	(3.28%)
12/31/0	09	58	(1.69%)
12/31/	10	56	(3.45%)
12/31/	11	55	(1.79%)
12/31/	12	51	(7.27%)
12/31/	13	49	(3.92%)
12/31/	14	48	(2.04%)
12/31/	15	47	(2.08%)
12/31/	16	44	(6.38%)
12/31/	17	43	(2.27%)
12/31/	18	42	(2.33%)
12/31/	19	40	(4.76%)
12/31/2	20	39	(2.50%)
12/31/2	21	39	-
12/31/2	22	39	-
12/31/2	23	39	_

Number of Companies Declined by 60% since Dec.'95

Note: Based on completed mergers in the EEI Index group of electric utilities.

Source: EEI Finance Department.

(2000–2023)
Announcements (
Acquisitions
Mergers &

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Ann'cd	Buyer	Seller/Acquired/Merged	Status	New Company	Complet- ed Date	Months to complete	Bus.	Terms	Est. Trans Value (\$MM)
10/30/23	Bernhard Capital Partners	Entergy Louisiana (Gas) / Entergy New Orleans (Gas)	Pending				PG	\$484 million in cash to acquire two gas distribution companies from Entergy	484.0
9/26/23	Chesapeake Utilities	Florida City Gas	Completed		12/1/23	ſ	99	\$923 million in cash to acquire Florida City Gas from NextEra Energy	923.0
9/5/23	Enbridge	East Ohio Gas / PSNC Gas / Questar Gas	Pending				gg	\$9.4 billion cash + \$4.6 billion debt to acquire three gas distribution companies from Dominion Energy	14,000.0
2/11/22	Ullico Inc.	Hope Gas, Inc.	Completed		8/31/22	9	EG	Ullico Inc. paid \$690 million in cash to acquire Hope Gas Inc. (parent company Dominion Energy)	690.0
10/26/21	Algonquin Power & Utilities Corp	Kentucky Power Company & AEP Kentucky Transmission Company Inc	Withdrawn		4/17/23		Ш	 221 billion debt + \$1.625 billion cash (valuation multiple of 1.3x rate base) 	2,846.0
3/18/21	PPL Energy Holdings. LLC	Narragansett Electric Company	Completed		5/25/22	14	EG	 51.5 billion debt + 3.8 billion cash (valuation multiple of 1.7x rate base) 	5.270.0
10/21/20	AVANGRID	PNM Resources	Withdrawn		12/31/23		E	AGR to pay \$50.30/share in cash (roughly 10% premium) for PNM common stock	4,300.0
7/5/20	Berkshire Hathaway Energy	Dominion Energy Natural Gas Transportation and Storage	Completed		11/1/20	4	EG	\$5.7 billion debt + \$4.0 billion cash	9,700.0
6/3/19	JP Morgan Investment Management	El Paso Electric	Completed		7/29/20	13	Ш	JPMorgan pays \$68.25/share in cash for each share of EI Paso Electric Co. common stock	4,285.7
5/21/18	NextEra Energy, Inc.	Gulf Power Company	Completed		1/1/19	7	E	NEE to pay \$4.35 billion in cash to acquire Gulf Power Company from Southern Company	4,350.0
4/23/18	CenterPoint Energy	Vectren Corporation	Completed		2/1/19	10	EG	CNP pays \$72.00/share in cash for each share of Vectren common stock	6,000.0
1/3/18	Dominion Energy, Inc.	SCANA Corporation	Completed		1/1/19	12	Ш	\$6.7B debt + \$7.9 stock (per share value of \$55.35, roughly 31% premium)	14,600.0
8/21/17	Sempra Energy	Oncor Electric Delivery Co	Completed		3/8/18	9	EE	\$9.5B cash	9,450.0
7/19/17	Hydro One Limited	Avista Corporation	Withdrawn		1/23/19			\$5.3B cash (per share value of \$53.00, roughly 24% premium)	5,300.0
71/7/7	Berkshire Hathaway Inc.	Oncor Electric Delivery Co	Withdrawn		8/21/17			\$9.0B cash	9,000.0
9/28/16	DTE Energy	Appalachia Gathering System / Stonewall Gas Gathering	Completed		10/20/16	1	EG	Undisclosed	1,300.0
7/29/16	NextEra Energy, Inc.	Oncor Electric Delivery Co	Withdrawn		10/31/17			\$6.8B debt + \$4.4B cash	11.178.0
5/31/16	Great Plains Fnerøv	Westar Resources	Completed	Evergy, Inc.	6/5/18	24	LL LL	\$3.6B debt + \$8.6 stock and cash (ner share value of \$60,00)	12.200.0
2/9/16	Fortis Inc.	ITC Holdings Corp.	Completed	10.01	10/14/16	j ∞		54.4B debt + \$6.9B common shares and cash (per share value of \$44.90, roughly 33% premium)	11.300.0
2/9/16	Algonauin Power & Utilities	Empire District Electric Co	Completed		1/1/17	11	Ш	51.6B debt + additional debt and equity (per share value of \$34.00. roughly 21% premium)	2.400.0
2/1/16	Dominion Resources. Inc.	Questar Corporation	Completed		9/16/16	00	ĒG	51.5B debt + \$2.4B cash + \$500M equity (per share value of \$25.00, roughly 30% premium)	4.400.0
10/26/15	Duke Energy	Piedmont Natural Gas	Completed		10/3/16	12	EG	\$3.3B debt + \$1.0B cash + \$625M equity (per share value of \$60.00, roughly 40% premium)	4,900.0
9/4/15	Emera	TECO Energy. Inc.	Completed		7/1/16	10	Ш	\$6.5B debt + \$3.9B equity (per share value of \$27.55, roughly 48% premium)	10,400.0
8/24/15	Southern Company	AGL Resources	Completed		7/1/16	10	Ë	54.1B debt + \$8.0B equity (per share value of \$66.00, roughly 36% premium)	12,060.4
7/12/15	Black Hills Corporation	SourceGas Holdings	Completed		2/12/16	10	99	5760M debt + \$1.13B cash	1.890.0
2/25/15	Iberdrola USA	UIL Holdings	Completed	AVANGRID, Inc.	12/16/15	10	Ш	\$1.8B debt + \$0.6B cash + \$2.4B equity (per share value of \$52.75, roughly 25% premium, of	4,756.0
11/0/01	Novtern Enormy Inc.		Withour on the		21/01/2		L	Milicii ֆLU.3U Will DE Casil) NEE to occurrico LE for \$2 6D occurito + \$1 AD doth (fixed ovebenero estinof O 2013 NEE oberee)	0 0 0 0 0
10/00/11		Hawaiian Electric	WILINGRAWIT		01/01//	ç		Vee to acquire HE for \$2.05 equity + \$1.45 debt (lixed excrininge failo of 0.2413 NEE Shares)	3, 403.0
10/20/14	Macquarie-led Consortium	Cleco	Completed		4/13/16	10	ц Ц	53.4B equity (all Cleco shares at \$55.3 / / share in cash (~15% premium)) + \$1.3 debt	4,/00.0
6/23/14	Wisconsin Energy	Integrys	Completed	WEC Energy Group	6/30/15	12		WEC to acquire TEG for \$5.758B equity + \$3.374B debt (fixed exchange ratio of 1.128 WEC shares + \$18.58)	9,100.0
5/1/14	Berkshire Hathaway Energy	AltaLink (Canadian)	Completed		12/1/14	7	ET	3HE to acquire AL for \$3.2B cash + \$2.7B debt	5,927.0
4/30/14	Exelon	Pepco	Completed		3/23/16	24	Ш	EXC to acquire POM for \$6.8B in cash (\$27.25 per POM share)	12,337.0
3/3/14	UIL Holdings	Philadelphia Gas Works	Withdrawn		12/4/14		EG	JIL to acquire assets & liabilities of PGW from city of Philadelphia for \$1.86 billion in cash	1,860.0
12/12/13	Fortis Inc.	UNS Energy	Completed		8/15/14	∞	Ш	-ortis pays \$60.25 / share (31% premium to announcement day's close) + \$1.8B in debt	4,578.1
11/4/13	Avista	Alaska Energy & Resources Company	Completed		7/1/14	œ	Ш	4VA to acquire Alaska Energy & Resources Company for \$145MM equity + \$24.5MM debt	169.5
5/29/13	MidAmerican Energy Holdings Co.	NV Energy	Completed	Berkshire Hathawav Energy	12/19/13	2	Ш	VidAmerican pays \$23.75 / share + assume \$4.8 billion debt	10,494.3
5/25/13	TECO Energy, Inc.	New Mexico Gas Intermediate, Inc.	Completed	}	9/2/14	15	EE	rECO will pay \$950 million, including assume \$200 million debt to Continental Energy Systems LLC	950.0
2/20/12	Fortis Inc.	CH Energy Group	Completed		6/27/13	16	Ш	-ortis pays \$65.00/share cash & assumes approx. \$687.37 MM debt.	1,609.7
5/27/11	Fortis Inc.	Central Vermont Public Service Corp	Withdrawn		7/11/11		Ш	ortis pays approx. \$35.10/share cash & assumes approx. \$226.4 mill in debt.	701.6
1/8/11	Duke Energy	Progress Energy	Completed		7/3/12	18	Ш	0.87083 Duke shares (after 1-3 reverse split) for each Progress share + assume \$12.1 billion net debt.	32,000.0
7/11/11	Gaz Metro LP	Central Vermont Public Service Corp	Completed		6/27/12	12	GE	3az Métro pays \$35.25/share for each CVPS share & assumes \$226 million debt.	704.2
10/16/10	Northeast Utilities	NSTAR	Completed		4/10/12	18	Ш	1.312 NU shares for each NSTAR shr, plus \$3.36 bill assume debt	7,566.7
4/28/11	Exelon Corp.	Constellation Energy Group Inc.	Completed		3/12/12	11	Ш	CEG receive 0.93 shares of EXC for each CEG share. EXC assumes approx. \$2.9 bill net debt	10,623.2
4/19/11	AES Corporation	DPL Inc.	Completed		11/28/11	7	Ш	AES pays 30.00/share cash & assumes approx 1.1 billion of net debt	4,613.2
4/28/10	PPL Corp.	E.ON U.S.	Completed		11/1/10	9	Ш	\$6.83 billion cash + \$764.0 million in assumed debt	7,625.0
3/12/10	Emera Inc	Maine & Maritimes	Completed		12/21/10	б ;	出	\$76 mm cash + \$28.6 mm debt + \$13.8mm postretirement benefits	117.4
2/10/10	FirstEnergy	Allegheny Energy	Completed		2//25/11	12	H L	54.3 billion in equity + 54.7 billion in assumed debt	9,2/3.2
9/17/08	Berkshire Hathaway	Constellation Energy Group Inc.	Withdrawn		12/17/08		PE	54.7 bill cash + \$4.4 bill net debt and adjustments	9,152.5

771.9 327.0 320.0 160.0	202.5 520.2 500.0 882.0)40.0 165.8 172.4	574.4 279.5 866.6 200.0 377.5 311.5 800.0	700.0 224.0 350.0 225.0	40.0 200.0 200.0 200.0 200.0 200.0 255.0 200.0 200.0 200.0 255.0 200.0 200.0 255.0 200.0 255.0 200.0 255.0 200.0	
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		Jjustments cash equivalents)	n cash equivalents) 311mm assumed debt ension liabilities breferred stock	t and persion liabilities i in debt .00 million in cash million promissory note	41 million in pref stock hare	C = Completed W = Withdrawn PN = Pending
 \$499 million cash + 283 million debt \$245 million cash + \$82 million debt \$240 million cash + \$80 million assumed debt \$160 million cash 	\$202.5 million \$3.5 billion cash + \$3.02 billion net debt \$4.5 billion cash + \$4.1 billion net debt \$31.8 billion cash + \$12.1 billion net debt	\$940 million cash +working capital and other a \$305.2mm in cash + (\$173.6 in debt - \$13.0 ir \$2.47 billion	 \$1.59 billion cash + \$1.09 billion total debt \$187 million in cash + (\$100.8 debt - \$9.1mm i \$485.6mm cash + \$70mm common stock + \$ \$2.2 billion cash \$4.5 billion long-term debt \$1.3 billion cash + \$4.5 billion in et debt and i \$5.1 billion cash + \$4.3 billion in the debt and in \$6.1 billion cash + \$4.3 billion in the debt and i 	\$2.3 billion in equity +\$13.4 billion in ret deb \$12.3 billion in equity +\$13.4 billion in ret deb \$1.9 billion in stock and cash and \$355 million \$1.9 billion in debt, pref stock, & other liab + \$4 \$850 million cash + \$2 billion in debt \$275 million cash + \$1.8 billion in debt + \$150	 \$415 million cash + \$1.125 billion in assumed 4654 + \$541 million cash + \$781 in assumed 4654 + \$51.55 billion cash + \$200 per Westcoast (\$8390mm cash + \$200mm stock + \$505mm de \$14 bill. cash & equity + \$1.0 bill. net debt \$51.60 per share \$2.2 bill cash & equity + \$2.8 bill. net debt \$55.60 per share \$1.1 billion in cash \$25.0 per share \$1.1 billion in cash \$25.60 per share \$2.5 per share \$2.4 sib cash a control as \$25.60 per share \$2.8 bill. net debt \$25.60 per share \$2.8 bill net debt \$25.60 per share \$2.8 per share \$2.4 sib per share \$2.5 per share \$2.4 sib per share \$2.5 oper share \$2.5 oper share \$2.4 sib per share \$2.4 sib per share \$2.4 sib per share \$2.5 oper share 	 AES Corp acquired CILCORP in tions including generation, transmis- ler's electric and natural gas transmis-
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10/1/08 10/1/08 9/15/08 12/1/08	7/22/08 2/6/09 9/16/08 10/10/07	7/14/08 7/2/07 2/21/07	5/31/07 4/12/07 10/10/06 7/24/07 8/24/07 10/25/06 3/21/06	9/14/06 6/6/05 10/1/04 12/30/04 11/22/03	8/2/02 1/31/03 5/16/02 3/14/02 11/1/01 6/28/02 8/1/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/02 1/31/00 11/7/01 1/7/0	ed CILCORP fro Western Resour ution.
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Cor Cor Cor	With Corr Corr	Corr Corr	Conr Conr Conr Conr Conr Conr Conr Conr	Corr With With	With With Con Con Con With Con Con Con Con Con Con Con Con Con Con	e Hold- vestors) and NG utility,
EnergySouth Inc. Intermountain Gas Co. Catamount Energy Corp. Northen Utilities / Granite State Gas	nansmission Duget Energy Energy East Corp. TXU Corp. ¹	Aquila Inc. (CO elec. util. + CO, KS, NE, IA gas utils.) Cascade Natural Gas Corporation Peoples Energy Corporation	Duquesne Light Holdings Green Mountain Power Corp. Michigan Electric Transmission Co. NorthWestern Corp. KeySpan Corp. Constellation Energy Inc. Pacificorp	Publicio Service Enterprise Group TNP Enterprises Illinois Power ³ UniSource Energy Illinois Power	Cogentrix Energy Inc CILCORP ⁴ Portland General Westcoast Energy Louis Dreyfus Natural Gas RGS Energy concetiv Western Resources ⁵ Montana Power ⁶ Montana Power ⁶ Niagara Mohawk GPU Inc. Entergy IPALCO Bangor Hydro Wisconsin Fuel and Light LG&E GPU Inc. Entergy IPALCO Bangor Hydro Wisconsin Fuel and Light LG&E	as acquired by the Texas Energy Future 207. TEF was formed by a group of im acific Group to facilitate the merger. cquiring the electric utility in Colorado s Energy Inc. acquired the MI electric
Sempra Energy MDU Resources Group, Inc. Duke Energy Unitil Corp.	PNM Resources, Inc. Macquarie Consortium Iberdrola S.A. KKR & Texas Pacific Group	Black Hills Corp. / Great Plains Energy Inc. ² MDU Resources Group, Inc. WPS Resources Corporation	Macquarie Consortium Gaz Metro LP ITC Holdings Corp Bracock and Brown Infrastructure National Grid FPL Group Inc. MidAmerican Energy Holdings Co.	Exelon Corp. PNIM Resources Ameren Corp Saguaro Utility Group L.P. Exelon Corp.	Aquila Inc Ameren Corp Northwest Natural Gas Duke Energy Dominion Resources Energy East Pepco Poer Poerce PNM NorthWestern NorthWestern NorthWestern NorthWestern NorthWestern National Grid Group FristEnergy FPL Group MPS Resources PowerGen plc FirstEnergy FPL Group MPS Resources PowerGen plc FirstEnergy FPL Group NS Power WPS Resources PowerGen plc	r Energy Future Holdings Corp.) wa ted Partnership (TEF) on 10/10/20 hlberg Kravis Roberts and Texas P: s divided with Black Hills Corp. ac t CO, IA, KS, and NE. Great Plains
7/25/08 7/1/08 6/25/08 2/15/08	1/12/08 10/26/07 6/25/07 2/26/07	2/7/07 7/8/06 7/8/06	7/15/06 6/22/06 5/11/06 4/25/06 2/27/06 12/19/05 5/24/05 5/24/05	12/20/04 7/25/04 2/3/04 11/24/03 11/3/03	4/30/02 4/29/02 9/20/01 9/10/01 2/12/00 11/19/00 11/19/00 9/5/00 9/5/00 5/30/00 6/30/00 5/30/00 6/30/00 6/30/00 5/30/0	¹ TXU (now ings Limi led by Ko ² Aquila we utilities ir

³ Ameren purchased Illinois Power from Dynegy Corporation. Dynegy Corp acquired Illinois Power in February 2000.

Source: EEI Finance Department, SNL Financial

General Note: sum of Announced, Completed, Withdrawn, and Pending may not total due to inclusion of transactions announced prior to the 1994 window (e.g., a transaction announced in 1993 and completed in 1994 is included as a completion, but not as an announcement).

P = Privatized

de-risking the company and prioritizing investments in its core regulated businesses. AEP said net sale proceeds of approximately \$1.2 billion will fund opportunities to develop clean energy infrastructure. In 2022, AEP announced it would divest unregulated commercial renewables businesses over the next two years and focus on transmission and regulated renewable investments.

Divestitures To Fund Regulated Electric Capital Expenditures

On July 10, 2023, Dominion Energy said it agreed to sell its 50% interest in the Cove Point liquified natural gas (LNG) export facility to its operator, Berkshire Hathaway, in a transaction valued at \$3.5 billion. Cove Point is an LNG shipping terminal on Maryland's Chesapeake Bay. Consistent with its overall strategic review, Dominion called the Cove Point investment noncore to Dominion Energy and said the sale shows its commitment to a strong credit profile as it focuses on state-regulated electric utility operations. The sale was completed on September 1.

On February 2, 2023, FirstEnergy said it would sell an additional 30% ownership interest in its FirstEnergy Transmission (FET) business to Brookfield Super-Core Infrastructure Partners (Brookfield). FirstEnergy said proceeds from the \$3.5 billion all-cash deal will strengthen its financial position and support additional smart grid and clean energy investments in its regulated transmission and distribution businesses. In May 2022, FirstEnergy completed the sale of a 19.9% non-controlling interest in FET to Brookfield. FirstEnergy noted it will remain the majority owner of FET and FirstEnergy's workforce will continue to run the business.

On June 20, 2023, NiSource said it agreed to sell a 19.9% interest in its Indiana electric and gas utility NIPSCO to infrastructure investor Blackstone Group for \$2.15 billion. NiSource called the transaction a highly attractive and efficient form of equity financing. NiSource said it will use the capital infusion to support NIPSCO's growth, de-lever its balance sheet and fund the renewable generation transition underway. Through 2030, NIPSCO expects to invest \$3.5 billion in electric generation transition investments, with this investment primarily focused on installing new renewable generation to replace coal-fired generation.

At year-end 2023, most industry analysts expected whole company M&A to remain slow. The lower stock prices, as of December 31, 2023, made equity currencies less valuable and the industry's focus on strengthening balance sheets to fund internal capex makes uncertain regulatory approval a risky proposition. Yet, by its nature, M&A is hard to predict, and a changing macro landscape combined with company-specific nuance may allow even larger deals to make sense. Time will tell if the EEI list of utilities remains at 39 at year-end 2024 for a fifth straight year.

Construction

The industry brought 46,003 MW (38,484 MW generation and 7,518 MW storage) of new capacity online in 2023, 35% more than the 34,148 MW in 2022. The increase from 2022 to 2023 was primarily driven by expansions in solar, natural gas, and storage capacity.

Solar installations increased 58%, from 12,279 MW in 2022 to 19,438 MW in 2023. New natural gas capacity brought online increased from 6,978 MW in 2022 to 11,109 MW in 2023. New wind capacity was the only fuel type that declined, from 10,148 MW in 2022 to 6,340 MW in 2023. Wind as a generation source may be maturing after decades of rapid growth. Energy storage installations increased 74%, from 4,329 MW in 2022 to 7,518 MW in 2023.

New power plants comprised 63% of 2023's total new generation capacity (excluding energy storage), lower than 2022's 78% share. Expansions and rerates in 2023 ac-

New Capacity Online (MW)

U.S. ELECTRIC UTILITY AND NON-UTILITY



Notes: Includes all new capacity placed on the grid by U.S. investor-owned utilities, independent power producers, municipals, co-ops, government authorities and corporations. Totals may reflect rounding.

Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

New Capacity Online by Fuel Type (MW)

U.S. ELECTRIC UTILITY AND NON-UTILITY



Fuel Type	2019	2020	2021	2022	2023
Coal	-	-	-	-	-
Natural Gas	10,597	8,146	6,976	6,978	11,109
Nuclear	175	20	-	17	1,100
Solar	6,741	11,144	15,463	12,279	19,438
Wind	9,242	16,194	12,988	10,148	6,340
Other	627	483	274	396	498
Total	27,382	35,987	35,701	29,819	38,484
Energy Storage	274	790	3,572	4,329	7,518

Note: Includes all new capacity placed on the grid by U.S. investor-owned utilities, independent power producers, municipals, co-ops, government authorities and corporations. Other includes biomass, diesel/fuel oil, fuel cells, geothermal, landfill gas, pet coke, waste heat, water, and wood. All Other includes Coal, Nuclear, and Other. Totals may reflect rounding.

Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

counted for the remaining 37%, an increase from 22% in 2022.

Renewables accounted for 67% of new generation capacity in 2023 versus 75% in 2022. Supported by continually declining costs, wind and solar have powered more than half of the new capacity added in each of the last five years. Investor-owned utilities that brought the most new renewable capacity online

were NextEra Energy (1,687 MW of wind, 3,128 MW of solar), AES (238 MW of wind, 525 MW of solar), Alliant Energy (639 MW of solar), WEC Energy Group (351 MW of wind), Duke Energy (316 MW of solar), National Grid (274 MW of solar), TECO Energy (230 MW of solar), and Berkshire Hathaway (202 MW of wind).

Natural gas accounted for 29% of generation capacity added in 2023. Combined cycle technology accounted for 71% of this new natural gas capacity compared with 51% in 2022. New plants represented 15% of the natural gas total, expansions accounted for 79%, and the remaining 6% were rerates. Tennessee Valley Authority led natural gas additions with 1,500 MW. Southern Company was second with 846

		l	New C	apaci	ty Onlii	ne by Region (M	W)				
			U.S.	ELECTR	IC UTILI	TY AND NON-UTILITY					
	New Plant ar	nd Expar	ision/Re	rates			En	ergy Stor	age		
Region	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	
ASCC	33	11	9	8	15	1	-	-	47	-	
ERCOT	5,317	5,869	8,912	6,706	6,134	14	139	642	1,364	1,745	
HCC	187	60	17	42	66	34	-	46	39	156	
MRO	3,321	4,870	2,918	2,386	1,934	-	-	6	12	4	
NPCC	2,206	1,665	1,477	1,129	1,566	98	121	165	150	124	
RFC	4,023	2,794	6,153	5,576	7,096	31	11	21	6	62	
SERC	7,308	8,964	7,422	5,474	12,439	16	22	562	91	128	
SPP	1,119	3,367	2,745	2,708	1,757	24	-	-	-	-	
WECC	3,869	8,388	6,047	5,789	7,478	57	497	2,129	2,621	5,299	
Total	27,382	35,987	35,701	29,819	38,484	274	790	3,572	4,329	7,518	

Notes: Data includes new plants, rerates, and expansions of existing plants, including nuclear uprates. Totals may reflect rounding. Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

Announced New Capacity by Region and Fuel Type in 2023 (MW)

U.S. ELECTRIC UTILITY AND NON-UTILITY

Fuel Type	Alaska Systems Coordinating Council	Electric Reliability Council of Texas	Hawaiian Coordinating Council	Midwest Reliability Organization	Northeast Power Coordinating Council	Reliability First	SERC Reliability Corp	Southwest Power Pool Inc.	Western Electricity Coordinating Council
Coal	-	-	-	_	-	-	_	_	-
Natural Gas	-	2,215	-	588	-	120	4,628	454	627
Nuclear	-	-	-	-	-	135	_	-	_
Solar	8	691	3	715	3,391	4,890	9,927	477	7,301
Wind	-	258	-	56	4,009	937	_	_	4,426
Hydro	-	-	-	_	_	_	_	_	_
Other	-	-	-	4	-	17	728	4	466
Total	8	3,164	3	1,363	7,401	6,099	15,283	936	12,820
Energy Storage	0	2,592	0	179	15,556	1,352	1,162	0	9,090

Notes: Data includes new plants and expansions of existing plants announced, including nuclear uprates. Other includes biomass, diesel/fuel oil, fuel cells, geothermal, landfill gas, pet coke, waste heat, and wood. Totals may reflect rounding.

Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

MW. TECO Energy was third with 494 MW of gas turbine expansions.

A total of 7,518 MW of energy storage was brought online in 2023, a 74% increase from 2022. Investorowned utilities that brought the most energy storage capacity online included NextEra Energy (1,535 MW), Consolidated Edison (258 MW), Berkshire Hathaway (200 MW), Hawaiian Electric (120 MW), and AES Corporation (100 MW).

New Capacity Online by Region

The SERC Reliability Corporation brought the most new generation capacity online of any region in 2023; the 12,439 MW total (excluding energy storage) was more than double 2022's 5,474 MW. An increase in new solar generation, from 3,819 MW to 5,061 MW, and in natural gas generation, from 1,509 MW to 5,359 MW, were the primary contributors to the increase. The Western Electricity Coordinating Council (WECC) also increased new capacity, rising from 5,789 MW in 2022 to 7,478 MW in 2023; this was primarily driven by an increase in solar generation, from 3,327 MW to 5,946 MW. The Reliability First Corporation (RFC) had an increase of 1,520 MW, from 5,576 MW in 2022 to 7,096 MW in 2023, with new solar generation rising from 1,196 MW to 2,465 MW. The Southwest Power Pool (SPP) had the largest absolute decrease in new generation added, from 2,708 MW in 2022 to 1,757 MW in 2023; the decline resulted from reduced additions of wind (2,672 MW to 1,452 MW).

WECC brought the most energy storage capacity online of any region at 5,299 MW in 2023 compared to 2,621 MW in 2022. ERCOT was second with 1,745 MW in 2023 compared to 1,364 MW in 2022. Together, both regions accounted for 94% of energy storage capacity additions in 2023; this was primarily due to the high penetration of wind and solar generation in each region.

Announcements by Region and Fuel Type

New generation capacity (excluding energy storage) announced in 2023 totaled 47,077 MW. Renewable capacity accounted for 79% of the total, with solar at 58% and wind at 21%. Natural gas accounted for 18%. The remaining 3% was nuclear and other. No new coal capacity was announced in 2023.

New solar announcements declined 26%, from 37,089 MW in 2022 to 27,404 MW in 2023. New wind generation capacity announcements fell 16%, from 11,484 MW in 2022 to 9,687 MW in 2023. Higher interest rates and interconnection queue challenges may have contributed to lower renewable capacity announcements.

Announced new natural gas capacity rose for the first time since 2020, increasing from 1,337 MW in 2022 to 8,632 MW in 2023. SERC Reliability Corporation (SERC) and Electric Reliability Council of Texas (ERCOT) together accounted for 79%, or 6,844 MW, of the total new natural gas generation capacity announcements.

SERC Reliability Corporation (SERC) saw the most announced new generation of any region in 2023, at 15,283 MW, with 65% solar, 30% natural gas, and 5%

other. The Western Electricity Coordinating Council (WECC) region had the second-highest amount of any region, at 12,820 MW, with 57% solar, 35% wind, 5% natural gas, and 4% other.

Energy storage produced the strongest year-to-year growth in announced new capacity, with 29,931 MW in 2023 compared to 22,522 MW announced in 2022. Northeast Power Coordinating Council (NPCC), Western Electricity Coordinating Council (WECC), and Electric Reliability Council of Texas (ERCOT) together accounted for 91%, or 27,238 MW, of the total new energy storage capacity announcements in 2023.

Projected Capacity Additions

As of April 2024, new generation capacity (excluding energy storage) expected to come online from 2024 through 2028 totaled 370,041 MW. Renewable capacity accounted for most of the total, with solar representing 63% and wind 26%. The third-largest category was natural gas, at 9%, followed by nuclear at 1% and other at 1%. Of the 370,041 MW total, 50% was in the proposal stage, with only 15% under construction and 4% in the testing stage.

Separately, new energy storage capacity expected to come online from 2024 through 2028 totaled 130,188 MW. Approximately 49% was in the proposal state, with 10% under construction and 2% in the testing stage.

Retirements

From 2024 through 2028, 111,997 MW of capacity is scheduled to be retired. Coal continues to

Stage of Announced Capacity Additions (MW) 2024-2028

		U.U. LLLUII			OTILITI			
		Under	Site		Application			
Fuel Type	Testing	Construction	Prep	Permitted	Pending	Feasibility	Proposed	Total
Natural Gas	665	5,349	-	6,871	7,916	171	13,705	34,677
Nuclear	1,100	_	-	_	_	_	1,693	2,793
Solar	9,414	36,259	-	43,339	34,268	_	109,378	232,658
Wind	2,178	12,019	-	10,887	10,359	3,270	57,070	95,782
Other	7	1,287	-	316	71	1,343	1,107	4,131
Total	13,364	54,913	-	61,412	52,614	4,784	182,953	370,041
Energy Storage	2,925	12,556	_	15,400	31,473	4,526	63,308	130,188

Notes: Other includes biomass, diesel/fuel oil, fuel cells, geothermal, landfill gas, pet coke, waste heat, hydroelectric turbines, wood. Totals may reflect rounding. Data includes new plants and expansions of existing plants, including nuclear uprates. Data includes projects with an expected online date up to 2028.

Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

lead projected retirements, accounting for 52% of the total. Natural gas ranked second and fuel oil third in terms of projected retirements over the full five-year period.

Natural gas retirements are expected to peak in 2025 at 17,786 MW. Wind and solar retirements remain minimal, together accounting for only a combined 0.13% of total projected retirements from 2024 through 2028. Nuclear retirements peaked in 2020, at 2,031 MW, with the shutdowns of the Duane Arnold Energy Center in Iowa (660 MW) and Indian Point Unit 2 in New York (1,371 MW). There were no nuclear retirements in 2023 and no nuclear capacity is expected to retire over the next five years due to the cancelled shutdown of the 2,323 MW Diablo Canyon Power Plant in California.

Energy Storage

Energy storage continues to be a fast-growing area for the industry. At year-end 2023, utilities owned or operated 40,215 MW of storage capac-

ity, or about 93% of all energy storage in the United States. Since 2018, total installed energy storage capacity nationwide owned or operated by utilities has increased by 71%.

Pumped hydro accounted for 51%, or 21,992 MW, of the total energy storage capacity owned by both U.S. investor-owned utilities and non-utilities. Battery storage is the fastest-growing storage technology in terms of capacity, with the total deployed up more than ten times from 2,118 MW in 2019 to 20,623 MW in 2023. Between 2019 and 2023, battery storage grew from 8.6% of total energy storage capacity to 47.5%.

The fast-paced growth of battery storage is likely to continue; 72,788 MW of battery capacity is expected to come online from 2024 through 2028. Utilities will continue to lead battery storage deployment, accounting for 59,472 MW or 82% of this expected increase in battery storage capacity.

Energy storage capacity driven by other technology is also expected to increase during this time period, including 14,705 MW of additional pumped hydro. Three rerate projects will drive 865 MW of new hydro capacity: Salina by Grand River Dam Authority in Oklahoma (197 MW), Lewiston Niagara by the New York Power Authority (20 MW), and Bad Creek by Duke Energy in South Carolina (648 MW). One expansion project accounts for 1,000 MW of new hydro capacity, the Swan Lake North Hydro Pumped Storage Project in Oregon. A large compressed air energy storage project is also expected to enter operation. The Rosamond CASE project (500 MW) in California is expected to come online in 2024.

Actual 2019-2023 and Planned 2024-2028 Retirements (MW)

U.S. ELECTRIC UTILITY AND NON-UTILITY









📕 Actual 📃 Planned

			Actual					Planned		
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Coal	14,460	10,648	7,361	13,097	10,250	6,800	11,834	5,396	10,546	24,015
Natural Gas	4,111	2,858	1,381	2,821	4,055	4,988	17,786	8,949	2,815	1,294
Nuclear	1,641	2,031	1,074	823	-	-	-	-	-	-
Oil	546	1,366	397	903	1,137	345	13,757	849	522	1,421
Solar	8	-	275	4	3	-	-	2	4	7
Wind	210	259	303	294	99	139	1	-	-	-
Hydro	170	15	6	12	35	2	17	3	24	-
Other	740	211	345	326	303	173	43	-	52	213
Total	21,887	17,388	11,141	18,278	15,882	12,449	43,437	15,199	13,963	26,950

Notes: 2019-2023 is actual plants retired. 2024-2028 is projected based on announced or expected retirements. Other includes biomass, diesel/fuel oil, fuel cells, geothermal, landfill gas, pet coke, waste heat, wood, and energy storage. All Other includes Coal, Nuclear, and Other.

Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

Total Installed Energy Storage Capacity by Technology (MW)



U.S. ELECTRIC UTILITY AND NON-UTILITY

Notes: All other includes Thermal, CAES, and Flywheel

Sources: The Velocity Suite, Hitachi Energy; Wood Mackenzie Energy Storage Database; U.S. Department of Energy Sandia Energy Storage Dataset, EEI Energy Supply and Finance Department, March 2024

Fuel Sources

Net Generation and Electricity Sales

Electric power industry net generation in 2023 totaled 4,251,790 gigawatt hours (GWh), a decrease of 0.9% versus 2022. Nationwide retail electricity sales declined 1.7%, with lower totals across 38 states and the District of Columbia, after rising 2.7% in 2022. The states with the largest year-to-year percentage increases in retail electricity sales in 2023 were North Dakota (+12.8%), New Mexico (+5.7%), Texas (+2.4%) and Wyoming (+2.0). Kentucky (-7.2%), California (-5.4%), Maine (-5.4%) and New Jersey (-5.4%) had the largest percentage declines.

Total electricity sales to commercial customers decreased 1.1% in 2023 after two consecutive annual increases. Commercial sales rose 3.4% in 2022 and 2.9% in 2021 as business activity recovered from 2020's pandemic-related shutdowns. Most states experienced a decrease in commercial sales in 2023, with Kentucky (-4.8%), New Jersey (-4.6%) and Pennsylvania (-4.5%) experiencing the largest declines. However, commercial sales rose in a few states with North Dakota (+14.6%), South Carolina (+4.9%) and Mississippi (+4.8%) producing the largest percentage gains.

Total electricity sales to industrial customers increased 0.4% compared to 2022, showing year-to-year gains in 14 states. The nationwide gain was lower than 2022's 0.7% and 2021's 2.9% , which were likely driven by the resumption and expansion of industrial activity after states relaxed COVID-19 protocols. North Dakota (+18.7%) and Texas (+15.3%) had the highest percentage increases. Texas showed the highest increase in absolute terms, at 22,049 GWh. Most states experienced a decrease in industrial sales in 2023, with Oregon (-13.3%), Maine

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(-12.4%), California (-11.6%) and New Jersey (-10.0%) showing the largest percentage declines.

Total electricity sales to residential customers decreased 3.6% after rising 3.5% in 2022. Louisiana (+1.5%), Arizona (+1.2%) and New Mexico (+1.0%) were among the few states with growth. Louisiana also experienced the highest growth in absolute terms, at 481 GWh. On the other hand, 44 states and the District of Columbia saw residential electricity sales decrease in 2023. West Virginia (-8.1%), California (-7.3%) and Pennsylvania (-7.0%) had the largest percentage declines.

The significant reduction in yearto-year residential sales across states may indicate that fewer people worked from home in 2023 compared to 2022. Increases in each of the two previous years resulted in part from progressive easing of the protocols put in place during the Covid-19 pandemic.

	ruel S	Jurces for	
		U.S. ELECTRIC U	JTILITY AND NON-UTILITY
	2022r	2023	
Coal	19.4%	15.9%	Notes: r = revised. Other fuels include: Pumped hydro, other
Natural Gas	39.3%	42.4%	gases, and diesel/fuel oil. Totals may reflect rounding.
Nuclear	18.0%	18.2%	U.S. Electric Utility: Owns and/or operates facilities within the U. its territories, or Puerto Rico for the generation, transmission,
Hydro	5.9%	5.6%	distribution, or sale of electric energy primarily for use by the
Renewables	16.5%	17.1%	cooperatives.
Biomass	1.2%	1.1%	Non-Utility Power Producer: Includes qualifying cogenerators,
Geothermal	0.4%	0.4%	qualifying small power producers, and other non-utility generator (including independent power producers) without a designated
Solar	4.8%	5.6%	franchised service area.
Wind	10.1%	10.0%	Source: U.S. Department of Energy, Energy Information Adminis
Other Fuels	0.9%	0.8%	tration (EIA), EEI Energy Supply and Finance Dept, April 2024
Total	100.0%	100.0%	

2023

Fuel Sources for Net Electric Generation

U.S. ELECTRIC UTILITY AND NON-UTILITY

Percent of Total U.S. Electric Generation











	2014	2015	2016	2017	2018	2019	2020	2021	2022r	2023
Coal	38.5%	33.0%	30.2%	29.7%	27.3%	23.2%	19.1%	21.6%	19.4%	15.9%
Natural Gas	27.4%	32.6%	33.7%	32.0%	35.0%	38.1%	40.2%	38.0%	39.3%	42.4%
Nuclear	19.4%	19.5%	19.7%	19.8%	19.2%	19.4%	19.5%	18.7%	18.0%	18.2%
Hydro	6.3%	6.1%	6.5%	7.4%	6.9%	6.9%	7.0%	6.1%	5.9%	5.6%
Solar	0.7%	1.0%	1.3%	1.9%	2.2%	2.6%	3.2%	4.0%	4.8%	5.6%
Wind	4.4%	4.7%	5.5%	6.3%	6.5%	7.1%	8.3%	9.1%	10.1%	10.0%
Other Fuels	3.2%	3.2%	3.0%	2.9%	2.9%	2.7%	2.6%	2.6%	2.5%	2.3%

Notes: r = revised.

U.S. Electric Utility: Owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public. This includes investor-owned utilities, public power, and cooperatives.

Non-Utility Power Producer: Non-utility power producers include qualifying cogenerators, qualifying small power producers, and other non-utility generators (including independent power producers) without a designated franchised service area.

Source: Energy Information Administration (EIA), U.S. Department of Energy; EEI Energy Supply and Finance Department, April 2024



Notes: r = revised.

U.S. Electric Utility: Owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public. This includes investor-owned utilities, public power, and cooperatives.

Non-Utility Power Producer: Non-utility power producers include qualifying cogenerators, qualifying small power producers, and other non-utility generators (including independent power producers) without a designated franchised service area.

Source: Energy Information Administration (EIA), U.S. Department of Energy; EEI Energy Supply and Finance Department, April 2024

Coal

Generation from coal-fired plants decreased in 2023, with coal accounting for 15.9% of total electricity generation nationwide. Coal's 675,264 GWh of generation placed it third, behind natural gas and nuclear, among the fuels that contributed to total nationwide generation. The coal fleet's capacity factor decreased from 48% in 2022 to 42% in 2023. The price of coal combined with operations and maintenance costs for coal plants increased 9.1%, from \$38.56/MWh in 2022 to \$42.08/MWh in 2023. The average price of coal for electricity generation increased by 6.8%, from \$2.36 per million British Thermal Units (MMBtu) in 2022 to \$2.52 MMBtu in 2023. At the same time, average total operations and maintenance expense for coal increased by 11.2%, from \$10.56/MWh in 2022 to \$11.74/MWh in 2023. Given the small increase in overall generation cost for coal in 2023, along with a substantial decrease in natural gas fuel prices, coal was the most expensive fuel for electricity generation for the first time since 2020.

Natural Gas

Natural gas accounted for 42.4% of total generation from utility-scale

Average Cost to Produce Electricity (\$/MWh)

U.S. ELECTRIC UTILITY AND NON-UTILITY







Cost of Fuel

Non-Fuel 0&M

	Cost of Fuel						Non-Fuel 0&M				
	2019	2020	2021	2022r	2023	2019	2020	2021	2022r	2023	
Coal	\$22.53	\$21.52	\$22.64	\$28.00	\$30.34	\$10.00	\$10.72	\$10.30	\$10.56	\$11.74	
Natural Gas	\$22.72	\$20.05	\$39.04	\$55.58	\$26.21	\$5.37	\$4.51	\$4.70	\$5.07	\$4.78	
Nuclear	\$6.69	\$6.26	\$6.98	\$6.23	\$7.04	\$15.72	\$15.55	\$15.24	\$15.42	\$11.66	
Hydro	\$0.66	\$0.45	\$0.48	\$0.48	\$0.76	\$7.44	\$7.91	\$8.53	\$8.29	\$9.36	

Notes: r = revised. 2023 results are preliminary.

U.S. Electric Utility: Owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public. This includes investor-owned utilities, public power, and cooperatives.

Non-Utility Power Producer: Non-utility power producers include qualifying cogenerators, qualifying small power producers, and other non-utility generators (including independent power producers) without a designated franchised service area.

Source: The Velocity Suite, Hitachi Energy, EEI Energy Supply and Finance Department, April 2024

facilities in 2023, more than any other fuel type. Its share increased 3.1 percentage points from the 2022 level to a historical high. The average cost of natural gas for electricity generation fell dramatically, decreasing 53% from \$7.21/MMBtu in 2022 to \$3.36/MMBtu in 2023. As a result, the overall average cost to produce electricity from natural gas declined by 49% in 2023 versus 2022, and was 26% lower than the average cost to produce electricity from coal.

Renewables

The industry continues to add record amounts of renewable capacity. As a result, electric generation from carbon-free sources increased to 1,742,483 MWh in 2023, representing 41% of the electric power industry's total generation. Generation from all renewable sources was 967,136 MWh, or 22.7% of the total in 2023 compared with 962,100 MWh, or 22.4%, in 2022.

Generation from wind power decreased 2.1%, from 434,297 MWh in 2022 to 425,235 MWh in 2023 and accounted for 10% of total electricity generation. Solar generation increased 16.1%, from 205,079 MWh in 2022 to 238,121 MWh in 2023, reaching 5.6% of total elec-

tricity generation. Conventional hydroelectric generation declined to 239,855 MWh, a 5.9% reduction from 254,789 MWh in 2022. It accounted for 5.6% of electricity generation.

Nuclear

Nuclear generation increased 0.5% in 2023 and accounted for 18.2% of total electric power generation, up from 18% in 2022. The increase occurred despite recent nuclear plant retirements. From 2019 through 2023, 5,570 MW of nuclear capacity was retired. The most recent retirement was 823 MW at Palisades nuclear power plant in Michigan. Nuclear generators had an average capacity factor of 93% in 2023 compared to average capacity factors of 42% for coal and 39% for natural gas.

Nuclear fuel costs increased 13%, from \$6.23/MWh in 2022 to \$7.04/ MWh in 2023. However, non-fuel operations and maintenance costs decreased 24%, from \$15.42/MWh in 2022 to \$11.66/MWh in 2023.

Industry Financial Performance

Income Statement

- Energy Operating Revenues declined 0.4% versus last year. U.S. electric output fell 1.6% as mild weather reduced the need for both winter heating and summer cooling. Total nationwide heating degree days were 9% lower than last year and total cooling degree days fell 11%. Eight of the nine U.S. power regions saw output declines, which ranged from -0.8% to -4.1%. The South Central region's 2.8% gain was the only year-to-year increase. Energy operating revenue was also constrained by a sharp decline in the cost of natural gas. These forces were partially offset by a 2.9% increase in the average retail price of electricity nationwide.
- While fuel price inflation drove Total Energy Operating Expenses sharply higher in 2021 and in 2022, the trend reversed in 2023. This line item decreased 14.0% as its two constituents each showed large year-to-year declines. Total Electrical Generation Cost fell 11.6% as the average cost of natural gas for electricity generation declined 53% year-to-year. A 6.3% rise in the average cost of coal for electricity generation only partially offset the impact of

lower natural gas prices. Higher output from renewable generation (where fuel cost is zero) also constrained industry aggregate fuel costs. Gas Cost—which tracks fuel cost for the industry's natural gas distribution business segment—declined 24.5%.

- Operations and Maintenance (O&M) costs rose 2.2% over the 2022 total, a pace well below last year's 7.9% gain and 2021's 4.6% rise. O&M cost inflation was only 1.0% to 1.5% annually from 2018 through 2020. Utilities' O&M spending is benefitting from productivity gains resulting from smart-grid investment, and the industry worked hard to constrain O&M expenses during the pandemic to address revenue declines. Yet O&M spending is also driven by essential reliability needs. O&M costs rose, or were equal to last year, at 29 of the 43 utilities that report this line item. These costs declined at only 14 utilities.
- Depreciation & Amortization (D&A) expenses rose 5.8%. This metric increased for 38 of the 44 constituent companies, reflecting the industry's ongoing widespread and diverse investments in new clean generation, transmission, distribution, reliability, and grid modernization.

- Operating Income rose \$14.4 billion, or 19.7%, versus 2022. Slightly lower energy operating revenues were offset by even lower electrical generation and gas costs, overcoming rising O&M and depreciation expenses. While most utilities are focused on stateregulated operations, enough variety remains in individual corporate structures and business models to make broad generalizations difficult. So does the variety of costs that can affect operating income. Despite the industry's aggregate increase, operating income was flat to lower at 15 utilities and rose at 29.
- Total Other Recurring Revenue rose \$5.0 billion, or 66.9%, due almost entirely to a \$5.8 billion jump in Other Revenue. This in turn resulted from accounting treatment for energy operations at just a few of the 44 underlying utilities and does not reflect a broad industry trend. In fact, one company contributed half the industry's aggregate gain.
- Interest Expense rose by 34.4%, reflecting the sharp rise in interest rates during 2022 and 2023 and widespread debt issuance to fund the clean energy capex programs seen across the industry. In a rare display of consistency between aggregate industry figures and

individual company reports, this line item increased for all but one of the industry's 44 constituent companies.

- Net Income Before Taxes increased \$9.8 billion or 20.8%. Net Income rose \$8.9 billion or 20.4%. These figures are driven by the industry's largest companies and mask a wide variation in company-specific results. Pre-tax income rose at 25 companies and was unchanged or lower at 19. Net income rose at 26 and was unchanged or declined at 18. The year-to-year change in both metrics showed considerable variation across companies.
- The industry's aggregate Common Dividends payments rose 6.3% versus 2022, to \$33.0 billion from \$31.0 billion, although the average percentage dividend increase was 5.1%. Nearly all utilities raised their dividend in 2023. Income-oriented and risk-averse investors continue to benefit from the industry's reliable and growing stock dividends.

Consolidated Income Statement

U.S. INVESTOR-OWNED ELECTRIC UTILITIES						
		12 Months End	led			
(\$ Millions)	12/31/2023	12/31/2022r	% Change			
Energy Operating Revenues	\$411,173	\$412,757	(0.4%)			
Energy Operating Expenses						
Total Electrical Generation Cost	106,348	120,305	(11.6%)			
Gas Cost Total Energy Operating Expenses	<u> </u>	<u> </u>	(24.5%) (14.0%)			
	127,002	111,010	(111070)			
Revenues less energy operating expenses	284,171	265,112	7.2%			
Other Operating Expenses						
Operations & maintenance	100,349	98,185	2.2%			
Depreciation & Amortization	64,404	60,882	5.8%			
Taxes (not income) - Total	23,518	22,986	2.3%			
Other Operating Expenses	12,536	15,060	(16.8%)			
Total Operating Expenses	327,809	344,759	(4.9%)			
Operating Income	87,686	73,267	19.7%			
Other Recurring Revenue						
Partnership Income	1,388	2,666	(47.9%)			
Allowance for Equity Funds Used for Constru	ction 2,761	2,279	21.1%			
Other Revenue	8,319	2,523	229.7%			
Total Other Recurring Revenue	12,467	7,468	66.9%			
Non-Recurring Revenue						
Gain on Sale of Assets	1,501	441	240.8%			
Other Non-Recurring Revenue	123	319	(61.5%)			
Total Non-Recurring Revenue	1,624	760	113.8%			
Interest expense	36.253	26.978	34.4%			
Other expenses	187	822	(77.2%)			
Asset Writedowns	2.905	2,489	16.7%			
Other Non-Recurring Expenses	5.456	4.050	34.7%			
Total Non-Recurring Expenses	8.361	6,540	27.8%			
Net Income Before Taxes	56,977	47,155	20.8%			
Provision for Taxes	2 448	3 064	(20.1%)			
Dividends on Preferred Stock of Subsidiary		-	NM			
Other Minority Interest Expense	-	-	NM			
Minority Interest Expense			NM			
Trust Preferred Security Payments	-	-	NM			
Other After-tax Items	-	-	NM			
Total Minority Interest and Other After-tax Iter	m <u>s</u> -	-	NM			
Net Income Before Extraordinary Items	54,529	44,091	23.7%			
Discontinued Operations	(1,689)	(194)	772.4%			
Change in Accounting Principles	-	-	NM			
Early Retirement of Debt	-	-	NM			
Other Extraordinary Items	-	-	NM			
Total Extraordinary Items	(1,689)	(194)	772.4%			
Net Income	52,840	43,897	20.4%			
Preferred Dividends Declared	455	508	(10.5%)			
Other Preferred Dividends after Net Income	2	2	0.0%			
Other Changes to Net Income	2	(6)	(133.3%)			
Net Income Attributable to Noncontrolling Int	terests (266)	(513)	(48.1%)			
Net Income Available to Common	52.641	43.894	19.9%			
Common Dividends	32,980	31,016	6.3%			

r = revised NM = not meaningful

Quarterly Net Operating Income

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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

Quarterly Interest Expense

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



(\$ Billions)

INDUSTRY FINANCIAL PERFORMANCE

Individ	lual No	n-Recur	ring an	d Extra	ordinary	Items			
U.S. INVESTOR-OWNED ELECTRIC UTILITIES									
2014	2015	2016	2017	2018	2019	2020	2021	2022r	2023
s 996 296	789 (4)	767 888	1,012 493	5,272 131	3,049 117	(398) –	(1,902) 471	441 319	1,501 123
1,292	785	1,655	1,505	5,403	3,167	(398)	(1,430)	760	1,624
(8,762) (2,675)	(5,189) (1,764)	(17,487) (3,109)	(4,166) (5,630)	(4,121) (17,841)	(3,470) (13,034)	6,704 8,504	1,199 7,221	2,489 4,050	2,905 5,456
(11,437)	(6,953)	(20,596)	(9,796)	(21,962)	(16,504)	15,208	8,421	6,540	8,361
295 — — —	(1,148) _ _ _	(732) _ _ _	(1,554) _ _ _	602 - - -	1,243 _ _ _	17 	793 _ _ _	(194) _ _ _	(1,689) _ _ _
295	(1,148)	(732)	(1,554)	602	1,243	17	793	(194)	(1,689)
(9,850)	(7,316)	(19,674)	(9,844)	(15,957)	(12,094)	(15,589)	(9,058)	(5,974)	(8,425)
	Individ 2014 996 296 1,292 (8,762) (2,675) (11,437) 295 - - 295 (9,850) ent net indus	Individual No U.S. I 2014 2015 996 789 296 (4) 1,292 785 (8,762) (5,189) (2,675) (1,764) (11,437) (6,953) 295 (1,148) - - 295 (1,148) - - 295 (1,148) - - 295 (1,148) (9,850) (7,316)	Individual Non-Recur U.S. INVESTOR-0 2014 2015 2016 s 996 789 767 296 (4) 888 1,292 785 1,655 (8,762) (5,189) (17,487) (2,675) (1,764) (3,109) (11,437) (6,953) (20,596) 295 (1,148) (732) - - - 295 (1,148) (732) (9,850) (7,316) (19,674)	Individual Non-Recurring an U.S. INVESTOR-OWNED ELE 2014 2015 2016 2017 s 996 789 767 1,012 296 (4) 888 493 1,292 785 1,655 1,505 (8,762) (5,189) (17,487) (4,166) (2,675) (1,764) (3,109) (5,630) (11,437) (6,953) (20,596) (9,796) 295 (1,148) (732) (1,554) - - - - 295 (1,148) (732) (1,554) (9,850) (7,316) (19,674) (9,844)	Individual Non-Recurring and Extract U.S. INVESTOR-OWNED ELECTRIC UTIL 2014 2015 2016 2017 2018 s 996 789 767 1,012 5,272 296 (4) 888 493 131 1,292 785 1,655 1,505 5,403 (8,762) (5,189) (17,487) (4,166) (4,121) (2,675) (1,764) (3,109) (5,630) (17,841) (11,437) (6,953) (20,596) (9,796) (21,962) 295 (1,148) (732) (1,554) 602 - - - - - 295 (1,148) (732) (1,554) 602 - - - - - - 295 (1,148) (732) (1,554) 602 - - - - - - 295 (1,148) (732) (1,554) 602	Individual Non-Recurring and Extraordinary U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 s 996 789 767 1,012 5,272 3,049 296 (4) 888 493 131 117 1,292 785 1,655 1,505 5,403 3,167 (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 295 (1,148) (732) (1,554) 602 1,243 - - - - - - 295 (1,148) (732) (1,554) 602 1,243 - - - - - - 295 (1,148) (732) (1,554) 602 1,243 (9,850) (7,316) (19,674) (9,844) (15,957) <t< td=""><td>Individual Non-Recurring and Extraordinary Items U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 2020 s 996 789 767 1,012 5,272 3,049 (398) 296 (4) 888 493 131 117 - 1,292 785 1,655 1,505 5,403 3,167 (398) (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) 6,704 (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) 8,504 (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 15,208 295 (1,148) (732) (1,554) 602 1,243 17 - - - - - - - - - 295 (1,148) (732) (1,554) 602 1,243 17 - - - - - - - -</td><td>Individual Non-Recurring and Extraordinary Items U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 2020 2021 s 996 789 767 1,012 5,272 3,049 (398) (1,902) 296 (4) 888 493 131 117 - 471 1,292 785 1,655 1,505 5,403 3,167 (398) (1,430) (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) 6,704 1,199 (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) 8,504 7,221 (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 15,208 8,421 295 (1,148) (732) (1,554) 602 1,243 17 793 - - - - - - - - - 295 (1,148) (732) (1,554) 602 1,243 17 <</td><td>Individual Non-Recurring and Extraordinary Items U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 2020 2021 2022r s 996 789 767 1,012 5,272 3,049 (398) (1,902) 441 296 (4) 888 493 131 117 - 471 319 1,292 785 1,655 1,505 5,403 3,167 (398) (1,430) 760 (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) 6,704 1,199 2,489 (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) 8,504 7,221 4,050 (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 15,208 8,421 6,540 295 (1,148) (732) (1,554) 602 1,243 17 793 (194) - - - - - - - - - </td></t<>	Individual Non-Recurring and Extraordinary Items U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 2020 s 996 789 767 1,012 5,272 3,049 (398) 296 (4) 888 493 131 117 - 1,292 785 1,655 1,505 5,403 3,167 (398) (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) 6,704 (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) 8,504 (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 15,208 295 (1,148) (732) (1,554) 602 1,243 17 - - - - - - - - - 295 (1,148) (732) (1,554) 602 1,243 17 - - - - - - - -	Individual Non-Recurring and Extraordinary Items U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 2020 2021 s 996 789 767 1,012 5,272 3,049 (398) (1,902) 296 (4) 888 493 131 117 - 471 1,292 785 1,655 1,505 5,403 3,167 (398) (1,430) (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) 6,704 1,199 (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) 8,504 7,221 (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 15,208 8,421 295 (1,148) (732) (1,554) 602 1,243 17 793 - - - - - - - - - 295 (1,148) (732) (1,554) 602 1,243 17 <	Individual Non-Recurring and Extraordinary Items U.S. INVESTOR-OWNED ELECTRIC UTILITIES 2014 2015 2016 2017 2018 2019 2020 2021 2022r s 996 789 767 1,012 5,272 3,049 (398) (1,902) 441 296 (4) 888 493 131 117 - 471 319 1,292 785 1,655 1,505 5,403 3,167 (398) (1,430) 760 (8,762) (5,189) (17,487) (4,166) (4,121) (3,470) 6,704 1,199 2,489 (2,675) (1,764) (3,109) (5,630) (17,841) (13,034) 8,504 7,221 4,050 (11,437) (6,953) (20,596) (9,796) (21,962) (16,504) 15,208 8,421 6,540 295 (1,148) (732) (1,554) 602 1,243 17 793 (194) - - - - - - - - -

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

Top Net Non-Recurring and Extraordinary Gains (Losses) 2023

U.S. INVESTOR-OWNED ELECTRIC UTILITIES							
(\$ Millions)							
Company	Gains	Losses	Net Total				
Eversource Energy	-	2,174	2,174				
PG&E Corp	-	1,898	1,898				
Berkshire Hathaway Energy	-	1,677	1,677				
Edison International	-	898	898				
Consolidated Edison	865	-	865				
PPL Corp	(12)	547	559				
NextEra Energy	530	_	530				
Dominion Energy	27	307	280				
American Electric Power	_	197	197				
WEC Energy Group	-	179	179				
Source: S&P Global Market Intelligence and EE	El Finance Department.						



Aggregate Non-Recurring and Extraordinary Items

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Net Income

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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



Net Income Before Non-Recurring and Extraordinary Items

U.S. Electric Output (GWh) Periods Ending December 31								
Region	2022	2021	% Change					
Central Industrial	635,658	657,622	(3.3%)					
Mid-Atlantic	402,544	419,466	(4.0%)					
New England	111,002	115,781	(4.1%)					
Pacific Northwest	158,794	161,364	(1.6%)					
Pacific Southwest	267,566	273,602	(2.2%)					
Rocky Mountain	293,697	296,141	(0.8%)					
South Central	864,046	840,535	2.8%					
Southeast	1,005,533	1,036,554	(3.0%)					
West Central	337,306	341,836	(1.3%)					
Total United States	4,076,145	4,142,901	(1.6%)					

Note: Represents all power placed on grid for distribution to end customers; does not include Alaska or Hawaii.

Source: EEI Business Analytics.

EEI U.S. Electric Output – Regions



U.S. Weather January – December 2023								
	Total	Dev from Norm	% Change	Dev from Last Year	% Change			
Cooling Degree Days								
New England	550	133	32%	(136)	(20%)			
Mid-Atlantic	698	42	6%	(281)	(29%)			
East North Central	663	(45)	(6%)	(184)	(22%)			
West North Central	1,057	129	14%	(34)	(3%)			
South Atlantic	2,052	88	4%	(153)	(7%)			
East South Central	1,632	84	5%	(94)	(5%)			
West South Central	2,942	493	20%	16	1%			
Mountain	1,253	10	1%	(154)	(11%)			
Pacific	695	(9)	(1%)	(281)	(29%)			
United States	1,305	89	7%	(165)	(11%)			
Heating Degree Days								
New England	5,723	(888)	(13%)	(397)	(6%)			
Mid-Atlantic	5,004	(907)	(15%)	(609)	(11%)			
East North Central	5,561	(936)	(14%)	(795)	(13%)			
West North Central	6,038	(712)	(11%)	(911)	(13%)			
South Atlantic	2,318	(535)	(19%)	(388)	(14%)			
East South Central	2,897	(707)	(20%)	(591)	(17%)			
West South Central	1,970	(317)	(14%)	(399)	(17%)			
Mountain	5,221	12	0%	22	0%			
Pacific	3,412	184	6%	300	10%			
United States	4,001	(523)	(12%)	(401)	(9%)			

A mean daily temperature (average of the daily maximum and minimum temperatures) of 65 degrees Fahrenheit is the base for both heating and cooling degree day computations. National averages are population weighted.

Source: National Oceanic and Atmospheric Administration, National Weather Service, Climate Prediction Center.

2023 Weather Compared to 2022

AS MEASURED BY DEVIATIONS BETWEEN THE TWO YEARS

Number of Degree Days 200 Cooling Deviation from Last Year		Cooling Deviation From Last Year	Heating Deviation From Last Year
150 Heating Deviation from Last Year	Jan	2	(185)
100	Feb	5	(76)
	Mar	2	79
50	Apr	(8)	(36)
	Мау	(50)	20
0	Jun	(60)	14
	Jul	(2)	0
-50	Aug	(21)	4
	Sep	(10)	(6)
-100	Oct	19	(35)
	Nov	(40)	(4)
-150	Dec	(2)	(176)
-200 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Source: National Oceanic and Atmospheric Administration and National Weather Service.	Total	(165)	(401)

January–December 2023										
	COOLII	NG DEGREI	E DAYS	HEAT	HEATING DEGREE DAYS			PERCENTAG	E CHANGE	
	Total	Deviation From Norm	Deviation From Last Yr	Total	Deviation From Norm	Deviation From Last Yr	Cooling Degree Change From Norm	Cooling Degree Change From Last Yr	Heating Degree Change From Norm	Heating Degree Change From Last Yr
Jan	8	(1)	2	742	(175)	(185)	(11.1%)	33.3%	(19.1%)	(20.0%)
Feb	13	5	5	649	(83)	(76)	62.5%	62.5%	(11.3%)	(10.5%)
Mar	21	3	2	617	24	79	16.7%	10.5%	4.0%	14.7%
First Quarter	42	7	9	2,008	(234)	(182)	20.0%	27.3%	(10.4%)	(8.3%)
Apr	35	5	(8)	320	(25)	(36)	16.7%	(18.6%)	(7.2%)	(10.1%)
Мау	90	(7)	(50)	146	(13)	20	(7.2%)	(35.7%)	(8.2%)	15.9%
Jun	189	(24)	(60)	41	2	14	(11.3%)	(24.1%)	5.1%	51.9%
Second Quarter	314	(26)	(118)	507	(36)	(2)	(7.6%)	(27.3%)	(6.6%)	(0.4%)
Jul	371	50	(2)	3	(6)	0	15.6%	(0.5%)	(66.7%)	0.0%
Aug	319	29	(21)	8	(7)	4	10.0%	(6.2%)	(46.7%)	100.0%
Sep	179	24	(10)	53	(24)	(6)	15.5%	(5.3%)	(31.2%)	(10.2%)
Third Quarter	869	103	(33)	64	(37)	(2)	13.4%	(3.7%)	(36.6%)	(3.0%)
Oct	62	9	19	237	(45)	(35)	17.0%	44.2%	(16.0%)	(12.9%)
Nov	13	(2)	(40)	524	(15)	(4)	(13.3%)	(75.5%)	(2.8%)	(0.8%)
Dec	5	(2)	(2)	661	(156)	(176)	(28.6%)	(28.6%)	(19.1%)	(21.0%)
Fourth Quarter	80	5	(23)	1,422	(216)	(215)	6.7%	(22.3%)	(13.2%)	(13.1%)
Full Year	1,305	89	(165)	4,001	(523)	(401)	7.3%	(11.2%)	(11.6%)	(9.1%)

Heating and Cooling Degree Days and Percent Changes

A mean daily temperature (average of the daily maximum and minimum temperatures) of 65°F is the base for both heating and cooling degree day computations. National averages are population weighted.

Source: National Oceanic and Atmospheric Administration and National Weather Service.

Balance Sheet

- The U.S. economy in 2023 defied recession fears and rebounded steadily from late 2022's weakness. Real gross domestic product (GDP) grew 1.7% year-over-year in Q1 and 2.4% in Q2. Then growth strengthened to 2.9% in Q3 and 3.1% in Q4. Full-year 2023 real GDP growth was 2.5%.
- The Federal Reserve hiked shortterm rates four times during the year's first half, raising the target Fed Funds rate to a range of 5.25% to 5.50%. Inflation eased from 2022's 7% to 9% monthly readings, falling from 6.4% in January to 3.1% in June. The Fed held rates steady in the year's second half, hoping the lag effects of its year-long tightening campaign would be enough to drive inflation lower. But inflation throughout 2023's second half remained above 3%, higher than the Fed's 2% policy goal.
- Inflation data and concerns over Washington's deficit spending lifted the 10-year Treasury yield from 3.5% in the year's first half to 5% by October before easing into year end. But economic confidence drove credit risk premia steadily lower throughout 2023. As a result, investment-grade corporates (Moody's Baa rating) could borrow long-term for less than 6% for most of the year.

- The industry's financial condition remained strong in 2023. Balance-sheet leverage appropriate for a lower risk profile has accompanied the multi-year trend toward increased state-regulated operations. Balance sheet leverage, in aggregate, increased slightly in 2023. However, aggregate figures convey only broad, longterm trends and emphasize large holding companies. Balance sheet structures vary widely across the industry. Leverage increased more than one percentage point at 21 utilities. Leverage was reduced by more than one percentage point or was largely unchanged at the remaining 23.
- The industry's consolidated total debt rose in 2023, a natural consequence of financing the aggressive build-out of clean-energy infrastructure. Rising interest rates since early 2022 have increased utilities' borrowing costs. Yet most have managed balance sheet ratios and cash flows to maintain investment-grade credit ratings. Most utilities increased long-term debt in 2023. Short-term debt rose at 24 companies and decreased or was largely unchanged at the remaining 20.
- Common equity issuance in 2023 declined from 2022's total, remaining well below its level from 2018 through 2020. This metric increased in 2023 at only 13 utilities. Many have sought to fund capex without significant equity dilution, in some cases with proceeds from asset sales.

Equity issuance was strong in both 2020 and 2019 as companies augmented balance sheets and addressed the impact of tax reform. Equity issuance was also strong in 2018 as utilities took advantage of high price-earnings ratios and welcoming capital markets to fund capex and offset debt issuance.

- Property, plant and equipment in service (PPE in Service, net) rose 7.1% from its year-end 2022 level. This metric grew at nearly all 44 utilities which constitute EEI's consolidated data. Such broad growth shows the size and scope of the industry's build-out of new renewable generation, transmission, reliabilitynew related infrastructure and other capital projects that support the nation's clean energy transition. Construction work in progress (CWIP), a part of the PPE in Service total, jumped more than 18% from 2022's year-end total. CWIP accounts for capital investment in utility infrastructure still under construction and not yet in service. The growth in CWIP offers another view of the industry's rising clean energy capex.
- The debt-to-capitalization ratio by category data shows the dominance of state-regulated operations in the industry. EEI's "Regulated" group numbered 37 utility holding companies at yearend 2023. The remaining eight utilities constituted the "Mostly Regulated" group.

Consolidated Balance Sheet

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Millions)	12/31/2023	12/31/2022r	% Change	\$ Change
PP&E in service, gross	1,899,012	1,788,991	6.1%	110,021
Accumulated depreciation	541,724	512,896	5.6%	28,828
PP&E in service, net	1,357,288	1,276,095	6.4%	81,193
Construction work in progress	122,475	103,611	18.2%	18,864
Net nuclear fuel	13,189	12,933	2.0%	256
Other property	14,963	15,328	(2.4%)	(365)
PP&E, net	1,507,915	1,407,967	7.1%	99,948
Cash & cash equivalents	14,182	13,331	6.4%	852
Accounts receivable	55,013	55,591	(1.0%)	(578)
Inventories	32,115	29,025	10.6%	3,090
Other current assets	81,539	80,311	1.5%	1,229
Total current assets	182,850	178,257	2.6%	4,592
Total investments	103,073	99,385	3.7%	3,688
Other assets	320,674	333,697	(3.9%)	(13,022)
Total Assets	2,114,512	2,019,305	4.7%	95,207
Common equity	566,924	539,386	5.1%	27,537
Preferred equity	8,332	10,287	(19.0%)	(1,955)
Noncontrolling interests	29,659	28,036	5.8%	1,623
Total equity	604,915	577,709	4.7%	27,205
Short-term debt	54,446	49,464	10.1%	4,983
Current portion of long-term debt	51,390	50,895	1.0%	495
Short-term and current long-term debt	105,836	100,359	5.5%	5,477
Accounts payable	86,980	90,908	(4.3%)	(3,928)
Other current liabilities	62,052	60,128	3.2%	1,923
Current liabilities	254,867	251,396	1.4%	3,472
Deferred taxes	122,845	116,561	5.4%	6,284
Non-current portion of long-term debt	799,481	734,906	8.8%	64,575
Other liabilities	330,684	337,154	(1.9%)	(6,470)
Total liabilities	1,507,877	1,440,016	4.7%	67,861
Subsidiary preferred	421	421	(0.0%)	(0)
Other mezzanine	1,299	1,159	12.1%	140
Total mezzanine level	1,720	1,580	8.9%	140
Total Liabilities and Owner's Equity	2,114,512	2,019,305	4.7%	95,207

r = revised

Capitalization Structure									
U.S. INVESTOR-OWNED ELECTRIC UTILITIES									
Capitalization Structure (\$M) 12/31/2023 12/31/2022r Change									
Common Equity	566,924	539,386	27,537						
Noncontrolling Interests & Preferred Equity	37,991	38,323	(332)						
Long-term Debt (current & non-current)*	850,871	785,801	65,070						
Total	1,455,785	1,363,510	92,275						
Common Equity %	38.9%	39.6%	-0.6%						
Noncontrolling Interests & Preferred Equity %	2.6%	2.8%	-0.2%						
Long-Term Debt (current & non-current)* %	58.4%	57.6%	0.8%						
Total	100.0%	100.0%	_						

r = revised

Long-term debt not adjusted for (i.e., includes) securitization bonds.

- The tendency toward slightly higher balance sheet leverage at the consolidated industry level is not so clear when measured by individual company totals. Only 18 of the 37 "Regulated" holding companies meaningfully increased leverage in 2023. Leverage increased at three of the six "Mostly Regulated" companies.
- The dispersion across companies in both categories—with some showing higher, some lower and others no change in leverage shows why individual company strategies are just as meaningful as consolidated totals when assessing industry trends.
- Regulated companies as a group continued to report higher balance sheet leverage than their Mostly Regulated peers. This is to be expected given their lower business risk profile.



Proceeds from Issuance of Common Equity

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

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



Short-term Debt

U.S. INVESTOR-OWNED ELECTRIC UTILITIES
Long-term Debt

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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

Debt-to-Cap Ratio by Category

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

	Regulated		Mostly	Regulated	Total Industry			
	Number	%	Number	%	Number	%		
Lower	8	21.1%	2	33.3%	10	22.7%		
No Change*	12	31.6%	1	16.7%	13	29.5%		
Higher	18	47.4%	3	50.0%	21	47.7%		
Total	38	100.0%	6	100.0%	44	100.0%		

*No change defined as less than 1.0%

Note: December 31, 2023 vs. December 31, 2022. Refer to page v for category descriptions. Source: S&P Global Market Intelligence and EEI Finance Department.

Capitalization Structure by Category

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

		D 1111				
		Regulated		MC	1	
	2023	2022r	Change	2023	2022r	Change
Common Equity (\$M)	443,314	426,314	17,000	123,610	113,073	10,537
Total Preferred Equity	24,760	22,950	1,809	13,231	15,372	(2,141)
Long-term Debt (current & non-current)*	710,215	654,636	55,579	140,656	131,165	9,491
Total Capitalization	1,178,289	1,103,900	74,389	277,497	259,610	17,886
Common Equity %	37.6%	38.6%	-1.0%	44.5%	43.6%	1.0%
Preferred Equity %	2.1%	2.1%	0.0%	4.8%	5.9%	-1.2%
Long-Term Debt %	60.3%	59.3%	1.0%	50.7%	50.5%	0.2%
Total	100.0%	100.0%		100.0%	100.0%	_

r = revised

Refer to page v for category descriptions.

Note: Long-term debt not adjusted for (i.e., includes) securitization bonds.

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

PP&E In Service, Net									
Date	PP&E in Service, Net (\$M)	% Change from 12/31/2019							
12/31/2023	1,357,288	20.1%							
12/31/2022r	1,276,095	12.9%							
12/31/21	1,221,089	8.1%							
12/31/20	1,196,315	5.9%							
12/31/19	1,129,880								

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

Cash Flow Statement

- Net Cash Provided by Operating Activities increased by \$24.8 billion, or 26.9%, to \$117.2 billion. Cash provided by Depreciation and Amortization (D&A), a non-cash charge on the income statement, increased by \$4.1 billion, or 6.5%, at the consolidated industry level. D&A increased at 38 of the 44 utility holding companies that comprise EEI's data set; widespread increases are to be expected given the industry's aggressive clean energy infrastructure buildout.
- Cash provided by Deferred Taxes & Investment Credits increased to \$3.5 billion from \$3.0 billion in 2022. This metric ranged from \$9.3 billion to \$16.5 billion annually from 2010 through 2017, which were historically high levels due to elevated capex and use of bonus depreciation. The Tax Cuts & Jobs Act (TCJA), passed in late 2017, significantly reduced deferred taxes due to the reduction in the corporate income tax rate from 35% to 21% and the elimination of bonus depreciation. Since then, the aggregate industry total has been much lower.
- Change in Working Capital utilized \$11.4 billion less cash in 2023 than in 2022. The difference traced mostly to accounting at a few large utility holding companies. Other Operating Changes in Cash remained small and was little changed.

- Net Cash Used in Investing Activities increased by \$13.4 billion, or 9.0%. The industry's capital spending-by far the largest component of this metric-increased 16.4% to \$171.9 billion from \$147.7 billion in 2022. Industry capex has reached a new record high in each of the past ten years. EEI member companies continue to invest in clean energy resources and the infrastructure necessary to make the power grid more modernized, resilient, and secure for all customers. Spending on transmission and distribution continues to increase relative to recent years, as EEI member companies expand their focus on adaptation, hardening, and resilience (AHR) initiatives. Investment in generation continues to be driven by the development of renewable energy and natural gas generation.
- Cash provided by Asset Sales increased \$8.8 billion, or 37.7%, from \$23.5 billion in 2022 to \$32.3 billion in 2023. Utilities continue to utilize asset sales to exit non-regulated operations while raising equity to avoid dilutive stock offerings and fund clean energy capex. This metric is typically driven by activity at a few large utilities; 2023 was no exception as six companies accounted for more than 90% of the industry's 2023 total.

- Net Cash Provided by Financing Activities decreased by \$9.6 billion, or 17.5%. The decline resulted primarily from a nearly equal reduction, at \$8.2 billion, in the use of long-term debt financing. That metric fell in aggregate from \$67.5 billion in 2022 to \$59.3 billion in 2023 and was tied to divestiture activity and balance sheet management at just a few large utilities. Debt issuance is routine in the normal course of financing operations for such a capital-intensive industry, and just over half the 44 underlying utilities tracked by EEI increased their use of long-term debt in 2023.
- Dividends Paid to Common Shareholders rose 4.8% to \$32.9 billion. Investors that supply equity capital are attracted to steady and growing dividends. The industry raised its aggregate dividend payout during the 2008/2009 financial crisis and the more recent Covid-19 pandemic.

Statement of Cash Flows

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

\$ Millions	12 Months Ended						
	12/31/2023	12/31/2022r	% Change				
Net Income	\$52,840	\$43,897	20.4%				
Depreciation and Amortization	67,289	63,156	6.5%				
Deferred Taxes and Investment Credits	3,548	2,894	22.6%				
Operating Changes in AFUDC	(1,989)	(1,599)	24.4%				
Change in Working Capital	(1,057)	(12,454)	(91.5%)				
Other Operating Changes in Cash	(3,378)	(3,463)	(2.4%)				
Net Cash Provided by Operating Activities	117,252	92,431	26.9%				
Capital Expenditures	(171,918)	(147,662)	16.4%				
Asset Sales	32,296	23,454	37.7%				
Asset Purchases	(18,144)	(19,681)	(7.8%)				
Net Non-Operating Asset Sales and Purchases	14,146	3,769	275.3%				
Change in Nuclear Decommissioning Trust	(1,112)	(698)	59.3%				
Investing Changes in AFUDC	55	45	22.6%				
Other Investing Changes in Cash	(4,131)	(5,015)	(17.6%)				
Net Cash Used in Investing Activities	(162,954)	(149,557)	9.0%				
Net Change in Short-term Debt	11,203	8,013	39.8%				
Net Change in Long-term Debt	59,269	67,472	(12.2%)				
Proceeds from Issuance of Preferred Equity	542	_	NM				
Preferred Share Repurchases	(2,339)	(2,768)	(15.5%)				
Net Change in Prefered Issues	(1,797)	(2,768)	(35.1%)				
Proceeds from Issuance of Common Equity	8,505	10,957	(22.4%)				
Common Share Repurchases	(1,095)	(2,036)	(46.2%)				
Net Change in Common Issues	7,410	8,921	(16.9%)				
Dividends Paid to Common Shareholders	(32,925)	(31,409)	4.8%				
Dividends Paid to Preferred Shareholders	(322)	(335)	(4.0%)				
Other Dividends	_	_	NM				
Dividends Paid to Shareholders	(33,247)	(31,744)	4.7%				
Other Financing Changes in Cash	2,577	5,123	(49.7%)				
Net Cash (Used in) Provided by Financing Activities	45,414	55,016	(17.5%)				
Other Changes in Cash	13	(38)	NM				
Net increase (decrease) in cash and cash equivalents	(\$275)	(\$2,148)	(87.2%)				
Cash and cash equivalents at beginning of period	\$14,457	\$15,478	(6.6%)				
Cash and cash equivalents at end of period	\$14,182	\$13,331	6.4%				
r = revised NM = not meaningful							

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

Capital Expenditures

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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



Capital Expenditures—Trailing 12 Months

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

Free Cash Flow (FCF)

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



(\$ Billions)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Net Cash Provided by Operating Activitie	s 89.0	101.6	98.3	101.2	100.1	95.3	67.7	82.4	92.4	117.3
Capital Expenditures	(96.1)	(104.0)	(112.5)	(113.1)	(119.2)	(123.8)	(132.7)	(134.1)	(147.7)	(171.9)
Dividends Paid to Common Shareholder	s (21.1) (22.5)	(23.8)	(25.5)	(25.6)	(27.9)	(29.3)	(30.3)	(31.4)	(32.9)
Free Cash Flow	(28.2)	(24.8)	(38.1)	(37.5)	(44.7)	(56.4)	(94.4)	(81.9)	(86.6)	(87.6)

r = revised

Note: Totals may not equal sum of components due to rounding. Source: S&P Global Market Intelligence and EEI Finance Department.

Net Change in Long-term Debt



U.S. INVESTOR-OWNED ELECTRIC UTILITIES

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

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Rate Review Summary

- There were 80 rate reviews filed in 2023, with 91 rate reviews decided. This is notably more than the 59 rate reviews filed and the 81 rate reviews decided in 2022.
- Of the decided filings, electric companies requested revenue increases of approximately \$17 billion in 2023; with approximately \$9.3 billion approved.
- The average awarded ROE was 9.58 percent, a slight rebound of 11 basis points from 2022 which had an average awarded ROE of 9.47 percent. The average awarded ROE for distributiononly companies was 9.24 percent compared to 9.80 percent for vertically integrated companies.
- Regulatory lag hovered around 8.51 months, which is longer than it has been in the last couple years at 8.01 months in 2022 and 8.41 months in 2021.

State Regulatory Highlights from 2023

■ Infrastructure Investment 82 Jobs Act (IIJA) and Inflation Reduction Act (IRA) - More than two dozen states have opened proceedings for electric companies to provide information related to their efforts to obtain federal grants or other benefits under IIJA and IRA. Many of these proceedings also look to quantify the benefits to customers, explore potential challenges for electric companies in receiving the grants, and information gathering/reporting. As of yearend 2023, 22 member companies

Number of Rate Reviews Filed



Source: S&P Global Market Intelligence/Regulatory Research Assoc. and EEI Finance Department.

Average Awarded ROE

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: S&P Global Market Intelligence/Regulatory Research Assoc. and EEI Finance Department.

have received over \$1 billion in Grid Resilience and Innovation Partnerships (GRIP) awards.

- Rate Design The convergence of numerous industry pressures including the clean energy transition, affordability, ambitious state policies, and unprecedented load growth have brought rate design to the forefront in several states. Rate design helps to determine who pays, how much they will pay, and how they will pay and is currently being examined by stakeholders as a potential tool to help address the pressures listed above. For example, in California, the commission opened a docket, as required by legislation passed in 2022, to implement an income-graduated fixed charge to protect low-income customers. Missouri was also the latest state to make time-of-use rates the default option for residential customers, while a similar proceeding is currently under consideration in Hawaii.
- Affordability The topic of affordability continues to play a significant role in state regulatory activity and is a key consideration in many of the areas mentioned above. Several states are considering wide-ranging action to support low- to moderate-income (LMI) customers. This includes expanding electric company credits or bill discounts, including an LMI carveout for community solar programs like those in Maryland and New Jersey, and/or how to stack various state, electric company, and federal programs to ensure the customers most in need receive the biggest benefit.



Source: S&P Global Market Intelligence/Regulatory Research Assoc. and EEI Finance Department.



10-Year Treasury Yield



Average Regulatory Lag

Source: S&P Global Market Intelligence/Regulatory Research Assoc. and EEI Finance Department.

Finance, Accounting, and Investor Relations

The Finance, Accounting, and Investor Relations teams are part of EEI's Business Operations Group. This division provides leadership and management for advocating industry policies, technical research, and enhancing the capabilities of individual members through education and information sharing. The division's leadership is used in areas that affect the financial health of the investorowned electric utility industry, such as finance, accounting, taxation, internal auditing, investor relations, risk management, and budgeting and financial forecasting. If you need research information about these issue areas, please contact an EEI Finance, Accounting, or Investor Relations staff member. Under the direction of both the Finance and the Accounting Executive Advisory Committees, the division provides staff representatives to work with issue area committees. These committees give member company personnel a forum for information exchange and training and an opportunity to comment on legislative and regulatory proposals.

Publications

Quarterly Financial Updates

A series of financial reports on the investor-owned segment of the electric utility industry. Quarterly Financial Update (QFU) reports include stock performance, dividends, credit ratings, and rate review summary.

Financial Review

An annual report that provides a review of the financial performance of the investor-owned electric utility industry including the QFU topics mentioned above as well as the industry's consolidated financial statements. The report also includes an analysis in the areas of business segmentation, mergers & acquisitions, construction, and fuel use by electric utilities.

EEI Index

Quarterly stock performance of the U.S. investor-owned electric utilities. The EEI index, which measures total return and provides company rankings for year to date and trailing one-year periods, is widely used in company proxy statements and for overall industry benchmarking.

Executive Accounting News Flash

Published quarterly and distributed to members of accounting committees, this update provides current information about the impact on our companies of evolving accounting and financial reporting issues. The News Flash is prepared jointly with AGA by the Utility Industry Accounting Fellow in coordination with our accounting staff to keep members informed on proposed and newly effective requirements from key accounting standard-setters.

Introduction to Depreciation for Utilities and Other Industries

Updated in 2013, the latest edition of this book serves as a primer on the concepts of depreciation accounting including fundamental principles, life analysis techniques, salvage and cost of removal analysis methods and depreciation rate calculation formulas and examples.

Conference Highlights

Financial Conference

This three-day conference is the premier industry gathering of electric company c-suite officers, investors, and the financial community. This annual conference provides a unique opportunity for delegates to network and discuss issues impacting electric companies, investors, customers, and key stakeholders. This exclusive event fosters an engaging setting for delegates, speakers, and sponsors. The meeting features general session presentations, breakout company visit rooms, and entertaining receptions. Contact Jacob Moshel for more information.

Chief Financial Officers' Forum

This forum is held once a year in the fall in conjunction with the EEI Financial Conference. The forum provides an opportunity for chief financial officers to identify and discuss critical issues and challenges impacting the financial health of the electric utility industry. The forum is open to member company chief financial officers only. Contact Aaron Cope for more information.

Finance Committee Meeting

This day and a half meeting is held in the spring or summer. The meeting covers current and emerging industry issues critical to the electric power industry. It also provides an opportunity for utility financial officers to identify best practices and share management skills that contribute to financial performance. Contact Aaron Cope for more information.

Investor Relations Meeting

This one-day meeting is held in the spring. Executives gain insight on current and evolving industry issues, analysts' perspectives on the industry and have an opportunity to identify and share IR best practice concepts within and outside the electric utility industry. Contact Jacob Moshel for more information.

Treasury Group Meeting

Half day meetings are held in the spring and the fall annually. Discussion is focused on pension funding, capital markets and economic and regulatory impacts on debt and equity issuances. Members are provided an opportunity to share and identify best practices beneficial to the well-being of the industry. Contact Jacob Moshel for more information.

ESG/Sustainability Committee Forum

The committee forum convenes in-person biannually and virtually as needed to discuss existing and emerging ESG issues in the power sector. The two-day forum is open to the financial community, ESG stakeholders, and members on day one and is closed to members only on day two. Attendees hear industry and expert perspectives on key ESG trends that have implications on the power sector. The forum also allows attendees to discuss best practices and develop collaborative industry solutions to address various ESG issues and increasing disclosure mandates. Contact Aaron Cope for more information.

Accounting Leadership Conference

This annual meeting, held jointly with the Chief Audit Executives and their counterparts from AGA, covers current accounting, finance, business, and management issues for the Chief Accounting Officers and key accounting leadership of EEI member companies. Beginning in 2024, the EEI Accounting Standards Committee joined this conference. Contact Dave Dougher for more information.

Chief Audit Executives Conference

This annual conference provides a forum for EEI and AGA Chief Audit Executives to discuss issues and challenges and exchange ideas on utilityspecific internal auditing topics. The conference is open to members of the Internal Auditing Committee and other employees of EEI/ AGA member companies designated by the CAE. Contact Dave Dougher for more information.

Spring Accounting Conference

Hosted by the EEI Accounting, Reporting, & Automation Committee, the Property Accounting & Valuation Committee, the Budgeting & Financial Forecasting Committee AGA and the Corporate Accounting and Property Accounting Committees, this conference provides a forum for members to discuss current issues and challenges and exchange ideas in the electric and natural gas utility industries. The meeting is open to members of the Committees and other employees of EEI/AGA member companies. Contact Dave Dougher for more information.

Taxation Committee Meeting

This three-day meeting is held every June and November, providing an opportunity for member company tax personnel to discuss technical information on utility tax issues. In addition to information exchange, members are briefed on current developments concerning major tax issues through presentations by committee members, outside tax specialists, and EEI staff. Contact Mark Agnew for more information.

Tax School

Hosted by the EEI Taxation Committee, this training is held every year as a virtual meeting done over 2-3 days. The program is designed for tax managers and tax staff with two-plus years of tax experience or for financial accounting supervisors with tax responsibilities. The school is taught by a faculty of outstanding speakers from the accounting and legal professions as well as others from within the industry. The EEI Tax School will rotate in alternate years between an intermediatelevel focus and a beginner-level focus. The 2024 EEI Tax School will be held in September and have an intermediate-level focus. Contact Mark Agnew for more information.

Accounting Courses

Introduction to Public Utility Accounting

This 4-day program, offered jointly with AGA, concentrates on the fundamentals of public utility accounting. It focuses on providing basic knowledge and a forum for understanding the elements of the utility business. It is intended primarily for recently hired electric and gas utility staff in the areas of accounting, auditing, and finance. Contact Dave Dougher for more information.

Advanced Public Utility Accounting

This intensive, 4-day course, jointly sponsored with AGA, focuses on complex and specific advanced accounting and industry topics. It addresses current accounting issues including those related to deregulation and competition, as they affect EEI member companies. Contact Dave Dougher for more information.

Property Accounting & Depreciation Training Seminar

The content from this seminar has been incorporated into the public utility accounting training courses described above and is no longer offered as a separate seminar. Contact Dave Dougher for more information.

Utility Internal Auditor's Training

Provides utility staff auditors, managers, and directors with the fundamentals of public utility auditing and specific utility audit/accounting issues including advanced internal auditing topics and is presented jointly by EEI and AGA convenes for two and one-half days. Contact Dave Dougher for more information.

Additional Training Opportunities

Provides additional training opportunities as appropriate, such as Accounting for Energy Derivatives and FERC Accounting. Contact Dave Dougher for more information.

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Schedule of Upcoming Meetings

To assist in planning your schedule, here are upcoming meetings related to finance and accounting that may be of interest.

July 22-23, 2024 EEI/AGA Accounting Liaison Committee Meeting with FERC Staff Edison Electric Institute Washington, DC

August 27-29, 2024 EEI/AGA Utility Internal Auditor's Training Courses Loews Atlanta Hotel Atlanta, Georgia

August 27-30, 2024 EEI-AGA Introduction to Public Utility Accounting and Advanced Public Utility Accounting Training Courses Loews Atlanta Hotel Atlanta, Georgia

September 9 and 11, 2024 EEI Tax School Virtual Meeting

November 3-6, 2024 EEI/AGA Taxation Committee Meeting Marco Island, Florida

November 10-12, 2024 EEI Financial Conference Diplomat Beach Resort Hollywood, Florida November 10, 2024 EEI Treasury Group Meeting (Closed meeting, admittance by invitation only) Diplomat Beach Resort Hollywood, Florida

November 10, 2024 Chief Financial Officers Forum (Closed meeting, admittance by invitation only) Diplomat Beach Resort Hollywood, Florida

December 2024 Investor Relations Planning Group Meeting (Closed meeting, admittance by invitation only) New York, New York

December 2024 Wall Street Advisory Group Meeting (Closed meeting, admittance by invitation only) New York, New York

May 2025 EEI/AGA Spring Accounting Conference TBD

June 2025 EEI/AGA Accounting Leadership and Chief Audit Executives Conferences TBD

U.S. Investor-Owned Electric Utilities

(At 12/31/2023)

ALLETE, Inc. Alliant Energy Corporation Ameren Corporation American Electric Power Company, Inc. AVANGRID, Inc. Avista Corporation Berkshire Hathaway Energy Black Hills Corporation CenterPoint Energy, Inc. Cleco Corporate Holdings LLC CMS Energy Corporation Consolidated Edison, Inc. Dominion Energy, Inc. DTE Energy Company Duke Energy Corporation

Edison International Entergy Corporation Evergy, Inc. Eversource Energy Exelon Corporation FirstEnergy Corp. Hawaiian Electric Industries, Inc. IDACORP, Inc. MDU Resources Group, Inc. MGE Energy, Inc. NextEra Energy, Inc. NiSource Inc. NorthWestern Energy OGE Energy Corp. Otter Tail Corporation PG&E Corporation Pinnacle West Capital Corporation PNM Resources, Inc. Portland General Electric Company PPL Corporation Public Service Enterprise Group Inc. *Puget Energy, Inc.* Sempra Energy Southern Company The AES Corporation * *DPL Inc. IPALCO Enterprices, Inc.* Unitil Corporation WEC Energy Group, Inc. Xcel Energy Inc.

Note: This list includes 39 publicly traded U.S. electric utility holding companies plus an additional five electric utilities (shown in italics) that are not listed on U.S. stock exchanges because they are owned by holding companies not primarily engaged in the business of providing retail electric distribution services in the United States.

* The AES Corporation is not included in the count of 39, but rather its two U.S. electric utility subsidiaries are included in the group of five italicized companies.

Other EEI Member Companies

American Transmission Company Central Hudson Gas & Electric Corp. Duquesne Light Company El Paso Electric Florida Public Utilities Green Mountain Power ITC Holdings Corp. Liberty Utilities Mt. Carmel Public Utility Company National Grid Ohio Valley Electric Corporation Sharyland Utilities Tampa Electric an Emera Company UGI Corporation UNS Energy Corporation Upper Peninsula Power Company Vermont Electric Power Company

Note: These companies are not included in the EEI Financial Review data sets for one of the following reasons: they do not provide retail electric distribution service (i.e., transmission-only), they are subsidiaries of foreign-owned companies, they are not traded on a major U.S. stock exchange, or they are owned by a non-utility holding company and the granularity of publicly available financial data is insufficient.

The Edison Electric Institute (EEI) is the association that represents all U.S. investor-owned electric companies. Our U.S. members provide electricity for 220 million Americans and operate in all 50 states and the District of Columbia. EEI also has dozens of international electric companies as International Members, and hundreds of industry suppliers and related organizations as Associate Members.

Safe, reliable, affordable, and increasingly clean energy enhances the lives of all Americans and powers the economy. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States and contributes 5 percent to the nation's GDP.

Organized in 1933, EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums.

For more information, visit our Web site at **www.eei.org**.



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