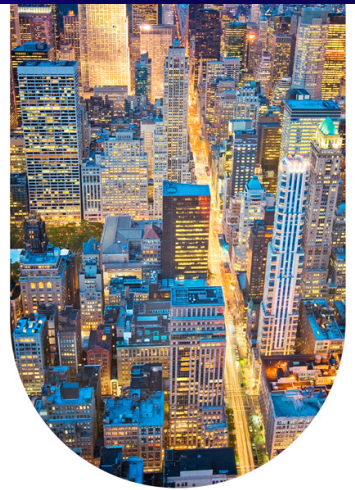
Edison Electric INSTITUTE

America's Electric Companies

Delivering the Future of Energy

Electric Power Industry Outlook
February 20, 2024

Electric Companies Create Value in America's Economy



Contribute

5%

annually to U.S. GDP

Support

7 million+

jobs across the United States

Invest

$150 billion+

per year to build smarter, cleaner, stronger, and more secure energy infrastructure

2024 Industry Priorities

Clean Energy & ESG

Customer Affordability

Industry Financial Health

Policy & Regulatory Implementation

Preparing for Increased Electrification

Resilience & Grid Security

Siting & Permitting Reform

Storm Response & Wildfire Mitigation

Workforce Development

Leading on Clean Energy

#Committed2Clean®

Across the nation, EEI's member companies are focused on customer reliability and affordability as they work to get the energy they provide as clean as they can as fast as they can.

Clean Energy Progress

Changing U.S. Energy Mix

>40%

CARBON-FREE

↓ CO_2

CARBON EMISSIONS
From the U.S. Power Sector
ARE AS LOW AS THEY WERE IN 1984,
While Electricity Use Is Up 73% Since Then

Increasing Investments

>$150 Billion

Per Year on Average
TO MAKE THE ENERGY GRID SMARTER, CLEANER, STRONGER, MORE DYNAMIC, AND MORE SECURE

>60%

Over the Past 10 Years,
More Than 60% of New Electricity
Generation Capacity Was
WIND AND SOLAR

Added in 2023

>23 Gigawatts

of
RENEWABLE TECHNOLOGIES

Investing

>$5 Billion

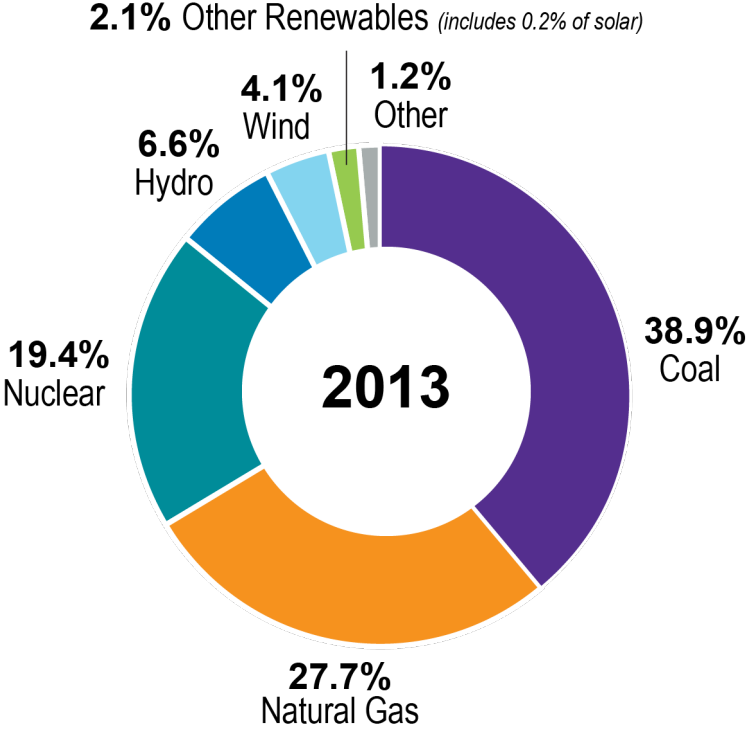
to Deploy
EV CHARGING INFRASTRUCTURE

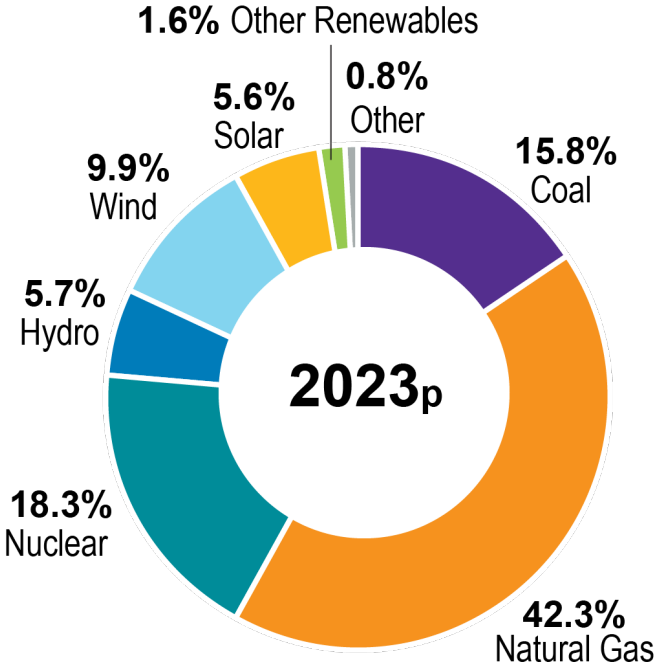
Using

92%

of all
U.S. ENERGY STORAGE

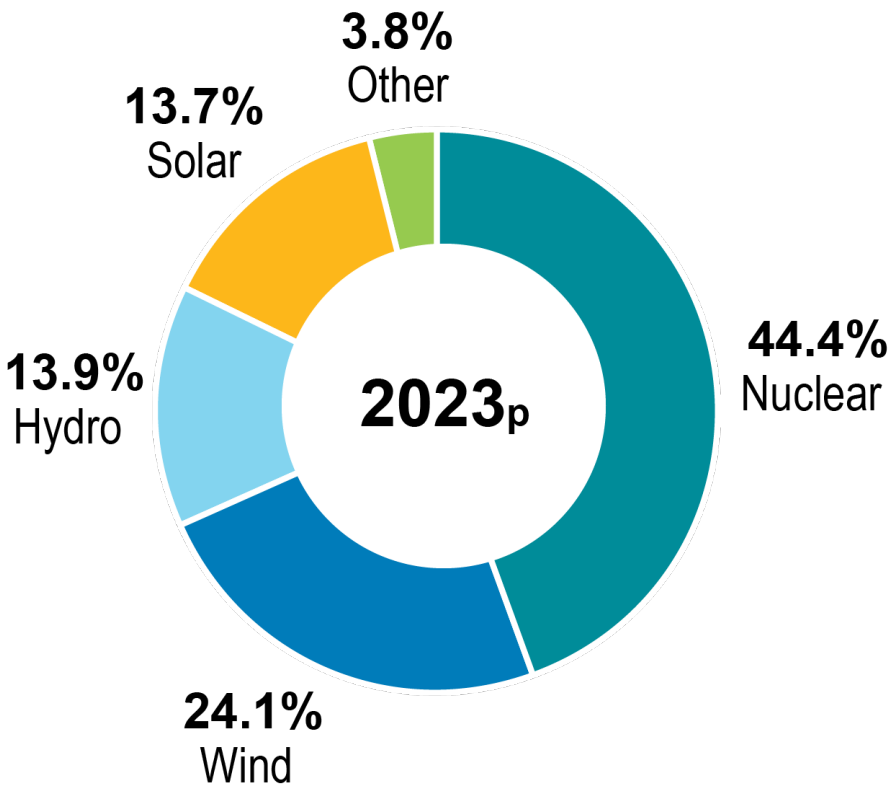
Transforming the Energy Mix





p = preliminary. Note: In 2023, "Other Renewables" includes geothermal and generation from biomass sources (agricultural waste, landfill gas recovery, municipal solid waste, wood, non-wood waste). In 2013, "Other Renewables" also includes universal (or large-scale) solar and private (or rooftop) solar. Source: U.S. Department of Energy, Energy Information Administration.

Carbon-Free Electricity Generated



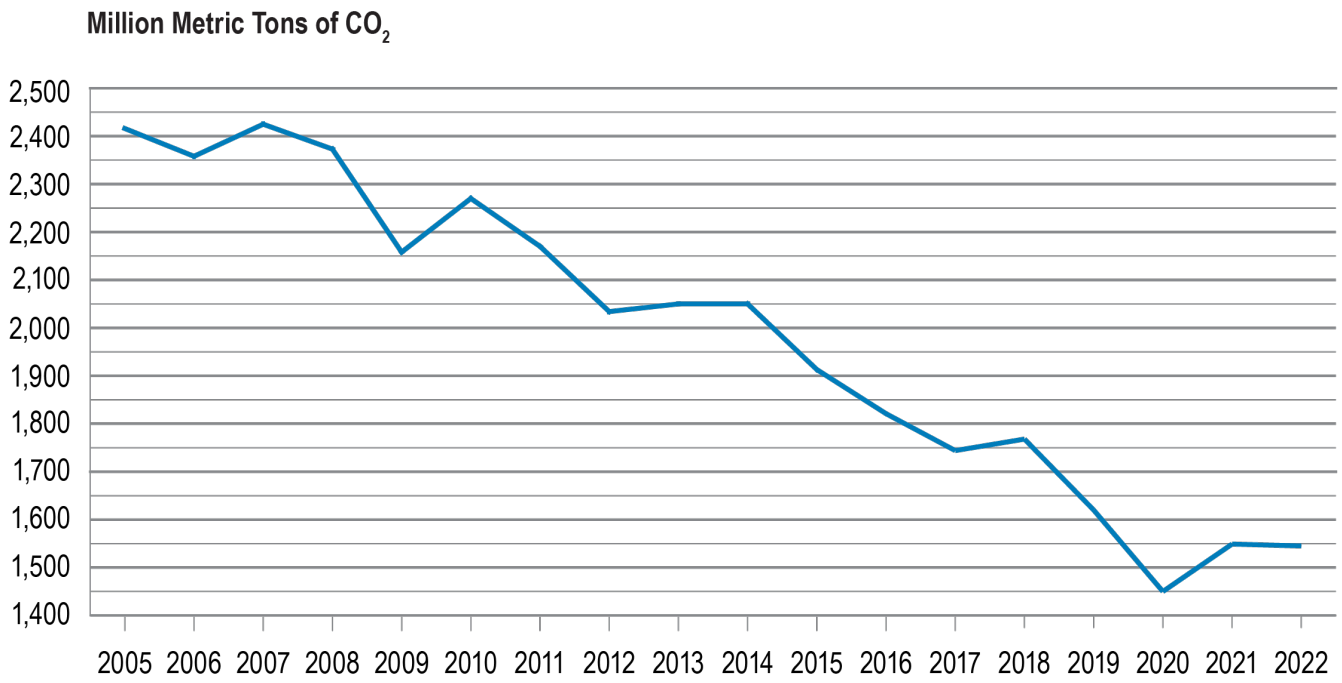
- Nuclear energy remains the largest source of carbon-free electricity.
- Since 2015, annual generation from carbon-free sources has increased more than 30 percent.
- Generation from solar energy has increased almost 50 percent over the last two years and is more than four times the generation total from 2016.
- Today, wind and solar combined make up 16 percent of the total electricity generated in the U.S.

p = preliminary

"Other" includes biomass, geothermal, and landfill gas.

Source: U.S. Department of Energy, Energy Information Administration.

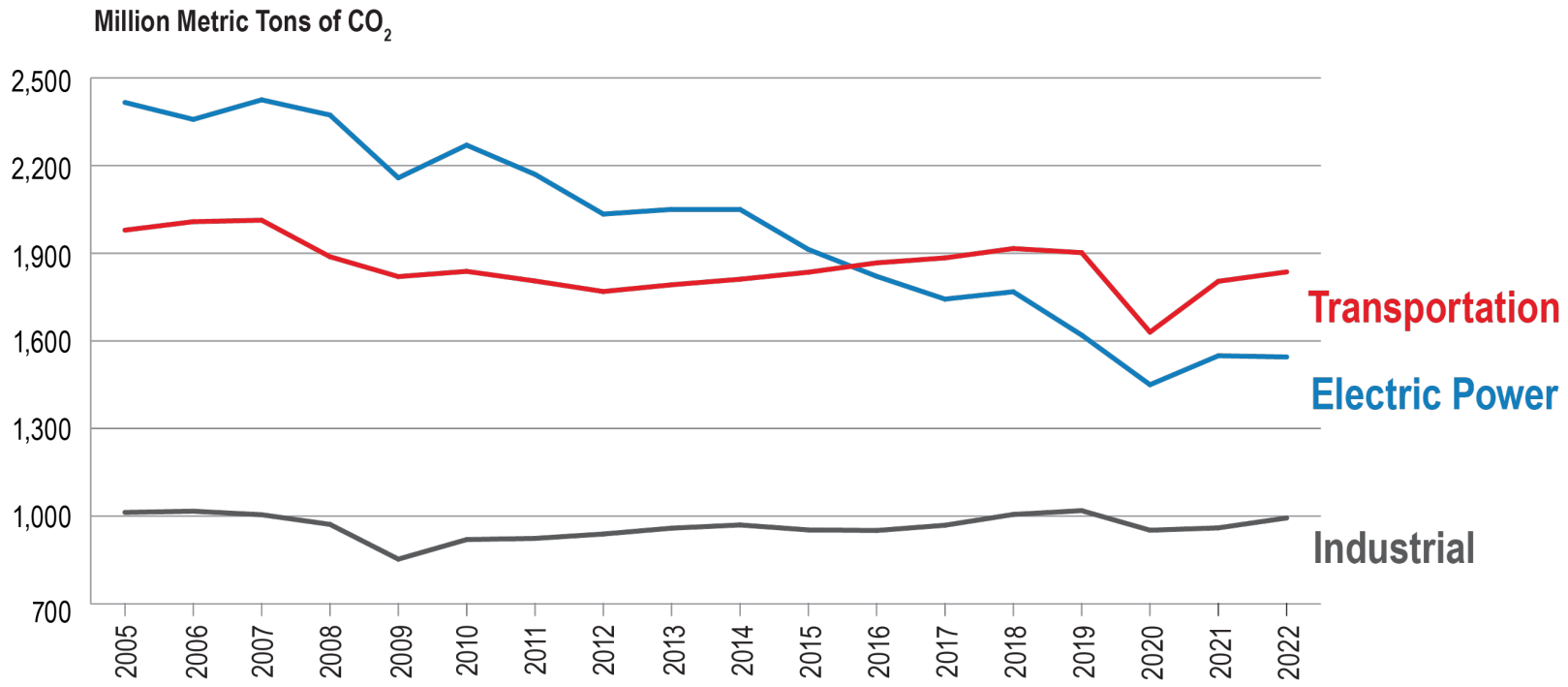
Reducing Carbon Emissions



Source: U.S. Department of Energy, Energy Information Administration (EIA), *Monthly Energy Review*, June 2023.

- Today, more than 40 percent of U.S. electricity comes from carbon-free sources.
- As of 2022, electric power industry CO_2 emissions were 36 percent below 2005 levels.
- The overall trajectory is expected to continue based on current trends.

Carbon Emissions by Sector



Source: U.S. Department of Energy, Energy Information Administration (EIA), *Monthly Energy Review*, June 2023.

Key Funding in Bipartisan Infrastructure Law

$5.05B
Expanding Access to Clean Energy & Energy Efficiency

$16.5B
Grid Resilience & Improvements

$6.7B
Maintaining Our Existing Clean Generation Fleet

$21.5B
Clean Energy Demonstration & Research Hubs

$43.4B
Broadband Development & Infrastructure

$8.9B
Electric Vehicle Infrastructure

IRA's Clean Energy Tax Package

Key provisions in the Inflation Reduction Act include:

- New production tax credit for existing nuclear facilities.
- Extension of investment and production tax credits for wind, solar, energy storage, and other qualified technologies.
- New technology-neutral tax credit for carbon-free generation.
- New production tax credits for hydrogen.
- Extension and expansion of tax credits for carbon capture and sequestration.
- New EV and EV infrastructure tax credits.
- New consumer tax credits and rebates to support energy-saving home improvements.

Advocating for Siting and Permitting Reform

- Siting and permitting reforms included in last year's Fiscal Responsibility Act will enable a more efficient, timely, environmentally sound, and durable energy infrastructure process.
- Still, it is too difficult, too costly, and too time-consuming to develop and build critical and necessary energy infrastructure projects of all kinds.
- There is no one-size-fits-all solution, but there are opportunities to further optimize the interagency review processes.

Institute for the Energy Transition

The Institute for the Energy Transition:

- Provides accessible qualitative summaries of key carbon-free technologies.
- Identifies barriers to deployment.
- Summarizes takeaways from key demonstration project.
- Develops materials to educate key stakeholders.

The Edison Foundation

Institute for
The Energy Transition

Helping Customers Manage Their Energy Bills

Providing Energy Bill Assistance

EEI's member companies are focused on providing customers with the resilient clean energy solutions they want, while keeping energy bills as low as possible.

- The average percent of the household budget that goes to electric bills is between 1.9 percent to 2.9 percent, depending on region.
- For customers in the bottom 20 percent of household incomes, that national average is 3.7 percent.
- Electric companies have prioritized finding innovative new ways to offer tailored support and direct assistance to customers in need.

Advocating for Full LIHEAP Funding

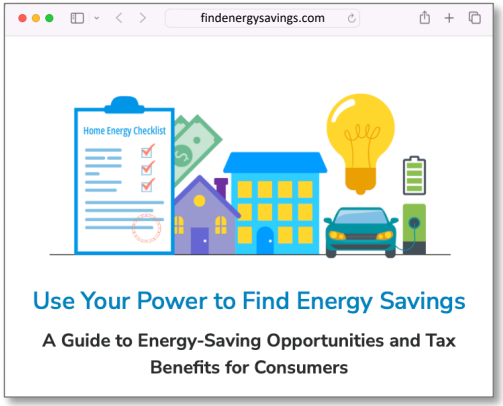
- The federal Low Income Home Energy Assistance Program (LIHEAP) delivered payment assistance to more than 7 million households in fiscal year 2023. While this was a record number, **4 out of 5 families eligible for LIHEAP aid still do not receive it.**
- EEI's member companies continue to advocate for full funding of LIHEAP. They also are working with implementing agencies to streamline the application process and to enhance program accessibility.

Helping Customers Save Energy and Money

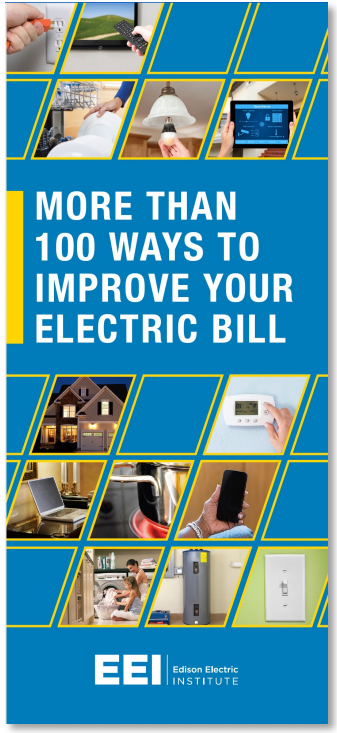
Electric companies work with customers to help them reduce their bills by better managing their energy use.

In 2022, energy efficiency programs saved enough electricity to power

33 million U.S. homes for **1 year**.



www.findenergysavings.com



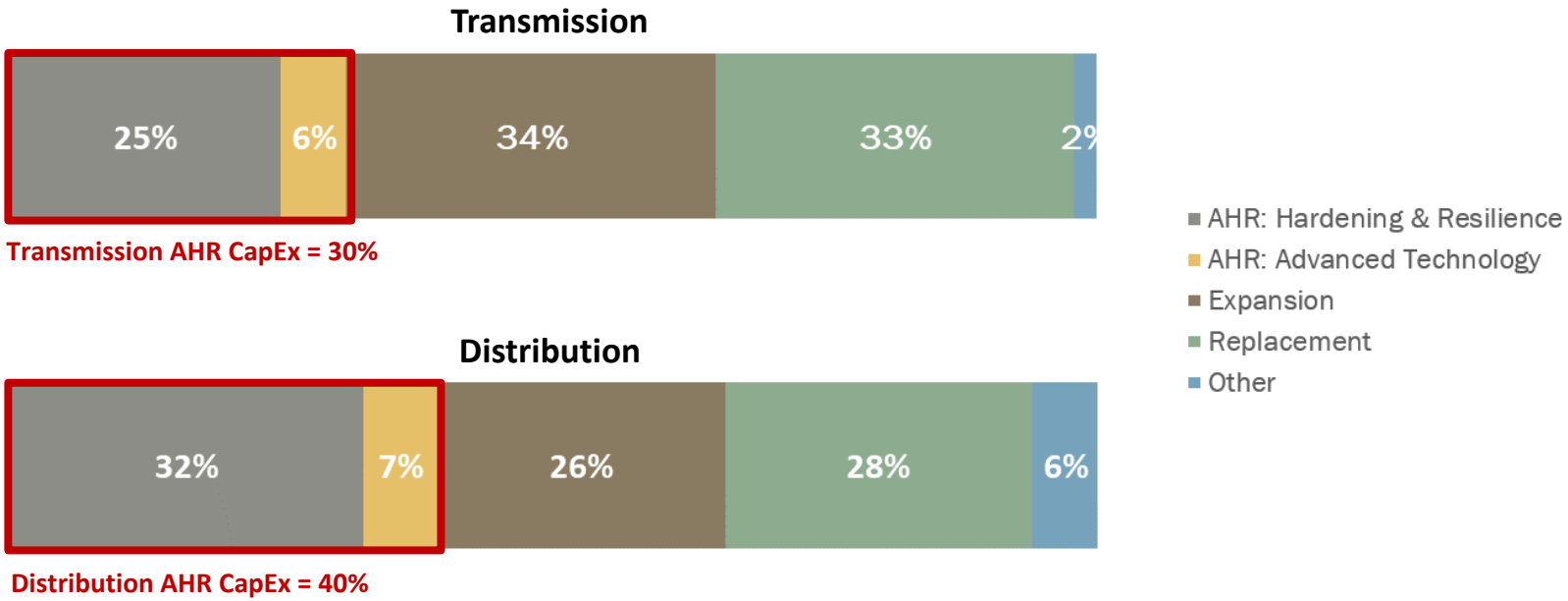
Enhancing Grid Security & Resilience

Investing in AHR

While investments in adaptation, hardening, and resilience (AHR) have increased significantly over the past decade, more investments are needed to enhance the overall reliability and resilience of the energy grid.

AHR as a Driver of Future Electric T&D Investment

Adaption, Hardening, and Resilience



Note: Due to rounding, the percentages may not add to Transmission and Distribution totals shown.

Source: EEI Financial Analysis and Business Analytics, EEI member company survey (2023).

Securing the Energy Grid

Protecting the nation's energy grid is the top priority for America's electric companies.

- Our security strategies constantly evolve and are closely coordinated with the federal government through the CEO-led Electricity Subsector Coordinating Council (ESCC).
- Part of this strategy includes the ESCC's Cyber Mutual Assistance program, which extends our industry's practice of sharing critical personnel and equipment for emergency response to the cyber realm.

ESCC
Electricity Subsector Coordinating Council

CMA
Cyber Mutual Assistance

Addressing & Mitigating Wildfire Risks

EEI's Strategic Wildfire Priorities:

- **Establish** a common understanding of the range of prudent wildfire mitigation activities that electric companies can undertake and that reflect their particular wildfire risks.
- **Expand** partnerships with the full complement of stakeholders needed to address wildfire risk at the community, state, and federal levels.
- **Promote** and protect the value of financially healthy electric companies in supporting national and economic security; building a clean, resilient power sector; and electrifying other sectors.
- **Ensure** electric companies have access to necessary financial risk mitigation tools, including an array of appropriate insurance and financial products and tools to better manage the financial risks and liquidity consequences of potential wildfire liability.

The Industry’s Financial Health & Investments

Industry Financial Highlights

Stock Performance

	EEI Index	DJIA	S&P 500	NASDAQ
1-year	-8.70%	16.18%	26.29%	43.26%
3-year	8.16%	30.87%	33.10%	16.64%
5-year	34.47%	80.00%	107.21%	127.98%

Dividends

- Yield = 3.9%
- 38 of 39 companies are currently paying a dividend
- 87% of companies increased their dividend in 2023

Credit Ratings

- BBB+ Average Industry Credit Rating
- Outlook 84% Stable or Positive

Note: Stock returns are total returns ending December 31, 2023, (i.e., include dividends) except for NASDAQ, which is price appreciation only.
Source: EEI Finance Department, S&P Global Market Intelligence.

Industry Capital Expenditures

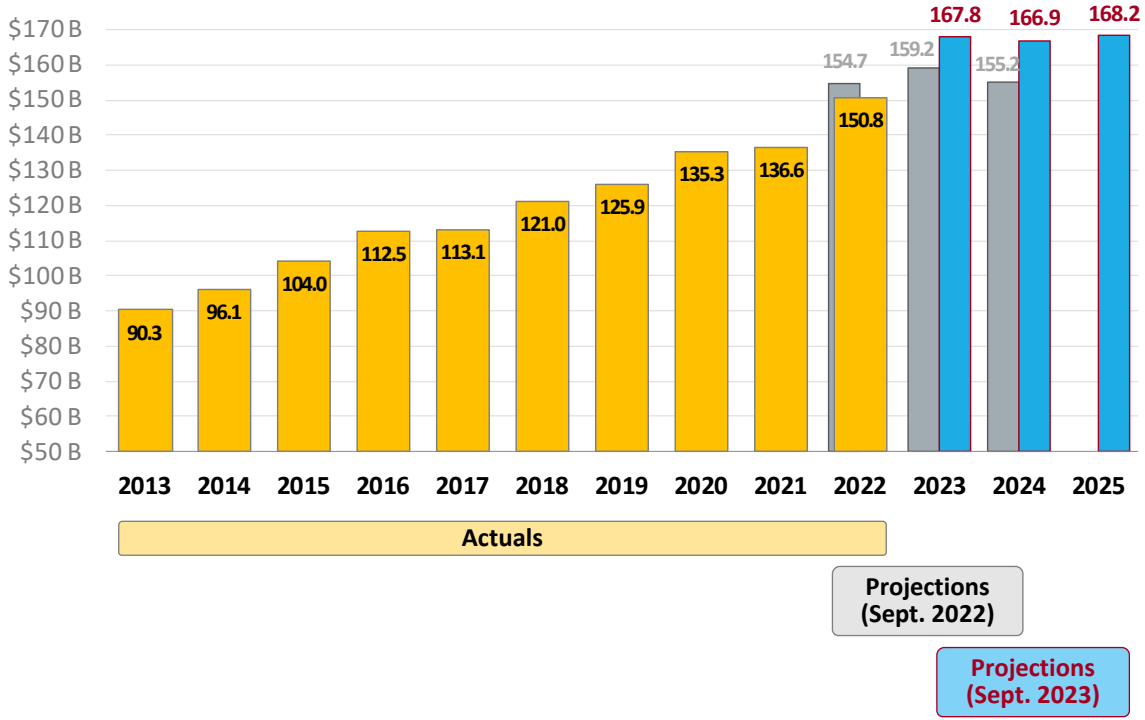


Chart represents total company spending of U.S. investor-owned electric companies, consolidated at the parent or appropriate holding company.

Note: At the industry level, CapEx tends to be overestimated for the current, or first year's projection and underestimated for the two following years.

Source: EEI Finance Department, member company reports, and S&P Global Market Intelligence (updated Sept. 2023).

Projected Functional CapEx

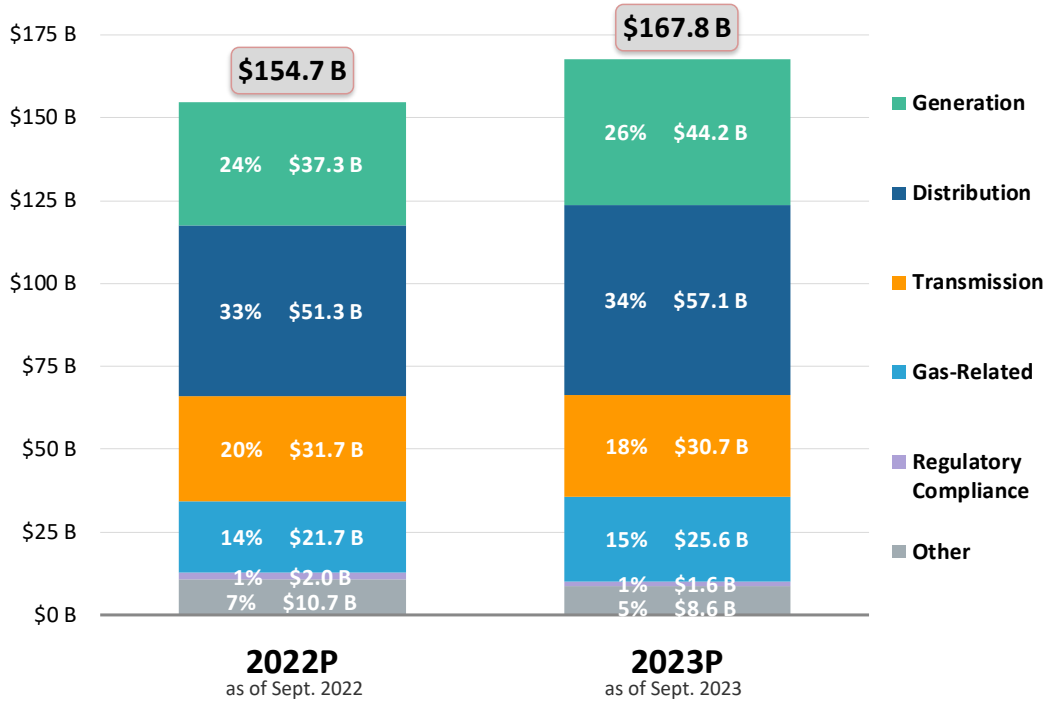
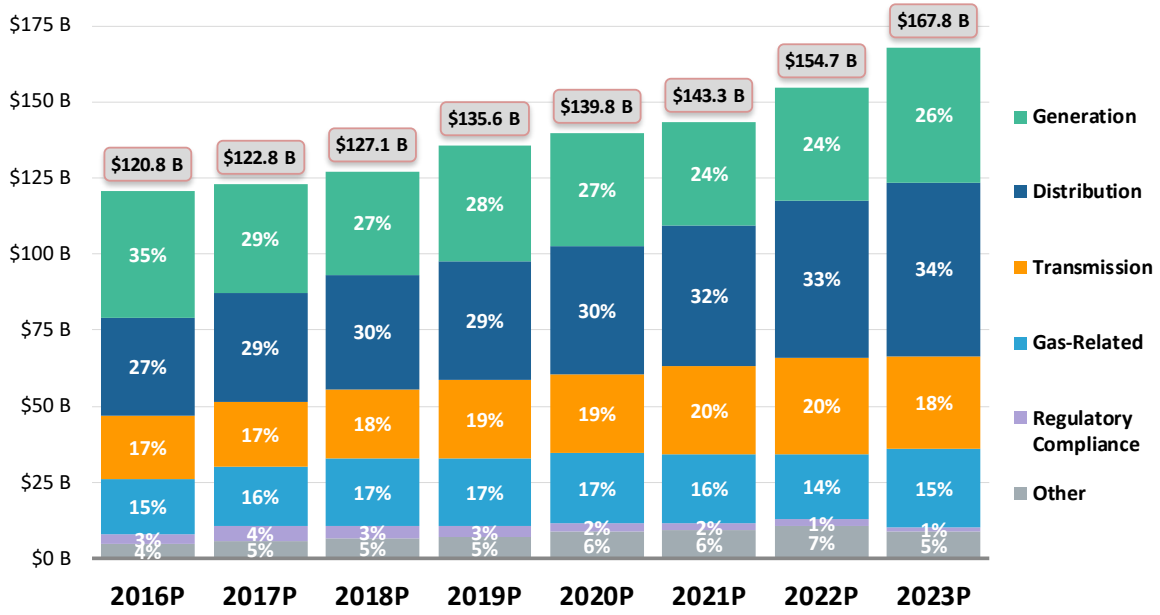


Chart represents total company functional spending of U.S. investor-owned electric companies. Individual years may not sum to 100% due to rounding error.

Note: Each annual functional projection is compiled during the calendar year for which it is reported and is not revised to align with the actual total. Therefore, the projected total dollar amounts in the functional chart do not align with the actual totals reported on the enclosed industry capital expenditures chart.

Source: EEI Finance Department, company reports, and S&P Global Market Intelligence (updated Sept. 2023).

Projected Functional CapEx



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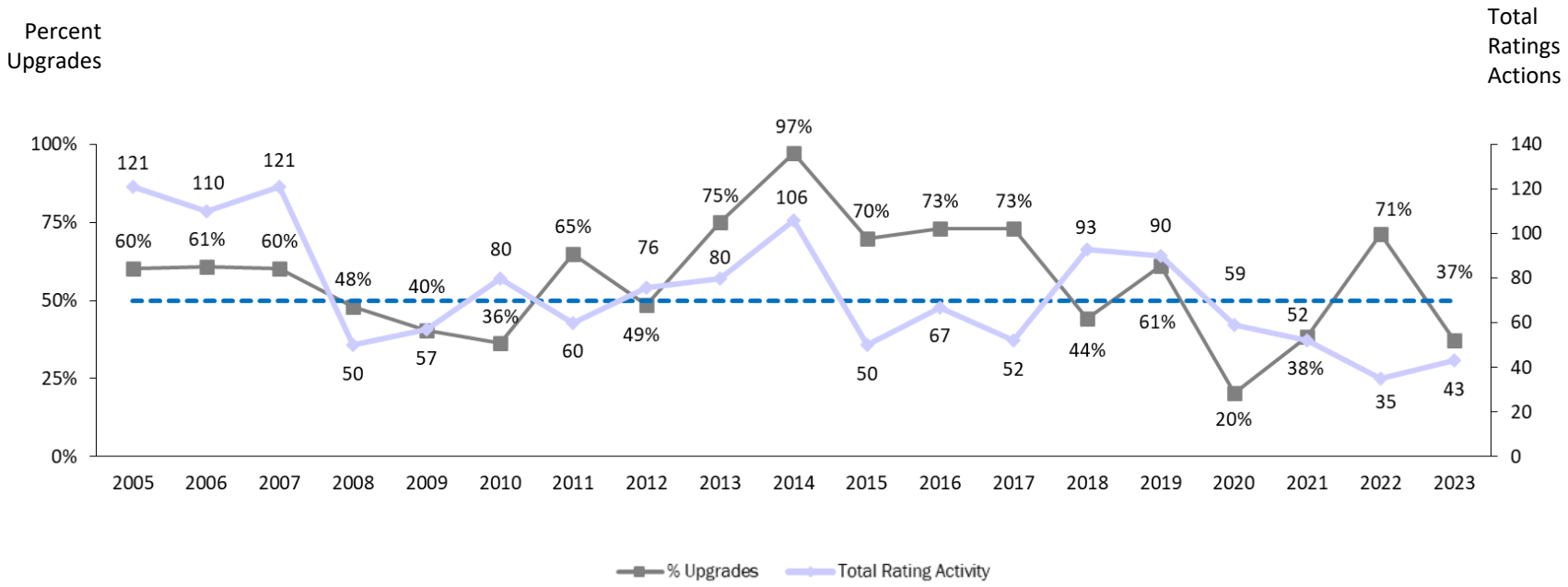
Source: EEI Finance Department, company reports, and S&P Global Market Intelligence (updated Sept. 2023).

Direction of Rating Actions

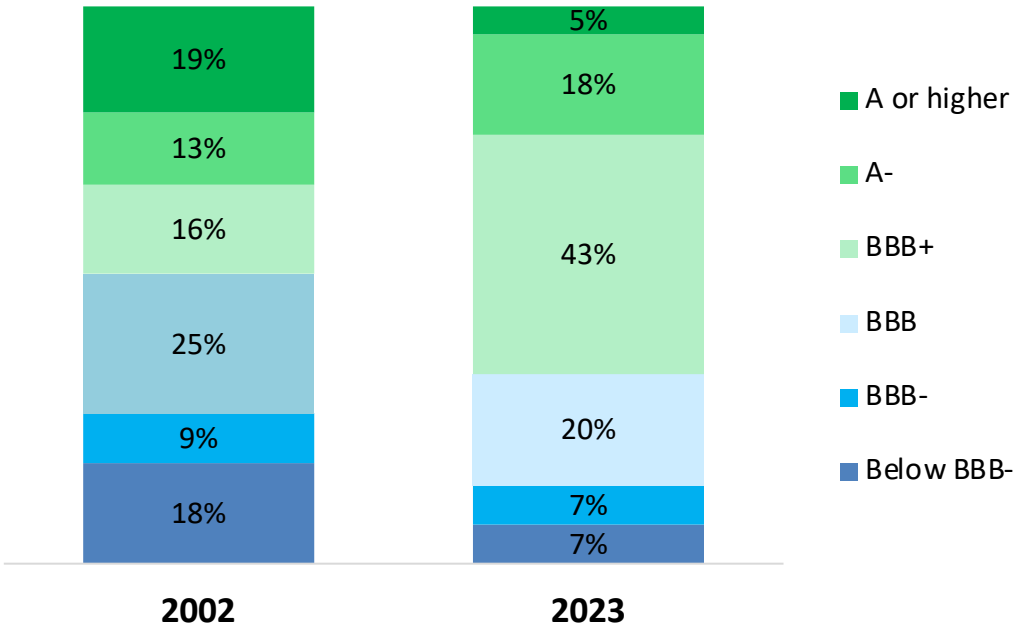
U.S. Investor-Owned Electric Companies, 2005-2022



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

U.S. Electric Industry Rating History

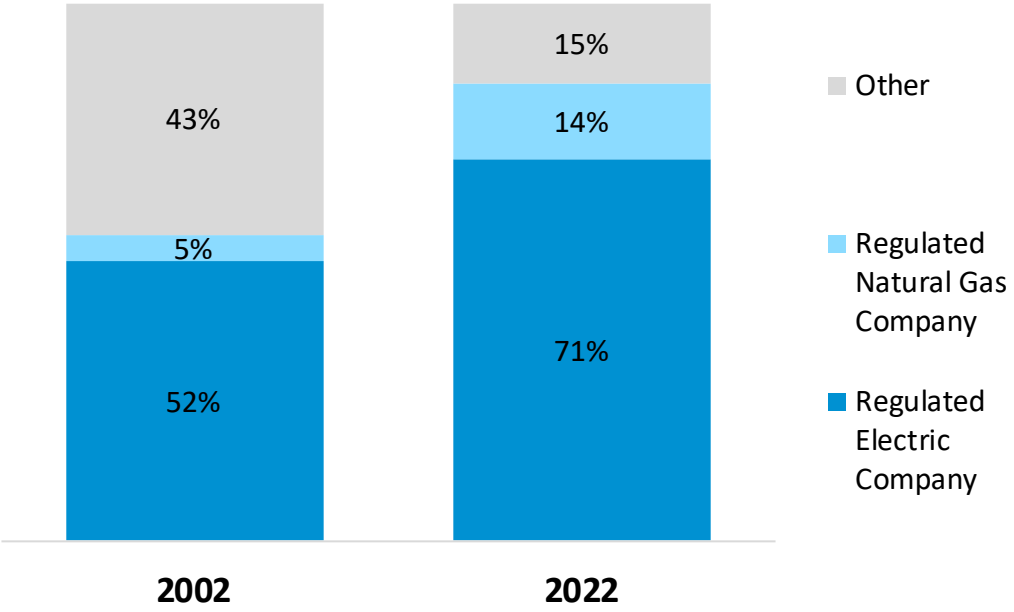
Industry maintains BBB+ rating since 2014; vast majority of outlooks stable or positive



Source: EEI Finance Department and Standard & Poor's.

Shift to More Regulated Business Strategies

Industry gradually increased to 85% regulated in 2022 from 57% in 2002

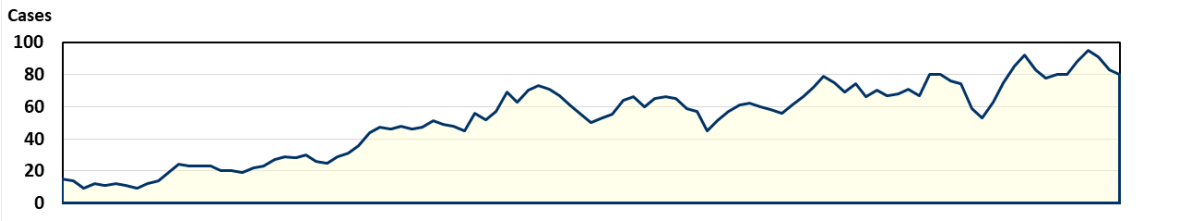


Note: Based on 2022 year-end assets. Source: EEI Finance Department.

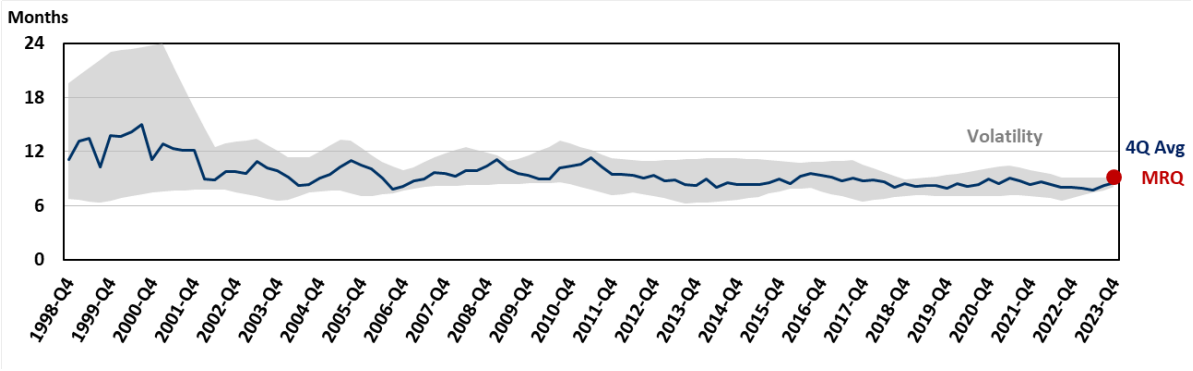
Rate Review Activity: Volume and Lag

U.S. Investor-Owned Electric Companies

Number of Electric Rate Reviews Filed (Trailing 12 Months)



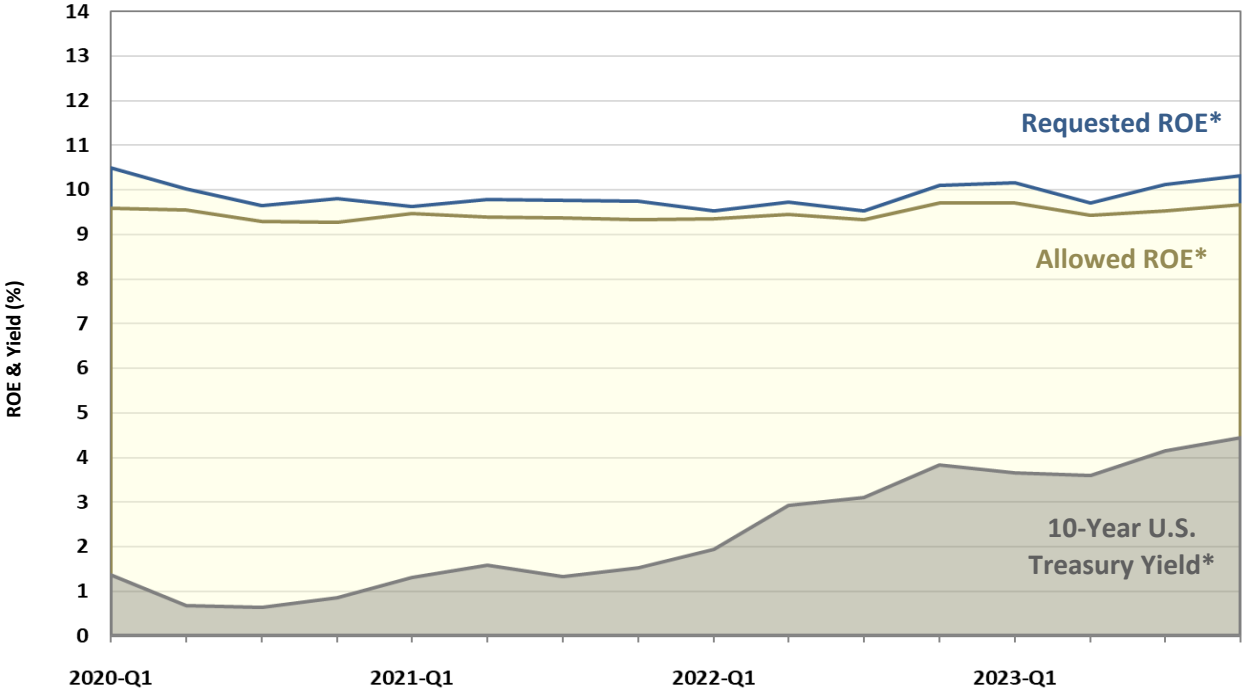
Average Regulatory Lag (Quarterly)*



*Average Regulatory Lag is defined here as the amount of time between the filing of and ruling on a rate review. This does not take into consideration the preparation time leading up to an initial filing.
MRQ = Most Recent Quarter. 4Q Avg = Trailing four-quarter average.
Source: S&P Global Market Intelligence / Regulatory Research Associates (RRA), EEI Finance Department.

Rate Review Activity: Average ROEs

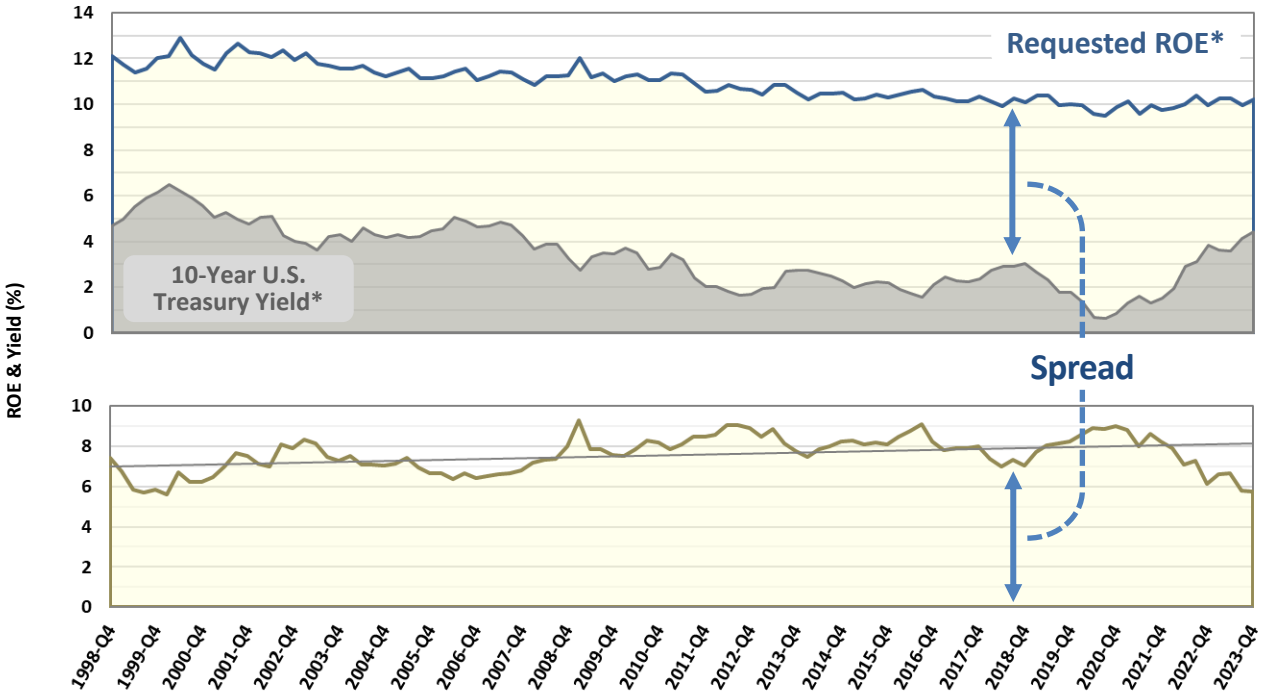
Requested ROE vs. Allowed ROE and 10-Year U.S. Treasury Yield



*The Allowed ROE represents the electric reviews settled during the indicated period while the Requested ROE represents the value requested by the company when the reviews were initially filed, generally during an earlier period (i.e., the regulatory lag is not factored in). Average returns are equal-weight.
Source: S&P Global Market Intelligence / Regulatory Research Associates (RRA), EEI Finance Department.

Rate Review Activity: Average ROEs

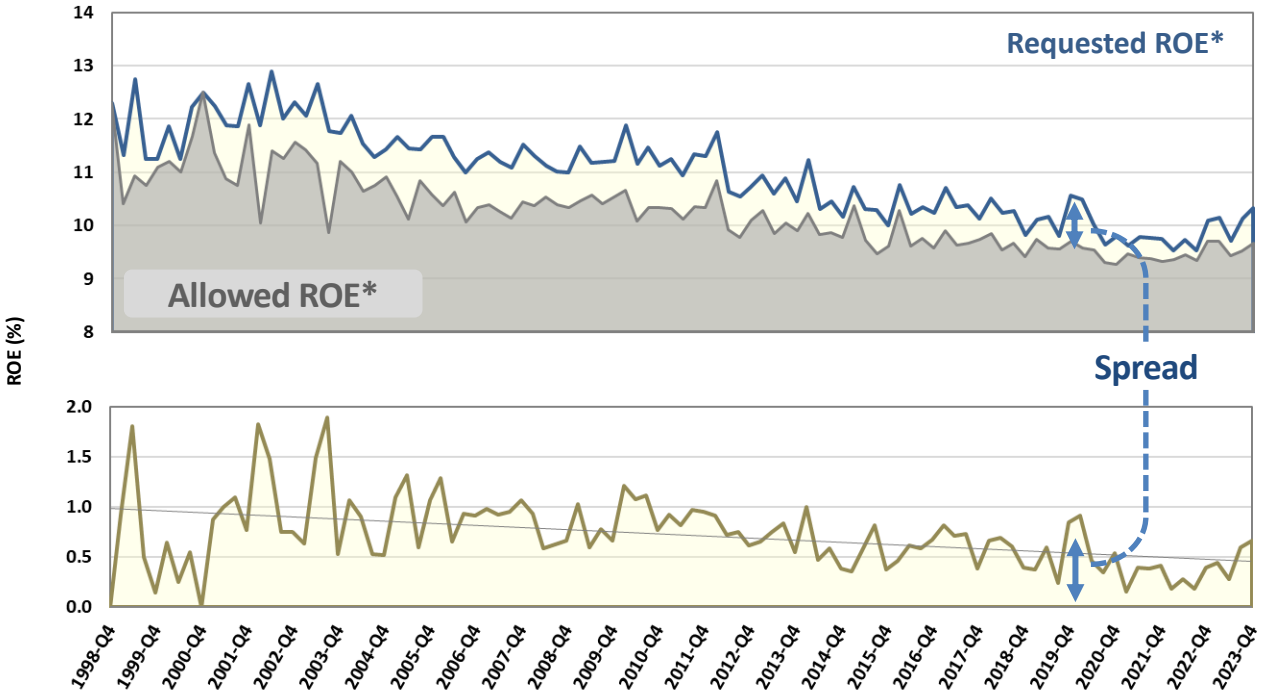
Requested ROE vs. 10-Year U.S. Treasury Yield



*Requested ROE represents the equal-weight average of all electric reviews filed during the indicated period.
10-Year U.S. Treasury Yield is the average of daily reported yields during each period.
Source: S&P Global Market Intelligence / Regulatory Research Associates (RRA), EEI Finance Department.

Rate Review Activity: Average ROEs

Allowed ROE vs. Corresponding Requested ROE



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Source: S&P Global Market Intelligence / Regulatory Research Associates (RRA), EEI Finance Department.

Policy & Regulatory Implementation

Advancing Key Regulatory Policies

EEI supports:

- Reforms in transmission planning, cost allocation, permitting, siting, and generator interconnection.
- The development and refinement of critical reliability standards.
- Clear and stable policies for cost-recovery of unforeseen emergencies.
- Broader recognition of the importance and customer benefits of the regulatory compact.

Environmental Regulations

EPA is expected to finalize four rules for the power sector this spring:

- Greenhouse gas rules for new and existing power plants (Clean Air Act Section 111 Rules)
- Supplemental effluent limitations guidelines (ELG) and standards for steam electric power generation (ELG Rule)
- Updated Mercury and Air Toxics Standards (MATS)
- Updated rules for managing coal combustion residuals (CCR Rule)

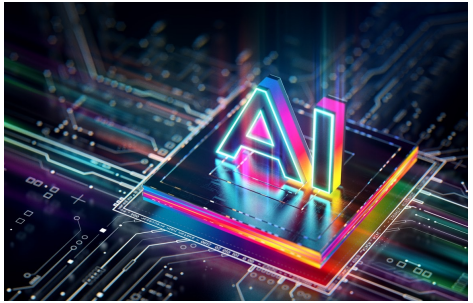
CAA Section 111 Rules

EEI and our member companies have been closely engaged with EPA for more than two years on the agency's proposed 111 rules. Since the very start, we have outlined three important priorities:

- Alignment of compliance deadlines with existing transition plans.
- Recognition of the critical role existing and new natural gas generation plays—and will continue to play—in integrating more renewable energy and maintaining reliability.
- Inclusion of a range of compliance flexibilities and the industry's commitment to developing and deploying critical clean energy technologies, including hydrogen and carbon capture and storage, when they are commercially available at scale and cost.

Preparing for Increased Electrification

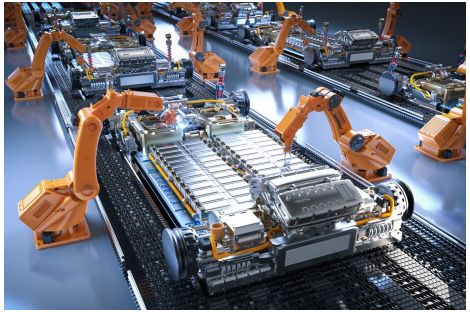
Demand Drivers



Artificial Intelligence

Data Centers

Electric Heating



Manufacturing

Transportation Electrification

Meeting Increasing Demand for Electricity Over the Next Five Years

2022 → Estimated **2.6% growth** (over the next five years)

2024 → Now Estimated **4.7% growth** (over the next five years)

↑ **38 GW**

Peak Demand

between now and 2028

> "Electricity peak demand and net energy growth rates in North America are increasing more rapidly than at any point in the past three decades."

North American Electric Reliability Corporation's 2023 Long-Term Reliability Assessment

Electric Transportation Trends

TODAY

There are more than

4 million

electric vehicles on U.S. roads.

>$5.2 billon

EEI's member companies are investing more than $5.2 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation.

IN 2030

The number of EVs on U.S. roads is projected to reach more than

26 million.

140,000

EV fast charging ports will be required to support this number.

Recruiting & Retaining a Highly Skilled, Diverse Workforce

Workforce Development Programs

Electric companies are focused on:

- Increasing awareness and promoting the merits of 21st century energy careers.
- Building more diverse, equitable, and inclusive workplaces.
- Developing people for increasingly technical and dynamic energy careers.

CEWD
Center for Energy Workforce Development

Appendix

EEI Financial Analysis Resources

Examples of EEI Financial Public Reports & Data

Items updated quarterly unless otherwise indicated

Financial Review (annual)

Incorporates the following reports and additional industry material

Stock Performance

Financial market performance (Price, TSR, etc.) of proprietary EEI member index and equity analyst opinions

Credit Ratings

Holding company ratings & rating agency activity

Dividends

Dividend-related actions of EEI members and relevant issues

Rate Review Summary

Aggregate industry statistics on quarterly rate review data

Industry Consolidated Financial Statements (annual)

- Income Statement
- Balance Sheet
- Cash Flow Statement

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