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# 2021 Financial Review

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





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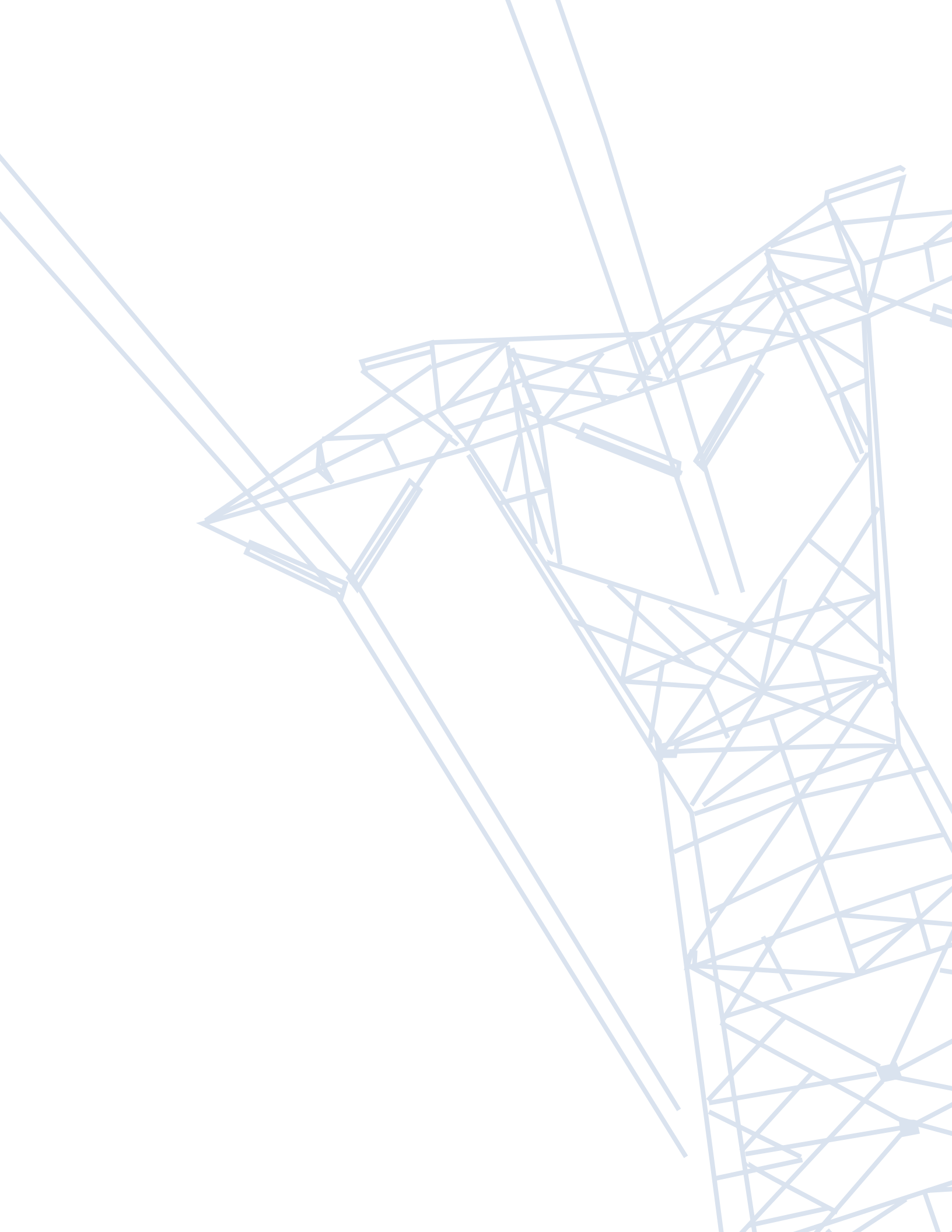
# 2021 FINANCIAL REVIEW

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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 2021 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 80 for a list of these companies.





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## Highlights of 2021

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

<b>FINANCIAL (\$ Millions)</b>	<b>2021</b>	<b>2020r</b>	<b>% Change</b>
Total Operating Revenues	385,500	347,934	10.8%
Utility Plant (Net)	1,362,155	1,309,480	4.0%
Total Capitalization	1,299,776	1,232,301	5.5%
Earnings Excluding Non-Recurring and Extraordinary Items	53,480	54,217	(1.4%)
Dividends Paid, Common Stock	30,075	29,503	1.9%

r = revised Note: Percent changes may reflect rounding.

## Abbreviations and Acronyms

AFUDC	Allowance for Funds Used During Construction	kWh	Kilowatt-hour
BTU	British Thermal Unit	M&A	Mergers & Acquisitions
CFTC	Commodity Futures Trading Commission	MW	Megawatt
CPI	Consumer Price Index	MWh	Megawatt-hour
DOE	Department of Energy	NARUC	National Association of Regulatory Utility Commissioners
DOJ	Department of Justice	NERC	North American Electric Reliability Corporation
DPS	Dividends per share	NOx	Nitrogen Oxide
EEI	Edison Electric Institute	NOAA	National Oceanic & Atmospheric Administration
EIA	Energy Information Administration	NRC	Nuclear Regulatory Commission
EITF	Emerging Issues Task Force	O&M	Operations and Maintenance
EPA	Environmental Protection Agency	PSC	Public Service Commission
EPS	Earnings per share	PUC	Public Utility Commission
FASB	Financial Accounting Standards Board	PUHCA	Public Utility Holding Company Act
FERC	Federal Energy Regulatory Commission	PURPA	Public Utility Regulatory Policies Act
GDP	Gross Domestic Product	ROE	Return on Equity
GW	Gigawatt	RTO	Regional Transmission Organization
GWh	Gigawatt-hour	SEC	Securities and Exchange Commission
IPP	Independent Power Producer	SO <sub>2</sub>	Sulfur Dioxide
IRS	Internal Revenue Service	T&D	Transmission & Distribution
ISO	Independent System Operator		
ITC	Independent Transmission Company		



## 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

## 2021 Financial Review

EEI's member companies—America's investor-owned electric companies—are woven tightly into the fabric of our nation. For nearly 140 years, we have provided the energy that has sustained our customers and our communities, while powering our economy.

In 2021, we made substantial progress on our commitment to provide America's resilient clean energy. At the same time, we saw the continuation—and the emergence—of many unprecedented challenges. Our nation's economy faces headwinds from rising inflation and interest rates, as well as ongoing pressure within key supply chains. And, around the world, we are seeing the impacts of extreme weather and other natural disasters. Russia's war in Ukraine and its human toll on civilians have compounded these challenges, even as geopolitical tensions rise in other flashpoints.

Against this backdrop, EEI's member companies are maintaining the powerful momentum we have built over many years. Electricity truly is the energy that powers our lives. Now more than ever, our customers depend on the supply of resilient clean energy that EEI's member companies provide. As always, our customers are the focus of everything we do.

For us, the path forward is clear—and the path forward is clean.

Thanks largely to the leadership of EEI's member companies, carbon emissions from the U.S. electric power sector today are nearly 40 percent below 2005 levels. At the same time, 40 percent of our nation's electricity now comes from clean, carbon-free sources, including nuclear energy, hydropower, wind, and solar energy. Dozens of EEI's member companies have announced ambitious long-term carbon-reduction targets, including net-zero targets, showing the path forward.

In 2020, nearly 28 gigawatts (GW) of renewable technologies went online in the United States—a record deployment by a wide margin. Early data show that renewables also had a banner year in 2021, making up 20 percent of the energy mix for the second year in a row. EEI's member companies are well-positioned to be a major part of the climate solution—and we want to be part of the solution. With new technologies and the right policies—including congressional passage of a robust clean energy tax package that will deliver significant long-term benefits to electricity customers—a 100-percent clean energy future can be more than a goal. It can be a reality.

To create a cleaner economy, we will need a cleaner transportation sector. Today, the biggest barrier to electric vehicle (EV) adoption is



not a lack of EVs. It is a lack of access to charging infrastructure that is convenient, affordable, equitable, and reliable. EEI projects that there will be nearly 22 million EVs on U.S. roads in 2030. Given this growth in EVs, we estimate that more than 100,000 EV fast charging ports will be needed. That is more than a ten-fold increase over what we have today.

EEI's member companies already are investing more than \$3.4 billion to help build and to deploy this charging infrastructure and to accelerate electric transportation programs, with more than \$1 billion of additional investment pending. In December 2021, we proudly launched the National Electric Highway Coalition, which is a collaboration among electric companies that are committed to providing EV fast charging stations that will allow the public to drive EVs with confidence along major U.S. travel corridors by the end of 2023.

We also are working every day to improve energy grid security, reliability, and resiliency, and we continue to strengthen cyber and physical defenses and to en-

hance preparedness. Our strong industry-government partnership, coordinated through the CEO-led Electricity Subsector Coordinating Council, continues to be critical to accomplishing our shared goal of protecting the energy grid against all threats.

Increasingly, EEI's member companies are investing in adaptation, hardening, and resilience (AHR) initiatives to make the grid stronger and more secure for all customers. In October 2021, EEI published industry-level information on AHR capital expenditures based on a member company survey, which indicated that more than one-third of transmission and distribution investment is being driven specifically by AHR initiatives, rather than the traditional drivers of growth or maintenance.

We know that our stakeholders need a clear and consistent way to measure our progress on delivering a sustainable energy future. That is why EEI, working with our member companies and the investment community, created the first-of-its-kind, industry-wide environmental, social, governance, and sustainability (ESG/sustainability) reporting template. Launched in 2018, the template helps member companies provide investors, Wall Street analysts, and other key stakeholders with more consistent and uniform ESG/sustainability data and information. We continue to expand and to refine our original template, adding a qualitative disclosure on cybersecurity governance and formally integrating the American Gas

Association's members, among other improvements.

As you will see in this year's Financial Review, EEI's member companies continue to build upon a strong financial foundation. The industry's average credit rating was BBB+ for the eighth straight year in 2021, after increasing from the BBB average that previously had held since 2004. This improved credit quality greatly supports the continued level of elevated capital expenditures, which set a tenth consecutive record high of \$134.1 billion in 2021. We continue to be America's most capital-intensive industry.

The EEI Index returned a strong 17.1 percent for 2021, yet the major averages were stronger. The S&P 500 Index returned 28.7 percent, while the Dow Jones Industrial Average and Nasdaq Composite each gained more than 21 percent. Nonetheless, the EEI Index has produced a positive total return in 16 of the last 19 years, with returns of greater than 10 percent in 13 of the 16 positive years, and greater than 20 percent in 5 of the 16 positive years. Notably, the combined market capitalization for the 39 companies included in the EEI Index exceeded \$1 trillion for the first time in 2021, landing at \$1.03 trillion at year-end.

Our industry extended its long-term trend of widespread and consistent dividend increases last year, with a total of 32 companies increasing their dividend in 2021. The percentage of companies that raised or reinstated their dividend in 2021

was 82 percent, slightly lower than the range of 87 percent to 93 percent in each of the prior five years. Our industry's dividend payout ratio was 66.2 percent for the 12 months ended December 31, 2021, leading among the other major U.S. business sectors. As of December 31, 2021, 38 of the 39 companies in the EEI Index were paying a common stock dividend.

In 2022 and beyond, EEI and our member companies will remain focused on our commitment to delivering America's resilient clean energy. Fulfilling this commitment—and reaching a clean energy, net-zero carbon future—is not just a goal. It is the opportunity of our lifetimes—as well as a great challenge.

We truly value the partnership that we share with the financial community.

Thomas R. Kuhn



President  
Edison Electric Institute





# Capital Markets

## Stock Performance

The EEI Index returned a strong 17.1% in 2021, yet the major averages were even stronger. The S&P 500 Index returned 28.7% while the Dow and Nasdaq each gained more than 21%. Yet utilities' relative weakness occurred in 2021's first half, as the post-pandemic bull market lifted major averages up 12% to 15% while the EEI Index returned only 2.3%. The year's second half was a different story. Utilities outperformed the major averages in both Q3 and Q4. The EEI Index gained a notably strong 12.9% in Q4 even as rising monthly inflation data made news headlines. In fact, 2021's second half marked a trend change in relative return as utilities had sharply trailed the market's surge from the pandemic-induced low in Q1 2020 through Q2 2021. The industry's robust Q4 gain also helped it outperform the other primarily defensive sector, telecommunications, for 2021, which returned -8.7% for the year.

## Economy Watch

Economic data throughout 2021 showed a relatively steady economic recovery from the impact of 2020's lockdowns and restrictions. In late February, the Bureau of Economic

## 2021 Index Comparison

<b>EEI Index</b>	<b>17.1</b>
Dow Jones Industrials	21.0
S&P 500	28.7
Nasdaq Composite Index*	21.4

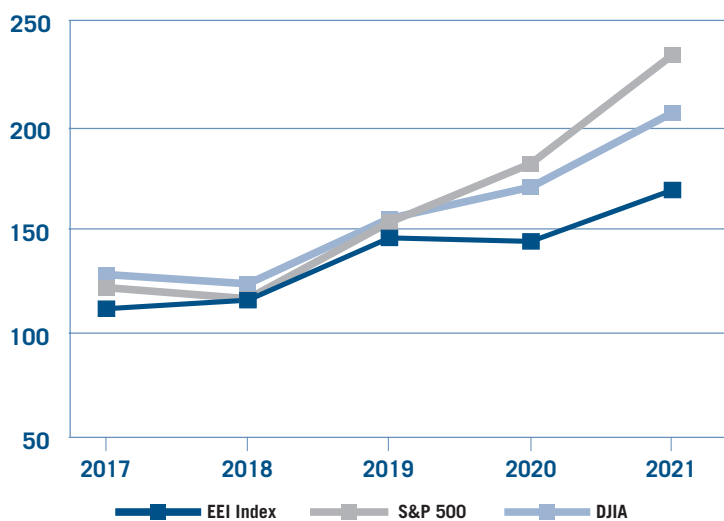
\* Price gain/(loss) only. Other indices show total return.

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

## Comparison of the EEI Index, S&P 500, and DJIA Total Return 1/1/17–12/31/21

REFLECTS REINVESTED DIVIDENDS

(Dollars)



All returns are annual.

Note: Assumes \$100 invested at closing prices December 31, 2016.

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

## EEI Index Top 10 Performers

### Twelve-month period ending 12/31/2021

Company	Total Return %	Category
Otter Tail Corp.	72.5	R
FirstEnergy Corp.	41.7	R
Exelon Corp.	41.2	MR
CenterPoint Energy, Inc.	32.4	R
Portland General Electric Co.	28.1	R
Evergy, Inc.	28.0	R
OGE Energy Corp.	26.3	R
NiSource Inc.	24.6	R
NextEra Energy, Inc.	23.4	MR
Consolidated Edison, Inc.	23.0	R

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

## Sector Comparison 2021 Total Shareholder Return

Sector	Total Return %
Oil & Gas	54.4%
Technology	37.2%
Financials	32.3%
Basic Materials	27.8%
Healthcare	23.6%
Consumer Goods	21.8%
Industrials	18.4%
Utilities	17.4%
<b>EEI Index</b>	<b>17.1%</b>
Consumer Services	12.0%
Telecommunications	-8.7%

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

Analysis (BEA) reported Q4 2020 real gross domestic product (GDP) rose 4.1% from its level in Q3 2020, which in turn jumped 33.8% from Q2, when pandemic stress was at its worst. In late June 2021, the BEA said real GDP rose at an annual

rate of 6.1% in Q1. In late July, the agency said Q2 GDP gained an even stronger 6.5%, which was revised higher to 6.7% in late September. Real GDP growth slowed to 2.3% in Q3 before surging to 6.9% in Q4 (announced in January 2022),

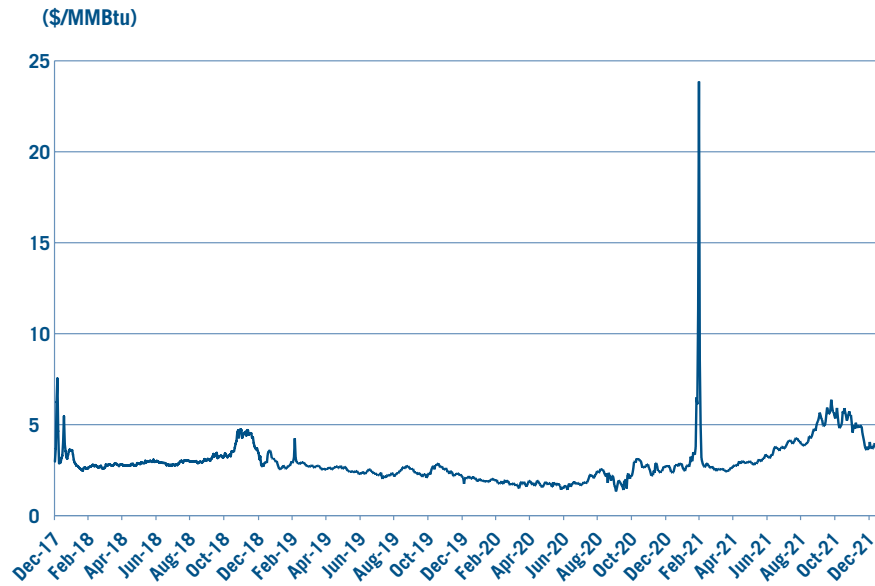
marking its fastest quarterly pace of the year.

The corporate earnings outlook also became increasingly bullish as 2021 evolved. By late December, Wall Street analysts surveyed by Zacks Investment Research collectively pegged S&P 500 2022 revenue and profit growth at 7.4% and 8.5%, respectively, with further gains of 5.3% and 9.8% expected for 2023. The year's economic data and optimistic corporate profit outlook lifted stocks across the board in 2021.

### Inflation Fireworks

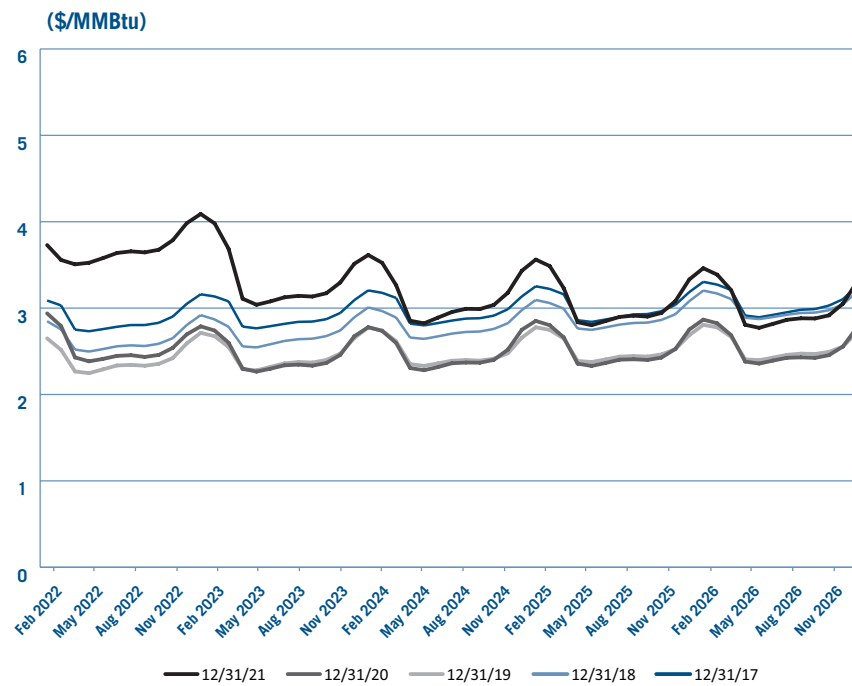
While investors in early 2021 focused on strong growth readings, economic headlines later in the year centered on inflation. Monthly inflation measured by the consumer price index (CPI) rose above 4% in April, held over 5% through Q3, breached 6% in October and November, and reached 7.1% in December. In fact, 2021's final quarter produced the highest inflation numbers since the early 1980s. Economists framed the inflation surge as a consequence of post-pandemic economic strength along with related supply chain disruptions, not as a new secular trend. That was the Federal Reserve's position too, as it held short-term interest rates at zero in Q4 and continued monthly purchases of Treasury and agency mortgage-backed securities. Natural gas spot prices seemed to confirm inflation skepticism; spot prices surged early in the year, reaching their highest levels since 2014, but fell back sharply in Q4 and longer-dated futures remained unchanged at lower levels.

## Natural Gas Spot Prices - Henry Hub 12/31/17 through 12/31/21



Source: S&P Global Market Intelligence.

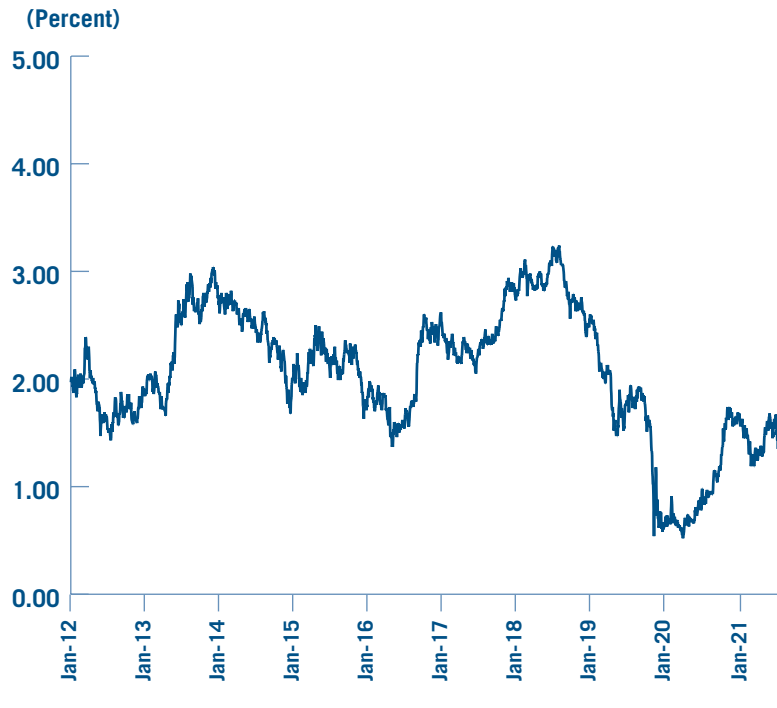
## NYMEX Natural Gas Futures February 2022 through December 2026



Source: S&P Global Market Intelligence.



## 10-Year Treasury Yield 1/1/12 through 12/31/21



Source: U.S. Federal Reserve.

Interest rates during 2021 seemed to confirm the belief that inflation pressures are temporary. The 10-year U.S. Treasury yield jumped from 0.9% to 1.7% in Q1, but despite the headline, inflation numbers fell back to 1.2% in July and spent 2021's second half drifting between 1.3% to 1.7%, closing the year at 1.5%.

### Electric Output Up 2.8% in 2021

Electricity demand rose a strong 2.8% for the year, powered in part by the economic rebound. Demand jumped 4.1% in the year's first half (rising a notable 5.1% in Q2) mirroring the buoyant economic data. Analysts cited a hot June across much of the nation combined with an economic recovery-induced boost

in commercial and industrial load as likely drivers of Q2's strength. Weather had a smaller impact on Q3, as demand gained 1.7% year-to-year. U.S. electric output rose 1.5% nationwide in Q4 with the fast-growing West Central region up more than 3%. Heating degree days in October and December were well below last year's level and historical averages, which may have suppressed electric demand for heating.

### Simplification Trend Continues

The industry's dominant strategic trend continued in 2021. Utility industry business strategies had already coalesced in 2020 around ambitious environmental, social and governance (ESG) agendas centered

on improving carbon profiles and ESG metrics, in many cases tied to a focus on regulated rate base. Numerous companies in 2020 announced moves to restructure and focus on developing state-regulated, clean energy infrastructure as their primary path to shareholder value creation. These moves continued in 2021 with an extensive list of announcements and transactions that included sales of fossil generation assets, natural gas midstream operations, international operations, and non-utility subsidiaries, along with the spin-off of competitive generation (see Business Segmentation for additional discussion).

### Other Industry Themes

Wall Street's analytical attention in early 2021 was focused on tracking and interpreting the new Biden Administration's many moves to advance a clean energy agenda. While a stronger federal focus on climate change was expected after Biden's 2020 election victory, the details that emerged as administration plans came into focus left industry analysts more bullish on prospects for long-term utility industry capex and rate base growth. Analytical attention shifted later in the year to tracking day-to-day news from Capitol Hill concerning legislative prospects for spending and tax proposals that support clean energy and decarbonization.

Utilities' perspectives on inflation were another key point of interest, particularly in the year's second half. Wall Street research suggested analysts and companies did not see meaningful pressure on near-term

operating costs, which are mostly labor related and controlled through long-term contracts or stable work-force pay schedules. But longer-term impacts are impossible to predict and if inflation becomes a secular trend the outlook is far less clear.

The EEI Financial Conference held in November is always a key industry event. Analysts noted discussions there with utility managements as well as upbeat Q3 earnings calls affirmed the industry's growth outlook. With broad public, state, regulatory and federal support, along with rising corporate demand for clean power, opportunities for renewable capex seemed to grow during 2021. Some utilities raised growth guidance for clean energy capex and analysts ratcheted up related earnings outlooks.

While not a new theme, utility bill headroom for funding aggressive capex arose as a focal point of analyst discussions; this was spurred in part by headline inflation data. Customer rates in aggregate nationwide have been almost flat for a decade, benefitting from low fuel commodity costs, falling interest rates, lower corporate taxes, and utilities' efforts to hold operations and maintenance (O&M) costs down. While analysts viewed state regulation as generally constructive, a few noted that funding capex plans may require rate increases that risk pushback from state commissions. That becomes especially hard to predict if inflation evolves into a durable source of consumer discontent, so it's a topic the industry watches carefully.

## 2021 Returns By Quarter

Index	Q1	Q2	Q3	Q4
EEI Index	3.0	(0.7)	1.4	12.9
Dow Jones Industrial Average	8.3	5.1	(1.5)	7.9
S&P 500	6.2	8.6	0.6	11.0
Nasdaq Composite*	2.8	9.5	(0.4)	8.3
Category	Q1	Q2	Q3	Q4
All EEI Index Companies	6.0	0.3	(0.7)	11.5
Regulated	4.8	0.3	(0.7)	11.9
Mostly Regulated	10.6	0.3	(0.8)	10.1

\* 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.

## 2021 Category Comparison

Category	Return (%)
<b>EEI Index</b>	<b>17.6</b>
Regulated	16.7
Mostly Regulated	21.1

\* Returns shown here are unweighted averages of constituent company returns. The EEI Index return shown in the 2021 Index Comparison table is cap-weighted.

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

### Infrastructure Bill Implementation

EEI was instrumental in advocating for many key provisions within the Infrastructure Investment and Jobs Act, particularly with respect to electric transportation, grid modernization, cybersecurity, energy resilience, broadband, and research, development, and deployment of new clean energy technologies. In early

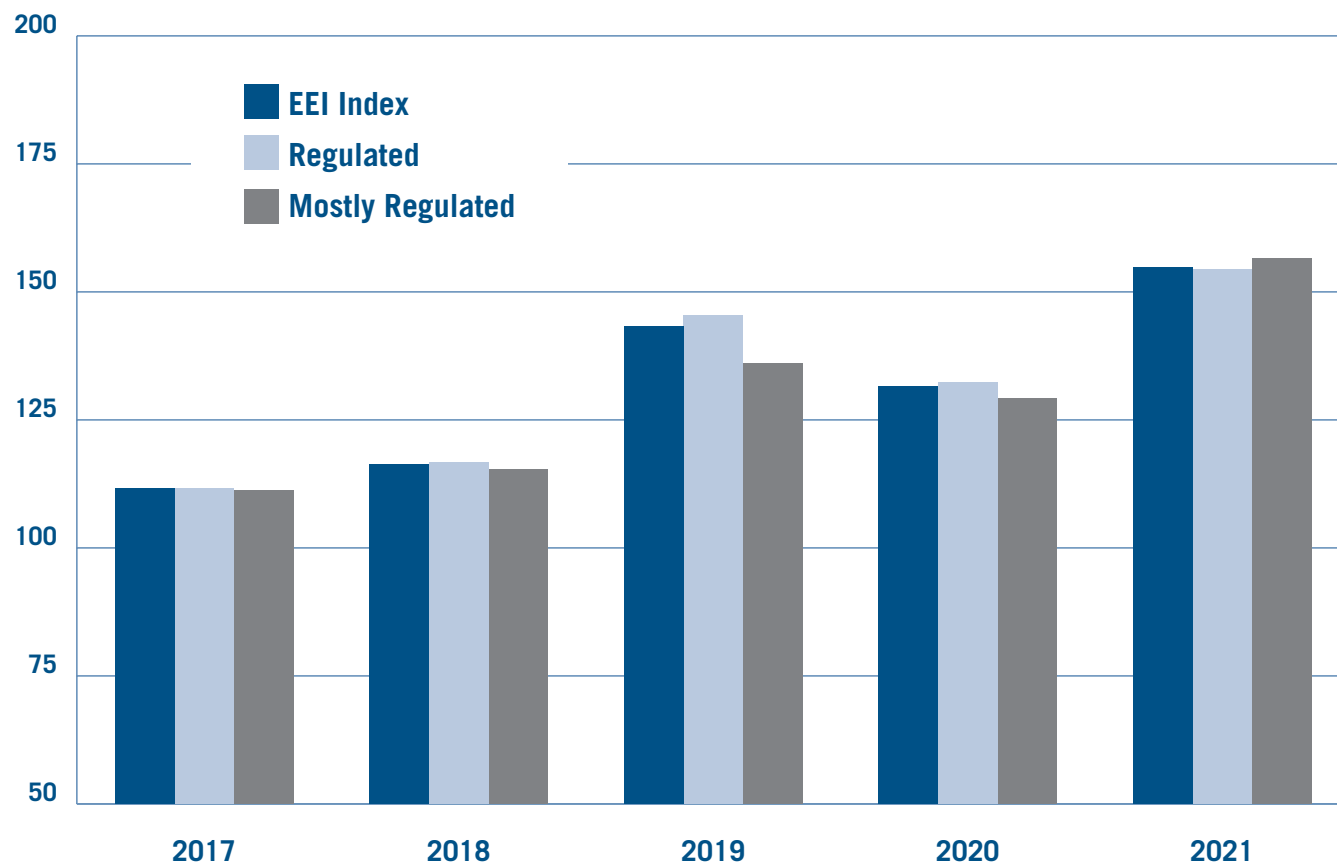
January 2022, the White House outlined its strategy for helping to accelerate the deployment of clean energy using new authorities and the substantial funding that was included in this legislation.

EEI is focused now on coordinating and leading industry efforts related to funding programs and im-

## Comparative Category Total Annual Returns 2017–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES,  
VALUE OF \$100 INVESTED AT CLOSE ON 12/31/2016

(Dollars)



	2017	2018	2019	2020	2021
EEI Index Annual Return (%)	11.56	4.28	23.06	(8.07)	17.62
EEI Index Cumulative Return (\$)	111.56	116.34	143.16	131.60	154.78
Regulated EEI Index Annual Return	11.66	4.55	24.56	(9.01)	16.72
Regulated EEI Index Cumulative Return	111.66	116.74	145.41	132.30	154.43
Mostly Regulated EEI Index Annual Return	11.32	3.62	17.87	(4.95)	21.09
Mostly Regulated EEI Index Cumulative Return	111.32	115.35	135.97	129.24	156.50

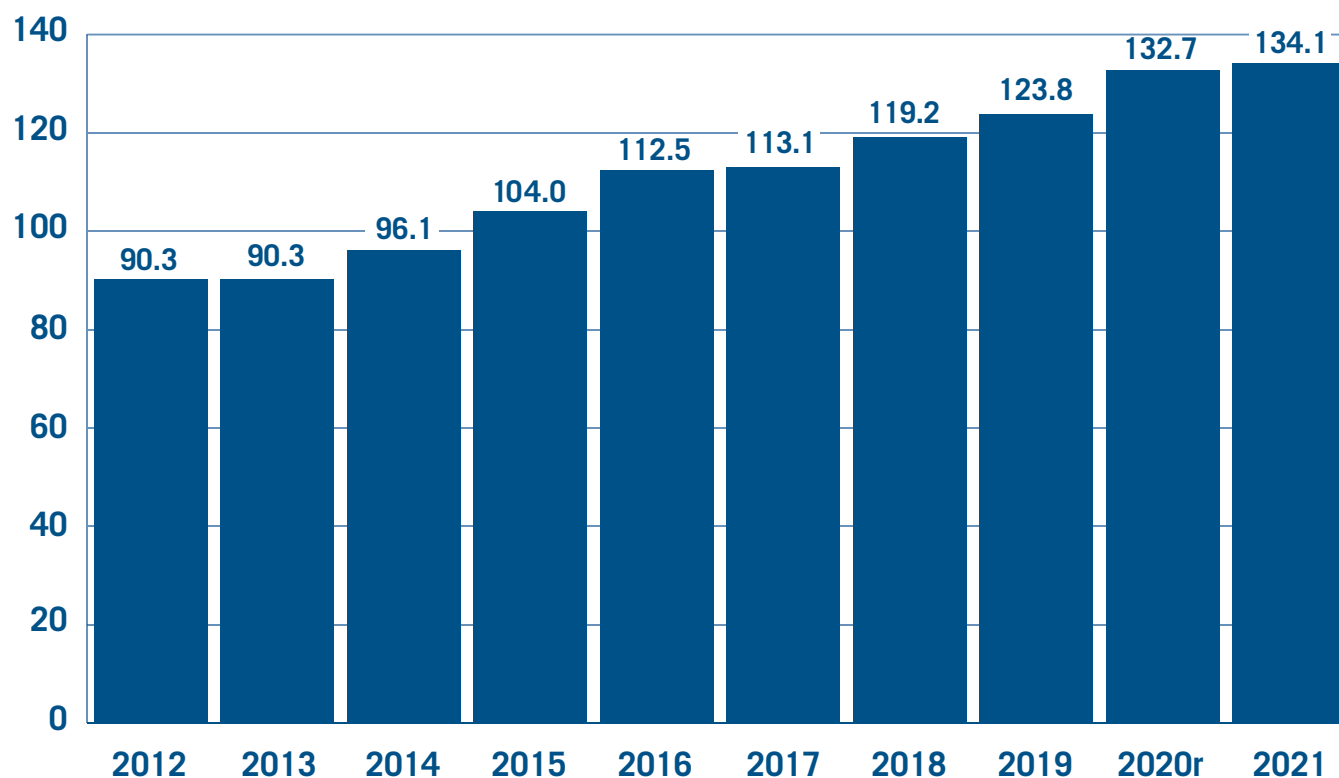
- For the Category Comparison, straight, equal-weight averages are used (i.e., not market-cap-weighted).  
- Cumulative Return assumes \$100 invested at closing prices on December 31, 2016.

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

# Capital Expenditures 2012–2021

## U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



r = revised

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

plementation of this law, working to ensure that member companies and their state and local governments are ready and able to access and to use new federal infrastructure funds and programs. Through careful planning and partnerships, everyone can benefit from the clean energy transition.

### Relative Performance Drought

The 2019 through 2021 period produced the worst stretch of relative return for utilities since the late 1990s tech bubble. The group gen-

erally lags a sharply rising bull market, so perhaps that three-year trend should not be a surprise. Yet investors may wonder if utilities have gotten the respect they deserve. As 2021 ended, analysts noted the industry offers good prospects for mid-single-digit steady earnings gains along with a 3% dividend yield. The S&P 500's 40%+ profit gain in 2021 overshadowed that but looking forward utilities may offer a comparable growth outlook with more than double the

S&P 500's 1.4% dividend yield and with less business risk.

As inflation numbers rose, analysts' reports late in the year tried to gauge utilities' sensitivity to rising interest rates, noting utilities typically suffer when long-term rates rise but are less sensitive to short-term yields. Of course, it is difficult to be certain about any rate sensitivity analysis. Interest rates have tracked a steady secular downtrend since the early 1980s, rising rate environments have

## Market Capitalization at December 31, 2021 (in \$MM)

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

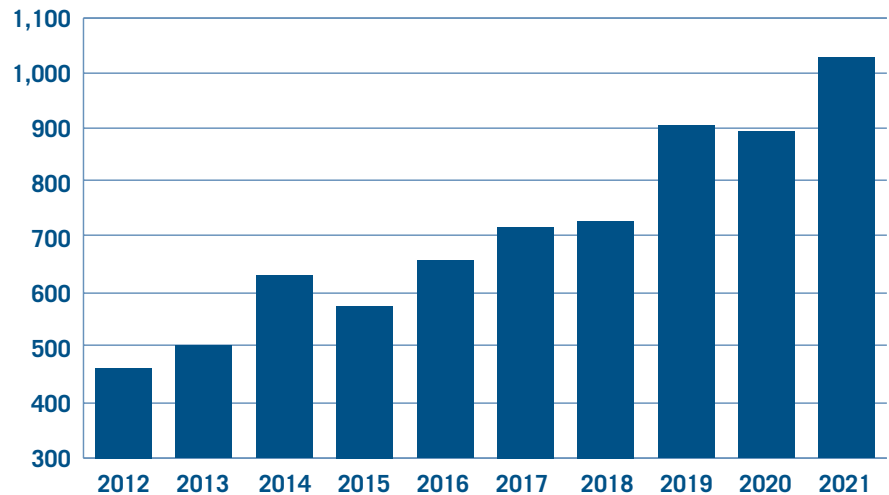
Company Name	Ticker	Market Cap.	% of Total	Company Name	Ticker	Market Cap.	% of Total
NextEra Energy, Inc.	NEE	183,238	17.82%	CMS Energy Corporation	CMS	18,806	1.83%
Duke Energy Corporation	DUK	80,668	7.84%	CenterPoint Energy, Inc.	CNP	16,875	1.64%
Southern Company	SO	72,763	7.07%	Evergy, Inc.	EVRG	15,760	1.53%
Dominion Energy, Inc.	D	63,531	6.18%	Alliant Energy Corporation	LNT	15,386	1.50%
Exelon Corporation	EXC	56,547	5.50%	NiSource Inc.	NI	10,856	1.06%
American Electric Power Company, Inc.	AEP	44,595	4.34%	Pinnacle West Capital Corporation	PNW	7,971	0.78%
Sempra Energy	SRE	42,216	4.10%	OGE Energy Corp.	OGE	7,684	0.75%
Xcel Energy Inc.	XEL	36,490	3.55%	MDU Resources Group, Inc.	MDU	6,256	0.61%
Public Service Enterprise Group Inc.	PEG	33,632	3.27%	IDACORP, Inc.	IDA	5,735	0.56%
Eversource Energy	ES	31,299	3.04%	Portland General Electric Company	POR	4,731	0.46%
WEC Energy Group, Inc.	WEC	30,616	2.98%	Hawaiian Electric Industries, Inc.	HE	4,536	0.44%
Consolidated Edison, Inc.	ED	30,152	2.93%	Black Hills Corporation	BKH	4,470	0.43%
Edison International	EIX	25,935	2.52%	PNM Resources, Inc.	PNM	3,926	0.38%
PG&E Corporation	PCG	24,098	2.34%	ALLETE, Inc.	ALE	3,477	0.34%
PPL Corporation	PPL	23,078	2.24%	Avista Corporation	AVA	2,977	0.29%
DTE Energy Company	DTE	23,071	2.24%	MGE Energy, Inc.	MGEE	2,974	0.29%
Ameren Corporation	AEE	22,902	2.23%	NorthWestern Corporation	NWE	2,966	0.29%
Entergy Corporation	ETR	22,638	2.20%	Otter Tail Corporation	OTTR	2,964	0.29%
FirstEnergy Corp.	FE	22,625	2.20%	Unitil Corporation	UTL	715	0.07%
AVANGRID, Inc.	AGR	19,320	1.88%				
				<b>Total Industry</b>		<b>1,028,480</b>	<b>100%</b>

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

been few and short-lived, and Federal Reserve policy has dominated bond markets since the Financial Crisis of 2008 and 2009. That history may not offer much to go on looking forward. And rising rates will probably impact high-growth, high-P/E companies more sharply than utilities, as early 2022's market volatility seemed to portend. It may take a bear market for utilities to really shine on a relative basis, if not in absolute terms. And investors have not seen a real bear for a long, long time.

## EEI Index Market Capitalization 2012–2021

(\$ Billions)



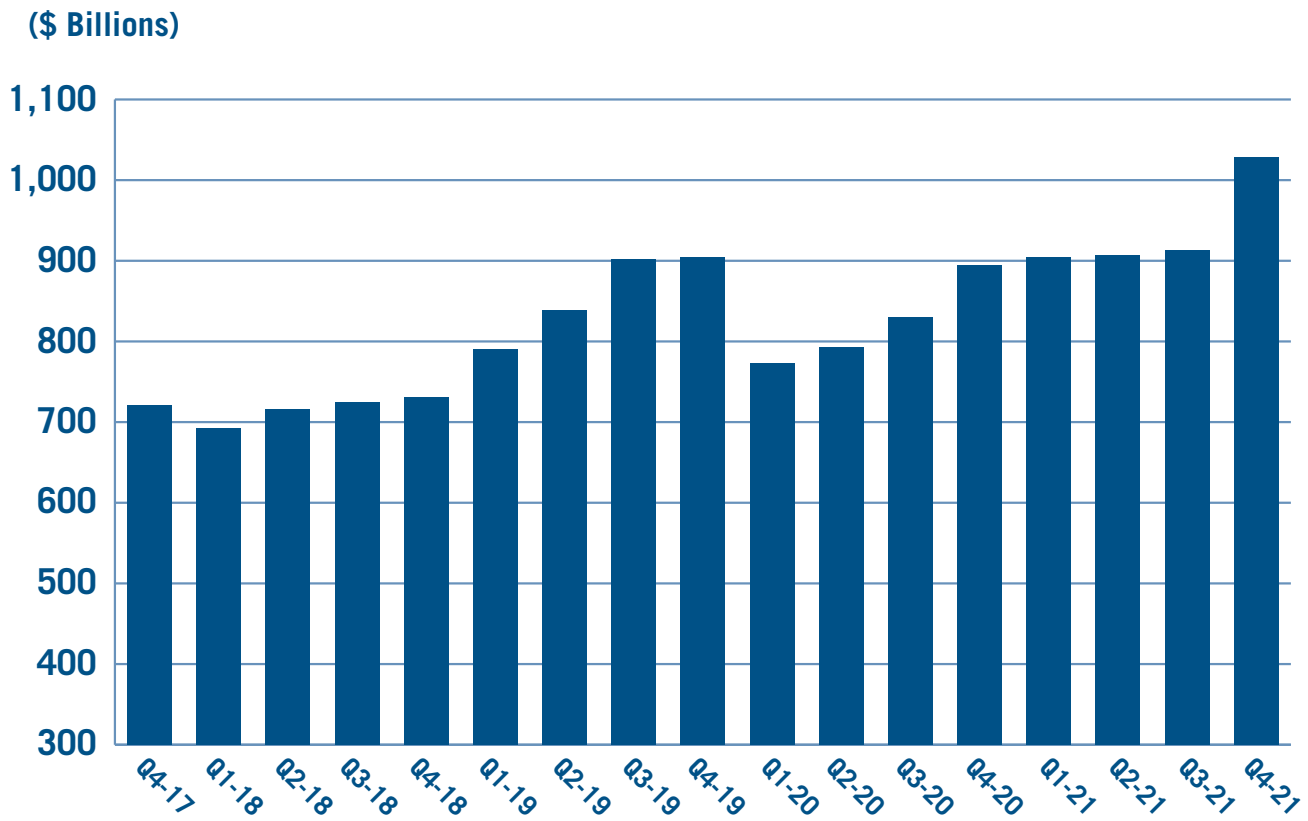
Note: Results are as of December 31 of each year.

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



# EI Index Market Capitalization

## December 31, 2017–December 31, 2021



Source: EII 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 2021. A total of 32 companies increased or reinstated their dividend compared to 34 in 2020, 37 in 2019, 39 in 2018 and 36 to

40 companies annually from 2012 through 2017.

The percentage of companies that raised or reinstated their dividend in 2021 was 82%, just below the 85% to 93% range seen from 2015 through 2020. By contrast, only 27 of the 65 utilities tracked by EEI in-

creased their dividend in 2003, just prior to the passage of legislation that reduced dividend tax rates. The percentages noted above are based on data beginning 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 2021.

### Dividend Patterns 1996–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

	Raised	No Change	Lowered	Omitted*	Reinstated	Not Paying	Total	Dividend Payout 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%		
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Average of the Increased Dividend Actions ***</b>	7.2%	5.3%	5.7%	5.8%	5.6%	5.6%	5.7%	5.1%	5.1%	4.8%
<b>Average of the Declining Dividend Actions ***</b>	NA	(41.0%)	(34.5%)	NA	NA	NA	(79.8%)	NA	(40.6%)	NA

\* 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.

2021 current year figures reflect dividend changes (raised, lowered, etc.) through 12/31/2021 and earnings and dividends through 12/31/2021 (payout ratio).

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

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, 2021. 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. Companies generally use the same quarter each year for dividend changes, with Q1 the most common for electric utilities.

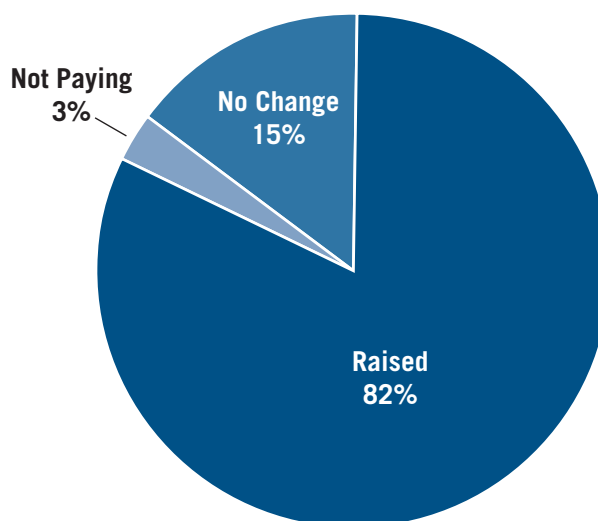
### 2021 Increases Average 4.8%

The average dividend increase in 2021 was 4.8%, with a range of 1.3% to 10.0% and a median increase of 5.4%. NextEra Energy (+10.0% in Q1), DTE Energy (+7.3% in Q4), WEC Energy (+7.1% in Q1) and Evergy (+7.0% in Q4) posted the largest percentage increases.

NextEra Energy, headquartered in Juno Beach, Florida, increased its quarterly dividend from \$0.35 to \$0.385 per share during the first quarter. The increase is consistent with its plan, announced in 2020, to target roughly 10% per year annual growth in dividends per share through at least 2022, off a 2020 base. NextEra recorded the industry's highest percentage increases in 2020 (+12.0%) and 2019 (+12.6%), 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). DTE Energy, based in Detroit, Michigan, increased its quarterly dividend from \$0.825 to \$0.885 per share in Q4. DTE has issued a cash dividend for more than 100 years. WEC Energy Group,

## 2021 Dividend Patterns

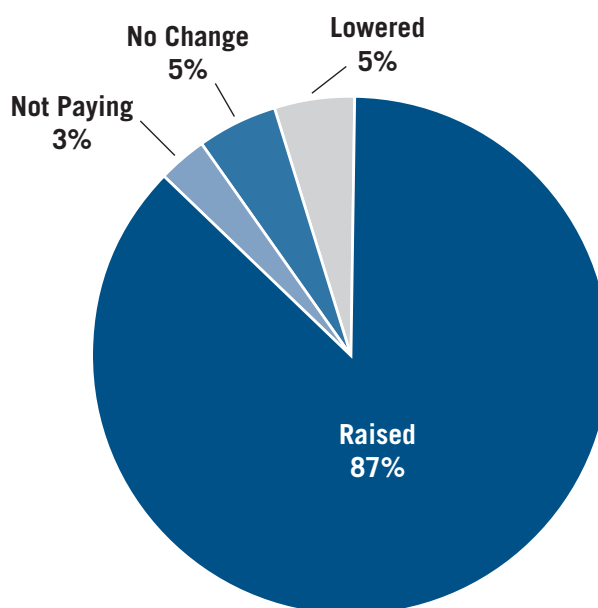
U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department.

## 2020 Dividend Patterns

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department.

headquartered in Milwaukee, Wisconsin, raised its quarterly dividend from \$0.6325 to \$0.6775 in the first quarter. This marked its 310th consecutive quarterly dividend dating back to 1942 and its 17th straight annual increase. WEC Energy continues to target a dividend payout ratio of 65% to 70% of earnings. Evergy, based in Kansas City, Missouri, increased its quarterly dividend from \$0.535 to \$0.5725 in the fourth quarter.

The industry's average and median increases have been relatively consistent in recent years. The average increase was 5.1% in 2020 and 2019, 5.7% in 2018, and 5.6% in 2017 and 2016. The median increase was 5.3% in 2020, 4.9% in 2019, 5.5% in 2018 and 2017, and 5.1% in 2016.

### Payout Ratio and Dividend Yield

The industry's dividend payout ratio was 66.2% for the twelve months ended December 31, 2021, exceeding all other U.S. business sectors. The industry's payout ratio was 62.7% when measured as an un-weighted average of individual company ratios. From 2000 through 2020, the industry's annual payout ratio ranged from 60.4% to 69.6%.

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

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

The industry's average dividend yield was 3.3% on December 31, trailing only the Energy sector's 4.2%. The year-end yield was 3.6%

in 2020, 3.0% in 2019 and 3.4% in each of the three previous years. In 2021, the industry's strong dividend activity was more than offset by higher stock prices, resulting in the lower average yield. The market cap-weighted EEI Index had a total return of 17.1% in 2021.

We calculate the industry's aggregate dividend yield using an un-weighted average of the yields of EEI Index companies paying a dividend. The strong yields prevalent among

## Sector Comparison Dividend Payout Ratio For 12-month period ending 12/31/21

Sector	Payout Ratio (%)
<b>EEI Index Companies*</b>	<b>66.2%</b>
Utilities	63.9%
Energy	60.8%
Consumer Staples	54.5%
Industrial	38.1%
Materials	29.2%
Health Care	26.4%
Financial	22.9%
Technology	22.7%
Consumer Discretionary	20.5%

\* 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 2021E dividends and earnings per share (estimates as of 12/31/2021).

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, 2021

Sector	Dividend Yield (%)
<b>EI Index Companies</b>	<b>3.3%</b>
Energy	4.2%
Utilities	2.9%
Consumer Staples	2.5%
Financial	1.7%
Materials	1.7%
Health Care	1.4%
Industrial	1.4%
Technology	0.8%
Consumer Discretionary	0.6%

#### Assumptions:

1. EI Index Companies' yield based on last announced, annualized dividend rates (as of 12/31/2021); S&P sector yields based on 2021E cash dividends (estimates as of 12/31/2021).

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

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

most electric utilities have benefitted their stock prices over the past decade, particularly given the period's historically low interest rates.

#### Business Category Comparison

The Regulated category's dividend payout ratio was 60.5% for the 12 months ended December 31, 2021 compared to 70.3% for the Mostly Regulated category. The Regulated group produced the highest annual payout ratio in 2020, 2017, 2015, 2011, 2010 and from 2003 through 2008.

The Regulated and Mostly Regulated average dividend yields were 3.3% and 3.0% on December

31, 2021, compared to 3.6% and 3.4% at year-end 2020 and 3.0% and 3.1% at year-end 2019. The dividend yield for both categories at year-ends 2018 and 2017 was 3.4%.

#### Electric Utilities' History of Strong Dividends

For more than a century, the investor-owned electric utility industry has stood out among U.S. business sectors for its steady and rising dividends. This reputation is founded on:

- A steady stream of income from a product that is universally needed with low elasticity of demand.

- A highly regulated industry that provides reasonable returns on investment with associated low business risk.
- A mature industry comprised of companies with very long track records of maintaining and/or steadily increasing their dividends over time.

These characteristics are especially attractive to an aging population of investors who seek a combination of growth and income. A typical total return model for electric utilities is approximately 4-5% annual earnings growth and a 3-4% dividend yield, producing highly visible and relatively stable 7-9% annualized long-term total return potential. The market's valuation of that return stream, of course, will shift with investor sentiment.

#### Legislative Proposals

During much of 2021, increases in capital gains and dividend tax rates for the top individual tax bracket were on the table as potential revenue sources for the Administration's "Build Back Better" plan. The House version of the bill, called the Build Back Better Act, was passed in November and did not include changes to capital gains or dividend tax rates. As 2022 started, passing a "slimmed down" version of the Build Back Better Act in the Senate remained a possibility.

The top tax rate for dividends and capital gains is currently 20%, with 2021 income thresholds of \$501,600 for couples and \$445,850 for individuals. For taxpayers below these



## Category Comparison, Dividend Payout Ratio

Category	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>EEl Index</b>	<b>64.2</b>	<b>61.5</b>	<b>60.4</b>	<b>67.0</b>	<b>62.9</b>	<b>64.0</b>	<b>63.9</b>	<b>62.6</b>	<b>65.3</b>	<b>62.7</b>
Regulated	62.1	60.5	59.4	68.7	61.1	68.7	60.1	62.1	65.3	60.5
Mostly Regulated	69.7	64.7	63.8	62.6	68.0	53.3	72.8	64.1	65.2	70.3
Diversified	53.4	44.7	56.4	64.9	64.6	–	–	–	–	–

Regulated: 80% or more of total assets are regulated

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

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

\*2021 figures reflect earnings and dividends through 12/31/2021.

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

thresholds, dividends and capital gains are taxed at rates of either 15% or 0%, depending on a filer's income. A 3.8% Medicare tax that was included in 2010 health care legislation is also applied to all investment income for couples earning more than \$250,000 (\$200,000 for singles).

Low dividend tax rates support the electric utility industry's ability to attract capital for investment. Maintaining parity between dividend and capital gains tax rates is crucial to avoid a disadvantage for companies that rely on strong dividends to attract investors.

## Category Comparison, Dividend Yield As of December 31, 2021

Category	Dividend Yield
<b>EEl Index</b>	<b>3.3%</b>
Regulated	3.3%
Mostly Regulated	3.0%

**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

## Dividend Summary

### As of December 31, 2021

#### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Company Name	Stock	Company Category	Annualized Dividends	Payout Ratio	Yield (%)	Last Action	To	From	Date Announced
ALLETE, Inc.	ALE	MR	\$2.52	95.7%	3.8%	Raised	\$2.52	\$2.47	2021 Q1
Alliant Energy Corporation	LNT	R	\$1.61	59.8%	2.6%	Raised	\$1.61	\$1.52	2021 Q1
Ameren Corporation	AEE	R	\$2.20	56.8%	2.5%	Raised	\$2.20	\$2.06	2021 Q1
American Electric Power Company, Inc.	AEP	R	\$3.12	60.8%	3.5%	Raised	\$3.12	\$2.96	2021 Q4
AVANGRID, Inc.	AGR	MR	\$1.76	88.8%	3.5%	Raised	\$1.76	\$1.73	2018 Q3
Avista Corporation	AVA	R	\$1.69	80.2%	4.0%	Raised	\$1.69	\$1.62	2021 Q1
Black Hills Corporation	BKH	R	\$2.38	57.7%	3.4%	Raised	\$2.38	\$2.26	2021 Q4
CenterPoint Energy, Inc.	CNP	R	\$0.68	NM	2.4%	Raised	\$0.68	\$0.64	2021 Q3
CMS Energy Corporation	CMS	R	\$1.74	66.3%	2.7%	Raised	\$1.74	\$1.63	2021 Q1
Consolidated Edison, Inc.	ED	R	\$3.10	63.0%	3.6%	Raised	\$3.10	\$3.06	2021 Q1
Dominion Resources, Inc.	D	R	\$2.52	65.7%	3.2%	Lowered	\$2.52	\$3.76	2020 Q4
DTE Energy Company	DTE	MR	\$3.54	57.7%	3.0%	Raised	\$3.54	\$3.30	2021 Q4
Duke Energy Corporation	DUK	R	\$3.94	78.2%	3.8%	Raised	\$3.94	\$3.86	2021 Q3
Edison International	EIX	R	\$2.80	41.1%	4.1%	Raised	\$2.80	\$2.65	2021 Q4
Entergy Corporation	ETR	R	\$4.04	56.1%	3.6%	Raised	\$4.04	\$3.80	2021 Q4
Eergy, Inc.	EVRG	R	\$2.29	55.0%	3.3%	Raised	\$2.29	\$2.14	2021 Q4
Eversource Energy	ES	R	\$2.41	64.4%	2.6%	Raised	\$2.41	\$2.27	2021 Q1
Exelon Corporation	EXC	MR	\$1.53	47.3%	2.6%	Raised	\$1.53	\$1.45	2020 Q1
FirstEnergy Corp.	FE	R	\$1.56	62.4%	3.8%	Raised	\$1.56	\$1.52	2019 Q4
Hawaiian Electric Industries, Inc.	HE	MR	\$1.36	60.1%	3.3%	Raised	\$1.36	\$1.32	2021 Q1
IDACORP, Inc.	IDA	R	\$3.00	59.4%	2.6%	Raised	\$3.00	\$2.84	2021 Q4
MDU Resources Group, Inc.	MDU	MR	\$0.87	45.4%	2.8%	Raised	\$0.87	\$0.85	2021 Q4
MGE Energy, Inc.	MGEE	R	\$1.55	51.8%	1.9%	Raised	\$1.55	\$1.48	2021 Q3
NextEra Energy, Inc.	NEE	MR	\$1.54	122.6%	1.6%	Raised	\$1.54	\$1.40	2021 Q1
NISource Inc.	NI	R	\$0.88	57.9%	3.2%	Raised	\$0.88	\$0.84	2021 Q1
NorthWestern Corporation	NWE	R	\$2.48	68.8%	4.3%	Raised	\$2.48	\$2.40	2021 Q1
OGE Energy Corp.	OGE	R	\$1.64	80.9%	4.3%	Raised	\$1.64	\$1.61	2021 Q3
Otter Tail Corporation	OTTR	R	\$1.56	36.7%	2.2%	Raised	\$1.56	\$1.48	2021 Q1
PG&E Corporation	PCG	R	\$-	0.0%	0.0%	Lowered	\$-	\$2.12	2017 Q4
Pinnacle West Capital Corporation	PNW	R	\$3.40	58.1%	4.8%	Raised	\$3.40	\$3.32	2021 Q4
PNM Resources, Inc.	PNM	R	\$1.31	49.7%	2.9%	Raised	\$1.31	\$1.23	2020 Q4
Portland General Electric Company	POR	R	\$1.72	61.5%	3.3%	Raised	\$1.72	\$1.63	2021 Q2
PPL Corporation	PPL	R	\$1.66	NM	5.5%	Raised	\$1.66	\$1.65	2020 Q1
Public Service Enterprise Group Incorporated	PEG	MR	\$2.04	45.1%	3.1%	Raised	\$2.04	\$1.96	2021 Q1
Sempra Energy	SRE	R	\$4.40	44.0%	3.3%	Raised	\$4.40	\$4.18	2021 Q1
Southern Company	SO	R	\$2.64	71.1%	3.8%	Raised	\$2.64	\$2.56	2021 Q2
Unitil Corporation	UTL	R	\$1.52	65.4%	3.3%	Raised	\$1.52	\$1.50	2021 Q1
WEC Energy Group, Inc.	WEC	R	\$2.71	64.3%	2.8%	Raised	\$2.71	\$2.53	2021 Q1
Xcel Energy Inc.	XEL	R	\$1.83	58.5%	2.7%	Raised	\$1.83	\$1.72	2021 Q1
<b>Industry Average</b>				<b>62.7%</b>	<b>3.3%</b>				

#### NOTES

Business Segmentation: Based on assets as of 12/31/2020.

**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 12/31/2021.

Dividend Payout Ratio: Dividends paid for 12 months ended 12/31/2021 divided by net income before nonrecurring and extraordinary items for 12 months ended 12/31/2021. 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 12/31/2021 divided by stock price at market close on 12/31/2021.

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.

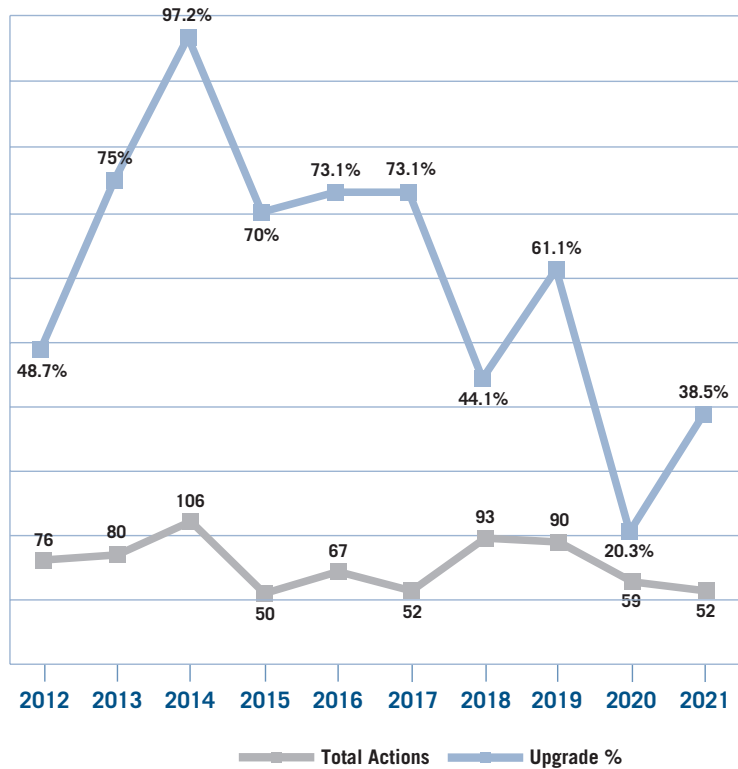
### Credit Ratings

The industry’s average parent company credit rating in 2021 remained at BBB+ for an eighth straight year, although three parent-level downgrades versus one upgrade caused a slight weakening in aggregate holding company credit quality. There were only 52 total actions — 20 upgrades and 32 downgrades — affecting both parents and subsidiaries. This pace was below the 73-action annual average of the previous ten calendar years and is the third-lowest annual total in our historical dataset (back to 2000).

On December 31, 2021, 68.2% of parent company ratings outlooks were “stable” and 9.1% were “positive” or “watch-positive”. The 22.7% share that was “negative” or “watch negative”, down from 31.8% at year-end 2020, was in line with

### Direction of Rating Actions

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

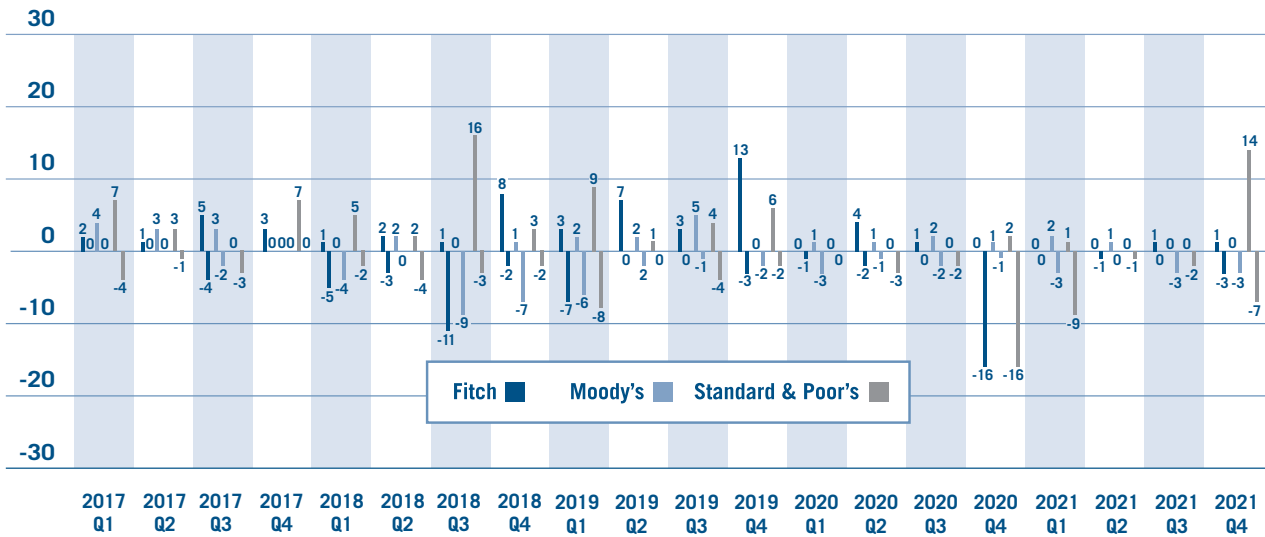


Source: Fitch Ratings, Moody's, and Standard & Poor's.

### Credit Rating Agency Upgrades and Downgrades 2017 Q1–2021 Q4

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(Number of Occurrences)



Note: Data presents the number of occurrences and includes each event, even if multiple actions occurred for a single company.

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

## Credit Rating Agency Upgrades and Downgrades 2017 Q1–2021 Q4

	2017		2018		2019		2020		2021	
	Total Upgrades	Total Downgrades	Total Upgrades	Total Downgrades	Total Upgrades	Total Downgrades	Total Upgrades	Total Downgrades	Total Upgrades	Total Downgrades
<b>Fitch</b>										
Q1	2	0	1	(5)	3	(7)	0	(1)	0	0
Q2	1	0	2	(3)	7	0	4	(2)	0	(1)
Q3	5	(4)	1	(11)	3	0	1	0	1	0
Q4	3	0	8	(2)	13	(3)	0	(16)	1	(3)
<b>Total</b>	<b>11</b>	<b>(4)</b>	<b>12</b>	<b>(21)</b>	<b>26</b>	<b>(10)</b>	<b>5</b>	<b>(19)</b>	<b>2</b>	<b>(4)</b>
<b>Moody's</b>										
Q1	4	0	0	(4)	2	(6)	1	(3)	2	(3)
Q2	3	0	2	0	2	(2)	1	(1)	1	0
Q3	3	(2)	0	(9)	5	(1)	2	(2)	0	(3)
Q4	0	0	1	(7)	0	(2)	1	(1)	0	(3)
<b>Total</b>	<b>10</b>	<b>(2)</b>	<b>3</b>	<b>(20)</b>	<b>9</b>	<b>(11)</b>	<b>5</b>	<b>(7)</b>	<b>3</b>	<b>(9)</b>
<b>S&amp;P</b>										
Q1	7	(4)	5	(2)	9	(8)	0	0	1	(9)
Q2	3	(1)	2	(4)	1	0	0	(3)	0	(1)
Q3	0	(3)	16	(3)	4	(4)	0	(2)	0	(2)
Q4	0	(1)	7	0	3	(2)	2	(16)	14	(7)
<b>Total</b>	<b>31</b>	<b>(7)</b>	<b>17</b>	<b>(8)</b>	<b>26</b>	<b>(11)</b>	<b>2</b>	<b>(21)</b>	<b>15</b>	<b>(19)</b>

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.

the 18.2% and 23.4% shares at year-end 2019 and 2018, respectively.

Electric utility industry credit quality generally improved over the past decade, although it experienced a slight decline, in aggregate, in each of the last three years. Aggregate parent-level credit had steadily strengthened from 2013 through 2018. Across the numerically larger universe that includes both parents and subsidiaries, the five-year period 2013 through 2017 produced the five highest upgrade percentages in our 22 years of historical data. Moreover, upgrades outnumbered downgrades in six of the past ten calendar years with an annual average upgrade percentage of 60.1% over the decade.

EEI captures upgrades and downgrades at both the parent and sub-

sidary levels. The industry's average credit rating and outlook are the unweighted averages of all S&P parent holding company ratings and outlooks. However, our upgrade/downgrade totals reflect all actions by the three major ratings agencies directed at parent holding companies as well as individual subsidiaries. Our universe of 44 U.S. parent company electric utilities at December 31, 2021 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.

The three major rating agencies remain somewhat divergent in their outlooks for 2022. S&P maintained a negative outlook, Moody's outlook remained stable and Fitch held its

neutral outlook. While the agencies noted regulatory relations are broadly constructive, managing regulatory risk and financial metrics in an era of high capex and potentially rising costs were cited as key concerns.

### Credit Actions at Parent Level

Parent-level ratings actions in 2021 included three downgrades and one upgrade. By comparison, there were three downgrades, one upgrade and one reinstatement in 2020, five downgrades and one upgrade in 2019, and six upgrades and two downgrades in 2018.

### Duke Energy

On January 26, S&P downgraded Duke Energy to BBB+ from A- after Duke's North Carolina utilities (Duke Energy Carolinas and Duke Energy Progress) reached a rate set-

tlement agreement where they would forgo recovery of roughly \$1.1 billion in coal ash management costs.

***Southern Co.***

On October 27, S&P lowered Southern Co.’s issuer credit rating to BBB+ from A-, observing that construction delays and higher costs at Vogtle Units 3 and 4 indicate heightened construction risk until these nuclear generating facilities are in service. S&P also lowered the ratings of subsidiaries Alabama Power (A- from A), Georgia Power (BBB+ from A-), Mississippi Power (BBB+ from A-), and Southern Power (BBB from BBB+).

***FirstEnergy***

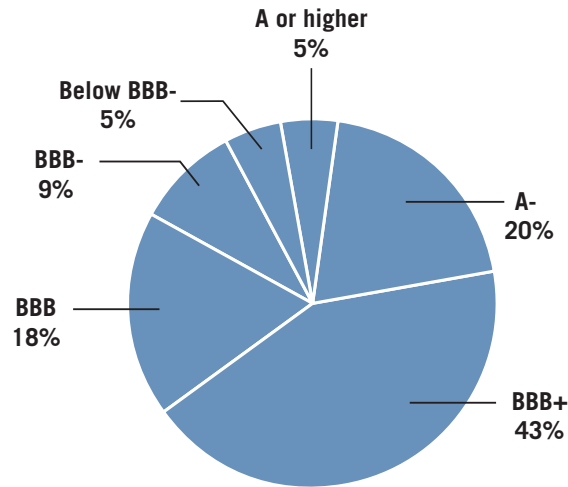
On November 8, S&P raised FirstEnergy’s rating by two notches to BBB- from BB based on recent significant improvements to the company’s business risk and financial measures. The higher rating incorporates the effects of FirstEnergy’s proposed minority sale of FirstEnergy Transmission LLC, the issuance of common equity, and the settlement in multiple Ohio proceedings.

***Pinnacle West Capital***

On November 9, S&P downgraded Pinnacle West’s rating to BBB+ from A due to a recent rate decision in Arizona. The downgrade reflects the Arizona Corporate Commission’s final order, which included a reduced authorized ROE of 8.7% and a \$119 million base rate reduction in the form of a \$5 million rate decrease and denied recovery of \$216 million of pollution control investments. S&P expects Pinnacle West’s

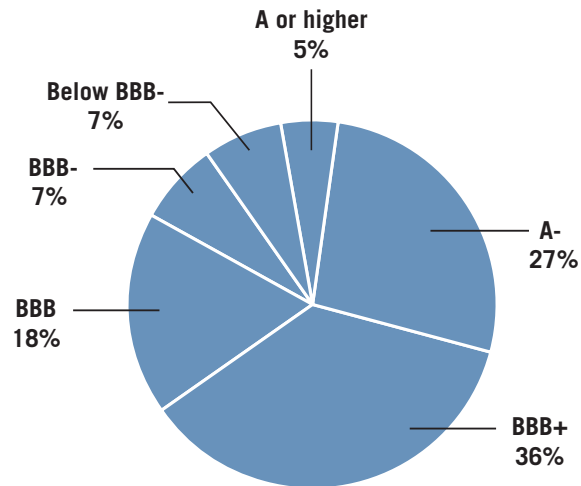
**Bond Ratings December 31, 2021  
as rated by Standard & Poor’s**

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



**Bond Ratings December 31, 2020  
as rated by Standard & Poor’s**

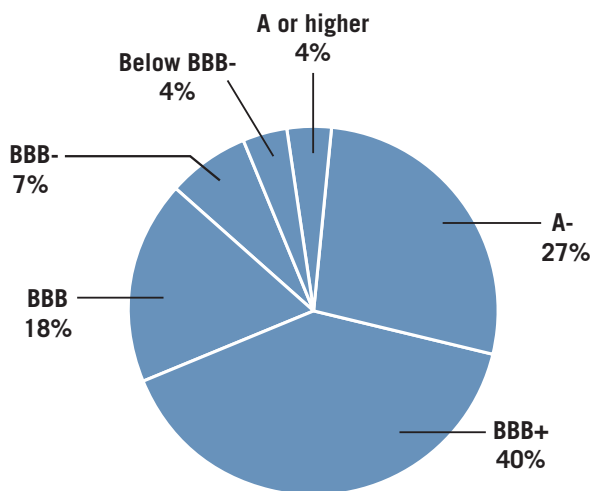
U.S. INVESTOR-OWNED ELECTRIC UTILITIES





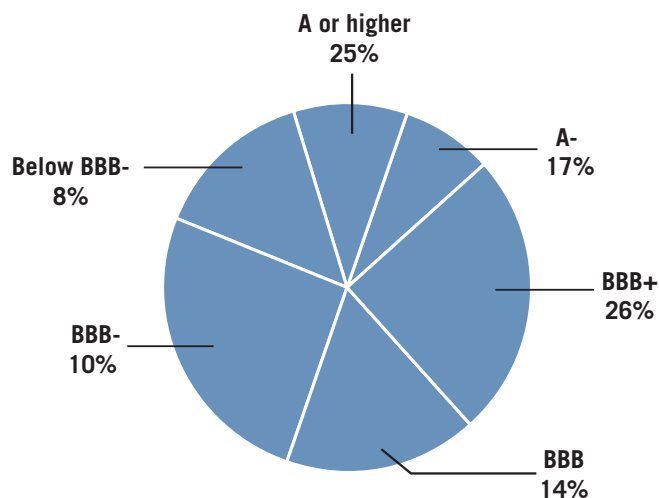
## Bond Ratings December 31, 2019 as rated by Standard & Poor's

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



credit metrics to suffer as a result of regulatory lag from the lower ROE and disallowance of investment and cost recovery. S&P also downgraded subsidiary Arizona Public Service to BBB+ from A-.

### Ratings Activity Remained Slow in 2021

The 52 rating changes during 2021 (upgrades plus downgrades), seven fewer than in 2020, was the third-lowest total of any year back to our dataset's inception in 2000. By comparison, there were 90 actions in 2019, 93 in 2018, and an annual average of 73 over the last decade. Given the heightened activity in 2019 and 2018, a slowdown in 2020 and 2021 is not surprising.

The industry's 20 upgrades in 2021 versus 32 downgrades produced an upgrade percentage of 38.5%, up from 20.3% in 2020 but below the 61.1% result in 2019. The five-year period 2013 through 2017 produced the five-highest upgrade percentages in our historical data. Upgrades outnumbered downgrades in six of the past ten calendar years, with an annual average upgrade percentage of 60.1%.

The Credit Rating Agency Upgrades and Downgrades table on page 17 presents quarterly activity by all three ratings agencies. Following are full-year totals for 2021:

- Fitch (2 upgrades, 4 downgrades)
- Moody's (3 upgrades, 9 downgrades)
- Standard & Poor's (15 upgrades, 19 downgrades)

## Rating Agency Activity

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Total Ratings Changes	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Fitch</b>	26	23	14	11	16	15	33	36	24	6
<b>Moody's</b>	20	17	85	12	13	12	23	20	12	12
<b>Standard &amp; Poor's</b>	30	40	7	27	38	25	37	34	23	34
<b>Total</b>	<b>76</b>	<b>80</b>	<b>106</b>	<b>50</b>	<b>67</b>	<b>52</b>	<b>93</b>	<b>90</b>	<b>59</b>	<b>52</b>

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

### Improved Metrics, Regulatory Outcomes Spur Upgrades

Most of the year's 20 upgrades were based on significant improvements to business risk and financial measures, while several were due to favorable regulatory outcomes.

Along with FirstEnergy, 13 of its subsidiaries were also upgraded on November 8 in recognition of the company's recent significant improvements to its business risk and financial measures. Twelve of those subsidiaries were increased two notches, to BBB from BB+, with Allegheny Generating Company rising one notch to BB+ from BB.

On March 17, S&P upgraded Hawaiian Electric Company (HECO), the utility operating company of Hawaiian Electric Industries (HEI), to BBB from BBB-. S&P cited the strength of HECO's financial measures and regulatory protections. On April 20, Moody's also upgraded HECO to Baa1 from Baa2, reflecting the company's considerable progress adding renewable resources to its energy supply mix and its improving regulatory relationship with the Hawaii Public Utilities Commission. Parent company HEI derives about 80% of its cash flow

from operations and 75% of its operating income from HECO. HEI relies to a lesser extent on its banking subsidiary, American Savings Bank, which S&P also views as having an investment-grade credit profile.

On March 30, Moody's upgraded Sempra Energy subsidiary San Diego Gas & Electric (SDG&E) to A3 from Baa1, reflecting the agency's expectation that SDG&E will maintain robust credit metrics. The upgrade also considers SDG&E's track record of effective wildfire risk mitigation and the credit support provided by wildfire fund legislation enacted by the state of California in July 2019. Moody's said the combination of these factors has reduced SDG&E's exposure to wildfire risk, a key ESG risk consideration and an important driver of the organization's improved credit quality.

On July 26, Fitch upgraded Dominion Energy South Carolina to A- from BBB+. Fitch cited financial improvements that have occurred since Dominion Energy acquired the subsidiary in January 2019, including equity contributions, debt reductions and a recent favorable rate case outcome.

On December 23, Fitch upgraded AEP subsidiary Indiana Michigan Power Company to A- from BBB+ due to strong credit metrics and supportive regulation, including a resolution with the Indiana Utility Regulatory Commission regarding a lease termination for the utility subsidiary's Rockport power plant.

Merger activity resulted in a rating increase on January 4 when Moody's upgraded Gulf Power, a NextEra Energy subsidiary, to A1 from A2, reflecting Gulf Power's January 1, 2021 merger with affiliate Florida Power & Light Company (FPL). FPL, which has an A1 rating and stable outlook, assumed all of Gulf Power's outstanding debt obligations. Gulf Power was initially acquired by NextEra Energy in January 2019.

### Weaker Metrics, Regulatory Outcomes Drive Downgrades

Weaker credit metrics were cited in the majority of 2021's downgrades. Among the underlying drivers, adverse regulatory outcomes were the most common followed by planned and/or potential divestitures of subsidiaries or business units.

On January 26, Moody's downgraded Orange & Rockland Utilities (O&R), a subsidiary of Consolidated Edison, to Baa2 from Baa1 due to a weakened financial profile and higher political and regulatory risk in New York, its primary service territory. Moody's said O&R's weakening financial profile comes at the same time that political and regulatory risks are rising. Given rising business risk and a projected cash flow to debt ratio expected to be around 15% for a sustained period, Moody's noted O&R's credit profile is better aligned with Baa2-rated peers.

On January 26, S&P lowered the rating for seven Duke Energy subsidiaries as a result of Duke's coal ash settlement, all falling to BBB+ from A-. S&P's outlook for Duke Energy and its subsidiaries is stable. On March 26, Moody's lowered its ratings for Duke Energy (to Baa2 from Baa1) and Duke Energy Carolinas (to A2 from A1), citing weaker financial metrics and the coal ash settlement agreement.

On February 25, Exelon Generation was downgraded by S&P to BBB- from BBB due to its planned spinoff by parent Exelon. The rating agency now considers Exelon Generation as nonstrategic to Exelon with resulting heightened business risk. S&P also noted that Exelon Generation's business risk profile has weakened due to declining costs for renewable power along with the advancement of energy storage technologies.

On April 8, Fitch lowered its rating for AEP Texas (AEPTX), a sub-

subsidiary of American Electric Power, to BBB from BBB+. The downgrade reflects weaker credit measures from a lower equity capitalization, lower than expected parent capital contributions, high capex, and regulatory lag associated with a fast-growing service territory.

On April 28, S&P downgraded Kentucky Power Co. (KPCo), a subsidiary of American Electric Power, to BBB+ from A-, following the parent company's announcement that it had launched a process to sell KPCo. AEP views this potential sale as a means to finance robust renewable energy investment over the next decade.

On July 20, Moody's downgraded AVANGRID's parent company rating to Baa2 from Baa1 and its subsidiaries New York State Electric & Gas (NYSEG) and Rochester Gas & Electric (RG&E) to Baa1 from A3. The downgrade of AVANGRID reflects weaker financial ratios, a higher-risk capital program through 2025, and heightened political influence and uncertainty in utility rate making in the company's two largest regulatory environments, New York and Connecticut. The downgrades of NYSEG and RG&E reflect the financial implications of their combined three-year rate plan in addition to heightened risk of political intervention in New York state's utility regulatory process.

In September, two Entergy subsidiaries were downgraded by S&P in the aftermath of Hurricane Ida. On September 2, Entergy Louisiana (ELL) was lowered to BBB+ from

A- due to the severity of storm activity in its Gulf Coast service territory, which eroded its business risk profile relative to peers rated A-. After factoring in the impact of Hurricane Ida, S&P expects ELL's financial measures to weaken but remain largely credit supportive. On September 24, S&P downgraded Entergy New Orleans (ENO) to BB from BB+ based on parent company Entergy's announcement of a variety of options for ENO's future, including a sale, spinoff, or municipalization of the utility.

On October 8, Moody's downgraded Public Service Electric and Gas to A3 from A2, reflecting the agency's concern that cash flow metrics will weaken as the utility implements its robust capital investment program.

On October 12, Fitch downgraded Pinnacle West Capital (PNW) and subsidiary Arizona Public Service (APS) to BBB+ from A- in anticipation of an adverse final order in APS's pending general rate case, which Fitch said could degrade credit metrics and elevate business risk. On November 17, Moody's lowered PNW's rating to Baa1 from A3 and APS's rating to A3 from A2; both moves were based on the Arizona Corporate Commission's final order that included a lower authorized ROE.

### Ratings by Company Category

The S&P Utility Credit Ratings Distribution by Company Category chart presents the distribution of credit ratings over time by company category (Regulated, Mostly

## S&P Utility Credit Ratings Distribution by Company Category

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

	2017		2018		2019		2020		2021	
	#	%	#	%	#	%	#	%	#	%
<b>Regulated</b>										
A or higher	2	6%	1	3%	1	3%	1	3%	1	3%
A-	12	34%	11	32%	11	31%	11	32%	8	23%
BBB+	10	29%	11	32%	11	31%	10	29%	14	40%
BBB	7	20%	7	21%	8	23%	7	21%	7	20%
BBB-	4	11%	4	12%	2	6%	2	6%	3	9%
Below BBB-	0	0%	0	0%	2	6%	3	9%	2	6%
<b>Total</b>	<b>35</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>35</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>35</b>	<b>100%</b>
<b>Mostly Regulated</b>										
A or higher	1	7%	2	15%	1	10%	1	10%	1	11%
A-	2	14%	2	15%	1	10%	1	10%	1	11%
BBB+	7	50%	7	54%	7	70%	6	60%	5	56%
BBB	2	14%	1	8%	0	0%	1	10%	1	11%
BBB-	1	7%	1	8%	1	10%	1	10%	1	11%
Below BBB-0	1	7%	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>14</b>	<b>100%</b>	<b>13</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>9</b>	<b>100%</b>

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.

Regulated and Diversified) for the investor-owned electric utilities. The Diversified category was eliminated in 2017 due to its dwindling number of companies. Ratings are based on S&P's long-term issuer ratings at the holding company level, with only one rating assigned per company. At December 31, 2021, the average rating for both the Regulated and Mostly Regulated categories was BBB+.

### Rating Agency Credit Outlooks

The three major ratings agencies held somewhat divergent utility industry credit outlooks as 2022 began. S&P maintained a negative outlook, Moody's outlook re-

mained stable and Fitch retained its neutral outlook. The agencies cited the regulatory environment, rising costs and related customer bill impacts, elevated capital expenditures, success managing the clean energy transformation, and stability of financial metrics as key themes they are watching. It should be noted that the groups of underlying companies vary slightly across the three rating agency outlooks.

### Standard & Poor's (S&P)

Published in late January 2022, S&P's report "Industry Top Trends 2022 – North America Regulated Utilities" maintained the agency's negative industry outlook. The re-

port noted that downgrades outpaced upgrades in 2021 and in 2020, and many utilities continue to operate with minimal financial cushion above downgrade thresholds. Given that 20% of the industry has a negative outlook versus about 5% with a positive outlook, the agency said downgrades will likely outpace upgrades again in 2022.

The report cited the size of the clean energy transformation and management of regulatory risk as other key concerns. Acknowledging the industry's ongoing success at reducing greenhouse gas (GHG) emissions, the agency said pressure to accelerate that pace could lead to unintended con-

## Long-Term Credit Rating Scales

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

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

	Moody's	Standard & Poor's	Fitch
<b>Speculative Grade</b>	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
	B1	B+	B+
	B2	B	B
	B3	B-	B-
	Caa1	CCC+	CCC+
	Caa2	CCC	CCC
	Caa3	CCC-	CCC-
	Ca	CC	CC
	C	C	C

	Moody's	Standard & Poor's	Fitch
<b>Default</b>	C	D	D

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

sequences, such as operational issues from over-reliance on intermittent power, which might weaken financial measures and credit quality. The S&P report noted many utilities delayed rate case filings during the pandemic or received rate orders that were lower than expected. While the pace of rate case filings has subsequently increased, the agency said effective management of regulatory relations remains a risk. Moreover, rising interest rates, general price inflation, and higher commodity fuel prices could increase customer bills and contribute to a more challenging regulatory environment.

While limiting excess credit capacity and maintaining thin downgrade cushions works well under favorable conditions, the report said utilities risk a weakening of credit quality if unexpected risks materialize or base case assumptions deviate from expectations.

#### Moody's

In its "Outlook – Regulated Electric and Gas Utilities–US" (released November 2021), Moody's maintained its stable outlook. The report said the regulatory environment will likely remain supportive for rate base growth, infrastructure investment, and efforts to protect networks from extreme weather events, and that utilities will benefit from continuing U.S. economic growth. The report projects average aggregate rate base growth of about 6% in 2022. The sector's aggregate industry funds from operations (FFO) to debt ratio will range between 14% and 15% in 2022 according to the report; this is con-



sistent with Moody's projections last year for 2021.

Moody's listed several factors that could change its outlook to positive: 1) if regulation turns more credit supportive, 2) if there is additional legislative support for certainty and visibility of cost recovery, and 3) if the sector's consolidated FFO-to-debt ratio rises to around 18% on a sustainable basis. Factors that could change its outlook to negative were: 1) a widespread and sustained decline in regulatory support for timely cost recovery, 2) a less favorable capital market environment, and 3) if availability of bank credit facilities becomes constrained. Moody's could also change its outlook to negative if aggregate FFO-to-debt appears likely to dip below 14% during 2022 and beyond, which could result from higher leverage, a slower-than-expected U.S. recovery, material load declines, high or unrecoverable bad debt expenses or the postponement of needed rate increases.

#### ***Fitch Ratings***

In its "2022 Outlook: North American Utilities, Power & Gas" (released December 2021), Fitch Ratings maintained a neutral outlook for the North American utilities, power and gas sector.

Fitch believes state regulatory environments will remain broadly constructive and retail electricity sales will continue to gain strength as commercial and industrial sales reach and/or exceed pre-pandemic levels. Fitch expects overall retail electricity sales to increase between 0.5% and 1.0% in 2022, however it cited the late-2021 increase in natu-

ral gas prices as a near-term concern since fuel and purchased power costs are passed through to customers. The report said that, based on natural gas futures prices in December 2021, customer rates may experience a high-single to low-double digit percent increase over the next one to two years and current winter heating bills may rise 30% versus last year. In addition, elevated capex, recovery of storm restoration costs, and recovery of deferred coronavirus-related expenses may compound any pressure on customer bills.

Fitch noted weather-driven outages are on the increase and regulatory/political scrutiny is forcing utilities to explore further storm-hardening responses, such as undergrounding electric lines, that may require further grid-hardening investment. While broadly supported by regulators, higher capex is also resulting from rising investments in solar, onshore and offshore wind, and battery storage projects. The report noted declining O&M expenses from cost control initiatives as well as the ongoing transition to lower cost renewables should provide some offset to customer impacts.

With more than 80% of company ratings at a stable outlook, Fitch expects limited rating movement in 2022. The number of downgrades from Fitch declined in 2021 after elevated levels in the preceding three years.

# Business Strategies

## Business Segmentation

The industry's regulated business segments — regulated electric and natural gas distribution — grew their combined assets by \$79.3 billion, or 5.1%, in 2021, extending a multi-year trend and driving a \$73.4 billion, or 3.9%, increase in total industry assets. Regulated assets were 81.6% of the industry total at year-end, rising from 80.8% at year-end 2020. The Regulated Electric segment's share of total industry assets was nearly unchanged at 68.6% compared to 68.7% at year-end 2020, although the segment's total assets increased \$50.6

billion, or 3.8%. The industry's other two significant business segments also grew assets in 2021. Natural Gas Distribution assets rose \$28.7 billion, or 12.3%, and Competitive Generation assets rose \$2.3 billion, or 1.1%. Assets for the smaller Natural Gas Pipeline segment fell by \$2.6 billion, or 7.3%. A record-high \$134.1 billion of capital expenditures and generally constructive regulatory relations supported the significant growth in Regulated assets.

Revenue for each primary business segment rose in 2021 as energy demand broadly rebounded from the impact of the COVID-19 pandemic. The Regulated Electric busi-

ness segment's revenue increased by \$20.0 billion, or 8.0%, as power demand was 2.8% higher in 2021 than in 2020. Revenue also experienced significant gains in each of the other primary business segments: Natural Gas Distribution revenue increased \$8.1 billion, or 18.0%; Competitive Energy revenue increased \$4.3 billion, or 10.2%; Natural Gas Pipeline revenue increased \$1.3 billion, or 28.9%. As a result, total industry revenue increased \$34.4 billion, or 9.8%, in 2021.

## 2021 Revenue by Segment

Regulated Electric revenue in 2021 increased by \$20.0 billion, or 8.0%, to \$271.5 billion from \$251.4

## Business Segmentation—Revenues

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Millions)	2021	2020	Difference	% Change
<b>Regulated Electric</b>	271,452	251,443	20,008	8.0%
<b>Competitive Energy</b>	46,800	42,463	4,338	10.2%
<b>Natural Gas Distribution</b>	53,149	45,054	8,096	18.0%
<b>Natural Gas Pipeline</b>	5,798	4,499	1,299	28.9%
<b>Other</b>	19,497	18,592	905	4.9%
<b>Discontinued Operations</b>	—	—	—	0.0%
<b>Eliminations/Reconciling Items</b>	(11,197)	(10,966)	(230)	2.1%
<b>Total Revenues</b>	<b>385,500</b>	<b>351,085</b>	<b>34,415</b>	<b>9.8%</b>

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)	12/31/2021	12/31/2020	Difference	% Change
<b>Regulated Electric</b>	1,377,457	1,326,815	50,642	3.8%
<b>Competitive Energy</b>	208,901	206,563	2,338	1.1%
<b>Natural Gas Distribution</b>	261,706	233,005	28,702	12.3%
<b>Natural Gas Pipeline</b>	32,691	35,283	(2,593)	-7.3%
<b>Other</b>	126,527	129,298	(2,772)	-2.1%
<b>Discontinued Operations</b>	1	1	(0)	-28.5%
<b>Eliminations/Reconciling Items</b>	(66,629)	(63,662)	(2,967)	4.7%
<b>Total Assets</b>	<b>1,940,653</b>	<b>1,867,303</b>	<b>73,350</b>	<b>3.9%</b>

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

billion in 2020. The segment's share of total industry revenue fell to 68.4% from 69.4% in 2020, but remained well above its level at the start of the industry's two-decade-long migration back to a regulated focus (Regulated Electric's share was only 51.9% in 2005).

Natural Gas Distribution revenue rose \$8.1 billion, or 18.0%, to \$53.1 billion from \$45.1 billion in 2020. This followed 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; the sharp gains in 2016 and 2017 were due in part to the 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 — increased by \$28.1 billion, or 9.5%, to \$324.6 billion in 2021. The indus-

try's focus on regulated operations has driven a steady growth in these business segments' share of industry revenue in recent years. Regulated revenue accounted for 81.8% of total industry revenue in 2021, matching its percentage in 2020 and 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 2021 and 2020*.

### 2021 Assets by Segment

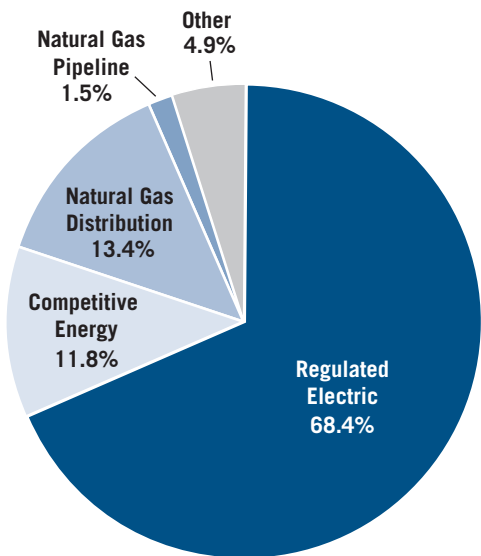
Regulated Electric assets increased \$50.6 billion, or 3.8%, during 2021. The segment's share of total industry assets was 68.6% at year-end, just below its 68.7% share at year-end 2020. Natural Gas Distribution assets increased by \$28.7 billion, or 12.3%, while Competitive Energy assets edged up \$2.3 billion, or

1.1%. The Natural Gas Pipeline segment's relatively small asset total got even smaller, declining \$2.6 billion, or 7.3%, to \$32.7 billion at year-end 2021 and representing just 1.6% of industry assets.

Total regulated assets (Regulated Electric and Natural Gas Distribution) grew \$79.3 billion, or 5.1% in 2021, increasing its share of total industry assets to 81.6% at year-end 2021 from 80.8% at year-end 2020. This aggregate 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 19-year period. Thirty of the industry's 44 constituent companies (68.2%) either increased regulated assets as a percent of total assets or maintained a 100% regulated structure in 2021.

### Revenue Breakdown 2021

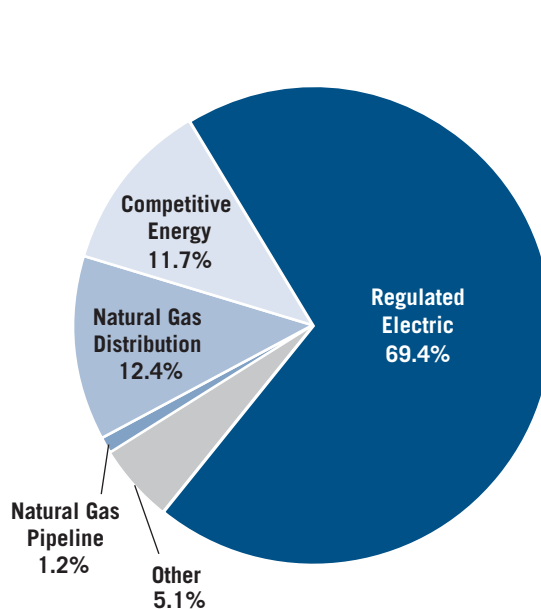
U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department and company annual reports.

### Revenue Breakdown 2020

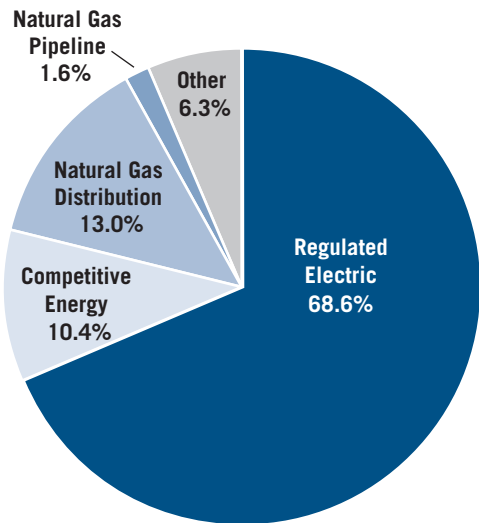
U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department and company annual reports.

### Asset Breakdown As of December 31, 2021

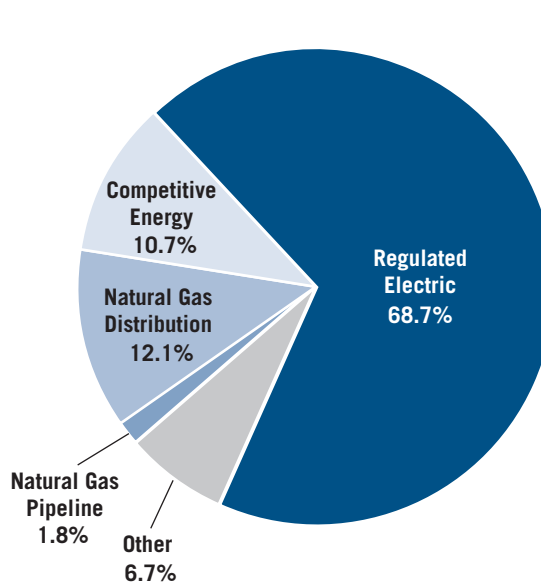
U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department and company annual reports.

### Asset Breakdown As of December 31, 2020

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



Source: EEI Finance Department and company annual reports.

## Regulated Electric

Regulated Electric segment operations include the generation, transmission and distribution of electricity under state regulation for residential, commercial and industrial customers. Regulated Electric revenue experienced a significant jump in 2021, rising \$20.0 billion, or 8.0%. Forty-two companies, or 95% of the industry, had higher Regulated Electric revenue versus the prior year. Regulated Electric revenue fell by 0.8% in 2020 and by 0.5% in 2019, was unchanged in 2018, grew 0.8% in 2017 and declined in 2016 (-0.1%) and in 2015 (-2.6%).

Total nationwide electric output increased 2.8% in 2021, recovering from a 2.9% decline in 2020. On a weather-adjusted basis, electric output gained 2.4% in 2021. Electric output has risen in only seven of the past 14 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 \$50.6 billion, or 3.8%, in 2021, marking the largest asset growth in dollar terms of all business segments. The industry's record-high \$134.1 billion of capital expenditures in 2021 and generally constructive regulatory relations supported the increase in regulated assets. The 2021 capital expenditure total was

the tenth consecutive annual record high, with the decade-long expansion well represented across the industry's Regulated Electric and Natural Gas Distribution segments. Asset growth is also evident in the industry's property, plant and equipment in service, which rose 4.0% from year-end 2020 and 38.5% over the level at year-end 2015. 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 \$2.3 billion, or 1.1%, to \$208.9 billion at year-end 2021 from \$206.6 billion at year-end 2020. This followed a \$9.7 billion, or 4.9%, increase in 2020. The recent growth has been driven largely by new renewable generation. Although the segment's assets are on the rise and its revenue rose \$4.3 billion, or 10.2%, in 2021 to \$46.8 billion from \$42.5 billion in 2020, 2020's revenue was the lowest annual total in data back to 2000. The segment's recent asset growth has only returned total assets to their level a decade ago; the segment's year-end 2011 asset total was \$209.4 billion, and its annual revenue peaked at \$110.9 billion in 2008. 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 20 companies that maintain Competitive Energy operations, ten (50%) grew these assets during 2021 and 14 (70%) had revenue gains from this segment.

## Natural Gas

Natural Gas Distribution assets rose \$28.7 billion, or 12.3%, to \$261.7 billion at year-end 2021 from \$233.0 billion at year-end 2020. The segment's revenue rose \$8.1 billion, or 18.0%, to \$53.1 billion in 2021 from \$45.1 in 2020, after declining 3.3% in 2020. This followed revenue growth of 4.4% in 2019, 3.0% in 2018, 17.6% in 2017 and 8.9% in 2016, gains that were supported by four large gas acquisitions completed in 2016. All 26 companies that report gas distribution revenue showed a year-to-year increase in 2021 while only 26% did so in 2020. This followed increases at 70%, 86% and 93% of reporting companies in 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 \$2.6 billion, or 7.3%, to \$32.7 billion at year-end 2021 from \$35.3 billion at year-end 2020. Five of the six companies that report this segment showed asset declines. Despite lower assets, higher natural gas prices enabled the segment's revenues to increase by \$1.3 billion, or 28.9%, to \$5.8 billion in 2021 from \$4.5 billion in 2020. 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 increased assets by \$26.1 billion, or 9.7%, in 2021 and produced revenue of \$58.9 billion, up from \$49.6 billion in 2020. In percentage terms, the contribution to total industry revenue from these two natural gas activities increased to 14.9% in 2021 from 13.6% in 2020.

### Strategic Moves Completed in 2021

Several companies completed strategic transactions in 2021 that notably affected their business segmentation reporting.

- CenterPoint Energy closed the sale of its Arkansas and Oklahoma natural gas LDC assets to Summit Utilities for \$2.15 billion in cash.
- CMS Energy completed the sale of its wholly owned subsidiary, EnerBank USA, to Regions Bank, a subsidiary of Regions Financial. CMS said the sale simplifies its investment thesis through a pure focus on energy, improves its risk profile, and helps finance its clean energy transformation. Estimated proceeds from the transaction were approximately \$1 billion and will be used to fund key initiatives in CMS' core utility businesses.
- PPL completed the sale of its U.K. utility business, Western Power Distribution (WPD), to National Grid for £7.8 billion, concluding the first of two strategic transactions announced in March 2021. PPL's second transaction is its

planned acquisition of Rhode Island's Narragansett Electric from National Grid for approximately \$3.8 billion. PPL said the sale and purchase will simplify its business mix, strengthen credit metrics, and improve prospects for long-term earnings growth through investment in sustainable energy solutions.

- DTE Energy completed the spin-off of its non-utility natural gas pipeline, storage and gathering business, DT Midstream. DTE said the transaction transforms the company into a predominantly pure-play electric and natural gas utility, where approximately 90% of DTE Energy's operating earnings and investments focus on utility operations.

### Strategic Announcements in 2021

In addition to 2021's completed transactions, several announcements were made that, if completed, will impact business segment reporting in 2022 and beyond.

- OGE Energy announced it would exit its midstream investment in Enable Midstream Partners and become a pure-play electric utility.
- Public Service Enterprise Group (PSE&G) announced it would sell its fossil fleet as it transitions to a 100% clean energy company.
- Duke Energy agreed to sell a 20% stake in subsidiary Duke Energy Indiana, which emphasizes coal and gas generation, to Singapore's sovereign wealth fund for \$2 billion. Duke said the move would eliminate the need for an equity offering and

help accelerate its regulated, clean energy rate base growth.

- Exelon announced plans for a tax-free separation of its regulated utilities and its competitive generating business into two independent companies. Exelon said the move would give each company better flexibility to focus on its core strategy and better address customer and shareholder goals.
- American Electric Power announced the sale of its Kentucky operations, which include Kentucky Power and AEP Kentucky Transco, to Liberty Utilities, a regulated utility subsidiary of parent company Algonquin Power & Utilities, for \$2.846 billion enterprise value. The sale is expected to close in 2022, pending regulatory approvals.
- Con Edison announced it would divest Stagecoach Gas Services, a natural gas pipeline and storage subsidiary, to Kinder Morgan for \$1.225 billion. Con Edison said the sale is consistent with its strategy to deliver the clean energy future customers expect.

### 2021 Year-End List of Companies by Category

Early each calendar year, we update 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 10-Ks. 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).



## List of Companies by Category at December 31, 2021

### Regulated (36)

Alliant Energy Corporation	Duke Energy Corporation	
Ameren Corporation	Edison International	Pinnacle West Capital Corporation
American Electric Power Company, Inc.	Entergy Corporation	PNM Resources, Inc.
Avista Corporation	Eversource Energy	Portland General Electric Company
Black Hills Corporation	FirstEnergy Corp.	PPL Corporation
CenterPoint Energy, Inc.	IDACORP, Inc.	<i>Puget Energy, Inc.*</i>
<i>Cleco Corporate Holdings LLC*</i>	<i>IPALCO Enterprises, Inc.*</i>	Sempra Energy
CMS Energy Corporation	NiSource Inc.	Southern Company
Consolidated Edison, Inc.	NorthWestern Corporation	Unitil Corporation
Dominion Energy, Inc.	MGE Energy, Inc.	WEC Energy Group, Inc.
<i>DPL Inc.*</i>	OGE Energy Corp.	Xcel Energy Inc.
DTE Energy Company	Otter Tail Corporation	
	PG&E Corporation	

### Mostly Regulated (8)

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

Note: \* Non-publicly traded companies.

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.

The only change in 2021 was DTE Energy's move from the Mostly Regulated to the Regulated category. DTE's regulated asset percentage rose above 80% due to the spin-off of its midstream natural gas pipeline, storage and gathering business. The transaction was completed on July 1, 2021. This lone migration increased the number of Regulated companies to 36 from 35 and reduced the Mostly Regulated group to eight companies from nine. The

number of parent companies in the EEI universe remained at 44, the same as the year-end 2020 total. (See *List of Companies by Category on December 31, 2021*).

## Mergers & Acquisitions

M&A activity involving whole U.S. utility operating companies with regulated service territories remained relatively low in 2021. There were two proposed whole company deals: 1) PPL's offer to buy Rhode Island regulated utility Narragansett Electric from National Grid USA (a subsidiary of the British utility holding company National Grid plc) and 2) Canadian utility Algonquin Power's move to buy regulated utility Kentucky Power from AEP. But 2021 was quite active if M&A activity is framed a bit more broadly.

The year produced several partial sales and restructurings that showcased key industry themes. Duke Energy sold a 19.9% stake in subsidiary Duke Indiana to Singapore's sovereign wealth fund. Exelon announced the split of its regulated and competitive operations into two separate companies. CenterPoint sold its Arkansas and Oklahoma LDC natural gas assets to Summit Utilities. Public Service Enterprise Group (PSEG) sold its fossil generation portfolio to private equity investor ArcLight Capital, which also bought a fossil portfolio from NRG Energy. And FirstEnergy sold a 19.9% stake

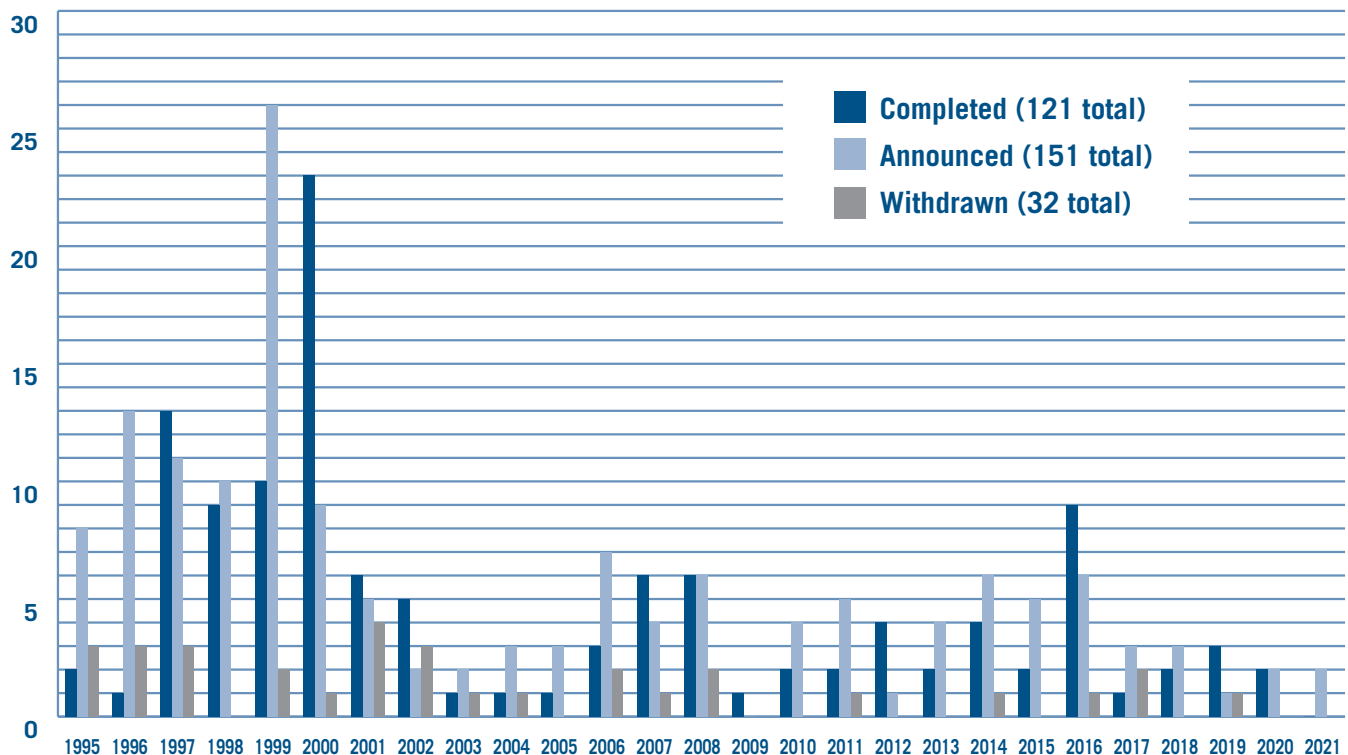
in its transmission assets to private infrastructure investor Brookfield.

Duke, PPL, PSEG, AEP and FirstEnergy all cited the chance to finance their build-outs of regulated clean energy investment as a key rationale for their moves. The private buyers in turn noted strong and steady returns from regulated utility infrastructure or the ability to own productive fossil assets without the cash flow and ESG pressures associated with public ownership. Exelon's split reflected long-term challenges with low power prices in competitive markets and capital markets' preference for lower-risk regulated business strategies. All ac-

## Status of Mergers & Acquisitions 1995–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(Number of Mergers & Acquisitions)



Source: EEI Finance Department.

tions broadly illustrate the primary trend in the industry: the ongoing focus by most utilities on earnings growth through building and operating the state-regulated clean energy infrastructure needed for the nation's clean energy transition.

Finally, the December 2021 rejection by New Mexico state regulators of AVANGRID's proposed acquisition of PNM was a reminder that regulatory oversight of utility M&A can present a difficult path to success.

### Announced Transactions

#### Duke Energy sells Stake in Indiana Utility

On January 28, Duke Energy announced plans to sell a 19.9% stake in regulated subsidiary Duke Energy Indiana (DEI) to an affiliate of GIC Private Limited, Singapore's sovereign wealth fund and an experienced investor in U.S. infrastructure. Duke said the \$2.05 billion purchase price represented a significant premium to its public equity valuation and said proceeds would allow it to forego plans to raise \$1 billion of common equity as it accelerates its clean energy investments in its portfolio of regulated utilities. With the announcement, Duke raised its projected five-year capex from \$58 billion to \$60 billion and boosted long-term earnings growth guidance to a range of 5% to 7% from a previous range of 4% to 6%.

Duke, which called GIC a long-term investor in DEI, said it would continue to operate the Indiana utility as majority owner with work force intact. GIC said companies focused on meaningful sustainability prac-

## Status of Announced Mergers & Acquisitions 1995–2021

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

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	–
<b>Totals</b>	<b>121</b>	<b>151</b>	<b>32</b>

Source: EEI Finance Department.

tices deliver superior risk-adjusted long-term returns and cited Duke's proven management team and commitment to a clean energy transition as motivations for its investment, which it said supports Duke's ESG and decarbonization goals. In 2016, GIC acquired a 19.9% stake in independent electric transmission company ITC Holdings.

The first of the two-phase sale closed in September when Duke received \$1.025 billion. The second

phase was expected to close in early 2022.

Duke Energy provides regulated electric service to 7.8 million customers in North Carolina, South Carolina, Florida, Indiana, Ohio and Kentucky. It distributes natural gas to 1.6 million customers in North Carolina, South Carolina, Tennessee, Ohio and Kentucky. The Duke Energy Renewables unit operates wind and solar generation facili-

ties across the U.S. as well as energy storage and microgrid projects.

### **Exelon Separates Regulated and Competitive Businesses**

On February 24, Exelon announced a plan to separate its six regulated and gas utilities (RemainCo) from its competitive power generation and customer-facing energy businesses (SpinCo), creating two publicly traded companies. Exelon said the separation gives each company the financial and strategic independence to focus on its specific customer needs while executing its core business strategy.

RemainCo will continue as parent company for Exelon's fully regulated transmission and distribution utilities, which deliver electricity and natural gas to more than 10 million customers across five states and the District of Columbia. SpinCo will be the nation's largest supplier of clean energy with more than 31,000 megawatts of generating capacity consisting of nuclear, wind, solar, natural gas and hydro assets. SpinCo will produce about 12 percent of the nation's carbon-free energy.

Exelon shareholders retained their shares of Exelon stock and received a pro-rata dividend of shares of SpinCo. After the transaction closed on February 2, 2022, the regulated company retained the familiar EXC stock symbol while the competitive operations, named Constellation Energy Corp., began trading under the symbol CEG.

Exelon noted the regulatory business is a high-quality utility asset with strong earnings growth of 6%

to 8% annually and a diversified rate base across seven jurisdictions with constructive regulation. Exelon said the combination of strong operations and attractive ESG attributes provides a platform that supports transition to a clean energy economy without owning generation. The competitive business operates 18.7 gigawatts of nuclear generation and 12.3 gigawatts of natural gas, hydro, solar and wind energy. Constellation Energy also includes a retail business with a strong share of commercial and industrial energy customers in the nation's competitive energy markets.

### **PPL Sells U.K. Business and Bids for Rhode Island Utility**

Pennsylvania-based PPL Corporation announced in August 2020 it would seek to sell its U.K. utility distribution business, Western Power Distribution (WPD), and become a U.S. utility holding company focused on advancing the nation's clean energy goals with rate-regulated assets. That plan materialized on March 18, 2021, when PPL announced an agreement to sell its U.K. utility business, Western Power Distribution (WPD), to National Grid plc for £7.8 billion and, in a separate transaction, acquire National Grid's Rhode Island regulated utility business, The Narragansett Electric Company (NEC), for \$3.8 billion. PPL said the strategic repositioning will refocus its strategy on strong, rate-regulated U.S. utilities, strengthen credit metrics and enhance long-term earnings growth and earnings predictability.

The agreement calls for PPL to sell WPD to National Grid in an

all-cash transaction valued at £14.4 billion, including assumption of £6.6 billion of debt, for net cash proceeds of approximately \$10.2 billion. Separately, PPL plans to acquire Narragansett Electric from National Grid in a transaction valued at \$5.3 billion, including the assumption of approximately \$1.5 billion of Narragansett Electric debt. PPL said it plans to use a portion of the proceeds from the sale of WPD to finance the acquisition. PPL also highlighted its plan to play a key role in advancing Rhode Island's decarbonization goals, noting its experience automating electricity networks can help the state achieve its target of 100% renewable energy by 2030.

PPL said net cash proceeds from the WPD sale will strengthen its balance sheet and enhance opportunities for strategic investment at its other utilities, in renewables or in share repurchases. On June 14, 2021, PPL announced it completed the sale of WPD to National Grid. It hopes to close the Narragansett purchase in the first half of 2022.

When both transactions are complete, PPL said it will serve approximately 3.5 million electricity and gas customers across diverse, constructive regulatory jurisdictions in the U.S. with rate base of approximately \$22 billion, mostly in the form of electricity and gas T&D assets.

## Merger Impacts 1995–2021

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Date	No. of Utilities	Change
12/31/95	98	–
12/31/96	98	–
12/31/97	91	(7.14%)
12/31/98	86	(5.49%)
12/31/99	83	(8.79%)
12/31/00	71	(14.46%)
12/31/01	69	(2.82%)
12/31/02	65	(5.80%)
12/31/03	65	–
12/31/04	65	–
12/31/05	65	–
12/31/06	64	(1.54%)
12/31/07	61	(4.69%)
12/31/08	59	(3.28%)
12/31/09	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%)
12/31/20	39	(2.50%)
12/31/21	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.

### CenterPoint Energy Sells Gas LDCs

In December 2020, CenterPoint Energy said it would seek to sell its Arkansas and Oklahoma natural gas distribution utilities to finance regulated electric system capex, including new solar and wind generation, without issuing new equity. It announced a sale on April 29, 2021 to Summit Utilities for \$2.15 billion in cash, including recovery of approximately \$425 million in unrecovered storm-related expenses. The assets include approximately 17,000 miles of main pipeline in Arkansas, Oklahoma, and Texarkana, TX serving more than half a million customers.

The proceeds represented a 2.5x multiple of 2020 rate base and a 38.0x multiple of 2020 earnings; industry observers noted the strong sale price was a vote of confidence in natural gas LDC assets, which had been shadowed by politicized anti-gas sentiments and concern about terminal values. CenterPoint, which retained other LDC assets, said the sale demonstrates its ability to efficiently recycle capital across its utility footprint — in this case selling assets at 2.5x rate base and building new rate base at the implied multiple of 1.0x. With the announcement, CenterPoint affirmed its goals of 6% to 8% annualized utility earnings per share growth and 10% annualized rate base growth. The transaction was completed on January 10, 2022.

The only investor-owned electric and gas utility based in Texas, CenterPoint Energy, Inc. (NYSE: CNP) is an energy delivery company with electric transmission and distri-



bution, power generation and natural gas distribution operations that, after the closing of the Arkansas/Oklahoma transaction, serve nearly seven million metered customers in Indiana, Louisiana, Minnesota, Mississippi, Ohio and Texas.

### **PSEG Divests Fossil Portfolio**

On July 31, 2020, Public Service Enterprise Group (PSEG) announced it would explore strategic alternatives for PSEG Power's non-nuclear generating fleet, which includes more than 6,750 megawatts of fossil generation and a 467-megawatt merchant solar portfolio. It said the move would accelerate its transformation into a primarily regulated electric and gas utility, reduce business risk and earnings volatility, improve its credit profile and enhance its ESG position through clean energy investments, methane reduction and zero-carbon generation.

On August 12, 2021, PSEG announced it would sell the fossil portfolio — which consists of 13 generating units in Maryland, New Jersey, New York and Connecticut — to ArcLight Energy Partners, a private equity fund controlled by Boston-based ArcLight Capital Partners, for approximately \$1.92 billion. PSEG affirmed the move enhances its ESG profile and advances its strategy to prepare for a low-carbon future. With the sale, PSEG also said it accelerated its net-zero climate vision from 2050 to 2030.

PSEG completed the sale of its solar portfolio to Quattro Solar LLC, an affiliate of LS Power, in June 2021 and finalized the sale of its fossil

portfolio in February 2022. PSEG said its business is now 90% regulated. The company noted it continues to advocate for the viability of its carbon-free 3,700-megawatt nuclear generation fleet, while also exploring investments in regional offshore wind.

PSEG is a diversified energy company whose operating businesses include Public Service Electric and Gas (PSE&G), New Jersey's largest provider of electric and natural gas service, and PSEG Long Island, which operates the electric transmission and distribution system of the Long Island Power Authority. PSEG Power owns and operates a diverse fleet of power plants located primarily in the Mid-Atlantic and Northeast regions and has solar energy facilities throughout the United States.

### **AEP to Sell Kentucky Power**

AEP announced in April 2021 that it was conducting a strategic review of its Kentucky operations. On October 26, 2021 the company announced a sale, which included Kentucky Power and AEP Kentucky Transco, to Liberty Utilities, a regulated subsidiary of Canadian utility holding company Algonquin Power & Utilities. AEP said the sale is expected to close in the second quarter of 2022, pending regulatory approvals. It plans to use the expected \$1.45 billion cash proceeds to eliminate equity needs in 2022 as it boosts investment in regulated renewable energy infrastructure. Kentucky Power owns 1,075 megawatts of generation including a 295-megawatt natural gas plant in Kentucky and 50% of the 1,560-megawatt coal-fired

Mitchell Plant in Moundsville, West Virginia, which it operates.

Ontario-based Algonquin said acquisition of Kentucky Power and Kentucky TransCo adds to its regulated footprint in the United States and said it expects to replace Kentucky Power's fossil fuel generation with renewable generation. Algonquin noted it has experience "greening" fleets of regulated fossil fuel generation. In 2017, it completed the acquisition of The Empire District Electric Company and recently completed a \$1.1 billion investment in 600 MW of wind generation to support Empire's service territory. AEP plans to grow its renewable generation portfolio to approximately 50% of total capacity by 2030. AEP noted it's on track to achieve an 80% reduction in carbon dioxide emissions from 2000 levels by 2030 and has committed to achieve net zero by 2050.

### **FirstEnergy Sells Stake in Transmission Business**

News reports in the summer of 2021 said FirstEnergy was looking to sell a stake in its FirstEnergy Transmission subsidiary. On November 7, the company said it reached agreement with private equity investor Brookfield Super-Core Infrastructure Partners to sell a 19.9% stake in FET, the holding company for FirstEnergy's three regulated transmission subsidiaries, for \$2.4 billion. FirstEnergy said the price represented an attractive electric utility valuation of 40 times trailing twelve-month earnings. On the same day, FirstEnergy announced that Blackstone Infrastructure



# Mergers & Acquisitions Announcements Updated through December 31, 2021

## U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Ann'd	Buyer	Seller/Acquired/Merged	Status	New Company	Completed Date	Months to complete	Bus.	Terms	Est. Trans Value (\$MM)
10/26/21	Algonquin Power & Utilities Corp	Kentucky Power Company & AEP Kentucky Transmission Company Inc	Pending			EE		\$1.221 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	Pending			EG		\$1.5 billion debt + 3.8 billion cash (valuation multiple of 1.7x rate base)	5,270.0
10/21/20	AVANGRID	PNM Resources	Pending			EE		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	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	EE		JP Morgan pays \$68.25/share in cash for each share of El Paso Electric Co. common stock	4,285.7
5/21/18	NextEra Energy, Inc.	Gulf Power Company	Completed		1/1/19	7 EE		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	EE		\$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	6 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
7/7/17	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 Energy	Westar Resources	Completed	Energy, Inc.	6/5/18	24 EE		\$3.6B debt + \$8.6 stock and cash (per share value of \$60.00)	12,200.0
2/9/16	Fortis Inc.	ITC Holdings Corp.	Completed		10/14/16	8 EE		\$4.4B debt + \$6.9B common shares and cash (per share value of \$44.90, roughly 33% premium)	11,300.0
2/9/16	Algonquin Power & Utilities	Empire District Electric Co	Completed		1/1/17	11 EE		\$1.6B 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	8 EG		\$1.5B 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 EE		\$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 EG		\$4.1B 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 GG		\$760M debt + \$1.13B cash	1,890.0
2/25/15	Iberdrola USA	UIL Holdings	Completed	AVANGRID, Inc.	12/16/15	10 EE		\$1.8B debt + \$0.6B cash + \$2.4B equity (per share value of \$52.75, roughly 25% premium, of which \$10.50 will be cash)	4,756.0
12/3/14	NextEra Energy, Inc.	Hawaiian Electric	Withdrawn		7/18/16	EE		NEE to acquire HE for \$2.6B equity + \$1.4B debt (fixed exchange ratio of 0.2413 NEE shares)	3,963.0
10/20/14	Macquarie-led Consortium	Cleco	Completed		4/13/16	18 EE		\$3.4B equity (all Cleco shares at \$55.37 / share in cash (~15% premium)) + \$1.3 debt	4,700.0
6/23/14	Wisconsin Energy	Integrty	Completed	WEC Energy Group	6/30/15	12 EE		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		BHE to acquire AL for \$3.2B cash + \$2.7B debt	5,927.0
4/30/14	Exelon	Peppo	Completed		3/23/16	24 EE		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		UIL 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	8 EE		Fortis 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	8 EE		AVA to acquire Alaska Energy & Resources Company for \$1.45MM equity + \$24.5MM debt	169.5
5/29/13	MidAmerican Energy Holdings Co.	NV Energy	Completed	Berkshire Hathaway Energy	12/19/13	7 EE		MidAmerican 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		TECO 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 EE		Fortis 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	EE		Fortis pays approx. \$35.10/share cash & assumes approx. \$226.4 mil in debt.	701.6
1/8/11	Duke Energy	Progress Energy	Completed		7/3/12	18 EE		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		Gaz Metro 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 EE		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 EE		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 EE		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	6 EE		\$6.83 billion cash + \$764.0 million in assumed debt	7,625.0
3/12/10	Emera Inc	Maine & Maritimes	Completed		12/21/10	9 EE		\$76 mm cash + \$28.6 mm debt + \$13.8mm postretirement benefits	117.4
2/10/10	FirstEnergy	Allegheny Energy	Completed		2/25/11	12 EE		\$4.3 billion in equity + \$4.7 billion in assumed debt	9,273.2
9/17/08	Berkshire Hathaway	Constellation Energy Group Inc.	Withdrawn		12/17/08	PE		\$4.7 bill cash + \$4.4 bill net debt and adjustments	9,152.5
7/25/08	Sempra Energy	EnergySouth Inc.	Completed		10/1/08	3 EG		\$499 million cash + 283 million debt	771.9

7/1/08	MDU Resources Group, Inc.	Intermountain Gas Co.	Completed	10/1/08	3	EG	\$245 million cash + \$82 million debt	327.0
6/25/08	Duke Energy	Catamount Energy Corp.	Completed	9/15/08	3	EP	\$240 million cash + \$80 million assumed debt	320.0
2/15/08	Unitil Corp.	Northern Utilities / Granite State Gas Transmission	Completed	12/1/08	10	EG	\$160 million cash	160.0
1/12/08	PNM Resources, Inc.	Cap Rock Holding Corp.	Withdrawn	7/22/08		EE	\$202.5 million	202.5
10/26/07	Macquarie Consortium	Puget Energy	Completed	2/6/09	16	EE	\$3.5 billion cash + \$3.02 billion net debt	6,520.2
6/25/07	Iberdrola S.A.	Energy East Corp.	Completed	9/16/08	15	EE	\$4.5 billion cash + \$4.1 billion net debt	8,600.0
2/26/07	KKR & Texas Pacific Group	TXU Corp. <sup>1</sup>	Completed	10/10/07	8	PE	\$31.8 billion cash + \$12.1 billion net debt	43,882.0
2/7/07	Black Hills Corp. / Great Plains Energy Inc. <sup>2</sup>	Aquila Inc. (CO elec. util. + CO, KS, NE, IA gas utils. )	Completed	7/14/08	17	EG	\$940 million cash + working capital and other adjustments	940.0
7/8/06	MDU Resources Group, Inc.	Cascade Natural Gas Corporation	Completed	7/2/07	12	EG	\$305.2mm in cash + (\$173.6 in debt - \$13.0 in cash equivalents)	465.8
7/8/06	WPS Resources Corporation	Peoples Energy Corporation	Completed	2/21/07	7	EG	\$2.47 billion	2,472.4
7/5/06	Macquarie Consortium	Duquesne Light Holdings	Completed	5/31/07	10	EE	\$1.59 billion cash + \$1.09 billion total debt	2,674.4
6/22/06	Gaz Metro LP	Green Mountain Power Corp.	Completed	4/12/07	10	EE	\$187 million in cash + (\$100.8 debt - \$9.1mm in cash equivalents)	279.5
5/11/06	ITC Holdings Corp	Michigan Electric Transmission Co.	Completed	10/10/06	5	EE	\$485.6mm cash + \$70mm common stock + \$311mm assumed debt	866.6
4/25/06	Babcock and Brown Infrastructure	NorthWestern Corp.	Withdrawn	7/24/07		EE	\$2.2 billion cash	2,200.0
2/27/06	National Grid	KeySpan Corp.	Completed	8/24/07	18	EE	\$7.4 billion cash + \$4.5 billion long-term debt	11,877.5
12/19/05	FPL Group Inc.	Constellation Energy Inc.	Withdrawn	10/25/06		EE	\$11.3 billion equity + \$4.1 billion net debt and pension liabilities	15,311.5
5/24/05	MidAmerican Energy Holdings Co.	PacifiCorp	Completed	3/21/06	10	EE	\$5.1 billion cash + \$4.3 billion in net debt and preferred stock	9,300.0
5/9/05	Duke Energy Corp.	Cinergy Corp.	Completed	4/3/06	11	EE	\$9.1 billion equity + \$5.5 billion net debt and pension liabilities	14,600.0
12/20/04	Exelon Corp.	Public Service Enterprise Group	Withdrawn	9/14/06		EE	\$12.3 billion in equity + \$13.4 billion in net debt and pension liabilities	25,700.0
7/25/04	PNM Resources	TNP Enterprises	Completed	6/6/05	12	EE	\$189 million in stock and cash and \$835 million in debt	1,024.0
2/3/04	Ameren Corp	Illinois Power <sup>3</sup>	Completed	10/1/04	8	EE	\$1.9 billion in debt, pref stock, & other liab + \$400 million in cash	2,300.0
11/24/03	Saguaro Utility Group L.P.	UniSource Energy	Withdrawn	12/30/04		PE	\$850 million cash + \$2 billion in debt	2,850.0
11/3/03	Exelon Corp.	Illinois Power	Withdrawn	11/22/03		EE	\$275 million cash + \$1.8 billion in debt + \$150 million promissory note	2,225.0
4/30/02	Aquila Inc	Cogentrix Energy Inc	Withdrawn	8/2/02		EIPP	\$415 million cash + \$1.125 billion in assumed debt	1,540.0
4/29/02	Ameren Corp	CILCORP <sup>4</sup>	Completed	1/31/03	9	EE	\$541 million cash + \$781 in assumed debt + \$41 million in pref stock	1,400.0
10/8/01	Northwest Natural Gas	Portland General	Withdrawn	5/16/02		GE	\$1.55 billion cash + \$250mm in stock	1,800.0
9/20/01	Duke Energy	Westcoast Energy	Completed	3/14/02	6	EG	Equity + cash valued at \$27.90 per Westcoast share	8,500.0
9/10/01	Dominion Resources	Louis Dreyfus Natural Gas	Completed	11/1/01	2	EG	\$890mm cash + \$900mm stock + \$505mm debt	2,295.0
2/20/01	Energy East	RGS Energy	Completed	6/28/02	16	EE	\$1.4 bill. cash & equity + \$1.0 bill. net debt	2,400.0
2/12/01	Peppo	Connectiv	Completed	8/1/02	18	EE	\$2.2 bill cash & equity + \$2.8 bill. net debt	5,000.0
11/9/00	PNM	Western Resources <sup>5</sup>	Withdrawn	1/8/02		EE	Stock transfer	4,442.0
10/2/00	NorthWestern	Montana Power <sup>6</sup>	Completed	2/15/02	16	EE	\$1.1 billion in cash	1,100.0
9/5/00	National Grid Group	Niagara Mohawk	Completed	1/31/02	16	EE	\$19 per share	8,900.0
8/8/00	FirstEnergy	GPU Inc.	Completed	11/7/01	15	EE	\$35.60 per share	12,000.0
7/31/00	FPL Group	Energy	Withdrawn	4/2/01		EE	1/1 - FPL, 0.585/1 - ETR	27,000.0
7/17/00	AES Corporation	IPALCO	Completed	3/27/01	8	IPPE	\$25 per share	3,040.0
6/30/00	NS Power	Bangor Hydro	Completed	10/10/01	16	EE	\$26.50 per share	206.0
5/30/00	WPS Resources	Wisconsin Fuel and Light	Completed	4/2/01	11	EG	1.73 shares of WPSR	5,400.0
2/28/00	PowerGen plc	LG&E	Completed	12/11/00	10	EE	\$24.85 per share	12,000.0
8/8/00	FirstEnergy	GPU Inc.	Completed	11/7/01	15	EE	\$35.60 per share	27,000.0
7/31/00	FPL Group	Energy	Withdrawn	4/2/01		EE	1/1 - FPL, 0.585/1 - ETR	3,040.0
7/17/00	AES Corporation	IPALCO	Completed	3/27/01	8	IPPE	\$25 per share	3,040.0
6/30/00	NS Power	Bangor Hydro	Completed	10/10/01	16	EE	\$26.50 per share	206.0
5/30/00	WPS Resources	Wisconsin Fuel and Light	Completed	4/2/01	11	EG	1.73 shares of WPSR	5,400.0
2/28/00	PowerGen plc	LG&E	Completed	12/11/00	10	EE	\$24.85 per share	5,400.0

<sup>1</sup> TXU (now Energy Future Holdings Corp.) was acquired by the Texas Energy Future Holdings Limited Partnership (TEF) on 10/10/2007. TEF was formed by a group of investors led by Kohlberg Kravis Roberts and Texas Pacific Group to facilitate the merger.

<sup>2</sup> Aquila was divided with Black Hills Corp. acquiring the electric utility in Colorado and NG utilities in CO, IA, KS, and NE. Great Plains Energy Inc. acquired the MI electric utility, stock, and other corporate assets.

<sup>3</sup> Ameren purchased Illinois Power from Dynegy Corporation. Dynegy Corp acquired Illinois Power in February 2000.

<sup>4</sup> Ameren purchased CILCORP from AES Corporation. AES Corp acquired CILCORP in October 1999.

<sup>5</sup> PNM purchased Western Resources' electric operations including generation, transmission, and distribution.

<sup>6</sup> NorthWestern Corporation purchased Montana Power's electric and natural gas transmission and distribution assets.

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).

C = Completed  
W = Withdrawn  
PN = Pending  
E = Electric  
G = Gas  
O = Oil  
IPP = Independent Power Producer  
P = Privatized

Partners would make a \$1 billion equity investment at \$39.08 per share to support FirstEnergy's smart grid and clean energy transition initiatives. With these simultaneous announcements, FE also announced a \$2.2 billion increase to its capital investment plan through 2025, which now totals \$17 billion from 2021 to 2025 including \$10 billion in sustainable energy investments.

FirstEnergy said the two transactions will enhance its credit profile, fund strategic capital expenditures and address its equity capital needs. FirstEnergy said the initiatives will also support a more resilient grid and drive its transition to a low-carbon future; the company hopes to achieve carbon neutrality by 2050, with an interim 30% reduction in greenhouse gas emissions under the company's direct control by 2030, from a 2019 base. Brookfield said FET is well-positioned to capture significant capital investment opportunities driven by grid modernization, decarbonization and general electrification of the economy. FET owns and operates one of the largest transmission systems in PJM.

With the deal announcements, FE affirmed a 6-8% long-term growth rate along with the expanded investment plan. FirstEnergy's 10 regulated distribution companies form one of the nation's largest investor-owned electric systems, serving six million customers in the Midwest and Mid-Atlantic regions from the Ohio-Indiana border to the New Jersey shore,

### *New Mexico Regulators Block AVANGRID/PNM Merger*

One of the 2020 announcements on EEI's list of whole company deals was AVANGRID's offer to acquire PNM Resources. AVANGRID said the transaction would support its U.S. growth strategy focused on regulated businesses and renewables in states with legal and regulatory stability and predictability. PNM, which operates regulated utilities in Texas and New Mexico, called the move a strategic fit that will 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. News reports cited concern about reliability, potential rate increases and slower development of renewable resources by PNM as reasons for the decision. Reports also noted nearly all intervening customers and clean energy advocates supported the merger, and that the PRC staff had said they would not oppose it. AVANGRID expressed disappointment with the decision but said it will evaluate next steps and hoped the merger could eventually succeed.

As 2022 began, most utilities seemed focused on organic growth opportunities and M&A was not high on most lists of shareholder value strategies. Yet industry analysts noted potential drivers that may prompt future deals. Load growth is uneven across the nation and smaller

utilities operating in slow-growth territories may use M&A for potential cost savings and synergies with stronger parents; that may be particularly true for those facing heavy capex needs to fund clean energy development. Acquirers may seek utilities with fossil generation and constructive state regulators who would support greening the portfolio with regulated rate base. Vast global pools of private capital, whether infrastructure funds or sovereign wealth funds, will continue to view steady returns from utility infrastructure as attractive in a world with pervasive low bond yields. Productive fossil generation assets, whether coal or gas, do not present to private buyers the same strategic ESG and volatile cash flow concerns that public companies face. It is not possible to predict specifics, but it seems likely sporadic M&A deal flow will continue.

## Construction

The electric utility industry brought 33,391 MW of new capacity online in 2021, 7% less than 2020's 35,714 MW but 21% more than the 27,505 MW of 2019. The decline from 2020 to 2021 was due to reductions in both new natural gas and wind capacity. New natural gas capacity declined from 7,892 MW in 2020 to 6,448 MW in 2021, extending a trend of annual declines that began with 2018. Supply chain issues plagued wind and solar projects in 2021, causing many to be delayed. As a result, new wind capacity brought online decreased from

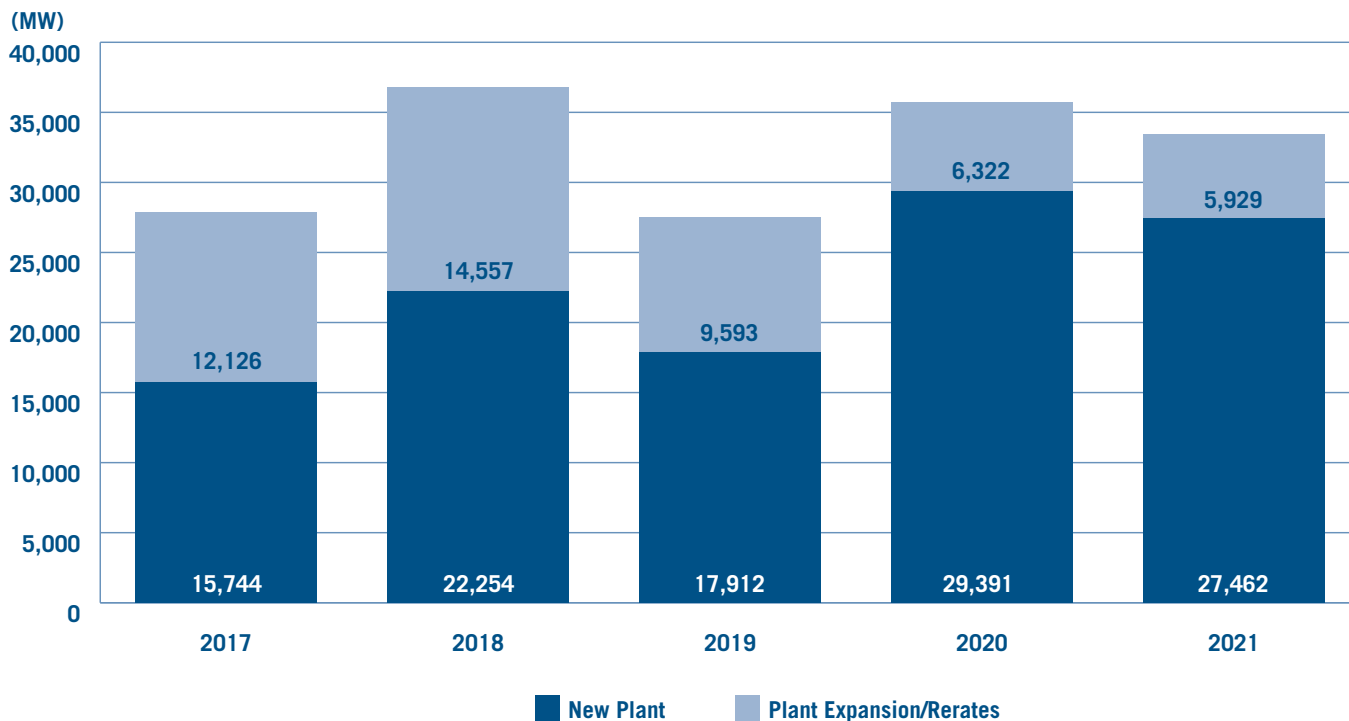
16,359 MW in 2020 to 11,957 MW in 2021, marking wind's first annual decline since 2017. Despite supply chain challenges, solar capacity installation increased 35%, from 10,984 MW in 2020 to 14,845 MW in 2021.

New plants comprised 82% of 2021's total new capacity. Expansions and rerates accounted for the remaining 18%. The ratio of new plants to expansions was essentially unchanged from 2020.

Renewables continued to lead capacity additions, accounting for 80% of new capacity in 2021 versus 77% in 2020 even though sup-

ply chain challenges pushed some of 2021's scheduled projects into 2022. Supported by continually declining costs, wind and solar have powered more than half of new capacity each year since 2019. Solar led new capacity additions in 2021, accounting for 14,845 MW or 44% of the total across all fuels. Wind was second, with 11,957 MW or 36%. Investor-owned utilities that brought the most new renewable capacity online were NextEra Energy (2,126 MW of wind, 1,606 MW of solar), Duke Energy (534 MW of wind, 483 MW of solar), American Electric Power (488 MW of wind, 127 MW of solar), Southern Company (418

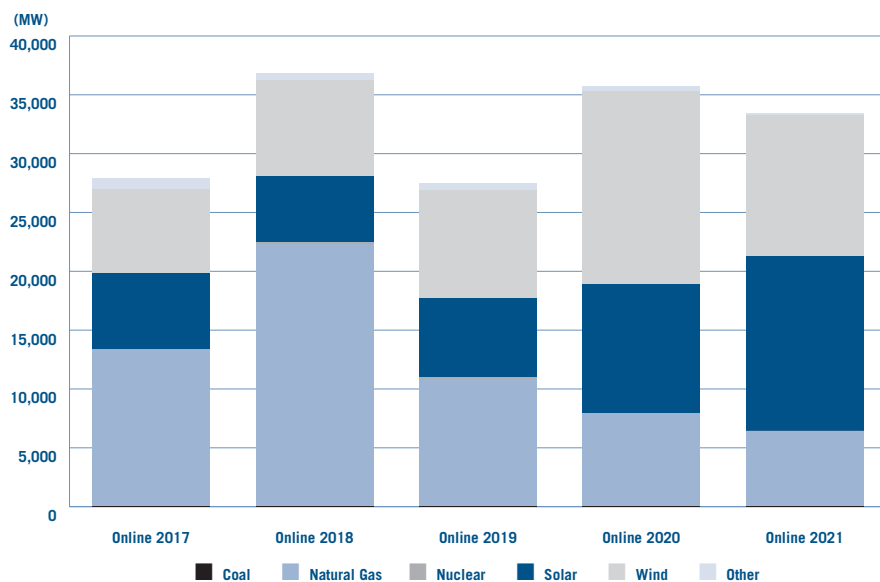
## New Capacity Online 2017–2021



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

Source: Velocity Suite, Hitachi Energy, March 2022

### New Capacity Online by Fuel Type 2017–2021



Fuel Type	2017	2018	2019	2020	2021
Coal	45	10	62	30	11
Natural Gas	13,194	22,282	10,773	7,892	6,448
Nuclear	102	192	175	20	0
Solar	6,467	5,570	6,683	10,984	14,845
Wind	7,190	8,187	9,240	16,359	11,957
Other	872	569	572	428	130
<b>Total</b>	<b>27,871</b>	<b>36,811</b>	<b>27,505</b>	<b>35,714</b>	<b>33,391</b>

Note: Includes all new capacity placed on the grid by 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, wood, and energy storage. Totals may reflect rounding.

Source: Velocity Suite, Hitachi Energy, March 2022

MW of wind, 139 MW of solar), Ameren (496 MW of wind), DTE Energy (459 MW of wind), ConEd (437 MW of solar), AES (376 MW of solar), NiSource (302 MW of wind), and Xcel Energy (200 MW of wind).

Natural gas accounted for nearly all the remaining new capacity added in 2021, totaling 6,448 MW or 19% of the total. Combined cycle accounted for 44% compared with 76% in 2020. Combustion turbine technology powered 56%. New plants represented 62% of total new gas capacity, expansions accounted

for 34% and the remaining 4% were rerates. NextEra Energy led natural gas additions with 950 MW in gas plant expansions (940 MW gas turbine, 10 MW combined cycle), followed by TECO Energy, whose gas turbine expansions totaled 796 MW. Third was Otter Tail Power with 349 MW of new build gas turbine capacity.

### New Capacity Online by Region

The Reliability First Corporation (RFC) region had the largest year-to-year percentage increase in new capacity, 120% higher than in 2020. Increases in natural gas (1,008 MW

to 2,775 MW), solar (645 MW to 1,139 MW), and wind capacity (990 MW to 1,885 MW) all contributed to the gain. The Electric Reliability Council of Texas (ERCOT) had the second-largest year-to-year percentage growth, at 43%, with capacity gains for both gas (290 MW to 1,208 MW) and solar (2,102 MW to 4,130 MW); wind decreased from 3,481 MW in 2020 to 3,054 MW in 2021. The Alaska Systems Coordinating Council (ASCC) was the only other region with an increase in new capacity compared to 2020, up 21% from 6.7 MW to 8.1 MW. The Hawaiian Coordinating Council (HCC) saw the largest percentage decrease in new capacity added, down 71% due to a decline in new solar additions (17 MW compared to 32 MW in 2020) and no new wind additions. The Midwest Reliability Organization (MRO) had the largest absolute decrease in new capacity added, from 5,039 MW in 2020 to 2,693 MW in 2021, producing a drop of 47%. The decline resulted from reduced additions of gas (700 MW to 505 MW) and wind (3,995 MW to 1,761 MW); these were partly offset by an increase in solar installations (298 MW to 408 MW). New capacity additions in the Western Electricity Coordinating Council (WECC) region also declined more than 2,000 MW, dropping 28% from 8,111 MW in 2020 to 5,831 in 2021. That decline was led by lower gas (1,592 MW to 63 MW) and wind (3,643 MW to 1,917 MW) and was partially offset by an increase in solar capacity (2,680 MW to 3,799 MW).



### New Capacity Online by Region (MW) 2017–2021

Region	Online 2017	Online 2018	Online 2019	Online 2020	Online 2021
ASCC	116	1	33	7	8
HCC	61	135	187	60	17
MRO	1,976	3,298	3,297	5,039	2,693
NPCC	682	3,294	2,156	1,647	1,096
RFC	5,484	12,023	4,026	2,656	5,843
SERC	6,507	9,582	7,282	8,938	7,146
SPP	3,233	1,906	1,118	3,370	2,354
TRE	6,537	2,950	5,277	5,888	8,402
WECC	3,274	3,622	4,130	8,111	5,831
<b>Total</b>	<b>27,871</b>	<b>36,811</b>	<b>27,505</b>	<b>35,714</b>	<b>33,391</b>

Note: Data includes new plants and expansions of existing plants, including nuclear uprates. Totals may reflect rounding.

Source: Velocity Suite, Hitachi Energy, March 2022

### Announced New Capacity by Region and Fuel Type in 2021 (MW)

Fuel Type	Electric Reliability Council of Texas	Hawaiian Coordinating Council	Midwest Reliability Organization	Northeast Power Coordinating Council	Reliability First	SERC Reliability Corp	Southeast Power Pool Inc.	Western Electricity Coordinating Council	Total
Coal	—	—	—	—	—	—	—	—	—
Natural Gas	8	—	635	17	913	1,296	—	190	3,060
Nuclear	—	—	—	22	—	—	—	—	22
Wind	665	—	1,652	1,230	2,100	994	870	1,158	8,668
Solar	1,013	13	1,041	7,516	8,367	8,109	19	9,029	35,107
Hydro	—	—	—	—	—	216	34	3,379	3,629
Other	—	—	2	9	—	27	—	509	546
<b>Total</b>	<b>1,686</b>	<b>13</b>	<b>3,330</b>	<b>8,793</b>	<b>11,381</b>	<b>10,642</b>	<b>923</b>	<b>14,265</b>	<b>51,032</b>

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

Source: Velocity Suite, Hitachi Energy, EEI Finance Department, March 2022

#### Announcements by Region and Fuel Type

New capacity announced in 2021 totaled 51,032 MW, a decrease of 23% from 66,386 MW in 2020. Renewable capacity accounts for 93% of 2021's total, with solar at 69%, wind at 17%, and hydro at 7%. The remaining 7% is almost all

natural gas. As in 2020, no new coal capacity was announced in 2021.

Lower wind and solar announcements led the overall decline in new capacity announcements. New wind capacity announcements declined 34%, from 13,073 MW in 2020 to 8,668 MW in 2021. New solar capacity announcements also de-

creased, falling 28% from 48,449 MW in 2020 to 35,107 MW in 2021. The supply chain challenges that impacted renewable buildouts may also have contributed to lower renewable capacity announcements in 2021 compared to 2020.

Wind, solar, and hydro accounted for nearly 100% of new capacity



## Stage of Announced Capacity Additions (MW) 2022–2026

Fuel	Proposed	Feasibility	Application		Site Prep	Under		Total
			Pending	Permitted		Construction	Testing	
Coal	95	—	—	—	—	—	—	95
Natural Gas	15,993	876	5,245	11,917	—	11,828	2,410	48,269
Nuclear	4,753	1,600	—	219	—	—	2,200	8,772
Wind	58,915	2,412	13,146	9,051	352	12,026	1,101	97,003
Solar	102,063	200	31,106	34,825	545	20,081	2,049	190,869
Other	2,321	8,777	719	1,851	6,511	—	5	20,183
<b>Total</b>	<b>184,140</b>	<b>13,865</b>	<b>50,215</b>	<b>57,863</b>	<b>7,408</b>	<b>43,935</b>	<b>7,765</b>	<b>365,191</b>

Notes: Other includes biomass, diesel/fuel oil, fuel cells, geothermal, landfill gas, pet coke, waste heat, water, wood, and energy storage. 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 2026.

Source: Velocity Suite, Hitachi Energy, March 2022

announcements in the Electricity Reliability Council of Texas (ERCOT), Hawaiian Coordinating Council (HCC), Northeast Power Coordinating Council (NPCC), Southwest Power Pool (SPP), and Western Electricity Coordinating Council (WECC) regions. New natural gas capacity announcements decreased for the second year in a row, falling 26% from 4,144 MW in 2020 to 3,060 MW in 2021.

The Western Electricity Coordinating Council (WECC) region saw the most announced new capacity for the second year in a row, at 14,265 MW; 95% of that is renewable, with 63% solar, 24% hydro, and 8% wind. The Reliability First Corp (RFC) region had the second-largest amount of new capacity announced in 2021, at 11,381 MW; 92% is renewable, with 74% solar and 18% wind.

### Projected Capacity Additions

As of March 2022, the new capacity expected to come online from 2022 through 2026 was 365,191

MW, a 10% increase over the projection one year ago for the 2021 through 2025 five-year period. Renewable capacity accounted for most of the projected new capacity, with solar representing 52%, wind accounting for 27%, natural gas at 13% and nuclear at 2%. Of the 365,191 MW total, 50% was in the proposal stage as of March 2022, including 53% of the projected solar and 61% of the projected wind. Only 12% of the total was under construction.

### Retirements

As of March 2022, 104,044 MW of capacity was scheduled to be retired from 2022 through 2026. Coal continues to lead retirements, accounting for 41% of the projected total. Coal retirements are expected to reach a new peak in 2022, with 17,597 MW expected to shut down. Natural gas ranked second and fuel oil third in terms of projected retirements, at 38% and 17%, respectively.

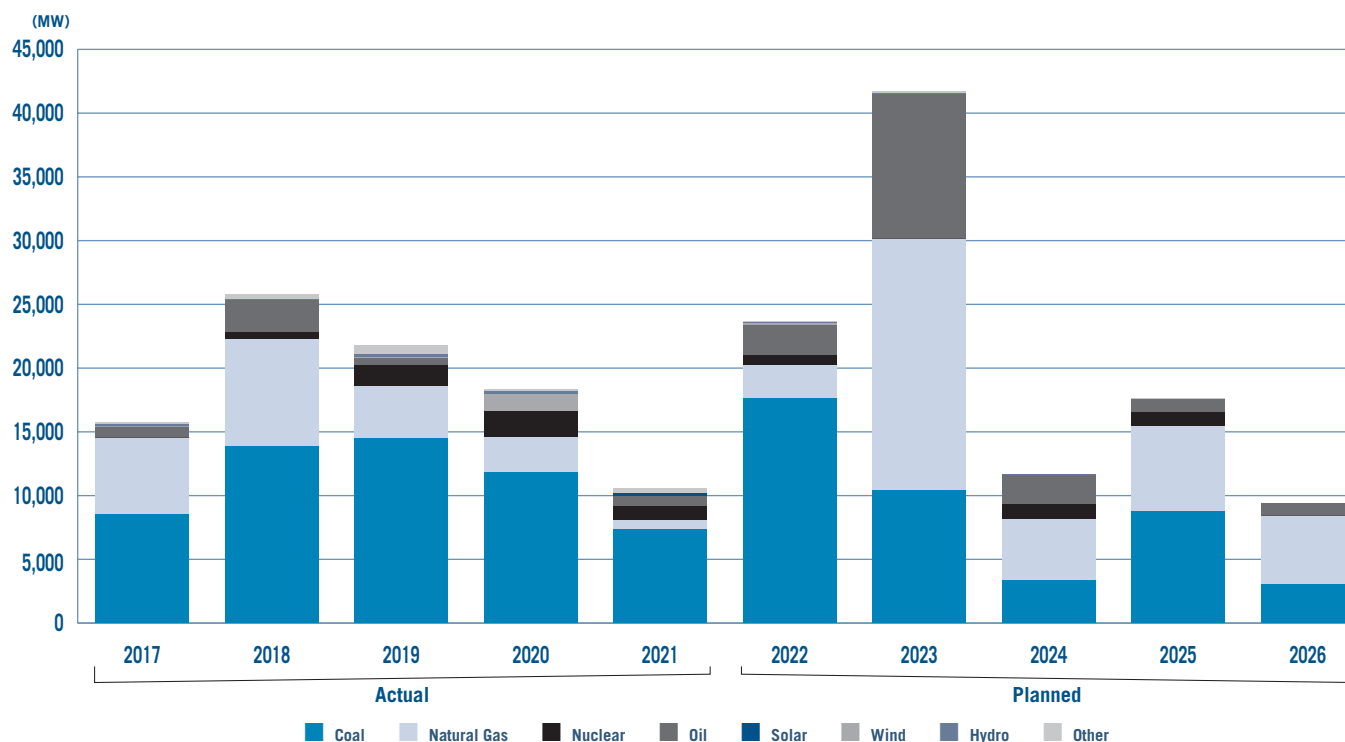
Natural gas retirements are expected to peak in 2023 at 19,761 MW;

this would be the highest actual or projected annual retirement total of any fuel from 2017 through 2026. Wind and solar retirements remain minimal, together accounting for only a combined 0.3% of total retirements from 2022 through 2026. 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). Indian Point Unit 3 (1,074 MW) was the only nuclear facility to retire in 2021 and accounted for all nuclear capacity retired that year. An additional 3,146 MW of nuclear capacity is expected to retire over the next four years due to two anticipated shutdowns: the 823 MW Palisades Power Plant in Michigan in 2022 followed by the 2,323 MW Diablo Canyon Power Plant (CA) in stages between 2024 and 2025.

### Energy Storage

Energy storage continues to be a fast-growing area for the industry. At year-end 2021, electric companies owned 19,135 MW of storage

## Actual and Planned Retirements 2017–2026



	Actual					Planned					Total
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
<b>Coal</b>	8,529	13,877	14,460	11,813	7,342	17,597	10,385	3,311	8,740	3,018	43,051
<b>Natural Gas</b>	6,012	8,390	4,108	2,760	747	2,617	19,761	4,852	6,673	5,384	39,288
<b>Nuclear</b>	—	550	1,641	2,031	1,074	823	—	1,159	1,164	—	3,146
<b>Oil</b>	848	2,482	543	1,336	765	2,306	11,333	2,292	947	1,004	17,882
<b>Solar</b>	—	3	8	—	265	—	—	—	—	1	1
<b>Wind</b>	60	63	135	224	—	203	—	—	1	—	205
<b>Hydro</b>	126	55	161	9	5	6	48	6	14	—	74
<b>Other</b>	207	384	733	180	367	106	200	—	91	—	397
<b>Total</b>	<b>15,781</b>	<b>25,803</b>	<b>21,789</b>	<b>18,353</b>	<b>10,565</b>	<b>23,658</b>	<b>41,727</b>	<b>11,620</b>	<b>17,631</b>	<b>9,408</b>	<b>104,044</b>

Notes: Other includes biomass, diesel/fuel oil, fuel cells, geothermal, landfill gas, pet coke, waste heat, wood, and energy storage. Totals may reflect rounding. 2017-2021 is actual plants retired. 2022-2026 is projected based on announced or expected retirements.  
Source: Velocity Suite, Hitachi Energy; EEI Finance Department, March 2022

capacity, or about 70% of all energy storage in the United States. Since 2015, total installed energy storage capacity nationwide has increased 19%, from about 23 GW to just over 27 GW in 2021. Pumped hydro accounts for 81% of the total, at 21.9 GW of capacity. Battery storage is the fastest-growing storage technology in terms of capacity, with total deployed capacity up approximately 1,400% from 2015 to 2021.

Between 2017 and 2021, battery energy storage grew from 2.75% of total energy storage capacity to 17.4%.

The fast-paced growth is likely to continue; 58,756 MW of storage capacity is expected to come online from 2022 through 2026, increasing total energy storage capacity by 200% by year-end 2026. Front-of-the-meter, grid-scale energy storage will continue to dominate energy

storage deployments, accounting for 82% of projected deployment from 2022 through 2026. Battery storage is expected to continue to account for most new energy storage deployments, representing 55,881 MW, or 95%, of the projected new energy storage from 2022 through 2026 and becoming the dominant energy storage technology by 2024. Pumped hydro is expected to account for the remainder, with 1,520

MW provided by four new pumped hydro facilities — the Gordon Butte Pumped Storage Project in Montana (400 MW), the Old Forge Bore Hole Reclamation Pumped Storage Project in Pennsylvania (184 MW), the Cat Creek Energy & Water Project in Idaho (720 MW), and the Lewis Ridge Pumped Storage Project in Kentucky (216 MW). While data sources indicate these projects may become operational by 2026, they are in early stages of development and only Gordon Butte has been permitted. Rerates and expansions at existing facilities accounted for 1,355 MW of the projected new pumped storage capacity.

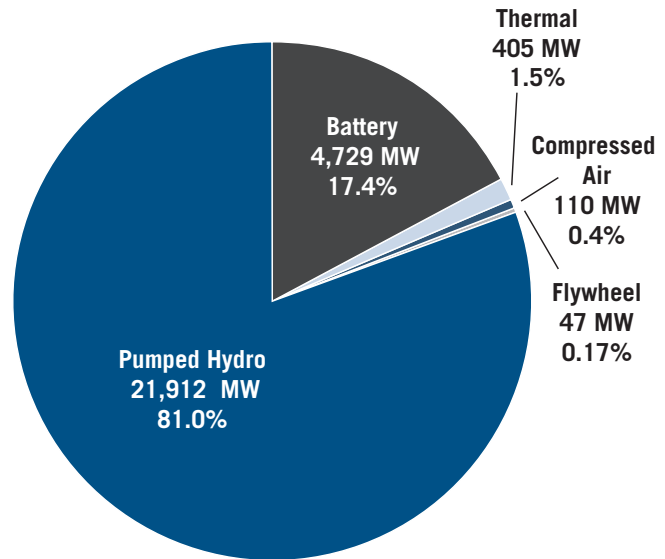
**Transmission and Distribution**

According to EEI’s Property & Plant Capital Investment Survey, investor-owned electric utilities and stand-alone transmission companies invested \$25.0 billion in transmission assets in 2021, a 5.5% increase over the \$23.7 billion invested in 2020.

EEI member companies are spending a significant and growing amount of resources on adaptation, hardening, and resilience (AHR) initiatives. In recent years, it is estimated that EEI’s member companies have invested around \$25 billion per year in AHR for transmission and distribution infrastructure. Specific examples of AHR investments in the electric grid include undergrounding power lines, installing cement poles, and elevating or relocating transformers. AHR is increasingly becoming an important way that electric companies fulfill their mission of supplying customers with reliable, affordable and increasingly sustain-

**Total Installed Energy Storage Capacity by Technology - 27,203 MW**

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

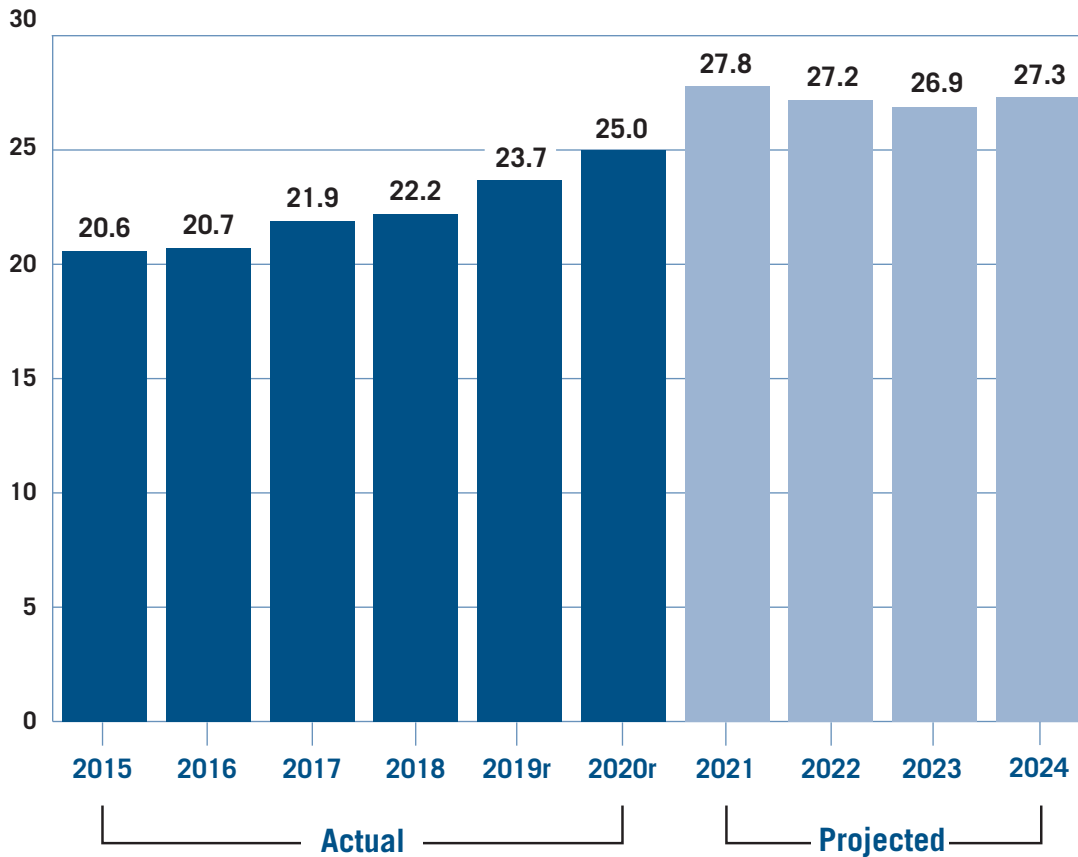


Source: Energy Information Administration Form 860.

able energy. Electric companies also are developing weather predictive services, risk modeling, fire spread modeling, deployment of sensors and high-definition cameras, communication networks, satellite data damage assessment, and other real or near real time situational awareness instruments that can help them better predict and prepare for extreme weather events and wildfires.

## Actual & Projected Transmission Investment\* 2015–2024

(\$ Billions)



r = revised

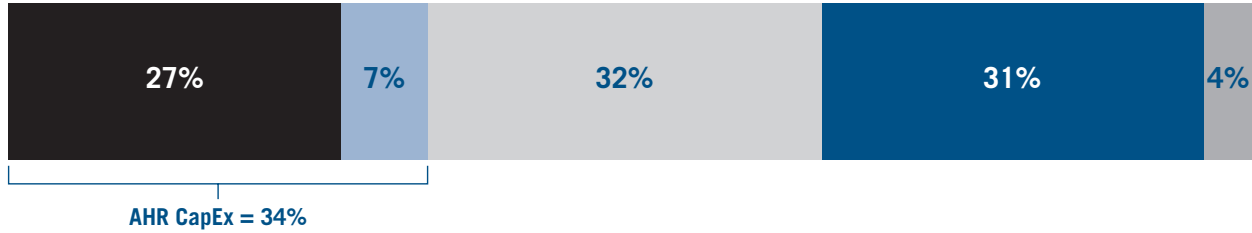
\*Investment of investor-owned electric companies and stand-alone transmission companies. Actual Investment figures were obtained from the EEI Property & Plant Capital Investment Survey supplemented with FERC Form 1 data. Projected investment figures were obtained from the EEI Transmission Capital Budget & Forecast Survey supplemented with data obtained from company 10-K reports and investor presentations.

Source: EEI Business Analytics.

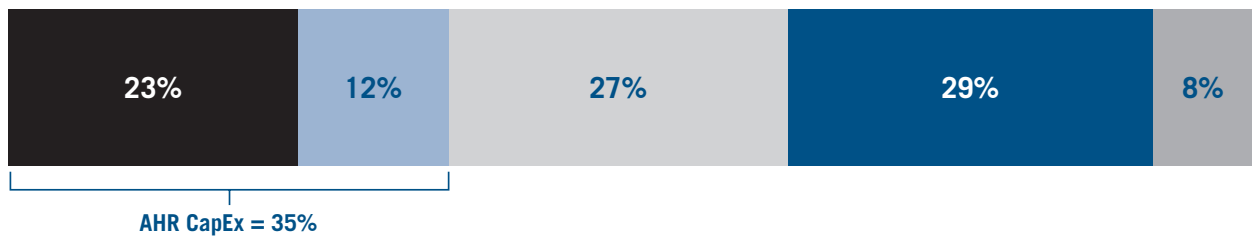
Updated December 2021.

# Adaptation, Hardening, and Resilience (AHR) as Drivers of T&D Investment Based on 2021 Survey Results

## Distribution



## Transmission



- AHR: Hardening & Resilience**
- AHR: Advanced Technology**
- Expansion/Growth**
- Replacement/Maintenance**
- Other**

Source: EEI Financial Analysis and Business Analytics; EEI member company survey, regulatory filings, and investor presentations; and S&P Global Market Intelligence.

## Fuels Analysis

### Net Generation and Electricity Sales

Electric power industry net generation in 2021 amounted to 4,164,566 gigawatt hours (GWh), an increase of 2.9% versus 2020. Nationwide retail electricity sales increased 2.1% in 2021, showing gains across 46 states and the District of Columbia, after declining 3.9% in 2020 due to the impact of the COVID-19 pandemic. The states with the largest year-to-year percentage increases in retail electricity sales in 2021 were Arkansas (+6.2%), Virginia (+5.7%), Tennessee (+5.5%), and North Dakota (+5.3%). California (-1.7%), Arizona (-1.1%), Florida (-0.6%), and Texas (-0.1%) were the few states with sales declines.

Total sales to commercial customers increased 2.9%, substantially above the 2.1% overall nationwide sales gain, indicating that busi-

nesses were reopening and resuming business-as-usual following 2020's pandemic-related shutdowns. Every state experienced an increase in commercial sales in 2021, with Rhode Island (+0.5%) showing the smallest percentage increase and Virginia (+10.1%) producing the largest.

Total electricity sales to industrial customers also increased 2.9% compared to 2020, showing year-to-year gains in 40 states and the District of Columbia. As with commercial sales, this was likely due to the resumption and expansion of industrial activity after states relaxed their COVID-19 protocols. The District of Columbia had the highest percentage increase, at 29%, followed by North Dakota (+10.7%) and Arkansas (+9.6%). Ohio showed the highest increase in absolute terms, at 3,298 GWh, representing a 7% increase from 2020. The states experiencing industrial sales declines were Arizona, California, Connecticut, Maine, Montana, New Jersey, Oregon,

Texas, Utah, and Washington, where decreases ranged from 0.3% (Montana) to 5.7% (Maine).

Electricity sales to residential customers increased 0.8%, with Tennessee (+5.1%) and Arkansas (+5%) experiencing the highest percentage growth in 2021. Tennessee also experienced the highest growth in absolute terms, at 2,102 GWh, followed by North Carolina, at 2,079 GWh. 40 states and the District of Columbia saw residential electricity sales increase in 2021. Whereas California (-4.6%) and Arizona (-3.9%) had the largest declines in residential electricity sales.

The variations in year-to-year residential sales trend across states may be due, in part, to the impact of differing COVID-19 protocols and mandates. States with residential electricity sales growth may have seen an increase in the number of people working from home in 2021 compared to 2020. Conversely, resi-

## Fuel Sources for Net Electric Generation

### U.S. ELECTRIC UTILITY AND NON-UTILITY

	2020	2021
<b>Coal</b>	19.1%	21.6%
<b>Gas</b>	40.1%	37.8%
<b>Nuclear</b>	19.5%	18.7%
<b>Hydro</b>	7.0%	6.2%
<b>Renewables</b>	13.3%	14.8%
<b>Biomass</b>	1.4%	1.3%
<b>Geothermal</b>	0.4%	0.4%
<b>Solar</b>	3.2%	3.9%
<b>Wind</b>	8.3%	9.1%
<b>Other fuels</b>	0.9%	0.9%
<b>Total</b>	100%	100%

Note: Totals may not equal 100% due to rounding.

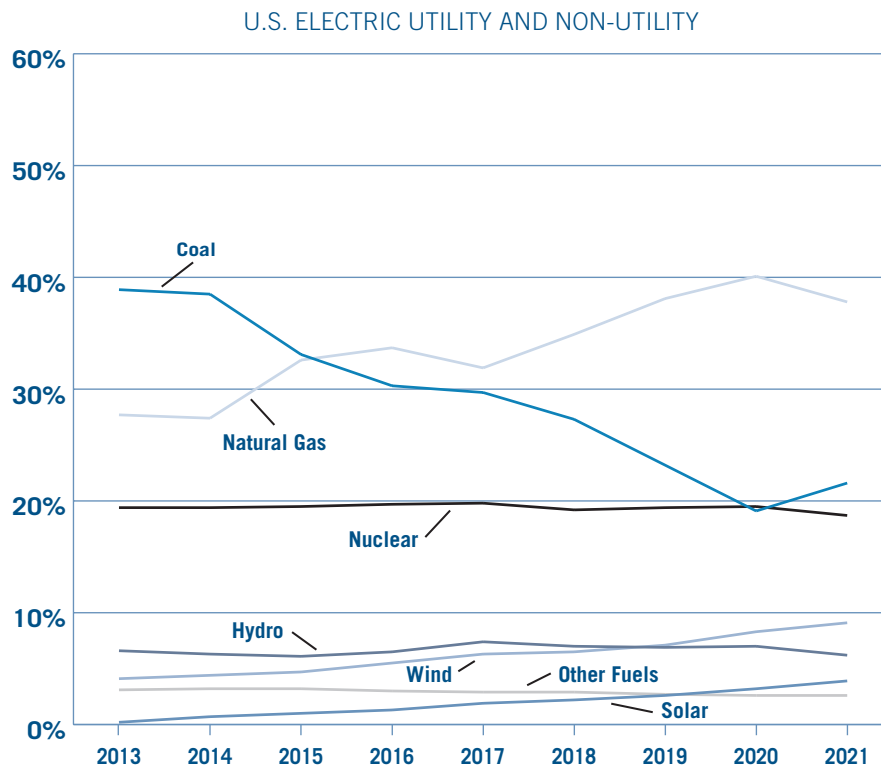
**U.S. Electric Utility:** Owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public. This includes investor-owned utilities, public power, and cooperatives.

**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: U.S. Department of Energy, Energy Information Administration (EIA). March 2022.



## Fuel Sources for Net Electric Generation (in Percent of total electric generation) 2013–2021



**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.

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Source: U.S. Department of Energy, Energy Information Administration (EIA), March 2022.

dential sales declines may indicate that fewer people worked from home in those states in 2021 than in 2020.

### Coal

Generation from coal-fired plants increased for the first time since 2014, rising 16.2% above its 2020 total due to stable coal fuel prices and higher natural gas fuel prices. Coal accounted for 21.6% of total electricity generation nationwide in 2021. Coal’s 898,679 GWh of generation placed

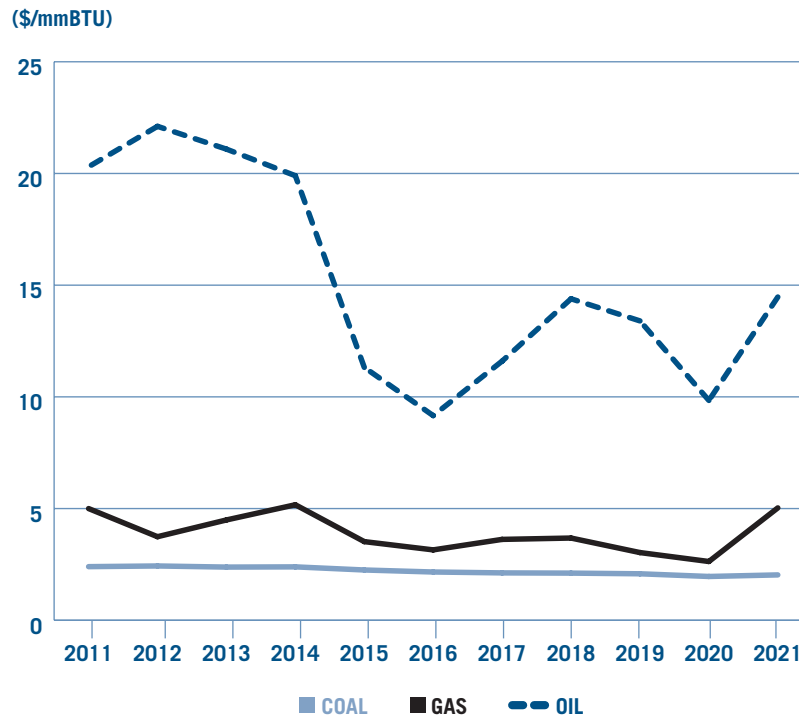
it second, behind natural gas, among the fuels that contributed to total nationwide generation. The coal fleet’s capacity factor increased for the first time since 2018, from 41% in 2020 to 49% in 2021.

The price of coal combined with operations and maintenance costs for coal plants decreased 1.4%, from \$32.26/MWh in 2020 to \$31.81/MWh in 2021. A 3.6% increase in the average price of coal, from

\$1.96 per million British Thermal Units (MMBtu) in 2020 to \$2.03 MMBtu in 2021, was offset by a 14.4% decline in average operations and maintenance expenses, which dropped from \$10.73/MWh in 2020 to \$9.19/MWh in 2021. The largely unchanged overall generation cost for coal made it the second-most expensive fuel for electricity generation in 2021 as higher natural gas fuel prices made natural gas generation more costly.

## Average Cost of Fossil Fuels 2011–2021 in \$/MMBtu

U.S. ELECTRIC UTILITIES



**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.

Source: U.S. Department of Energy, Energy Information Administration (EIA), March 2022.

The rise in coal generation in 2021 was mainly due to an increased average capacity factor, instead of new coal capacity or lower-than-expected coal capacity retirements. From 2017 through 2021, only 158 MW of new coal capacity came on-line compared to 56,021 MW of coal retirements during the same period. Another 43,051 MW of coal capacity is projected to retire from 2022 through 2026.

### Natural Gas

Natural gas accounted for 38% of 2021's total generation from utility-scale facilities, more than any other single fuel type. That share, however, was down two percentage points from its 2020 level due to higher natural gas fuel prices in 2021. The average cost of natural gas for electricity generation rose dramatically, increasing 91% from \$2.63/MMBtu in 2020 to \$5.03/MMBtu in 2021, its highest level since 2014. As a

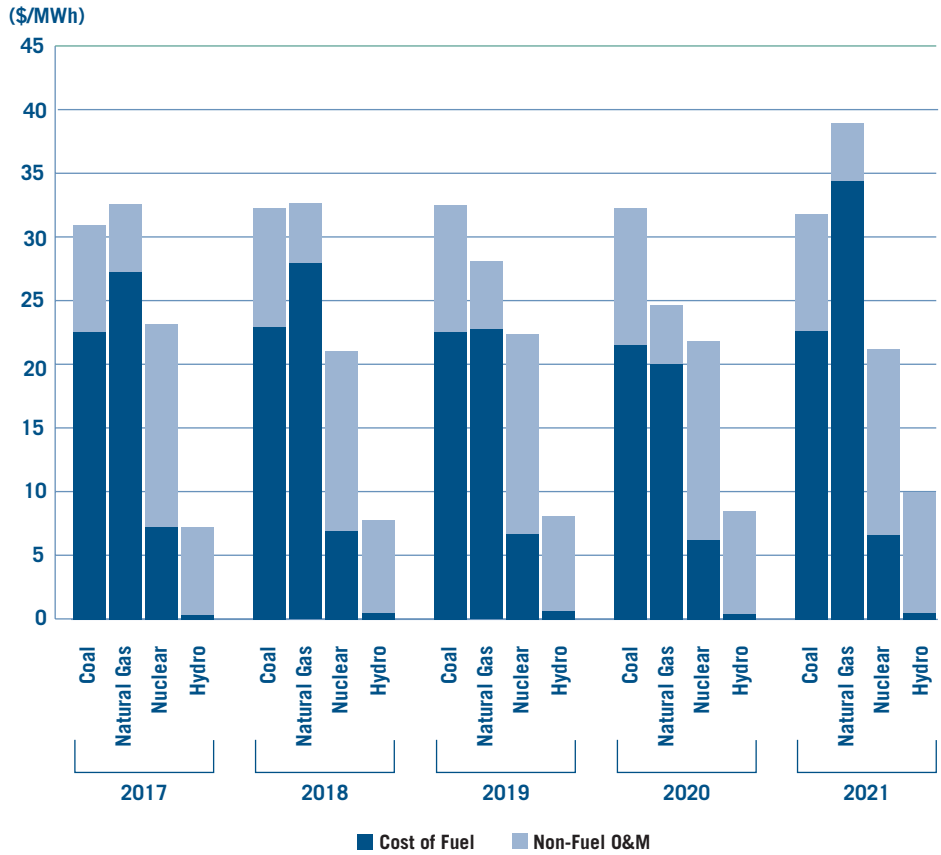
result, the average cost to produce electricity from natural gas rose 58% in 2021 versus 2020 and was 22% higher than the average cost to produce electricity from coal.

### Renewables

The electric industry continues to add record amounts of renewable capacity. Electric generation from carbon-free sources increased to 1,653,563 MWh in 2021, representing 39.7% of the electric power in-

## Average Cost to Produce Electricity 2017–2021

U.S. ELECTRIC UTILITY AND NON-UTILITY



**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.

\*2021 results are preliminary. All years based on modeled data from Velocity Suite, Hitachi Energy; March 2022.

dustry’s total generation. Generation from all renewable sources was 875,411 MWh, or 21% of the total in 2021 compared with 824,526 MWh, or 20.4%, in 2020.

Conventional hydroelectric generation fell to 260,225 MWh, an 8.8% decline from 2020’s 285,274 MWh. It accounted for 6.2% of electricity generation in 2021, down from 7%

in 2020, due to a historic drought in California and reduced hydroelectric output in the Pacific Northwest. Generation from wind power increased 12.4%, from 337,938 MWh in 2020 to 379,767 MWh in 2021 and accounted for 9.1% of 2021’s total electricity generation. Solar generation increased 25.2%, from 130,721 MWh in 2020 to 163,793 MWh in 2021, reaching 3.9% of

total electricity generation. Utility-scale solar accounted for 114,678 MWh, or 70%, of solar generation, an increase from 68% in 2020.

### Nuclear

Nuclear generation decreased 1.5% in 2021 and accounted for 18.7% of total electric power generation, down from 19.5% in 2020. The decline was due to reduced

capacity resulting from nuclear plant retirements – 5,298 MW of nuclear capacity was retired from 2017 through 2021. Another 3,146 MW is projected to retire over the next five years through closure of the Diablo Canyon power plant in California and the Palisades power plant in Michigan. Nuclear power plants had an average capacity factor of 92.7% in 2021, compared to average capacity factors of 49% for coal and 36% for natural gas.

Nuclear fuel costs increased 6%, from \$6.26/MWh in 2020 to \$6.64/MWh in 2021. However, non-fuel operations and maintenance costs decreased 6.2%, from \$15.56/MWh in 2020 to \$14.60/MWh in 2021. As a result, the total cost to produce electricity from nuclear power declined 2.6%.

A total of 15,962 MW of nuclear capacity is expected to come online from 2022 through 2026. Including reductions due to planned retirements, nuclear capacity is projected to increase 12,816 MW during this period. Five existing plants have planned expansions — 2,200 MW each at Vogtle (GA) and Harris (NC), 1,700 MW at Comanche Peak (TX), 1,520 MW at North Anna (VA), and 1,213 MW at Bellefonte (AL). An additional five new or restarted plants, including the proposed 3,000 MW Blue Castle Nuclear (UT), 1,650 MW Southern Ohio Clean Energy Park, and 1,600 MW Colorado Energy Park, are also expected to contribute to new nuclear capacity additions.

Small modular nuclear reactors (SMR) will also begin to contrib-

ute to nuclear capacity increases. The Idaho National Laboratory 300 MW Next Generation Nuclear plant is expected to restart in 2022 and the 540 MW NuScale Small Nuclear Modular Project (ID) is expected to come online in 2024. In addition, the Tennessee Valley Authority has proposed to build an 800 MW SMR project at its Clinch River site with an operational date of 2032.

## States with Renewable Energy, Clean Energy and Greenhouse Gas Reduction Goals and Targets

State	State- and Economy-wide Greenhouse Gas Reduction Targets	Clean Energy Target	RPS Target
Arizona			15% by 2025, 4.5% distributed generation
California	40% below 1990 levels by 2030. Carbon neutrality by 2045. 80% below 1990 levels by 2050.	100% of electric retail sales from renewable energy and zero-carbon resources by 2045	44% by 2024, 52% by 2027, 60% by 2030
Colorado	26% below 1990 levels by 2025, 50% by 2030, 90% by 2050	By 2030, reduce emissions from electricity generation 80% from 2005 levels. 100% carbon-free electricity generation by 2050.	30% by 2020, 3% of electric retail sales from distributed generation, including 1.5% customer sited, by 2020. 100% by 2050. Energy storage charged solely by renewable resources is a qualified renewable energy source.
Connecticut	45% below 2001 levels by 2030, 80% by 2050		28% by 2022, increasing 2% annually to 44% by 2030, plus 4% energy efficiency
Delaware	30% below 2008 levels by 2030		40% by 2035, 10% solar
District of Columbia	50% below 2006 levels by 2032, 80% reduction and net-zero emissions by 2050	100% of electric retail sales from renewable energy by 2032	32.5% by 2022 plus 2.175% local solar, 51.25% by 2025 plus 2.85% local solar, 82.5% by 2030 plus 4.5% local solar, 95% by 2032 plus 5% local solar
Hawaii	Net-zero emissions by 2050	100% of electric retail sales from renewable energy by 2045	40% by 2030, 70% by 2040, 100% by 2045
Illinois		By 2050, procure 100% of energy from clean energy sources, which are defined as sources that are at least 90% carbon-free. Coal-fired power plants must reduce emissions by 45% by 2035 and by 100% by 2045.	25% by 2025, 40% by 2030, 50% by 2040
Indiana			10% by 2025 (voluntary goal). Underground pumped hydro storage projects may be used to meet this goal.
Iowa			105 MW, 1 GW wind goal by 2010
Kansas			20% by 2020 (voluntary goal)
Louisiana	26-28% below 2005 level, 40-50% by 2030, Net-zero emissions by 2050		
Maine	45% below 1990 levels by 2030, 80% reduction and net-zero emissions by 2050	By 2050, 100% of electricity sold in the state must be supplied by renewable resources	50% by 2030, 80% by 2030, 100% by 2050
Maryland	60% below 2006 levels by 2031		50% by 2030, including 14.5% solar
Massachusetts	50% below 1990 levels by 2030, 75% by 2040, 85% reduction and carbon neutrality by 2050		35% by 2030, +1% annually, 80% of electricity sales from clean energy sources by 2050
Michigan	26-28% below 2005 levels by 2025. Carbon neutrality by 2050 and net negative emissions thereafter.		15% by 2021
Minnesota	30% below 2005 levels by 2025, 80% by 2050		31.5% by 2020 (Xcel Energy), 26.5% by 2025 (all other IOUs), 1.5% solar
Missouri			15% by 2021, 2% solar
Montana	GHG neutrality between 2045 and 2050		

Notes: The table depicts finalized and proposed state actions. Goal indicates there is no explicit compliance requirement.

Updated March 2022.

## States with Renewable Energy, Clean Energy and Greenhouse Gas Reduction Goals and Targets (continued)

State	State- and Economy-wide Greenhouse Gas Reduction Targets	Clean Energy Target	RPS Target
Nebraska			No state goal but Nebraska's two largest public power districts have renewable goals
Nevada	28% below 2005 levels by 2025, 45% by 2030, Zero or near-zero emissions by 2050	State economy must have zero or near-zero carbon emissions by 2050	29% by 2022, 34% by 2024, 42% by 2027, 50% by 2030, 100% by 2030 (voluntary goal)
New Hampshire	20% below 1990 levels by 2025, 80% by 2050		22.5% by 2022 (0.7% solar), 25.2% by 2025
New Jersey	80% below 2006 levels by 2050	100% carbon-free electricity by 2050 (voluntary goal)	35% by 2025, 50% by 2030, 5.1% from solar by 2021 then declines to 1.1% by 2033
New Mexico	45% below 2005 levels by 2030	By 2045, zero-carbon resources must provide 100% of electric retail sales	50% by 2030, 80% by 2040, 100% by 2045 (IOUs)
New York	40% below 1990 levels by 2030, 85% reduction and net-zero emissions by 2050	By 2040, 100% of electricity sold in the state must come from carbon-free sources	70% by 2030, 100% by 2040
North Carolina	Per Executive Order, the state will strive to achieve 50% reduction below 2005 levels by 2030, 100% reduction by 2050, and 70% reduction in the electric power sector by 2030		12.5% by 2021 for investor owned utilities, 0.2% solar by 2018.
Ohio			8.5% by 2026
Oklahoma			15% by 2015 (voluntary goal)
Oregon	80% below baseline (average emissions level for period of 2010 through 2012) by 2030, 90% below baseline by 2035, 100% below baseline by 2040		25% by 2025, 50% by 2040
Pennsylvania	26% below 2005 levels by 2025, 80% by 2050		18% by 2021, 0.5% solar by 2021
Rhode Island	45% below 1990 levels by 2035, 80% by 2050		38.5% by 2035
South Carolina			2% by 2021, 0.25% from distributed generation (goal)
South Dakota			10% by 2015 (voluntary goal)
Tennessee			Tennessee Valley Authority's goal is 60% clean energy by 2030
Texas			5,880 MW by 2015, 10,000 MW by 2025. 500 MW non-wind (voluntary goal)
Vermont	40% below 1990 levels by 2030, 80% by 2050		55% by 2017, 75% by 2032. Additional 12% energy efficiency by 2032.
Virginia	Net-zero emissions by 2045	100% carbon-free electricity by 2050	Dominion Energy Inc.: 17% by 2022, 100% by 2045. Appalachian Power Co. and all retail providers: 7% by 2022, 100% by 2050.
Washington	45% below 1990 levels by 2030, 70% by 2040, 95% reduction and net-zero by 2050	Electricity generation must be carbon-neutral by 2030 and fossil fuel-free by 2045	15% renewables by 2020. Carbon-neutral electricity supply by 2030. Fossil fuel-free electricity supply by 2045.
Wisconsin		100% carbon-free electricity by 2050	Varies by electric company. Total of 10% by 2015.

Notes: The table depicts finalized and proposed state actions. Goal indicates there is no explicit compliance requirement.

Updated March 2022.



# Industry Financial Performance

## Income Statement

- Energy Operating Revenues rose 10.8% versus last year. The historically strong gain was mostly a result of sharply higher fuel commodity prices, which are directly passed through to customers under rate regulation. Nationwide electricity generation rose 2.8% due to a recovery in commercial and industrial sales from 2020's pandemic-related weakness. Residential sales rose only marginally in 2021. The average retail price of electricity nationwide increased 5.6%, according to EIA data, as recent rate reviews allowed for recovery of rising capex; the average retail price nationwide was nearly unchanged over the four previous years. Almost all of the utilities included in EEI's industry consolidated data reported higher revenue in 2021.
- The inflation pressures that made news headlines in 2021 impacted generation costs. The cost of natural gas for electric generation more than doubled from 2020's level while the cost of coal rose about 4%, based on EIA data. As a result, the industry's consolidated Total Electric Generation

Cost climbed 21.7% year-to-year while Gas Cost jumped 41.1%. These two line items combined to drive the industry's Total Energy Operating Expenses up 24.2%. Many utilities separately disclose Electric Fuel Expense and Cost of Purchased Power. Based on that data, the industry's aggregate Electric Fuel Expense rose 28.8% while Cost of Purchased Power increased 15.3%.

- Operations and Maintenance (O&M) costs rose 4.6% after gaining only 1.0% to 1.5% in the three previous years. Utilities are benefitting from smart-grid investment productivity and they worked hard to constrain O&M-related expenses during the pandemic as a means of addressing revenue declines. But O&M costs are also driven by essential reliability needs. Most utilities showed a year-to-year increase in O&M for 2021.
- Depreciation & Amortization (D&A) expenses rose 6.9%. This metric increased for 39 of the 44 constituent companies, reflecting the industry's ongoing widespread and diverse investments in new clean generation, transmission, distribution and grid modernization.

- Most of the \$5.8 billion year-to-year jump in Other Operating Expenses reflects accounting for energy trading at one utility and cost allocation for non-utility operations at another large diversified company with energy holdings. Neither reflect industry-wide trends.
- Operating Income was unchanged versus 2020. Higher Energy Operating Revenues were partially offset by higher generation and gas costs while Operations and Maintenance expenses and Depreciation and Amortization expenses also increased. Operating Income rose for 30 companies and declined for 14.
- Beneath the Operating Income line, 2021's negative \$3.2 billion Gain on Sale of Assets resulted primarily from the sale of impaired fossil generation assets at one utility. The \$4.7 billion reduction in Asset Write-downs, from \$6.7 billion in 2020 to \$2.0 billion in 2021, likewise sourced to three utilities with large write-downs in 2020 but not 2021.

- Interest Expense declined by 0.6%. However, this line item rose markedly for some utilities and declined for others in relation to each company's approach to balance sheet management. Exactly half the underlying utilities showed higher interest expense and half lower.
- Net Income Before Taxes increased 7.7%. Net Income rose 9.4%. These figures are driven by the industry's largest companies and mask a wide variation in company-specific results. Pre-Tax Income rose at 29 companies and declined at 15. Net Income likewise rose at 28 and fell at 16. The year-to-year change in both metrics showed considerable variation across companies.
- The industry's aggregate Common Dividend payments rose 1.9% versus 2020, although the average percentage dividend increase was 4.8%. The lower aggregate figure from 2020 reflects dividend cuts at two large utilities. Most utilities increased their dividend rates in 2021. The industry's reliable stock dividends offer a welcome source of income for savings-oriented investors, especially given the near-zero short-term rates and meager bond yields available during 2021.

## Consolidated Income Statement

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

12 Months Ended

(\$ Millions)	12/31/2021	12/31/2020r	% Change
<b>Energy Operating Revenues</b>	\$385,500	\$347,934	10.8%
<b>Energy Operating Expenses</b>			
Total Electrical Generation Cost	98,104	80,606	21.7%
Gas Cost	16,910	11,984	41.1%
<b>Total Energy Operating Expenses</b>	<b>115,014</b>	<b>92,589</b>	<b>24.2%</b>
<b>Revenues less energy operating expenses</b>	<b>270,486</b>	<b>255,344</b>	<b>5.9%</b>
<b>Other Operating Expenses</b>			
Operations & maintenance	95,741	91,549	4.6%
Depreciation & Amortization	60,424	56,547	6.9%
Taxes (not income) - Total	22,156	20,895	6.0%
Other Operating Expenses	21,126	15,320	37.9%
<b>Total Operating Expenses</b>	<b>314,460</b>	<b>276,902</b>	<b>13.6%</b>
<b>Operating Income</b>	<b>71,040</b>	<b>71,032</b>	<b>0.0%</b>
<b>Other Recurring Revenue</b>			
Partnership Income	2,566	3,337	(23.1%)
Allowance for Equity Funds Used for Construction	2,085	2,032	2.6%
Other Revenue	8,290	8,291	(0.0%)
<b>Total Other Recurring Revenue</b>	<b>12,941</b>	<b>13,660</b>	<b>(5.3%)</b>
<b>Non-Recurring Revenue</b>			
Gain on Sale of Assets	(3,207)	(398)	705.2%
Other Non-Recurring Revenue	1,161	-	NM
<b>Total Non-Recurring Revenue</b>	<b>(2,046)</b>	<b>(398)</b>	<b>413.7%</b>
Interest expense	26,469	26,636	(0.6%)
Other expenses	385	486	(20.7%)
Asset Writedowns	2,012	6,704	(70.0%)
Other Non-Recurring Expenses	7,875	8,504	(7.4%)
Total Non-Recurring Expenses	9,888	15,208	(35.0%)
<b>Net Income Before Taxes</b>	<b>45,192</b>	<b>41,964</b>	<b>7.7%</b>
Provision for Taxes	3,646	3,354	8.7%
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 Items	-	-	NM
<b>Net Income Before Extraordinary Items</b>	<b>41,547</b>	<b>38,610</b>	<b>7.6%</b>
Discontinued Operations	731	17	NM
Change in Accounting Principles	-	-	NM
Early Retirement of Debt	-	-	NM
Other Extraordinary Items	-	-	NM
Total Extraordinary Items	731	17	NM
<b>Net Income</b>	<b>42,277</b>	<b>38,627</b>	<b>9.4%</b>
Preferred Dividends Declared	573	597	(4.0%)
Other Preferred Dividends after Net Income	2	2	0.0%
Other Changes to Net Income	(2)	(3)	(33.3%)
Net Income Attributable to Noncontrolling Interests	(527)	(533)	NA
<b>Net Income Available to Common</b>	<b>42,227</b>	<b>38,558</b>	<b>9.5%</b>
<b>Common Dividends</b>	<b>30,075</b>	<b>29,503</b>	<b>1.9%</b>

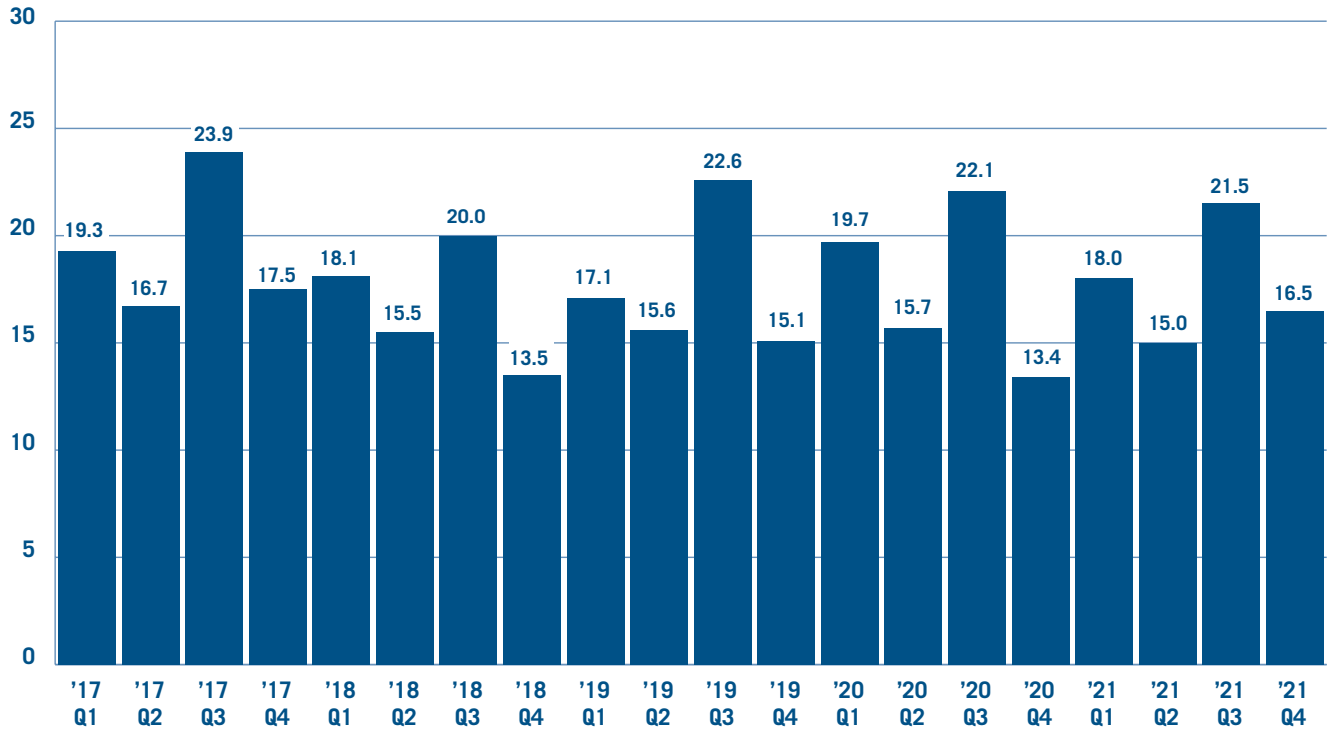
r = revised NM = not meaningful

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

## Quarterly Net Operating Income

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)

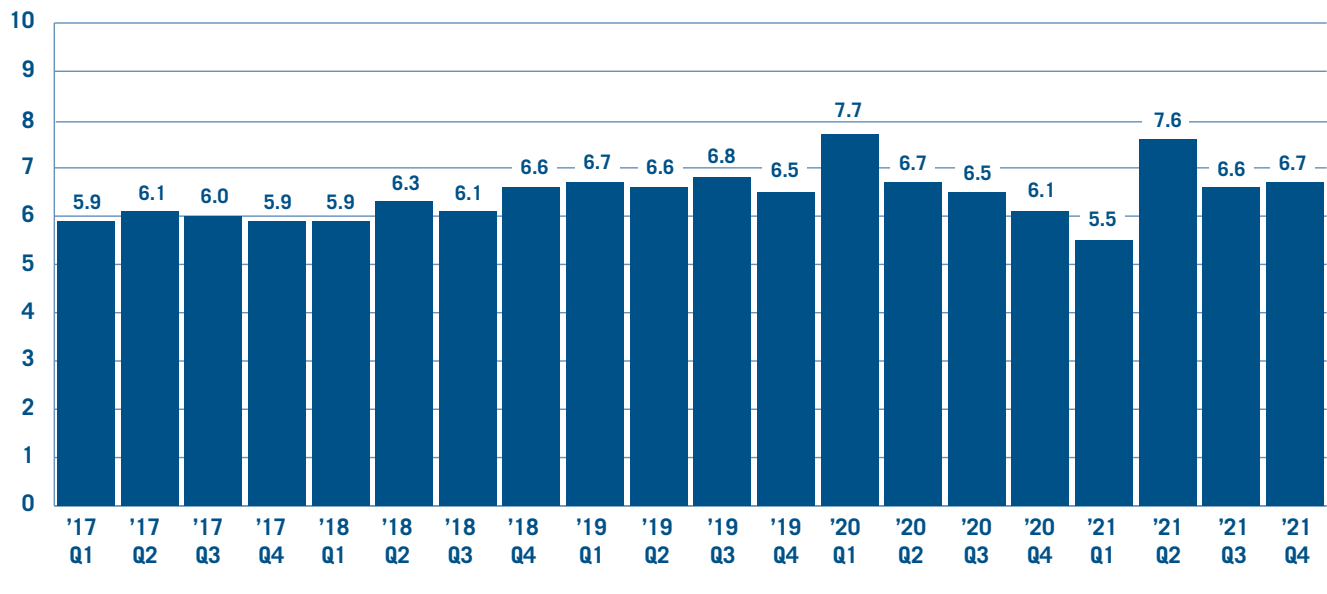


Source: S&P Global Market Intelligence and EEI Finance Department.

## Quarterly Interest Expense

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



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

## Individual Non-Recurring and Extraordinary Items 2012–2021

## U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Millions)	2012	2013	2014	2015	2016	2017	2018	2019	2020r	2021
Net Gain (Loss) on Sale of Assets	311	414	996	789	767	1,012	5,272	3,049	(398)	(3,207)
Other Non-Recurring Revenue	264	78	296	(4)	888	493	131	117	–	1,161
<b>Total Non-Recurring Revenue</b>	<b>576</b>	<b>492</b>	<b>1,292</b>	<b>785</b>	<b>1,655</b>	<b>1,505</b>	<b>5,403</b>	<b>3,167</b>	<b>(398)</b>	<b>(2,046)</b>
Asset Writedowns	(5,646)	(4,276)	(8,762)	(5,189)	(17,487)	(4,166)	(4,121)	(3,470)	6,704	2,012
Other Non-Recurring Charges	(3,136)	(3,510)	(2,675)	(1,764)	(3,109)	(5,630)	(17,841)	(13,034)	8,504	7,875
<b>Total Non-Recurring Charges</b>	<b>(8,783)</b>	<b>(7,786)</b>	<b>(11,437)</b>	<b>(6,953)</b>	<b>(20,596)</b>	<b>(9,796)</b>	<b>(21,962)</b>	<b>(16,504)</b>	<b>15,208</b>	<b>9,888</b>
Discontinued Operations	(4,317)	(88)	295	(1,148)	(732)	(1,554)	602	1,243	17	731
Change in Accounting Principles	–	–	–	–	–	–	–	–	–	–
Early Retirement of Debt	–	–	–	–	–	–	–	–	–	–
Other Extraordinary Items	–	–	–	–	–	–	–	–	–	–
<b>Total Extraordinary Items</b>	<b>(4,317)</b>	<b>(88)</b>	<b>295</b>	<b>(1,148)</b>	<b>(732)</b>	<b>(1,554)</b>	<b>602</b>	<b>1,243</b>	<b>17</b>	<b>731</b>
<b>Total Non-Recurring and Extraordinary Items</b>	<b>(12,524)</b>	<b>(7,381)</b>	<b>(9,850)</b>	<b>(7,316)</b>	<b>(19,674)</b>	<b>(9,844)</b>	<b>(15,957)</b>	<b>(12,094)</b>	<b>(15,589)</b>	<b>(11,203)</b>

r = revised

Note: Figures represent net industry totals. Totals may reflect rounding.

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

## Top Net Non-Recurring and Extraordinary Gains (Losses) 2021

## U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Millions)

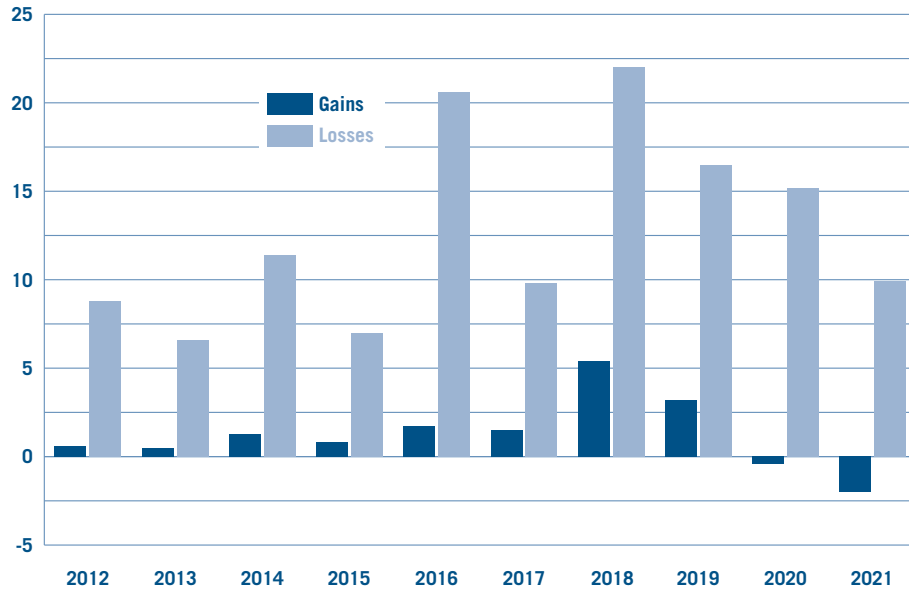
Company	Gains	Losses	Net Total
<b>Public Service Enterprise Group</b>	(2,637)	298	2,935
<b>Exelon Corp</b>	(954)	1,305	2,259
<b>Southern Company</b>	186	1,785	1,599
<b>Sempra Energy</b>	36	1,596	1,560
<b>Edison International</b>	10	1,491	1,481
<b>PG&amp;E Corp</b>	–	786	786
<b>CenterPoint Energy</b>	689	–	689
<b>Duke Energy</b>	13	484	471
<b>Consolidated Edison</b>	–	443	443
<b>PPL Corp</b>	–	432	432

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

### Aggregate Non-Recurring and Extraordinary Items 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



	2012	2013	2014	2015	2016	2017	2018	2019	2020r	2021	Total
<b>Gains</b>	0.6	0.5	1.3	0.8	1.7	1.5	5.4	3.2	(0.4)	(2.0)	12.6
<b>Losses</b>	8.8	6.6	11.4	7.0	20.6	9.8	22.0	16.5	15.2	9.9	127.8
<b>Total</b>	<b>(8.2)</b>	<b>(6.2)</b>	<b>(10.1)</b>	<b>(6.2)</b>	<b>(18.9)</b>	<b>(8.3)</b>	<b>(16.6)</b>	<b>(13.3)</b>	<b>(15.6)</b>	<b>(11.9)</b>	<b>(115.2)</b>

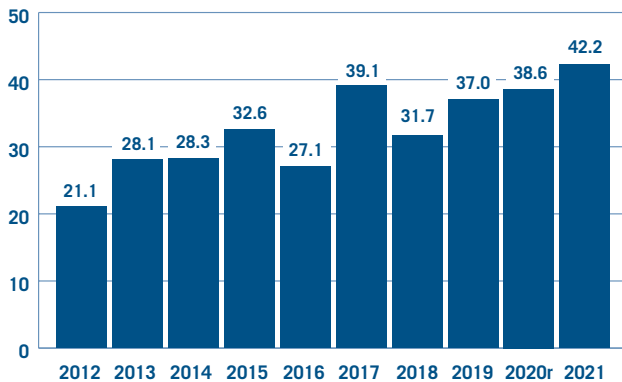
r = revised Note: Totals may reflect rounding.

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

### Net Income 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



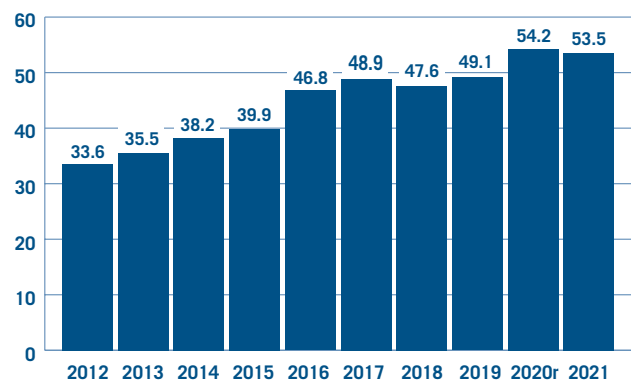
r = revised

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

### Net Income Before Non-Recurring and Extraordinary Items 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



r = revised

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

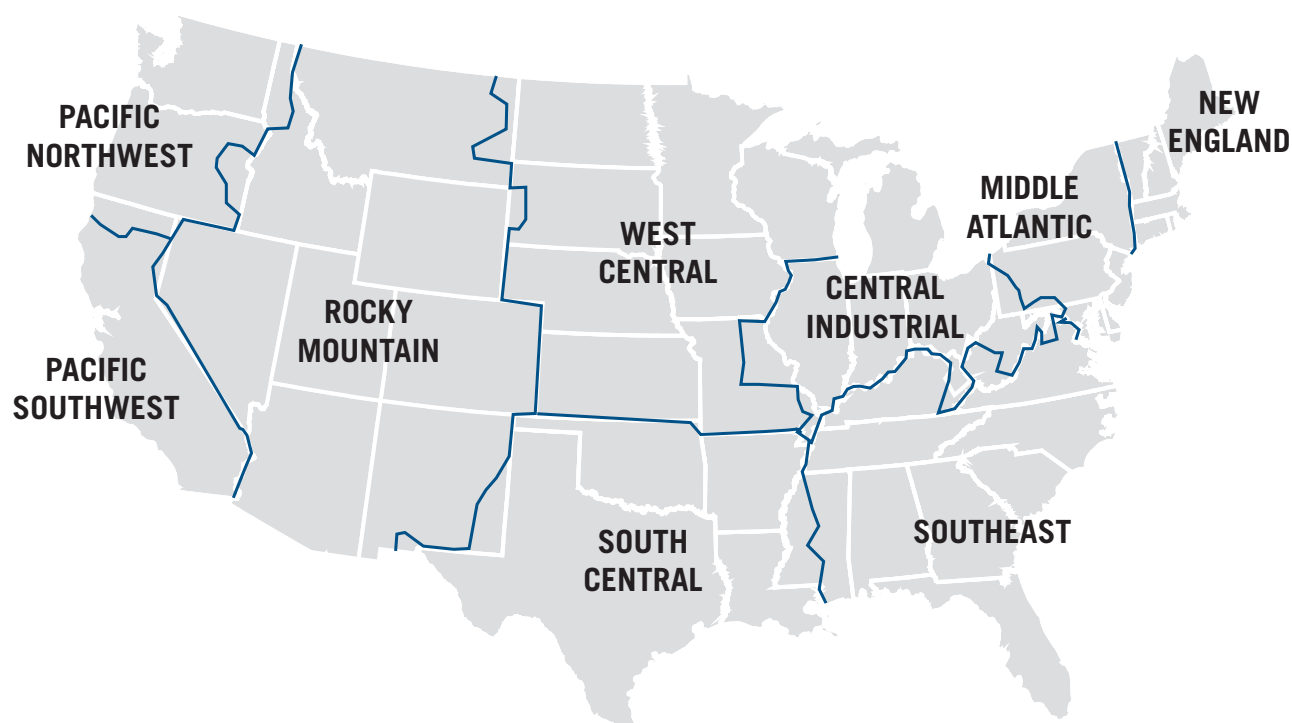
## U.S. Electric Output (GWh) Periods Ending December 31

Region	2021	2020	% Change
New England	115,930	114,308	1.4%
Mid-Atlantic	418,296	408,677	2.4%
Central Industrial	651,041	630,703	3.2%
West Central	335,136	321,004	4.4%
Southeast	1,014,838	984,921	3.0%
South Central	778,018	756,856	2.8%
Rocky Mountain	292,947	287,084	2.0%
Pacific Northwest	158,170	153,806	2.8%
Pacific Southwest	268,259	266,450	0.7%
<b>Total United States</b>	<b>4,032,635</b>	<b>3,923,809</b>	<b>2.8%</b>

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



Source: EEI Business Analytics.



## U.S. Weather

### January – December 2021

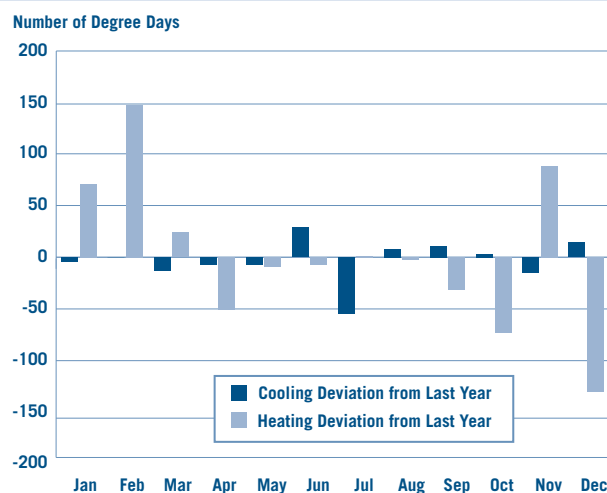
	Total	Dev from Norm	% Change	Dev from Last Year	% Change
<b>Cooling Degree Days</b>					
New England	656	239	57%	(81)	(11%)
Mid-Atlantic	912	256	39%	(33)	(3%)
East North Central	968	260	37%	101	12%
West North Central	1,117	189	20%	114	11%
South Atlantic	2,226	262	13%	(121)	(5%)
East South Central	1,684	136	9%	(10)	(1%)
West South Central	2,649	200	8%	(80)	(3%)
Mountain	1,400	157	13%	(103)	(7%)
Pacific	906	202	29%	(77)	(8%)
<b>United States</b>	<b>1,439</b>	<b>223</b>	<b>18%</b>	<b>(36)</b>	<b>(2%)</b>
<b>Heating Degree Days</b>					
New England	5,831	(780)	(12%)	17	0%
Mid-Atlantic	5,101	(810)	(14%)	31	1%
East North Central	5,745	(752)	(12%)	(75)	(1%)
West North Central	6,051	(699)	(10%)	(236)	(4%)
South Atlantic	2,454	(399)	(14%)	124	5%
East South Central	3,154	(450)	(12%)	127	4%
West South Central	1,964	(323)	(14%)	101	5%
Mountain	4,700	(509)	(10%)	(116)	(2%)
Pacific	3,105	(123)	(4%)	116	4%
<b>United States</b>	<b>4,012</b>	<b>(512)</b>	<b>(11%)</b>	<b>28</b>	<b>1%</b>

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.

### 2021 Weather Compared to 2020

AS MEASURED BY DEVIATIONS BETWEEN THE TWO YEARS



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

### Heating and Cooling Degree Days and Percent Changes

January–December 2021

	COOLING DEGREE DAYS			HEATING DEGREE DAYS			PERCENTAGE 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	5	(4)	(4)	812	(105)	71	(44.4%)	(44.4%)	(11.5%)	9.6%
Feb	10	2	0	811	79	147	25.0%	0.0%	10.8%	22.1%
Mar	21	3	(13)	518	(75)	24	16.7%	(38.2%)	(12.6%)	4.9%
<b>First Quarter</b>	<b>36</b>	<b>1</b>	<b>(17)</b>	<b>2,141</b>	<b>(101)</b>	<b>242</b>	<b>2.9%</b>	<b>(32.1%)</b>	<b>(4.5%)</b>	<b>12.7%</b>
Apr	33	3	(7)	321	(24)	(51)	10.0%	(17.5%)	(7.0%)	(13.7%)
May	102	5	(7)	161	2	(9)	5.2%	(6.4%)	1.3%	(5.3%)
Jun	275	62	29	19	(20)	(7)	29.1%	11.8%	(51.3%)	(26.9%)
<b>Second Quarter</b>	<b>410</b>	<b>70</b>	<b>15</b>	<b>501</b>	<b>(42)</b>	<b>(67)</b>	<b>20.6%</b>	<b>3.8%</b>	<b>(7.7%)</b>	<b>(11.8%)</b>
Jul	341	20	(55)	4	(5)	1	6.2%	(13.9%)	(55.6%)	33.3%
Aug	354	64	8	6	(9)	(2)	22.1%	2.3%	(60.0%)	(25.0%)
Sep	189	34	11	39	(38)	(31)	21.9%	6.2%	(49.4%)	(44.3%)
<b>Third Quarter</b>	<b>884</b>	<b>118</b>	<b>(36)</b>	<b>49</b>	<b>(52)</b>	<b>(32)</b>	<b>15.4%</b>	<b>(3.9%)</b>	<b>(51.5%)</b>	<b>(39.5%)</b>
Oct	78	25	3	186	(96)	(73)	47.2%	4.0%	(34.0%)	(28.2%)
Nov	12	(3)	(15)	511	(28)	88	(20.0%)	(55.6%)	(5.2%)	20.8%
Dec	19	12	14	624	(193)	(130)	171.4%	280.0%	(23.6%)	(17.2%)
<b>Fourth Quarter</b>	<b>109</b>	<b>34</b>	<b>2</b>	<b>1,321</b>	<b>(317)</b>	<b>(115)</b>	<b>45.3%</b>	<b>1.9%</b>	<b>(19.4%)</b>	<b>(8.0%)</b>
<b>Full Year</b>	<b>1,439</b>	<b>223</b>	<b>(36)</b>	<b>4,012</b>	<b>(512)</b>	<b>28</b>	<b>18.3%</b>	<b>(2.4%)</b>	<b>(11.3%)</b>	<b>0.7%</b>

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Heating Degree Days Percentage Change from Historical Norm (16.6) (0.6) 1.1 (9.1) (14.8) (14.2) (4.2) (4.4) (11.9) (11.3)

Cooling Degree Days Percentage Change from Historical Norm 22.4 10.9 5.8 19.2 29.4 16.0 26.4 20.3 21.1 18.3

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 economic turmoil of 2020 caused by the COVID-19 pandemic gave way to steady growth in 2021. U.S. real gross domestic product (GDP) gained 6.3% in Q1, 6.7% in Q2, slowed to 2.3% in Q3, then jumped to its strongest gain of the year, at 7.0%, in Q4. Full-year real GDP rose 5.7%, according to annualized data from the Bureau of Economic Analysis.
- An unwelcome consequence of the post-pandemic rebound was the worst inflation since the early 1980s. Monthly inflation measured by the Consumer Price Index jumped above 4% in April, above 5% in June and climbed steadily through the second half of 2021, reaching 7.9% in December.
- Surprisingly, interest rates barely responded to the inflation fireworks. The Federal Reserve held money market rates near zero all year to support the economic recovery and framed inflation pressures as only temporary. The 10-year Treasury yield drifted below 1.75% all year and ended the year at 1.5%. Investment-grade corporates could borrow long-term for less than 3% throughout 2021's second half, even with inflation above 6%.
- The industry's financial condition remained strong in 2021. The multi-decade trend toward a regulated focus continued along with leverage appropriate for a lower risk profile. Balance sheet leverage, in aggregate, was largely unchanged. Four large utilities – Sempra, CenterPoint, Dominion and Berkshire Hathaway Energy – each reduced preferred equity and drove the small reduction in this metric. However, aggregate figures convey only broad, long-term trends and emphasize large utility holding companies. Balance sheet structures widely vary across the industry. Leverage increased at 27 of the 44 utilities included in EEI's industry consolidated data, but rose more than one percentage point at only 21. Leverage was reduced by more than one percentage point at 14 companies.
- The industry's consolidated total debt rose in 2021, a natural consequence of strong asset growth. Utilities took advantage of another year of very low interest rates and strong demand from fixed-income investors with most companies managing balance sheet ratios and cash flows to maintain investment-grade credit ratings. Long-term debt increased at 35 utilities. The nine instances where debt declined included large debt reductions at AVANGRID and Sempra tied to equity financings, at PPL funded through the sale of its U.K. subsidiary, and at DTE financed through the spin-off of its midstream business. Balance sheet management also produced five much smaller debt reductions.
- Common equity issuance was sharply lower after three active years. Four companies accounted for almost 70% of 2021's \$9.4 billion total. AVANGRID raised \$4 billion in a private placement with parent Iberdrola and the Qatar Investment authority. FirstEnergy likewise raised \$1 billion from private investor Blackstone Infrastructure Partners. Consolidated Edison raised \$775 million through a public offering. AEP also issued \$600.5 million in new equity. Thirty utilities reported equity issuance in 2021, but generally in small amounts. 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 4.0% from year-end 2020 and 10.1% over the level at year-end 2019. This metric grew at nearly all utilities included in EEI's consolidated data. Such broad growth indicates the size and scope of the industry's build-out of new renewable generation, new transmission, reliability-related infrastructure and other capital projects related to the nation's clean energy transition.
- Debt-to-capitalization ratios by category show the dominance of regulated operations in the industry. The tendency in the Mostly Regulated category toward slightly lower leverage in 2021 resulted from AVANGRID'S balance sheet restructuring and, to a lesser extent, reduction in leverage at MidAmerican Energy.

## Consolidated Balance Sheet

## U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Millions)	12/31/2021	12/31/2020r	% Change	\$ Change
PP&E in service, gross	1,746,509	1,677,413	4.1%	69,096
Accumulated depreciation	502,863	481,097	4.5%	21,765
PP&E in service, net	1,243,646	1,196,315	4.0%	47,331
Construction work in progress	86,365	81,559	5.9%	4,806
Net nuclear fuel	15,358	15,252	0.7%	107
Other property	16,786	16,354	2.6%	432
PP&E, net	1,362,155	1,309,480	4.0%	52,676
Cash & cash equivalents	17,842	16,404	8.8%	1,438
Accounts receivable	47,728	41,962	13.7%	5,766
Inventories	25,220	24,300	3.8%	919
Other current assets	67,067	70,954	(5.5%)	(3,886)
Total current assets	157,857	153,620	2.8%	4,237
Total investments	136,761	129,344	5.7%	7,417
Other assets	283,880	274,860	3.3%	9,020
<b>Total Assets</b>	<b>1,940,654</b>	<b>1,867,303</b>	<b>3.9%</b>	<b>73,350</b>
Common equity	526,146	494,872	6.3%	31,274
Preferred equity	10,870	14,566	(25.4%)	(3,697)
Noncontrolling interests	25,939	27,502	(5.7%)	(1,563)
Total equity	562,954	536,940	4.8%	26,014
Short-term debt	41,836	35,951	16.4%	5,885
Current portion of long-term debt	37,380	39,208	(4.7%)	(1,828)
Short-term and current long-term debt	79,217	75,160	5.4%	4,057
Accounts payable	79,979	72,654	10.1%	7,326
Other current liabilities	54,400	63,311	(14.1%)	(8,911)
Current liabilities	213,596	211,125	1.2%	2,471
Deferred taxes	112,686	106,328	6.0%	6,358
Non-current portion of long-term debt	699,441	656,153	6.6%	43,288
Other liabilities	349,363	356,000	(1.9%)	(6,638)
Total liabilities	1,375,086	1,329,606	3.4%	45,480
Subsidiary preferred	712	712	0.0%	0
Other mezzanine	1,901	45	4106.4%	1,856
Total mezzanine level	2,613	757	245.2%	1,856
<b>Total Liabilities and Owner's Equity</b>	<b>1,940,654</b>	<b>1,867,303</b>	<b>3.9%</b>	<b>73,350</b>

r = revised

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

The dispersion across companies in both categories – with some showing higher, some lower and others no change in leverage – indicates why individual company strategies are as meaningful as aggregate 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.

### Capitalization Structure

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

Capitalization Structure (\$M)	12/31/2021	12/31/2020r	12/31/2019r
<b>Common Equity</b>	526,146	494,872	462,915
<b>Noncontrolling Interests &amp; Preferred Equity</b>	36,808	42,068	29,811
<b>Long-term Debt (current &amp; non-current)*</b>	736,821	695,361	627,662
<b>Total</b>	<b>1,299,776</b>	<b>1,232,301</b>	<b>1,120,389</b>
<b>Common Equity %</b>	40.5%	40.2%	41.3%
<b>Noncontrolling Interests &amp; Preferred Equity %</b>	2.8%	3.4%	2.7%
<b>Long-Term Debt (current &amp; non-current)* %</b>	56.7%	56.8%	56.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

r = revised

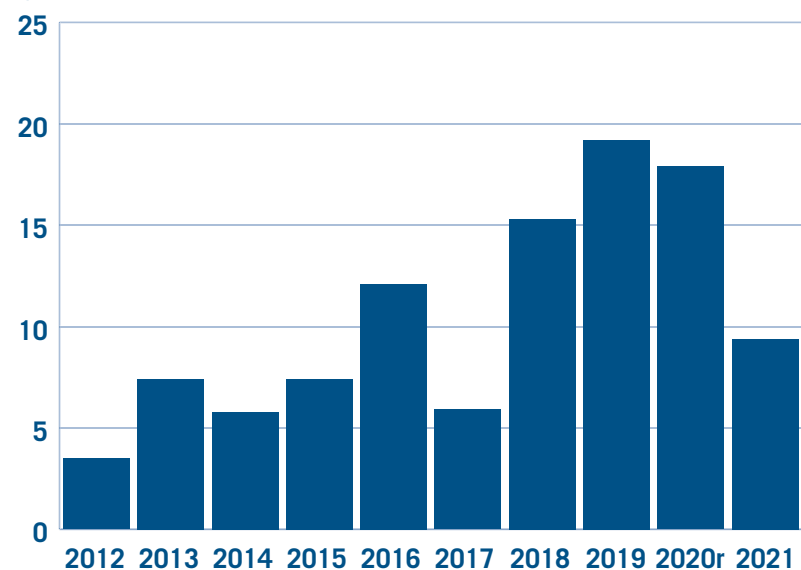
Long-term debt not adjusted for (i.e., includes) securitization bonds.

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

### Proceeds from Issuance of Common Equity 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



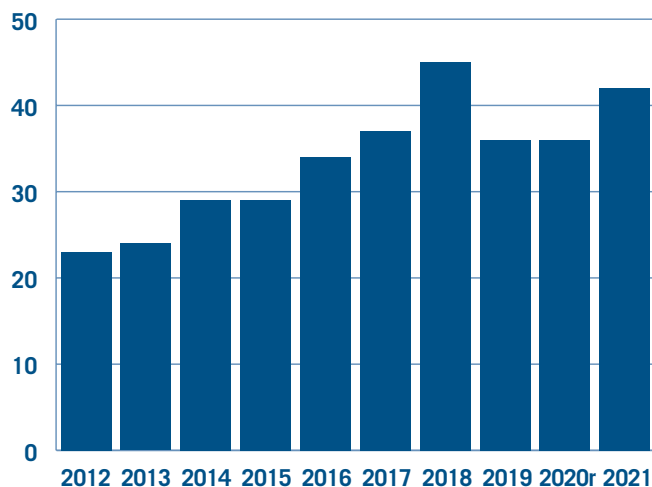
r = revised

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

## Short-term Debt 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



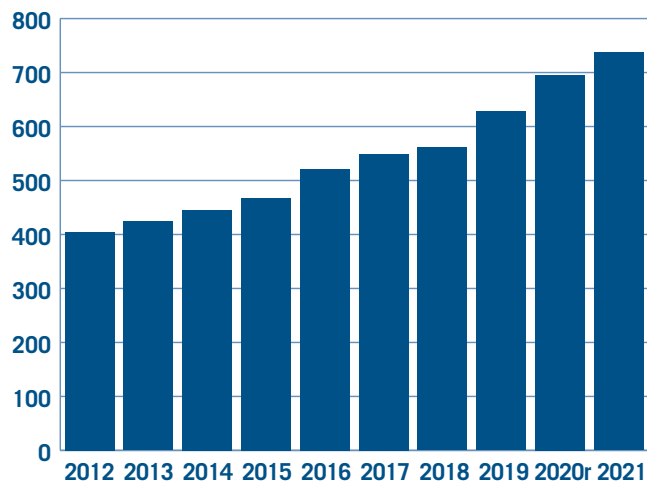
r = revised

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

## Long-term Debt 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



r = revised

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

## Debt-to-Cap Ratio by Category 2021 vs. 2020r

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

	Regulated		Mostly Regulated		Total Industry	
	Number	%	Number	%	Number	%
<b>Lower</b>	12	34.3%	2	22.2%	14	31.8%
<b>No Change*</b>	8	22.9%	1	11.1%	9	20.5%
<b>Higher</b>	15	42.9%	6	66.7%	21	47.7%
<b>Total</b>	<b>35</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>	<b>44</b>	<b>100.0%</b>

\*No change defined as less than 1.0%

Note: December 31, 2021 vs. December 31, 2020. Refer to page v for category descriptions.

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



## Capitalization Structure by Category 2021 vs. 2020r

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

	Regulated			Mostly Regulated		
	2021	2020r	Change	2021	2020r	Change
<b>Common Equity (\$M)</b>	359,101	335,185	23,916	167,045	159,687	7,358
<b>Total Preferred Equity</b>	21,213	22,366	(1,152)	15,595	19,703	(4,107)
<b>Long-term Debt (current &amp; non-current)*</b>	542,835	505,542	37,294	193,986	189,820	4,167
<b>Total Capitalization</b>	923,149	863,092	60,057	376,626	369,209	7,417
<b>Common Equity %</b>	38.9%	38.8%	0.1%	44.4%	43.3%	1.1%
<b>Preferred Equity %</b>	2.3%	2.6%	-0.3%	4.1%	5.3%	-1.2%
<b>Long-Term Debt %</b>	58.8%	58.6%	0.2%	51.5%	51.4%	0.1%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>—</b>	<b>100.0%</b>	<b>100.0%</b>	<b>—</b>

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.

Date	PP&E in Service, Net (\$M)	% Change from 12/31/2017
12/31/2021	1,243,646	22.5%
12/31/2020r	1,196,315	17.9%
12/31/2019r	1,129,880	11.3%
12/31/2018	1,058,164	4.2%
12/31/2017	1,015,100	

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

## Cash Flow Statement

- Net Cash Provided by Operating Activities decreased by \$14.7 billion or 21.8%. The two primary contributors to this metric both generated cash. Cash supplied by Net Income grew 9.4% while cash supplied by Depreciation and Amortization (a non-cash expense) increased 5.3%. The 59.2% decrease in cash used for Change in Working Capital sourced mostly to accounting treatment of a 2020 restructuring at one large utility. The 40.3% increase in cash used for Other Operating Changes in Cash sourced to activity at nine relatively large utilities in 2021. Neither of these two line items reflects broad-based fundamental industry trends.
- Net Cash Used in Investing Activities decreased by \$12.2 billion or 9.5%. The industry's capital spending — by far the largest component of this metric — totaled \$134.1 billion in 2021, up \$1.3 billion from 2020 after rising an unusually strong \$8.9 billion, or 7.2%, in 2020. Industry capex has reached a new record high in each of the past ten years. Most utilities' five-year outlooks at year-end 2021 emphasized growth through rising regulated clean energy investment. Half of the utilities represented in consolidated data grew capex in 2021.
- EEI member companies continue to invest in clean energy resources and the infrastructure necessary to make the power grid more modernized, more resilient, and more 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 \$9.6 billion, or 37.3%, from \$25.6 billion to \$35.2 billion. The increase sourced mostly to PPL's June 2021 sale of its U.K. utility business, Western Power Distribution (WPD), to National Grid for \$10.4 billion. Cash used for Asset Purchases decreased by \$5.3 billion, or 23.1%; this was mostly due to reduced asset purchases in 2021 at five large utilities compared to their activity in 2020.
- Net Cash Provided by Financing Activities decreased by \$30.8 billion or 47.3%. The decline resulted primarily from broadly reduced debt issuance relative to 2020 as well as debt paydowns to strengthen balance sheets at a few large utilities. Twenty-five companies reported a reduction in cash provided by long-term debt. Issuance of common equity also declined, falling by nearly 50% to \$9.4 billion from \$17.9 billion in 2020.
- Dividends Paid to Common Shareholders rose 3.3%, to \$30.3 billion.

## Statement of Cash Flows

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

\$ Millions	12 Months Ended		
	12/31/2021	12/31/2020r	% Change
Net Income	\$42,277	\$38,627	9.4%
Depreciation and Amortization	62,928	59,766	5.3%
Deferred Taxes and Investment Credits	5,278	4,196	25.8%
Operating Changes in AFUDC	(1,453)	(1,432)	1.5%
Change in Working Capital	(8,354)	(20,478)	(59.2%)
Other Operating Changes in Cash	(18,277)	(13,029)	40.3%
<b>Net Cash Provided by Operating Activities</b>	<b>82,400</b>	<b>67,651</b>	<b>21.8%</b>
Capital Expenditures	(134,056)	(132,733)	1.0%
Asset Sales	35,221	25,647	37.3%
Asset Purchases	(17,535)	(22,793)	(23.1%)
Net Non-Operating Asset Sales and Purchases	17,686	2,854	519.6%
Change in Nuclear Decommissioning Trust	(314)	(408)	(23.0%)
Investing Changes in AFUDC	49	102	(51.5%)
Other Investing Changes in Cash	754	2,081	(63.8%)
<b>Net Cash Used in Investing Activities</b>	<b>(115,881)</b>	<b>(128,104)</b>	<b>(9.5%)</b>
Net Change in Short-term Debt	5,043	3,182	58.5%
Net Change in Long-term Debt	45,444	68,220	(33.4%)
Proceeds from Issuance of Preferred Equity	3,783	5,364	(29.5%)
Preferred Share Repurchases	(2,100)	-	NM
Net Change in Preferred Issues	1,683	5,364	(68.6%)
Proceeds from Issuance of Common Equity	9,432	17,938	(47.4%)
Common Share Repurchases	(1,531)	(3,933)	(61.1%)
Net Change in Common Issues	7,901	14,006	(43.6%)
Dividends Paid to Common Shareholders	(30,279)	(29,319)	3.3%
Dividends Paid to Preferred Shareholders	(475)	(397)	19.9%
Other Dividends	-	-	NM
Dividends Paid to Shareholders	(30,754)	(29,716)	3.5%
Other Financing Changes in Cash	5,112	4,219	21.2%
<b>Net Cash (Used in) Provided by Financing Activities</b>	<b>34,430</b>	<b>65,274</b>	<b>(47.3%)</b>
Other Changes in Cash	12	9	33.3%
Net increase (decrease) in cash and cash equivalents	\$961	\$4,830	(80.1%)
Cash and cash equivalents at beginning of period	\$16,881	\$11,574	45.9%
Cash and cash equivalents at end of period	\$17,842	\$16,404	8.8%

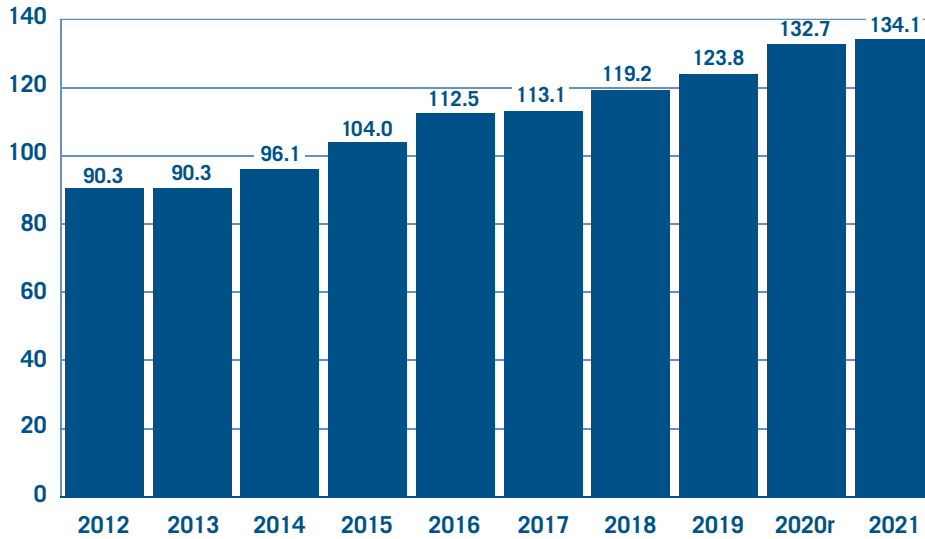
r = revised    NM = not meaningful

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

## Capital Expenditures 2012–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



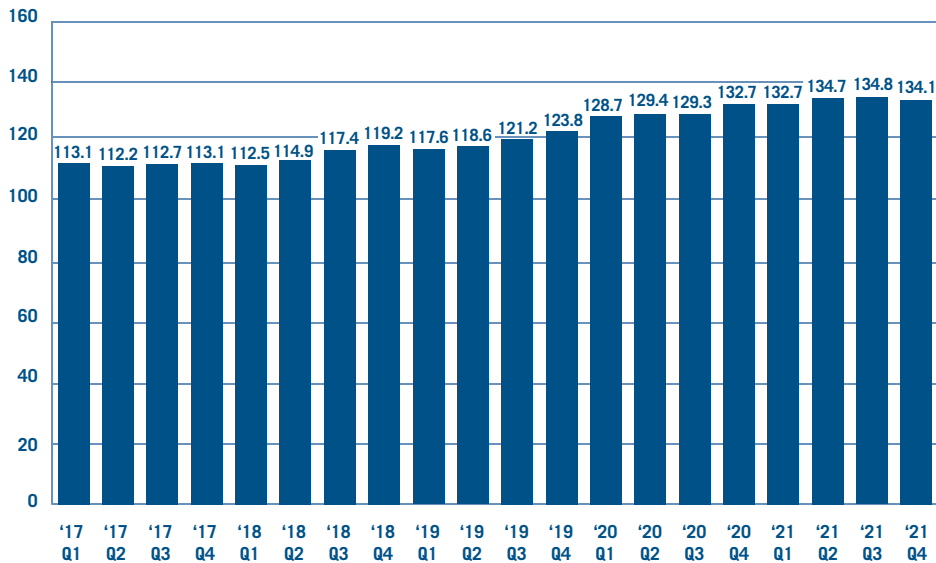
r = revised

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

## Capital Spending—Trailing 12 Months

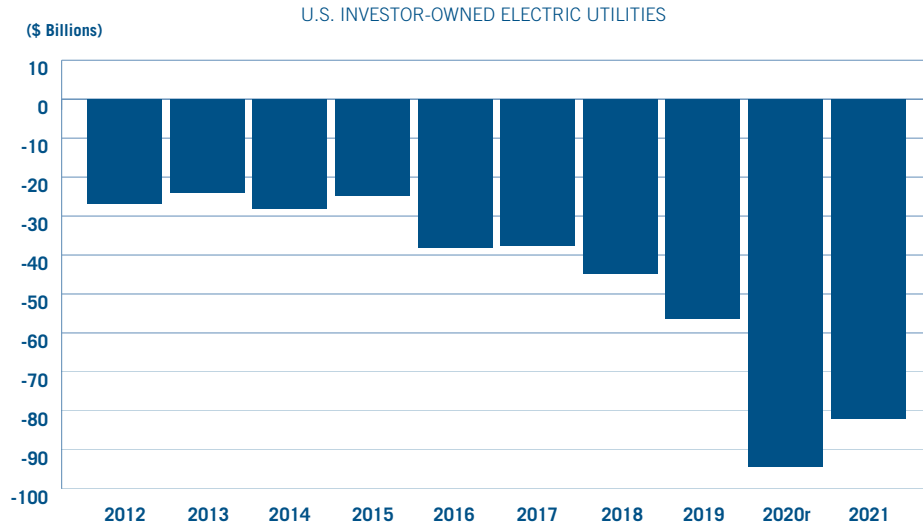
U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Billions)



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

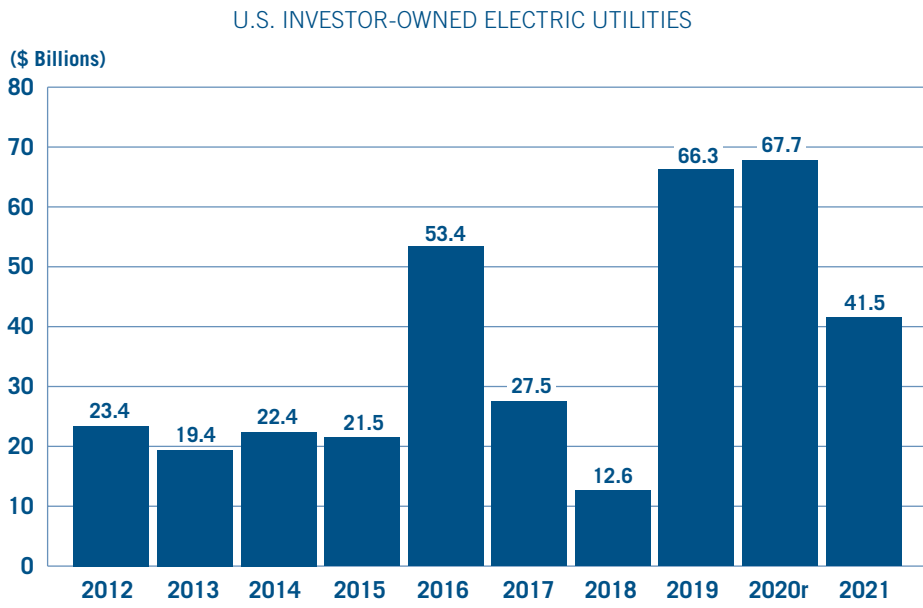
### Free Cash Flow (FCF) 2012–2021



(\$ Billions)	2012	2013	2014	2015	2016	2017	2018	2019	2020r	2021
Net Cash Provided by Operating Activities	84.0	87.1	89.0	101.6	98.3	101.2	100.1	95.3	67.7	82.4
Capital Expenditures	(90.3)	(90.3)	(96.1)	(104.0)	(112.5)	(113.1)	(119.2)	(123.8)	(132.7)	(134.1)
Dividends Paid to Common Shareholders	(20.5)	(20.8)	(21.1)	(22.5)	(23.8)	(25.5)	(25.6)	(27.9)	(29.3)	(30.3)
<b>Free Cash Flow</b>	<b>(26.8)</b>	<b>(24.0)</b>	<b>(28.2)</b>	<b>(24.8)</b>	<b>(38.1)</b>	<b>(37.5)</b>	<b>(44.7)</b>	<b>(56.4)</b>	<b>(94.4)</b>	<b>(81.9)</b>

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 2012–2021



r = revised  
 Note: Based on data from industry's consolidated balance sheet.  
 Source: S&P Global Market Intelligence and EEI Finance Department.

## Rate Review Summary

- There were approximately 28 percent more rate reviews filed in 2021 when compared to 2020. At the end of the year, there were 31 pending rate reviews while 48 rate reviews were decided.
- In total, electric companies requested revenue increases of approximately \$9 billion in 2021. Of that amount, approximately \$5 billion was approved.
- For 2021, the average awarded ROE was 9.40 percent, continuing a decade long downward trend. By way of comparison, for 2020, the average awarded ROE was 9.43 percent. On average, awarded ROE in 2021 was approximately 50 basis points lower than the average requested. Consistent with declining interest rates, average awarded ROEs have been under 10 percent for the electric industry for most of the last decade.
- Regulatory lag was approximately 8.41 months, which is slightly better than 2020. Commission agendas continued to be filled with numerous other regulatory filings including those related to COVID, clean energy transition, and affordability.

## Key Highlights from 2021

- **COVID-Related Matters** – By the end of 2021, there were only a handful of states that had extended their disconnection moratoria until December 31. With most states having no active COVID-related disconnection moratoria, more than a dozen rate reviews had requests by electric companies to recover COVID-related costs. Most companies that sought approval to defer or amortize uncollectible expenses related to COVID-19 were successful. As a condition of settlement, some electric companies agreed to work with stakeholders to create new or expand existing income qualified programs or discount rates to assist customers that are still struggling economically due to the pandemic.
- **Affordability** – The topic of affordability is not new to regulated electric companies; however, the pandemic brought this issue to the forefront of numerous commissions. Many electric companies, that had filed or decided rate reviews in 2021, recognized the economic hardships customers were facing and utilized regulatory and accounting mechanisms to mitigate customer bill impacts. Some electric companies agreed to phase in rate increases over multiple years, offset costs through a variety of accounting mechanisms, or delay rate review requests until a later date. In addition, numerous states, like California, Connecticut, Illinois, and Pennsylvania, have contin-

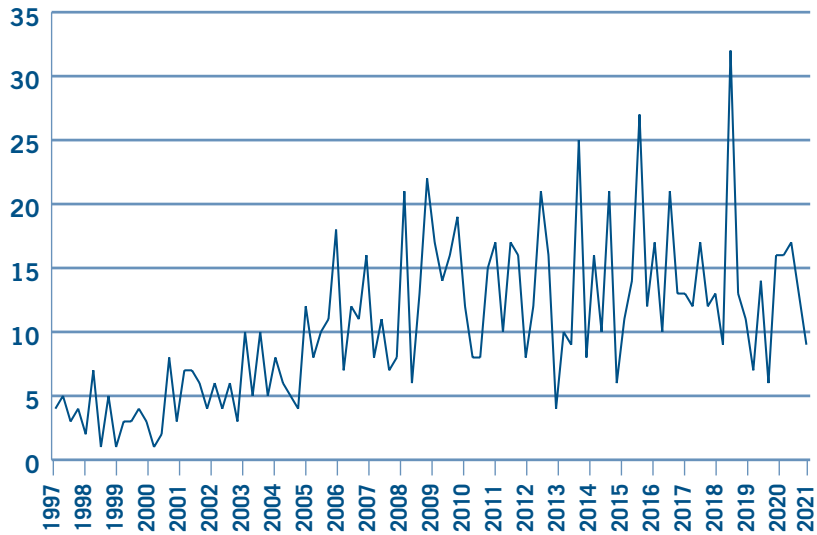
ued discussions, via general dockets, around energy affordability.

- **Accelerated Clean Energy Transition** – Momentum for increased clean energy and carbon-free resources were a major focus for electric companies in 2021. The transition to clean energy requires the efficient upgrading of existing and development of new transmission in order to meet ambitious clean energy goals. Knowing that regulators, at both the state and federal level, must address numerous transmission-related issues, the Federal Energy Regulatory Commission (FERC) and the National Association of Regulatory Utility Commissioners (NARUC) established a joint-task force to increase cooperation and coordination. Meetings of this group are expected to continue throughout 2022.



## Number of Rate Reviews Filed 1997–2021

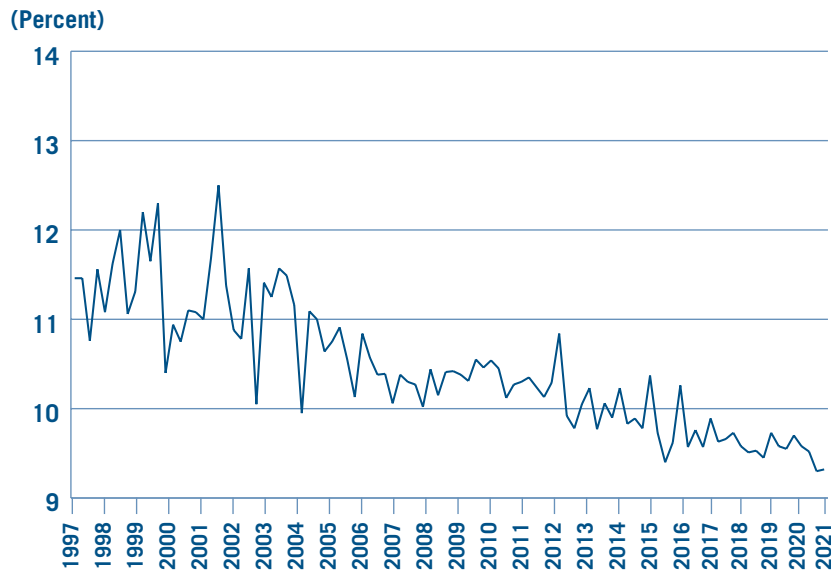
U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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

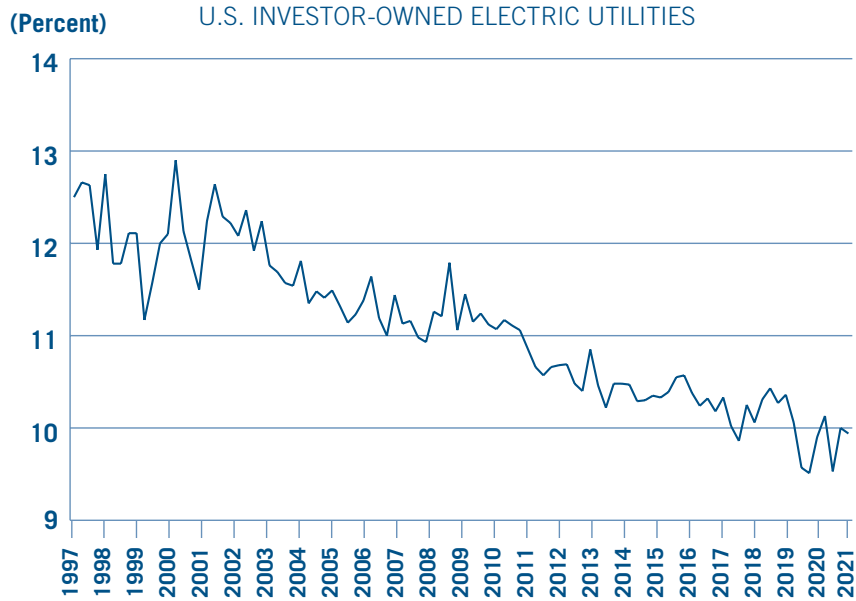
## Average Awarded ROE 1997-2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



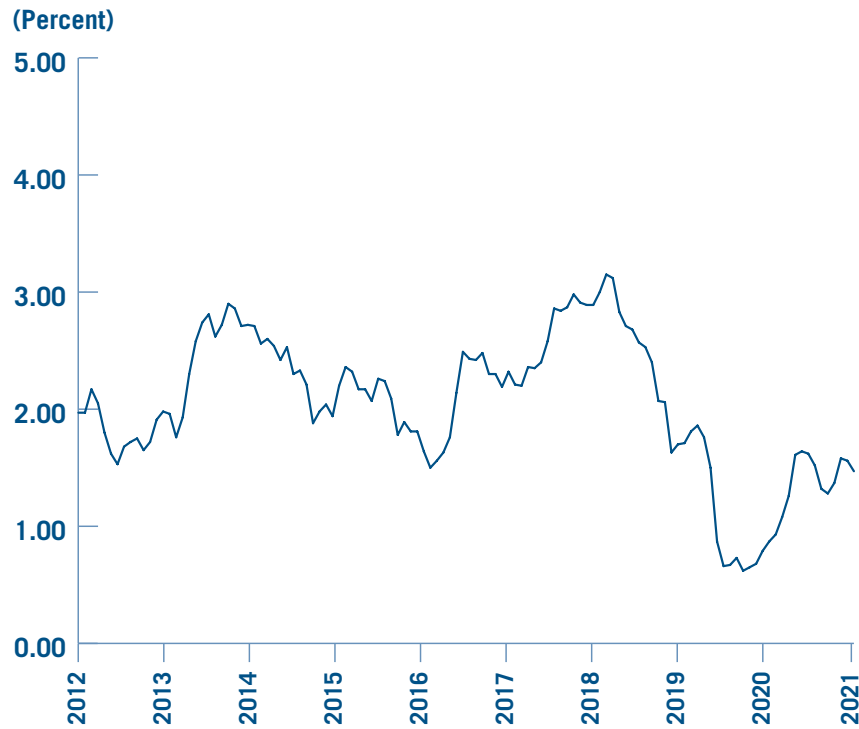
Source: S&P Global Market Intelligence/Regulatory Research Assoc. and EEI Finance Department.

## Average Requested ROE 1997–2021



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

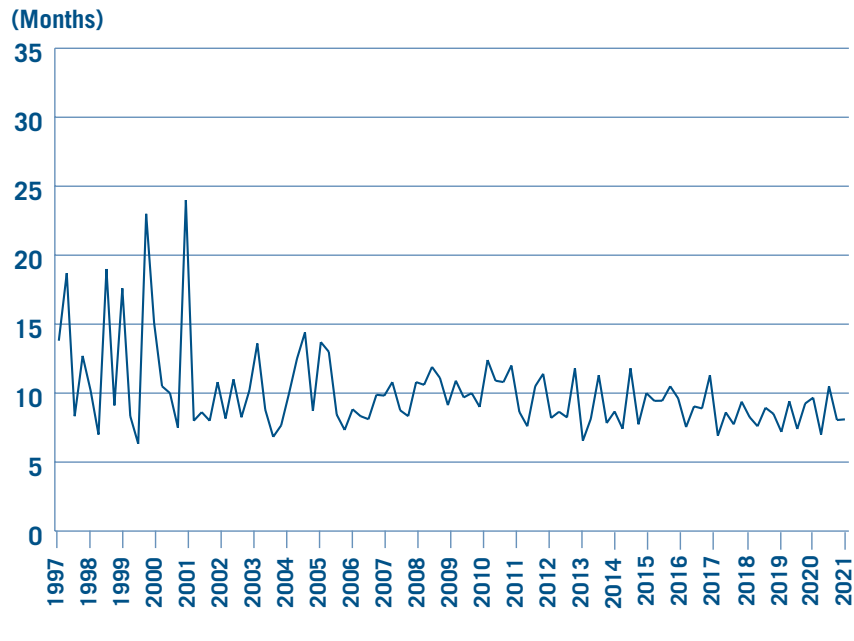
## 10-Year Treasury Yield 1/1/12 through 12/31/21



Source: U.S. Federal Reserve.

## Average Regulatory Lag 1997–2021

U.S. INVESTOR-OWNED ELECTRIC UTILITIES



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 Energy Supply & Finance Department. This group provides the 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 investor-owned 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 (listed in this section). 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.

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## 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 in order 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 annual fall gathering of utilities and the financial community; it is attended by more than 1,000 senior executives, including utility CEOs, CFOs, treasurers, investor relations executives, and Wall Street investment analysts, portfolio managers, commercial and investment bankers and the rating agencies. The General Sessions cover topics of strategic interest to the industry and financial community. Contact Aaron Cope 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 Aaron Cope 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 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. Contact Randall Hartman 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 utility-specific 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 and Fall Accounting Conferences

Hosted by the EEI Corporate Accounting Committee, the Property Accounting & Valuation Committee, the Accounting Standards Committee, the Budgeting & Financial Forecasting Committee and the AGA Corporate Accounting and Property Accounting Committee, the conference provides a forum for members to discuss current issues and challenges and exchange ideas in the electric and natural gas utility industries. The spring meeting is intended for all aforementioned committees, while the fall meeting is designed for the Corporate Accounting Committee and the Property Accounting & Valuation Committee. The meetings are open to members of the Committees and other employees of EEI/AGA member companies. Contact Dave Dougher for more information.

### Tax School

Provides utility tax professionals with a forum to discuss developing tax issues impacting our member companies. This two and half day training is held every other year in the spring and is targeted for intermediate-level personnel. Contact Mark Agnew for more information.

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## 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 Randall Hartman or 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 Randall Hartman or Dave Dougher for more information.

### Property Accounting & Depreciation Training Seminar

This is a one and a half day seminar offered jointly with AGA that provides an introduction to property accounting and depreciation in the electric and natural gas utility industries. 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 Randall Hartman or Dave Dougher for more information.

### Additional Training Opportunities

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

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## The EEI Energy Supply & Finance Department Staff

### **Richard McMahon**

Senior Vice President, Energy

Supply and Finance

(202) 508-5571

rmcmahon@eei.org

### **Irene Ybadlit**

Senior Coordinator,

Energy Supply and Finance

(202) 508-5502

iybadlit@eei.org

### **Financial Analysis and Business Analytics Staff**

#### **Mark Agnew**

Senior Director, Financial Analysis

(202) 508-5049

magnew@eei.org

#### **Bill Pfister**

Senior Director, Business Analytics

202-508-5531

bpfister@eei.org

#### **Steve Frauenheim**

Senior Manager, Business Analytics

202-508-5580

sfrauenheim@eei.org

#### **Wenni Zhang**

Senior Financial and Business

Analyst

202-508-5142

wzhang@eei.org

### **Accounting and Investor Relations Staff**

#### **Randall Hartman**

Director, Accounting

(202) 508-5494

rhartman@eei.org

#### **Dave Dougher**

Senior Manager, Accounting

(202) 508-5570

ddougher@eei.org

#### **Aaron Cope**

Manager, Investor Relations

(202) 508-5127

acope@eei.org

#### **Kim King**

Coordinator, Finance and Tax

(202) 508-5493

kking@eei.org



## Edison Electric Institute Schedule of Upcoming Meetings

To assist in planning your schedule, here are upcoming meetings related to finance and accounting that may be of interest to you. For further details, contact Aaron Cope at (202) 508-5127, Randall Hartman (202) 508-5494, or Dave Dougher (202) 508-5570.

### July 27-28, 2022

#### EEI/AGA FERC Accounting Liaison Committee Meeting with FERC Staff

EEI Office  
Washington, DC

### August 22-24, 2022

#### EEI/AGA Utility Internal Auditor's Training Courses

JW Marriott  
Indianapolis, Indiana

### August 22-25, 2022

#### EEI-AGA Introduction to Public Utility Accounting and Advance Public Utility Accounting Training Courses

JW Marriott  
Indianapolis, Indiana

### November 13-15, 2022

#### EEI Financial Conference

Diplomat Beach Resort Hollywood  
Hollywood, FL

### November 13, 2022

#### EEI Treasury Group Meeting

*(Closed meeting, admittance by invitation only)*

Diplomat Beach Resort Hollywood  
Hollywood, FL

### November 13, 2022

#### Chief Financial Officers Forum

*(Closed meeting, admittance by invitation only)*

Diplomat Beach Resort Hollywood  
Hollywood, FL

### November (TBD), 2022

#### Fall Accounting Conference and Property Accounting & Depreciation Training Seminar

Location TBD

### December (TBD), 2022

#### Investor Relations Planning Group Meeting

*(Closed meeting, admittance by invitation only)*

New York, New York

### December (TBD), 2022

#### Wall Street Advisory Group Meeting

*(Closed meeting, admittance by invitation only)*

New York, New York

### May 21-24, 2023

#### Spring Accounting Conference

Grand Hyatt  
Denver, Colorado

## Earnings Twelve Months Ending December 31

### U.S. INVESTOR-OWNED ELECTRIC UTILITIES

(\$ Millions)

	2021	2020r
<b>Earnings Excluding Non-Recurring and Extraordinary Items</b>	<b>53,480</b>	<b>54,217</b>
<b>Non-Recurring Items (pre-tax)</b>		
Gain on Sale of Assets	(3,207)	(398)
Other Non-Recurring Revenues	1,161	—
Asset Write-downs	(2,012)	(6,704)
Other Non-Recurring Expenses	(7,875)	(8,504)
<b>Total Non-Recurring Items</b>	<b>(11,934)</b>	<b>(15,607)</b>
<b>Extraordinary Items (net of taxes)</b>		
Discontinued Operations	731	17
Change in Accounting Principles	—	—
Early Retirement of Debt	—	—
Other Extraordinary Items	—	—
<b>Total Extraordinary Items</b>	<b>731</b>	<b>17</b>
<b>Net Income</b>	<b>42,277</b>	<b>38,627</b>
<b>Total Non-Recurring and Extraordinary Items</b>	<b>(11,203)</b>	<b>(15,589)</b>

r = revised Note: Totals may reflect rounding.

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

# U.S. Investor-Owned Electric Utilities

(At 12/31/2021)

ALLETE, Inc.	Edison International	PG&E Corporation
Alliant Energy Corporation	Entergy Corporation	Pinnacle West Capital Corporation
Ameren Corporation	Eversource Energy	PNM Resources, Inc.
American Electric Power Company, Inc.	Exelon Corporation	Portland General Electric Company
AVANGRID, Inc.	FirstEnergy Corp.	PPL Corporation
Avista Corporation	Hawaiian Electric Industries, Inc.	Public Service Enterprise Group Inc.
<i>Berkshire Hathaway Energy</i>	IDACORP, Inc.	<i>Puget Energy, Inc.</i>
Black Hills Corporation	MDU Resources Group, Inc.	Sempra Energy
CenterPoint Energy, Inc.	MGE Energy, Inc.	Southern Company
<i>Cleco Corporate Holdings LLC</i>	NextEra Energy, Inc.	The AES Corporation *
CMS Energy Corporation	NiSource Inc.	<i>DPL Inc.</i>
Consolidated Edison, Inc.	NorthWestern Corporation	<i>IPALCO Enterprises, Inc.</i>
Dominion Energy, Inc.	OGE Energy Corp.	Unitil Corporation
DTE Energy Company	Otter Tail Corporation	WEC Energy Group, Inc.
Duke Energy Corporation		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

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

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](http://www.eei.org).



**Edison Electric Institute**  
701 Pennsylvania Avenue, NW  
Washington, DC 20004-2696  
202-508-5000 | [www.eei.org](http://www.eei.org)