EEI INVESTOR ESG REPORT

2024

AMERICAN ELECTRIC POWER

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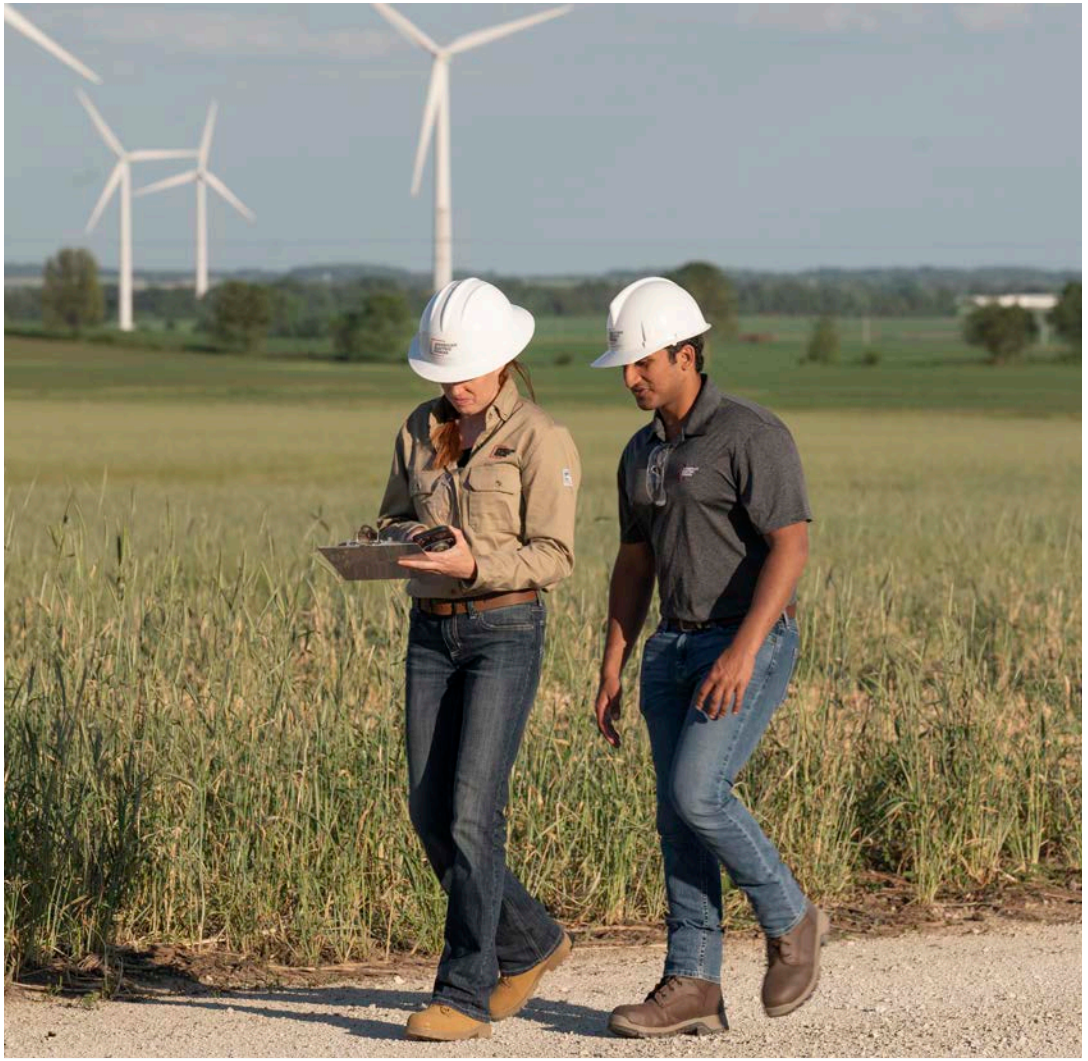
Section 1

QUALITATIVE REPORT

About AEP

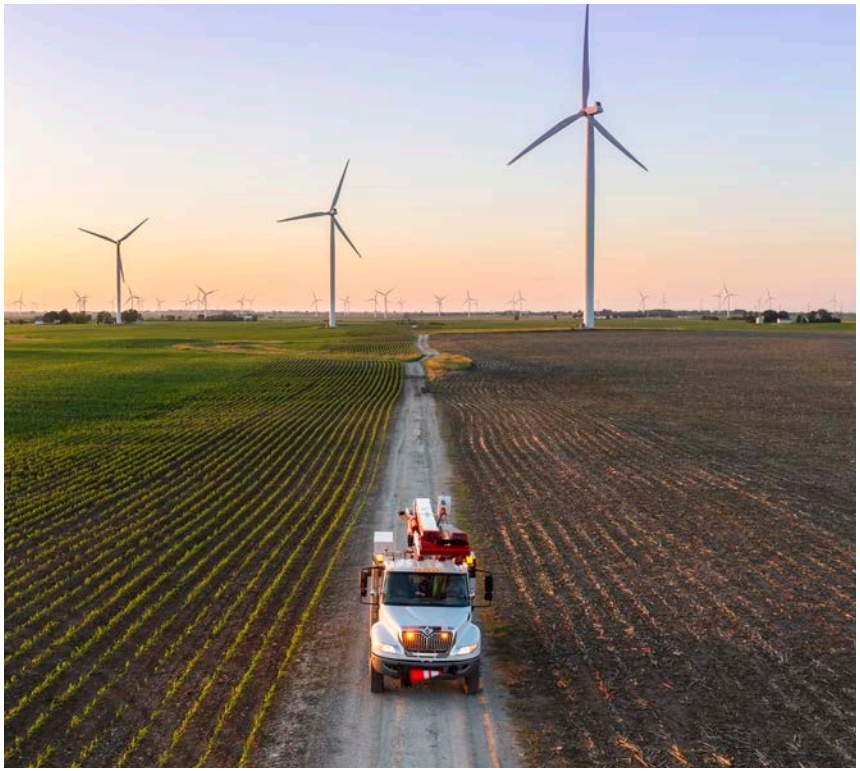
At American Electric Power, based in Columbus, Ohio, we understand that our customers and communities depend on safe, reliable and affordable power. Our nearly 17,000 employees operate and maintain more than 40,000 miles of transmission lines, the nation's largest electric transmission system, and more than 225,000 miles of distribution lines to deliver power to 5.6 million customers in 11 states. AEP also is one of the nation's largest electricity producers with approximately 29,000 megawatts of diverse generating capacity, including nearly 6,000 megawatts of renewable energy. AEP is investing $43 billion over the next five years to make the electric grid cleaner and more reliable. We are on track to reach an 80% reduction in carbon dioxide emissions from 2005 levels by 2030 and have a goal to achieve net zero by 2045. AEP is recognized consistently for its focus on sustainability, community engagement and inclusion. AEP's family of companies includes utilities AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana, east Texas and the Texas Panhandle). AEP also owns AEP Energy, which provides innovative competitive energy solutions nationwide.

For more information, vist *aep.com*



Responsible Business Practices

AEP is in the business of delivering safe, reliable and affordable electricity to our customers; that is our purpose. Our ability to do this is dependent upon our financial success, as well as non-financial, or sustainability, factors that can impact our operations, finances and reputation. Sustainability-related factors such as safety, workforce development, economic growth, affordability of our product, and customer satisfaction inform our decision-making process. These insights enable AEP to identify and manage potential risks and opportunities in order to act in the best interest of our customers, communities, shareholders and employees. We are committed to integrating responsible business practices into our strategy to better enable long-term stability and business continuity.



Our responsible business practices are guided by these key focus areas:

Affordable, Reliable & Just Energy Transition
Keeping our customers, communities and employees top of mind, we are committed to a safe, affordable and just transition as we continue to deliver reliable energy. In partnership with our regulators, we will invest in modernizing our grid while balancing fuel cost volatility and capacity needs with managing customer costs and impacts to our communities as we make the transition to a cleaner energy economy.

Environmental Compliance & Stewardship
We are committed to always complying with applicable environmental requirements and being good stewards of natural resources.

Social Justice & Inclusion
We are committed to considering the social impacts of our operations and decisions and putting mechanisms in place that provide access to cleaner and modern energy options. This includes meaningful engagement with customers and communities to ensure fair treatment and inclusive decision-making.

Governance & Oversight
We are committed to strong governance practices that protect the long-term interests of our stakeholders. Leadership and governance are foundational to building and strengthening sustained business value and ensuring transparency, fairness and accountability while providing structure to ethically manage business operations.

Energy Transition

Achieving a low-carbon economy by mid-century is a daunting challenge by any measure. It requires technological breakthroughs; navigating and working with partners and regulators in long-standing regulatory and market paradigms; and balancing investment across the power sector. AEP defines energy transition as meeting the generation resource requirements of the states in which it operates and the needs of customers who it serves. We anticipate that some of our states and customers will require less carbon intensive generation capacity and energy. AEP has already made considerable progress toward reducing environmental impacts by making significant investments in both fossil fuel generation and renewables to deliver reliable, affordable energy to our customers and to strengthen the resilience of the electric power grid. The increasing frequency and severity of extreme weather events in AEP's service territories have affected the level and duration of customer outages. While much work remains to transform the energy sector, the pace of progress ultimately will be determined by the need for reliability, resilience and affordability. Keeping this focus front and center will enable continued economic growth in our communities while addressing mandated environmental compliance and climate-related risks.

In recent years, record-breaking severe weather events have tested the resilience of the grid and exacted a significant financial and human toll. For example, according to the National Oceanic and Atmospheric Administration, 2023 was the single hottest year on record to date – fueled by a strong El Niño weather pattern that contributed to a massive heat dome over the South, Midwest and Great Plains. Following back-to-back severe storms in 2023, the electric grid experienced significant damage that left nearly a half million customers in four states in AEP's footprint without power. AEP is adapting its business practices and standards to these changing weather patterns to build a stronger, more resilient and reliable grid.

AEP's Shifting Generating Portfolio

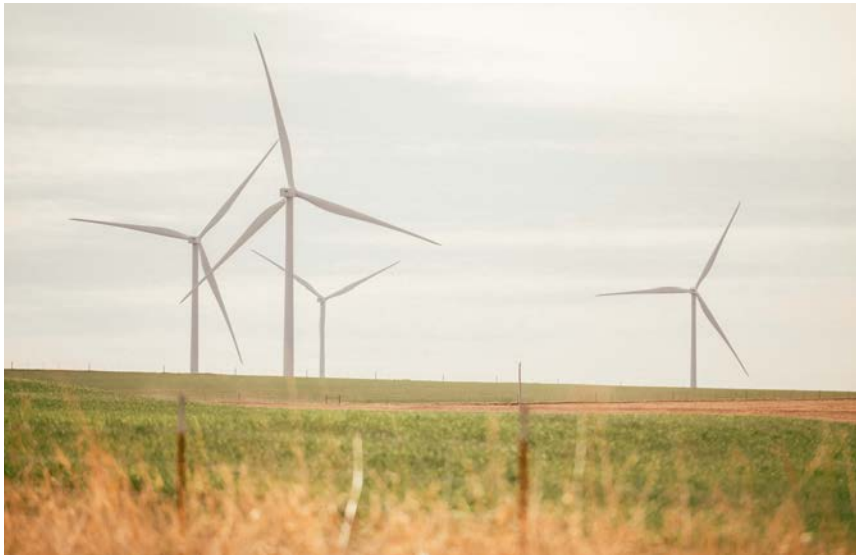
AEP has been on a long journey to transition its fleet while keeping in mind local and state energy policy and reliability. Since 2011, AEP retired, converted to natural gas, or sold approximately 14,000 MW of coal-fueled generation with more than 4,100 MW of additional coal plant retirements or fuel conversions expected by the end of 2028. Among the catalysts for this transition are the costs to comply with environmental regulations, aging infrastructure and fuel price volatility. We will continue to make prudent investments in the five remaining plants to ensure compliance with all environmental, safety and health mandates as these coal units are essential to maintaining the reliability of the grid. AEP's generation investments will be dictated by federal and state law and the needs of our customers without compromising reliability, resilience or affordability.

Consequently, we are taking a hard look at what is needed to ensure 24/7 dispatchable generation and delivery of electricity. AEP has identified 20 gigawatts of new generation opportunities over the next decade. This will likely be a combination of renewables, natural gas generation and storage to complement our existing generation portfolio. In addition, the industry is faced with new demands from regional transmission operators (RTOs) to have higher levels of capacity in reserve. Having a diverse resource portfolio is essential to a low-carbon future, enabling the industry to navigate the changing dynamics of supply and demand as well as the broader economy seeks to electrify.

AEP's renewable energy portfolio continues to grow as our investment strategy for cost-effective regulated renewables gains approval from our state regulators. Our current 2024-2028 capital investment plan, derived from AEP's Integrated Resource Planning analyses, includes $9.4 billion of regulated renewable projects. To date, we have received regulatory approvals for approximately $6.6 billion of these projects. In addition, federal tax credits for renewable generation have been extended which significantly reduces the costs of these projects.

Our primary purpose as a regulated electric utility is to generate and deliver reliable, affordable electricity to our customers. We believe that consistent with and subject to this mission, we can also achieve our greenhouse gas (GHG) reduction targets in parallel. AEP remains committed to working toward achieving an 80% reduction in Scope 1 GHG emissions by 2030 (from a 2005 baseline) and net-zero by 2045 (Scopes 1 and 2). These targets were established through the output of our Integrated Resource Plans (IRPs) and are reviewed annually. AEP's total Scope 1 GHG estimated emissions in 2023 were approximately 44.5 million metric tons, a 67% reduction according to the GHG Protocol, which excludes emission reductions that result from assets that were sold, or a 71% reduction from AEP's 2005 Scope 1 GHG emissions (inclusive of emission reductions that result from plants that have been sold).

While we continue to make progress, our ability to do so is dependent upon a number of factors outside of our control. This includes having regulatory support to execute on renewable resource plans, evolving RTO requirements, the advancement of carbon-free generation technologies, customer demand for carbon-free energy, potential tariffs, carbon policy and regulation, operational performance of renewable generation and supply chain costs and constraints, all while continuing to provide the most cost-efficient and reliable power to customers.



We have formalized the annual review of our GHG reduction targets to assess our progress and adjust, as appropriate. This review will be conducted annually and discussed with AEP's Climate Change Executive Group.

We are working with our regulators and policymakers to choose the energy solutions that meet their individual needs. AEP's future resource portfolio, supported by our IRPs, gives us a defined path toward achieving this.

Our Pathway to Net-Zero

- Planned retirement and disposition of select fossil units
- Add solar, wind, natural gas and energy storage to our generation portfolio
- Build a resilient and reliable grid to efficiently deliver clean energy to customers
- Closely evaluate new technologies to further reduce or eliminate CO_2 emissions
- Procure carbon offsets to neutralize any remaining CO_2 emissions from our generation fleet

Near term → Long term

Opportunities & Headwinds

AEP's generation mix is driven by our resource plans, customer demand, environmental compliance and legal requirements. Our IRPs are designed to develop a set of supply- and demand-side resources to guide the generation and supply of electricity in a way that balances affordability, sustainability, reliability and resilience. The availability of cleaner energy is important to current and prospective customers, helping to spur economic development and growth across our service territory that has a positive impact for all customers. By integrating renewables into our generation portfolio, we can remove some of the volatility of fuel costs. In addition to creating jobs and new tax revenue for local communities, new or expanded business growth enables the spread of fixed costs across a broader customer base – benefiting all customers. We remain committed to working with our regulators, policymakers and other stakeholders to choose the most cost-effective and reliable energy solutions to serve our customers.

AEP's energy transition is tied to:

- Continuing to invest in infrastructure to provide safe, reliable, affordable, and environmentally-compliant service.
- Diversifying our electric generation fleet to minimize costs and risks to customers.
- Investing in transmission and distribution to enhance reliability and resilience, and to accommodate changing resources, demand and advanced technologies.
- Working with our regulators, policymakers and key stakeholders to emphasize the importance of reliability, resiliency, security and affordability.
- Conducting scenario planning to understand future risks and opportunities and sharing this information with our regulators, policymakers and key stakeholders.
- Supporting and engaging with our communities.

The diversity of the states AEP serves also means there are a variety of views, preferences, needs and mandates to balance generation resources at a pace that considers customer reliability and costs. All of these views exist within AEP's service territory, and we must continue to work within the boundaries of each of our jurisdictions to satisfy what they deem to be in the best interests of their constituents.

External factors outside of our control have created new challenges. Higher interest rates, inflation and persistent supply chain constraints affect the availability of components and development of renewable projects and increase our cost to finance these and other projects. In addition, a number of renewable projects have been canceled by developers and other utilities, while tariffs on foreign components needed for solar panels and batteries have stalled delivery at the border. Local opposition to siting and building renewables, like large-scale wind projects, also pose a challenge. This is happening at a time of high demand for electricity by other sectors of the economy and

growing demand for cleaner energy. The growth of data centers, the chemical and primary metals sectors, and electric vehicle charging infrastructure for major corporate fleets is compounding concerns over the adequacy of capacity resources to meet this demand. We continue to monitor and take an active role in the planning and infrastructure development processes in each of our regions to support resource adequacy and meet customer needs.

While technologies needed to help manage the intermittency of renewables continue to evolve, generating plants continue to be retired for a range of reasons, including age, cost to maintain and operate, market conditions, fuel costs and environmental regulations. This has led to growing concerns about the industry's ability to meet capacity (e.g., peak demand) and reliability needs. Regulators, policymakers, regional grid operators and utilities alike have raised concern. Across the country, some utilities are delaying plant retirements, dropping or adjusting their climate-related goals, converting coal plants to natural gas or building new natural gas plants to meet capacity requirements and protect the reliability of the grid. Natural gas provides a reliable 24/7 dispatchable resource similar to coal. It fills in the gaps when renewable generation is not present or sufficient for meeting real-time demand.

Sustainability Governance & Oversight

Board of Directors | Board Committee Oversight

Audit Committee	Directors & Corporate Governance	Executive Committee	Finance Committee	Human Resources Committee	Nuclear Oversight Committee	Technology Committee
Oversees AEP's financial statements, financial reporting and internal controls over financial reporting, compliance, independent auditor, internal audits and managing major risks.	Oversees Board qualifications and selection; Board independence, composition, compensation, size and committees; Board evaluation and education; corporate Governance Principles; corporate compliance; Corporate Sustainability Report and political engagement.	Acts on behalf of the Board of Directors in handling matters that need immediate attention.	Oversees monitoring capital requirements, capital deployment and financing plans and programs of AEP and its subsidiaries; and short- and long-term financing plans and programs of AEP and its subsidiaries.	Oversees CEO & senior executive goals, performance, salaries and compensation; employee incentive, long-term and equity compensation plans; benefit programs; culture and employee engagement; diversity and inclusion strategy and compliance; succession planning; and human capital risks.	Oversees management, operation, safety, reliability of nuclear operations; compliance with nuclear safety. operations and environmental laws: and control of mitigation of nuclear risks.	Oversees AEP's IT and cybersecurity strategy, investments and internal and external labor strategy; frameworks and programs to identify, assess, manage and mitigate cybersecurity and IT risks and a response framework to address disruptive incidents.

Policy Oversight

Regular oversight of policy matters affecting the AEP system, including receiving updates from outside experts on significant public policy issues.

Executive Leadership Teams | Executive/Senior Leader Working Committee & Councils

Risk Executive Committee	Climate Change Executive Group	Reliability Compliance Strategy Team	Reliability Compliance Committee	Safety & Health Committee	Culture & Inclusion Council	Social Issues Advisory Council	Environmenal & Social Justice Advisory Team	Third-Party Governance Committee	Corporate Compliance	Disclosure Committee	Executive Policy Advisory Committee

Vice President & Chief Sustainability Officer | Cross-Functional Committee & Councils

Enterprise Sustainability Council	Corporate ESG Steering Committee
Members represent all aspects of our business, serving as strategic ambassadors and providing guidance and support to ensure the success of our sustainable development strategy. They do this by integrating sustainability across the enterprise and in corporate strategy.	A cross-functional committee of the Company that will assist the enterprise regarding ESG matters, including increasing understanding of all three dimensions - environmental, social and governance - across AEP. The ESG Steering Committee provides a structured advisory forum to identify and address ESG-related issues (risks, opportunities, threats, etc.) that could affect AEP financially or operationally.

Today, natural gas is the largest fuel source for the power sector. The tradeoff is that heavier reliance upon gas for power generation could mean increased GHG emissions in the short-term. However, we remain confident that as technology and infrastructure catch up, emissions will decline at an accelerated rate. Natural gas and existing coal generation, along with a growing renewable portfolio, will provide a bridge to net-zero by protecting grid reliability and affordability for customers.

There are many factors that influence the decision to retire a generating unit, including ongoing cost and risk to current and future customers, age and condition of facilities, federal and state environmental requirements make it cost prohibitive to run the plant, and/or changing market economics, such as fuel costs. In making the difficult decision to retire a generating plant, we focus on balancing the plant's remaining life and economic viability with other options for delivering power. This includes a mix of renewable energy with natural gas, nuclear and hydro-electric generation to provide reliable, secure and affordable energy to customers and benefit the environment.

Climate Governance

Climate governance is a shared responsibility between management and the Board of Directors. At the management level, the Climate Change Executive Group ensures an integrated, enterprise-wide approach to understanding and managing climate risks and opportunities to inform public policy advocacy, evaluate and direct AEP's strategy and align actions with AEP's regulatory strategy.

The Board of Directors is actively engaged in working with management to oversee the company's planning and response to climate-related impacts. The Board understands the importance of climate change issues and its significance to our customers, employees, regulators, investors and other stakeholders. The Board regularly discusses climate-related issues, including GHG emission reductions, public policy, legislation and regulation, in the context of AEP's goal to ensure a durable and sustainable transition to a low-carbon energy economy. The Board's focus is to achieve this by balancing the energy transition with system reliability, resiliency, security and affordability.

In addition, the Board participates in outside educational activities to enhance their knowledge of climate-related issues, emerging trends and issues and updates on technological advancements. At other times, topical experts are invited to speak with the Board.

Just Transition

The nation's energy transition has practical challenges affecting people, communities and society at large. These challenges are particularly apparent in communities and regions dependent upon the fossil fuel industry for jobs, a tax base that supports public services

AEP's New Just Transition Principles

At AEP, we believe in facilitating a Just Transition that benefits our customers and communities, each other and the future.

Our Customers & Communities

- We strive to provide our customers and communities with safe, reliable and affordable power throughout our energy transition.
- We acknowledge the impacts of generation plant retirements on a community.
- We believe proactive, transparent engagement is vital to empower communities to create and own their future.

Each Other

- We will treat our workforce respectfully throughout our transition.
- We believe proactive partnership with employees can position them for future success.

The Future

- We believe a Just Transition requires responsible decommissioning and planning for the site's future.
- We commit to continuously improve our Just Transition processes and to share updates on our journey with key stakeholders.

such as education and safety, corporate philanthropic support and volunteerism.

AEP recognizes these challenges and is committed to building upon our long history of caring for our employees and communities in areas where we have retired power plants. We seek inclusive and collaborative partnerships between the public and private sectors to facilitate a Just Transition by ensuring our employees and communities are not left behind after a plant ceases operation. We want to empower communities to create and own their future while equipping employees with the skills needed to find new career opportunities.

To AEP, Just Transition matters because we care about our communities and workforce and want them to remain strong and vibrant long after a plant retires. AEP recently developed principles to formalize our commitment to Just Transition. These principles serve as foundational beliefs that guide our efforts in areas where we may need to retire facilities in the future, with the understanding that specific transition activities could vary based on plant and community needs. Details on our principles can be found at AEPCommunityTransition.com.

Grid Security

As one of the largest electric utilities in the U.S., it is our duty to ensure uninterrupted power supply to our customers 24/7. Which is why the mission of AEP's Security Team is to equip the enterprise with the knowledge needed to select and implement security controls that protect our workforce and increase the confidentiality, safety and integrity of AEP's assets. The nation's power grid faces many threats, including extreme weather, vandalism, terrorism, cyberattacks and insider threats. Each of these risks has the potential to jeopardize the reliability, safety and security of our services. Additionally, monitoring and protecting the security of the power grid becomes particularly crucial during periods of heightened geopolitical tensions.

It is imperative for companies like ours to make substantial reliability and security investments in the grid and ensure we have robust measures, policies, and oversight mechanisms in place to mitigate, prevent or minimize the impacts of potential attacks.

Strong governance, oversight and regulations are vital to the strength, security and resilience of our bulk electric system (BES). The reliability of the BES – which includes both cyber and physical security – is highly regulated by the federal government through North American Electric Reliability Corporation's (NERC) Critical Infrastructure Protection (CIP) and Operations and Planning (O&P) Standards. Today, AEP is subject to all mandatory enforceable CIP and O&P NERC Standards. AEP's Chief Information and Technology Officer has oversight for cyber and physical security. AEP's Vice President of NERC Compliance is responsible for the oversight of the execution of AEP's NERC Compliance Program and serves as the NERC CIP Senior Manager as required by the Standards. Although not required by the Standards, AEP has established its senior vice president of Regulated Infrastructure Investment & Planning as the NERC Senior O&P Manager responsible for all NERC O&P compliance

AEP takes a risk-based approach to mitigate potential reliability risk, which includes both cyber and physical security. We continually assess and proactively increase the number and sophistication of controls to manage and prioritize evolving NERC obligations. AEP consistently monitors and evaluates internal and external threats, mitigating these concerns through proactive Risk Management Plans. AEP's

infrastructure is a major component of the nation's BES. As such, we are constantly being audited by ReliabilityFirst, Texas Reliability Entity and Midwest Regional Organization, which in turn are governed by NERC and ultimately by the Federal Energy Regulatory Commission (FERC), requiring us to maintain a state of audit readiness across AEP for all NERC Standards.

In addition to regulatory oversight, AEP has a multi-level governance structure that focuses on managing reliability and security risk across the entire system. AEP's Enterprise NERC Reliability Assurance (ENRA) organization manages the NERC Compliance Program to ensure all applicable NERC Standards are being adequately addressed across the system to achieve a "one AEP" approach and operational excellence. In addition, AEP's Board of Directors formed a Technology Committee that focuses on the review and oversight of issues related to setting information technology (IT) and cybersecurity strategies.

AEP must disclose the occurrence of events, including cyber events, that have had a material impact on its business or prospects in periodic or current reports filed publicly with the Securities and Exchange Commission. This reporting process is implemented by our Financial Reporting Team and, regarding the periodic reports, reviewed by Audit Services. AEP Security and Legal teams regularly assess potential materiality and ensure all appropriate reporting is completed promptly.

Wildfire Risk

Intense wildfire activity across North America throughout 2023 and in early 2024 demonstrated the devastating impacts and reinforced the importance of having protocols and policies in place to mitigate fire risk. AEP takes precautions to ensure we deliver safe, reliable electricity to our customers, which includes performing annual assessments of wildfire risk. We also regularly review our operations to ensure we have plans and processes in place to limit the risk of wildfires caused by electrical equipment.

AEP teams in the field and in our control centers continually evaluate conditions that pose a risk to the electric grid and potentially the public. We have operational protocols and technologies in place that allow us to manage the risks associated with AEP facilities being impacted by or triggering a fire. This helps us determine if and what action is needed, such as proactively declaring conservative operations in these areas, adjusting work practices that could trigger fires, or even modifying power flows on our grid, including removing impacted lines from service and redirecting power to other lines. Additionally, there would be changes to how equipment that automatically reenergizes lines operates.

Human Capital Management

Attracting, developing and retaining high-performing employees with the skills and experience needed to serve our customers efficiently and effectively is crucial to AEP's growth and competitiveness and is central to our long-term strategy. The electric utility sector has an added level of complexity as we undergo a transition toward a cleaner energy future and work to understand the evolving skill sets and talent needed. To remain a competitive employer, AEP is investing in integrated talent management practices to support the energy transition as we continue delivering safe, affordable and reliable energy to all customers.

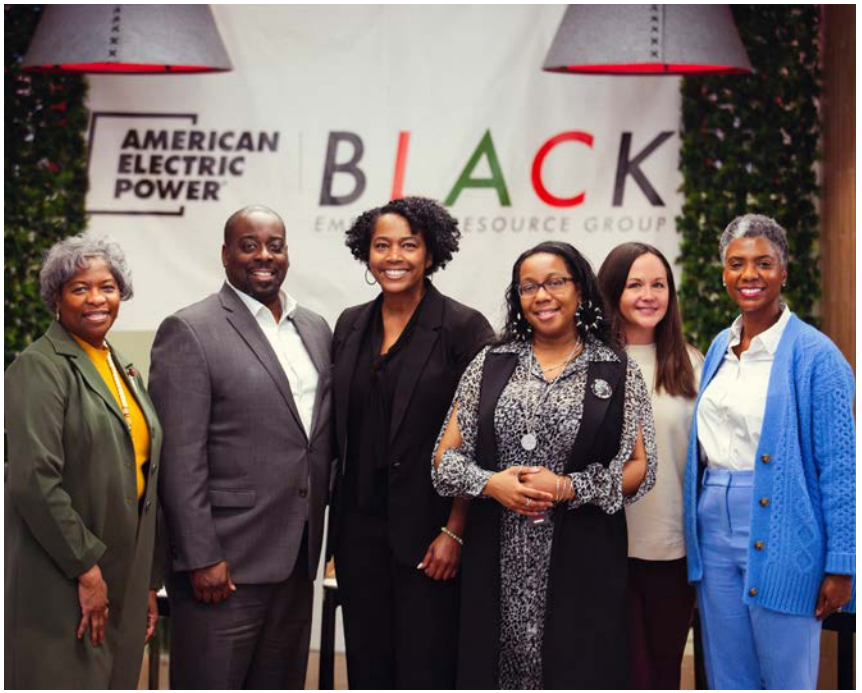
AEP's learning and development programs are built to ensure that every employee receives the right tools, resources and training at the right time so they can successfully perform their role and prepare for the next turn in their career. Simultaneously, we aim to prepare our workforce with career skills that address the ever-evolving needs of the industry. Employee development focuses on all levels, including technical skills, safety, compliance, professional training and leader development. We are dedicated to offering developmental pathways for employees, encompassing both informal professional growth and structured development programs.

AEP has a focus on increasing the talent pool of line workers, engineers, dispatchers and customer support to provide the service our customers expect. To meet these needs and develop our talent pipeline, AEP has growing co-op and internship programs in partnership with high schools, technical/vocational schools and colleges across our 11-state service territory. We work with these institutions to develop academic programs that will prepare students for new jobs and career opportunities in our industry. In 2023, enterprise-wide, AEP provided approximately 150 collegiate intern and co-op students with hands-on learning experiences across our operations.

AEP is committed to the well-being of our employees and we offer programs to foster employee financial security, physical and emotional health and social connectedness. We provide market competitive compensation and benefits that support our employees and their families to help them thrive at home and work. We ensure the pay we offer is competitive in the marketplace by pricing many of our positions using robust compensation survey information. Nearly all AEP employees participate in an annual incentive program that rewards the achievement of business goals and fosters a highperformance culture. AEP also offers paid time off in the form of vacation, holidays, sick time and parental leave. The company's employee assistance plan, medical and dental coverage, life insurance and well-being program help employees and their families stay healthy and feeling their best. Additionally, AEP's retirement programs position our employees for financial stability in retirement.

Culture & Inclusion

Culture serves as the foundation for success at AEP. An engaged, collaborative, inclusive and appreciated workforce is an empowered workforce – one that is more likely to embrace change, drive continuous improvement, take ownership, and value personal and professional growth. AEP views a culture of inclusion as a core business value



that creates understanding, sparks innovation and allows us to better serve our customers. We are committed to building a work culture that champions respect and belonging and encourages leveraging our differences as a strength. Inclusion is important to ensuring that AEP has the best talent to move our company forward and achieve business objectives.

Our inclusion progress is tied to enterprise, business unit and operating company annual incentive compensation objectives, measured through our annual employee culture survey. AEP's Human Resources Committee of the Board reviews the culture and employee engagement results annually, providing additional oversight. In addition, the Human Resources Committee of the Board provides oversight of our compensation and human resources policies and practices, including an annual review of our diversity, equity and inclusion strategy, and compliance with equal opportunity laws.

AEP's Inclusion Efforts

- **Inclusive Talent Selection Practices –** We continue to focus on increasing diverse representation within AEP leadership and standardizing hiring practices to ensure that minority and female candidates are on hiring slates and that hiring managers use interview panels consisting of diverse leaders.
- **Culture & Inclusion Council** – AEP's Culture and Inclusion Council, which consists of decision-makers from across the company, help lead our inclusion strategy.
- **Pay Equity Study** – AEP analyzes pay variances for female and minority employees to ensure equal and fair employee compensation, regardless of race or gender.
- **Employee Representation** – Government mandated affirmative action plans are required for companies operating sites with over 50 employees. AEP's Human Resources team annually develops affirmative action plans for eligible locations.
- **Employee Resource Groups** – AEP's nine ERGs reflect the diverse makeup of our workforce and provide valuable insight into the diverse communities we serve.

- Abled and Differently Abled Allies Partnering Together (ADAPT)
- Asian American Employee Partnership (AAEP)
- Black Employee Resource Group (BERG)
- Empowered Parent and Caregiver (EP|C)
- Hispanic Origin Latin American Employee Resource Group (HOLA)
- Military Veteran Employee Resource Group (MVERG)
- Native American Tribes Interacting Observing Networking (NATION)
- PRIDE Employee Resource Group (LGBTQ+)
- Women @ Work Employee Resource Group (W@W)

Culture & Inclusion Guiding Principles

Principle	Objectives
Leadership Accountability	Establish leadership accountability culture and inclusion outcomes • Continue to measure representation, talent development and movement at the enterprise and business unit levels • Refresh talent planning and review process • Increase communication across the enterprise about inclusion progress
Diverse Workforce	Build and maintain a workforce that reflects the communities we serve • Increase the number of diverse leaders within development programs and successor pools
Inclusive Workplace	Promote an inclusive culture where all employees have the opportunity to thrive • Increase engagement through programming, mentoring and development • Measure Employee Resource Group participation and effectiveness • Measure inclusion progress through annual employee culture survey
Community Well-Being	Support the communities we serve so they will prosper • Increase volunteerism and amplify community impact stories across service territories • Increase spend with small and diverse businesses within our communities

Index of Links

AEP's Disclosure Strategy

We developed a robust disclosure strategy to help drive our goal of being transparent and accessible. AEP's disclosure includes our annual Corporate Sustainability Report and ESG Data Center, which features a three-year trend on approximately 250 of the most requested ESG metrics. In addition, we publish several supplemental reports leveraging guidance from voluntary reporting standards and industry efforts in order to meet the unique needs of our stakeholders. This includes a GRI Report, SASB Report, Edison Electric Institute (EEI) ESG Investor Report, and an EEI Customer Emissions Report. We also respond to multiple ESG surveys, ratings and rankings including, CDP Climate, CDP Water and EcoVadis Sustainability Ratings for Global Supply Chains.

Energy Transition

AEP's Shifting Generating Portfolio
Modernizing the Grid
Climate Governance
Certifying GHG Targets
Just Transition
Electrification

Reducing Our Own Energy Consumption

Environment

Environmental Compliance
Biodiversity
Water Use & Management
Waste Management

Social

Customer Care & Support
Environmental & Social Justice
Economic Impact
Community Support
Supply Chain Management

Our People

Workforce Planning & Development
Career Development
Focus on Future Talent
Caring for Our Workforce
Safety & Health
Culture & Inclusion

Governance

Sustainability Governance
Ethics & Compliance
Risk Management
Political Engagement
Enterprise Security

Supplemental ESG Reports

AEP's Climate Impact Analysis Report - *A TCFD Report (March 2021)*

2024 GRI & SASB Report (ISSB S1)

2023 EEI Customer Emissions Report - *Online Access*

2023 CDP Climate Report

2023 CDP Water Report

2023 EcoVadis Sustainability Scorecard

2024 ESG Data Center

2024 Annual Meeting Proxy Statement

2023 Annual 10K

2023 Revenues from Coal

2023 Coal Generation Rate Base

Investor Relations ESG Website

Corporate Policies & Documents

Environment, Safety and Health Policy

Anti-Corruption Policy
Human Rights Policy
AEP Political Engagement Policy

AEP Trade Association Climate Lobbying Report

Environment and Social Justice Policy

AEP Principles of Business Conduct

Code of Business Conduct and Ethics for Directors

AEP Supplier Code of Conduct
Insider Trading Policy

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Section 2

QUANTITATIVE REPORT

American Electric Power

Ref. No.	Portfolio	Baseline Year 2005	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**35,547**	**25,050**	**23,309**
1.1	Coal	25,027	11,263	10,711
1.2	Natural Gas	7,520	7,613	7,596
1.3	Nuclear	2,130	2,296	2,296
1.4	Petroleum	0	0	0
1.5	**Total Renewable Energy Resources**	870	3,858	2,686
1.5.1	Biomass/Biogas	0	0	0
1.5.2	Geothermal	0	0	0
1.5.3	Hydroelectric	870	805	816
1.5.4	Solar	0	369	231
1.5.5	Wind	0	2,684	1,639
1.6	Other	0	20	20

American Electric Power

Ref. No.	Portfolio	Baseline Year 2005	2022	2023
2	**Net Generation for the Data Year (MWh)**	**187,188,901**	**153,810,473**	**136,288,611**
2.1	Coal	155,681,562	43,822,578	36,899,973
2.2	Natural Gas	10,978,285	15,892,193	17,766,711
2.3	Nuclear	19,219,383	16,621,031	18,640,118
2.4	Petroleum	0	0	0
2.5	**Total Renewable Energy Resources**	1,309,671	19,647,847	15,119,227
2.5.1	Biomass/Biogas	0	0	0
2.5.2	Geothermal	0	0	0
2.5.3	Hydroelectric	1,024,664	835,750	744,173
2.5.4	Solar	0	921,720	533,374
2.5.5	Wind	285,007	17,890,377	13,841,680
2.6	Other	0	57,826,824	47,862,582

American Electric Power

Ref. No.	Portfolio	Baseline Year 2005	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**186,903,894**	**78,674,590**	**70,483,008**
2.1.i	Coal	155,681,562	37,058,587	28,858,441
2.2.i	Natural Gas	10,978,285	14,740,697	16,826,181
2.3.i	Nuclear	19,219,283	16,621,031	18,640,118
2.4.i	Petroleum	0	0	0
2.5.i	**Total Renewable Energy Resources**	1,024,664	10,254,275	16,158,268
2.5.1.i	Biomass/Biogas	0	0	0
2.5.2.i	Geothermal	0	0	0
2.5.3.i	Hydroelectric	1,024,664	623,425	573,954
2.5.4.i	Solar	0	840,748	415,907
2.5.5.i	Wind	0	8,790,102	5,168,407
2.6.i	Other	0	0	0

American Electric Power

Ref. No.	Portfolio	Baseline Year 2005	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**285,007**	**75,135,883**	**65,805,603**
2.1.ii	Coal	0	6,763,991	8,041,532
2.2.ii	Natural Gas	0	1,151,496	940,530
2.3.ii	Nuclear	0	0	0
2.4.ii	Petroleum	0	0	0
2.5.ii	**Total Renewable Energy Resources**	285,007	9,393,572	8,960,959
2.5.1.ii	Biomass/Biogas	0	0	0
2.5.2.ii	Geothermal	0	0	0
2.5.3.ii	Hydroelectric	0	212,325	170,219
2.5.4.ii	Solar	0	80,972	117,467
2.5.5.ii	Wind	285,007	9,100,275	8,673,273
2.6.ii	Other	0	57,826,824	47,862,582

American Electric Power

Ref. No.	Portfolio	Baseline Year 2005	2022	2023
3	**Investing in the Future: Capital Expenditures, Energy Efficiency (EE) & Smart Meters**			
3.1	Total Annual Capital Expenditures (Nominal Dollars)	–	$7,982 million	$6,902 million
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	–	349,952	492,506
3.3	Incremental Annual Investment in Electric EE Programs (Nominal Dollars)	–	$86,806,298	$101,682,125
3.4	Percent of Total Electric Customers with Smart Meters (At End of Year)	–	72%	78%
4	**Retail Electric Customer Count (At End of Year)**			
4.1	Commercial	–	736,491	735,123
4.2	Industrial	–	45,189	44,540
4.3	Residential	–	4,755,584	4,787,958
	Other	–	30,599	30,690
	Total	–	**5,567,863**	**5,598,311**

American Electric Power

Ref. No.	Emissions	Baseline Year 2005	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO2) & Carbon Dioxide Equivalent (CO2e)**			
5.1	**Owned Generation[1,2]**			
5.1.1	Carbon Dioxide (CO_2)			
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	145,868,723	45,077,248	39,481,507
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.780	0.573	0.560
5.1.2	**Carbon Dioxide Equivalent (CO_2e)**			
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	146,889,804	45,388,856	39,729,995
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.855	0.577	0.564

[1] Owned Generation and emissions are adjusted for equity ownership share.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

CH_4 = 25

N_2O = 298

SF_6 = 22,800

American Electric Power

Ref. No.	Emissions	Baseline Year 2005	2022	2023
5.2	**Purchased Power[3]**			
5.2.1	Carbon Dioxide (CO_2)			
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	/	34,655,246	29,443,594
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	/	0.461	0.447
5.2.2	Carbon Dioxide Equivalent (CO_2e)			
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	/	34,922,422	29,640,800
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	/	0.465	0.450
5.3	**Owned Generation + Purchased Power**			
5.3.1	Carbon Dioxide (CO_2)			
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	145,868,723	79,732,494	68,925,101
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.780	0.518	0.506
5.3.2	Carbon Dioxide Equivalent (CO_2e)			
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	146,889,804	80,311,278	69,370,796
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.786	0.522	0.509

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne
1 lb = 453.59 grams
1 tonne = 1,000,000 grams
1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1
N_2O = 298
CH_4 = 25
SF_6 = 22,800

American Electric Power

Ref. No.	Emissions	Baseline Year 2005	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**			
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	–	166,482	197,454
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	–	0.002116	0.002801
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**			
6.1	Generation Basis for Calculation[5]	**Total**	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**			
6.2.1	Total NO_x Emissions (MT)	260,844	28,868	27,540
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.001396	0.000367	0.000391
6.3	**Sulfur Dioxide (SO_2)**			
6.3.1	Total SO_2 Emissions (MT)	824,773	32,672	24,486
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.004413	0.000415	0.000347
6.4	**Mercury (Hg)**			
6.4.1	Total Hg Emissions (kg)	3,640	98.9	72
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000019	0.000001	0.000001

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] NOx, SO_2, and Mercury Emissions are based on owned generation emissions

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1 N_2O = 298

CH_4 = 25 SF_6 = 22,800

American Electric Power

Ref. No.	Resources	Baseline Year 2005	2022	2023
7	**Human Resources**			
7.1	Total Number of Employees	19,630	16,974	17,250
7.2	Total Number on Board of Directors/Trustees	11	13	12
7.3	Total Women on Board of Directors/Trustees	1	6	5
7.4	Total Minorities on Board of Directors/Trustees	1	4	4
7.5	**Employee Safety Metrics**			
7.5.1	Recordable Incident Rate	2.350	0.719	0.690
7.5.2	Lost-Time Case Rate	0.593	0.312	0.279
7.5.3	Days Away, Restricted, and Transfer (DART) Rate	0.953	0.424	0.384
7.5.4	Work-Related Employee Fatalities	1	1	2

American Electric Power

Ref. No.	Resources	Baseline Year 2005	2022	2023
8	**Fresh Water Resources**			
8.1	Water Withdrawals — Consumptive (Millions of Gallons)	–	21,079	19,475
8.2	Water Withdrawals — Non-Consumptive (Millions of Gallons)	–	905,689	1,395,849
8.3	Water Withdrawals — Consumptive Rate (Millions of Gallons/Net MWh)	–	0.000314	0.000322
8.4	Water Withdrawals — Non-Consumptive Rate (Millions of Gallons/Net MWh)	–	0.013183	0.015024
9	**Waste Products**			
9.1	Amount of Hazardous Waste Manifested for Disposal (Metric Ton)	–	–	47,846
9.2	Percent of Coal Combustion Products Beneficially Used	–	43%	45%

Appalachian Power

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**6,681**	**6,712**
1.1	Coal	4,250	4,270
1.2	Natural Gas	1,646	1,646
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	785	796
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	785	796
1.5.4	Solar	0	0
1.5.5	Wind	0	0
1.6	Other	0	0

Appalachian Power

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**33,400,899**	**32,020,313**
2.1	Coal	14,226,619	15,062,711
2.2	Natural Gas	4,977,033	4,700,171
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	2,117,212	1,944,550
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	745,699	658,085
2.5.4	Solar	68,265	109,974
2.5.5	Wind	1,303,248	1,176,491
2.6	Other	12,080,035	10,312,881

Appalachian Power

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**17,936,505**	**18,583,221**
2.1.i	Coal	12,426,098	13,392,440
2.2.i	Natural Gas	4,977,033	4,700,171
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	533,374	490,610
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	533,374	478,866
2.5.4.i	Solar	0	2,744
2.5.5.i	Wind	0	0
2.6.i	Other	0	0

Appalachian Power

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**15,464,394**	**13,437,092**
2.1.ii	Coal	1,800,521	1,670,271
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	1,583,838	1,453,940
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	212,325	170,219
2.5.4.ii	Solar	68,625	107,230
2.5.5.ii	Wind	1,303,248	1,176,491
2.6.ii	Other	12,080,035	10,312,881

Appalachian Power

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	14,314,188	15,409,132
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.798	0.829
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	14,415,620	15,520,053
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.804	0.835

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Appalachian Power

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	7,712,888	6,270,976
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.499	0.467
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	7,769,374	6,313,885
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.502	0.470
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	22,027,076	21,680,108
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.659	0.677
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	22,184,994	21,833,938
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.664	0.682

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1 N_2O = 298

CH_4 = 25 SF_6 = 22,800

Appalachian Power

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	36,503	33,576
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00204	0.00181
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	7,111	8,056
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000213	0.000252
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	8,231	7,549
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000246	0.000236
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	22.68	36
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000001	0.000001

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Kentucky Power

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**1,075**	**1,075**
1.1	Coal	780	780
1.2	Natural Gas	295	295
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	0	0
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	0	0
1.5.5	Wind	0	0
1.6	Other	0	0

Kentucky Power

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**7,157,556**	**6,041,930**
2.1	Coal	2,480,860	1,663,651
2.2	Natural Gas	504,678	1,172,392
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	0	0
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	0	0
2.5.5	Wind	0	0
2.6	Other	4,172,018	3,205,887

Kentucky Power

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**2,985,538**	**2,836,043**
2.1.i	Coal	2,480,860	1,663,651
2.2.i	Natural Gas	504,678	1,172,392
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	0	0
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	0	0
2.5.5.i	Wind	0	0
2.6.i	Other	0	0

Kentucky Power

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**4,172,018**	**3,205,887**
2.1.ii	Coal	0	0
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	0	0
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	0	0
2.6.ii	Other	4,172,018	3,205,887

Kentucky Power

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	3,090,680	2,416,441
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	1.035	0.852
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	3,113,397	2,431,424
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	1.043	0.857

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Kentucky Power

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power [3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	1,762,000	1,356,875
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.422	0.423
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	1,775,039	1,365,641
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.425	0.426
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	4,852,680	3,773,316
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.678	0.625
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	4,888,436	3,797,064
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.683	0.628

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne
1 lb = 453.59 grams
1 tonne = 1,000,000 grams
1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1
N_2O = 298
CH_4 = 25
SF_6 = 22,800

Kentucky Power

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)[5]	7,713	7,227
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00258	0.00255
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	1,467	1,608
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000205	0.000266
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	1,314	569
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000184	0.000094
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	5.56	4.85
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000001	0.000001

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Kingsport Power

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**0**	**0**
1.1	Coal	0	0
1.2	Natural Gas	0	0
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	0	0
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	0	0
1.5.5	Wind	0	0
1.6	Other	0	0

Kingsport Power

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**1,938,878**	**1,942,232**
2.1	Coal	0	0
2.2	Natural Gas	0	0
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	0	0
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	0	0
2.5.5	Wind	0	0
2.6	Other	1,938,878	1,942,232

Kingsport Power

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**0**	**0**
2.1.i	Coal	0	0
2.2.i	Natural Gas	0	0
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	0	0
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	0	0
2.5.5.i	Wind	0	0
2.6.i	Other	0	0

Kingsport Power

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**1,938,878**	**1,942,232**
2.1.ii	Coal		
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	0	0
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	0	0
2.6.ii	Other	1,938,878	1,942,232

Kingsport Power

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	0	0
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0	0
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	0	0
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0	0

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Kingsport Power

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	819,301	822,040
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.423	0.423
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	825,364	827,350
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.426	0.426
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	819,301	822,040
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.423	0.423
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	825,364	827,350
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.426	0.426

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1 N_2O = 298

CH_4 = 25 SF_6 = 22,800

Kingsport Power

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	0	418
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0	0
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)		
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0	0
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)		
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0	0
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	0	0
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0	0

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Indiana Michigan Power

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**4,972**	**4,972**
1.1	Coal	2,620	2,620
1.2	Natural Gas	0	0
1.3	Nuclear	2,296	2,296
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	56	56
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	20	20
1.5.4	Solar	36	36
1.5.5	Wind	0	0
1.6	Other	0	0

Indiana Michigan Power

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**29,372,992**	**26,625,896**
2.1	Coal	6,052,758	3,603,027
2.2	Natural Gas	0	0
2.3	Nuclear	16,621,031	18,640,118
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	1,486,518	1,390,301
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	90,051	86,088
2.5.4	Solar	43,714	54,050
2.5.5	Wind	1,352,753	1,250,163
2.6	Other	5,212,685	2,992,450

Indiana Michigan Power

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**21,907,294**	**21,548,147**
2.1.i	Coal	5,152,498	2,767,891
2.2.i	Natural Gas	0	0
2.3.i	Nuclear	16,621,031	18,640,118
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	133,765	140,138
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	90,051	86,088
2.5.4.i	Solar	43,714	54,050
2.5.5.i	Wind	0	0
2.6.i	Other	0	0

Indiana Michigan Power

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**7,465,698**	**5,077,749**
2.1.ii	Coal	900,260	835,136
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	1,352,753	1,250,163
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	1,352,753	1,250,163
2.6.ii	Other	5,212,685	2,992,450

Indiana Michigan Power

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	5,426,783	3,088,188
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.248	0.143
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	5,469,618	3,112,526
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.250	0.144

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Indiana Michigan Power

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	3,463,874	2,153,826
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.464	0.424
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	3,491,308	2,168,939
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.468	0.427
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	8,890,657	5,242,014
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.303	0.197
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	8,960,926	5,281,465
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.305	0.198

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1 N_2O = 298

CH_4 = 25 SF_6 = 22,800

Indiana Michigan Power

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	26,340	24,207
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00120	0.00112
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	2,426	1,644
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000083	0.000062
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	3,388	2,248
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000115	0.000084
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	9.64	5.85
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0	0

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Wheeling Power

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**780**	**780**
1.1	Coal	780	780
1.2	Natural Gas	0	0
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	0	0
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	0	0
1.5.5	Wind	0	0
1.6	Other	0	0

Wheeling Power

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**5,249,058**	**5,193,658**
2.1	Coal	1,750,943	1,663,652
2.2	Natural Gas	0	0
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	0	0
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	0	0
2.5.5	Wind	0	0
2.6	Other	3,498,115	3,530,006

Wheeling Power

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**1,750,943**	**1,663,652**
2.1.i	Coal	1,750,943	1,663,652
2.2.i	Natural Gas	0	0
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	0	0
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	0	0
2.5.5.i	Wind	0	0
2.6.i	Other	0	0

Wheeling Power

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**3,498,115**	**3,530,006**
2.1.ii	Coal	0	0
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	0	0
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	0	0
2.6.ii	Other	3,498,115	3,530,006

Wheeling Power

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	1,848,734	1,776,275
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	1.056	1.086
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	1,863,604	1,790,606
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	1.064	1.076

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Wheeling Power

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	1,659,857	1,601,336
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.475	0.454
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	1,673,136	1,611,680
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.478	0.457
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	3,508,591	3,377,610
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.668	0.650
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	3,536,740	3,402,286
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.674	0.655

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1 N_2O = 298

CH_4 = 25 SF_6 = 22,800

Wheeling Power

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	1,783	1,672
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00102	0.00101
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	753	718
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000143	0.000138
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	795	542
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000151	0.000104
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	3.86	4.85
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000001	0.000001

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Public Service Company of Oklahoma

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**4,380**	**4,515**
1.1	Coal	465	472
1.2	Natural Gas	3,240	3,213
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	675	830
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	0	0
1.5.5	Wind	675	830
1.6	Other	0	0

Public Service Company of Oklahoma

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**21,935,780**	**20,140,563**
2.1	Coal	2,433,601	1,677,437
2.2	Natural Gas	5,430,512	6,186,136
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	5,798,881	6,051,443
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	0	0
2.5.5	Wind	5,798,881	6,051,443
2.6	Other	8,272,786	6,225,547

Public Service Company of Oklahoma

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**8,617,582**	**9,457,130**
2.1.i	Coal	2,433,601	1,677,437
2.2.i	Natural Gas	4,300,616	5,257,756
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	1,883,365	2,521,937
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	0	0
2.5.5.i	Wind	1,883,365	2,521,937
2.6.i	Other	0	0

Public Service Company of Oklahoma

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**13,318,198**	**10,683,433**
2.1.ii	Coal	0	0
2.2.ii	Natural Gas	1,129,896	928,380
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	3,915,516	3,529,506
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	3,915,516	3,529,506
2.6.ii	Other	8,272,786	6,225,547

Public Service Company of Oklahoma

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	4,827,143	5,081,133
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.560	0.537
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	4,849,810	5,099,282
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.563	0.539

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Public Service Company of Oklahoma

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	4,317,664	3,106,044
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.324	0.291
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	4,340,014	3,126,448
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.326	0.293
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	9,144,807	8,187,177
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.417	0.407
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	9,189,824	8,225,730
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.419	0.408

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Public Service Company of Oklahoma

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	16,911	15,634
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00196	0.00165
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	5,388	6,431
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000246	0.000319
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	4,305	2,902
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000196	0.000144
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	5.44	2.90
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000000	0.000000

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Southwestern Electric Power Company

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**5,585**	**5,009**
1.1	Coal	2,368	1,789
1.2	Natural Gas	2,408	2,411
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	809	809
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	0	0
1.5.5	Wind	809	809
1.6	Other	0	0

Southwestern Electric Power Company

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**24,978,854**	**24,140,375**
2.1	Coal	10,642,803	7,693,370
2.2	Natural Gas	4,906,490	5,633,639
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	3,776,006	3,613,077
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	0	0
2.5.5	Wind	3,776,006	3,613,077
2.6	Other	5,653,555	7,200,289

Southwestern Electric Power Company

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**17,783,597**	**15,961,329**
2.1.i	Coal	10,642,803	7,693,370
2.2.i	Natural Gas	4,884,890	5,621,489
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	2,255,904	2,646,470
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	0	0
2.5.5.i	Wind	2,255,904	2,646,470
2.6.i	Other	0	0

Southwestern Electric Power Company

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**7,195,257**	**8,179,046**
2.1.ii	Coal	0	0
2.2.ii	Natural Gas	21,600	12,150
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	1,520,102	966,607
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	1,520,102	966,607
2.6.ii	Other	5,653,555	7,200,289

Southwestern Electric Power Company

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	13,545,443	11,681,754
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.762	0.732
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	13,636,249	11,747,336
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.767	0.736

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Southwestern Electric Power Company

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	2,653,969	3,178,880
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.369	0.389
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	2,671,773	3,199,437
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.371	0.391
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	16,199,412	14,680,634
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.649	0.616
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	16,308,022	14,946,773
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.653	0.619

[3] Purchased power emissions have been calculated using the most relevant and accurate method:

- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Southwestern Electric Power Company

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions of Sulfur Hexafluoride (SF_6)[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	25,210	23,646
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00142	0.00148
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	9,718	7,534
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000389	0.000312
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	11,682	9,593
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000468	0.000397
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	48.30	17.65
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000002	0.000001

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Ohio Power Company

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**0**	**0**
1.1	Coal	0	0
1.2	Natural Gas	0	0
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	0	0
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	0	0
1.5.5	Wind	0	0
1.6	Other	0	0

Ohio Power Company

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**19,867,121**	**15,110,476**
2.1	Coal	2,285,276	2,119,959
2.2	Natural Gas	0	0
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	583,093	537,227
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	12,707	10,237
2.5.5	Wind	570,386	526,990
2.6	Other	16,998,752	12,453,290

Ohio Power Company

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**0**	**0**
2.1.i	Coal	0	0
2.2.i	Natural Gas	0	0
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	0	0
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	0	0
2.5.5.i	Wind	0	0
2.6.i	Other	0	0

Ohio Power Company

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**19,867,121**	**15,110,476**
2.1.ii	Coal	2,285,276	2,119,959
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	583,093	537,227
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	12,707	10,237
2.5.5.ii	Wind	570,386	526,990
2.6.ii	Other	16,998,752	12,453,290

Ohio Power Company

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	0	0
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.000	0.000
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	0	0
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.000	0.000

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Ohio Power Company

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	10,580,142	7,670,742
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.533	0.508
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	10,664,709	7,723,339
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.537	0.511
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	10,580,142	7,670,742
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.533	0.508
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	10,664,709	7,723,339
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.537	0.511

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1 N_2O = 298

CH_4 = 25 SF_6 = 22,800

Ohio Power Company

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions of Sulfur Hexafluoride (SF_6)[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	0	42,361
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0	0
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	1,417	1,550
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000071	0.000103
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	1,308	1,083
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000066	0.000072
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	0	0
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000000	0.000000

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

Energy Supply*

Ref. No.	Portfolio	2022	2023
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	**1,577**	**246**
1.1	Coal	0	0
1.2	Natural Gas	24	31
1.3	Nuclear	0	0
1.4	Petroleum	0	0
1.5	**Total Renewable Energy Resources**	1,533	195
1.5.1	Biomass/Biogas	0	0
1.5.2	Geothermal	0	0
1.5.3	Hydroelectric	0	0
1.5.4	Solar	333	195
1.5.5	Wind	1,200	0
1.6	Other	20	20

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Energy Supply*

Ref. No.	Portfolio	2022	2023
2	**Net Generation for the Data Year (MWh)**	**9,909,335**	**5,073,168**
2.1	Coal	3,949,718	3,416,166
2.2	Natural Gas	73,480	74,373
2.3	Nuclear	0	0
2.4	Petroleum	0	0
2.5	**Total Renewable Energy Resources**	5,886,137	1,582,629
2.5.1	Biomass/Biogas	0	0
2.5.2	Geothermal	0	0
2.5.3	Hydroelectric	0	0
2.5.4	Solar	797,034	359,113
2.5.5	Wind	5,089,103	1,223,516
2.6	Other	0	0

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Energy Supply*

Ref. No.	Portfolio	2022	2023
2.i	**Owned Net Generation for the Data Year (MWh)**	**7,693,131**	**433,486**
2.1.i	Coal	2,171,784	0
2.2.i	Natural Gas	73,480	74,373
2.3.i	Nuclear	0	0
2.4.i	Petroleum	0	0
2.5.i	**Total Renewable Energy Resources**	5,447,867	359,113
2.5.1.i	Biomass/Biogas	0	0
2.5.2.i	Geothermal	0	0
2.5.3.i	Hydroelectric	0	0
2.5.4.i	Solar	797,034	359,113
2.5.5.i	Wind	4,650,833	0
2.6.i	Other	0	0

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Energy Supply*

Ref. No.	Portfolio	2022	2023
2.ii	**Purchased Net Generation for the Data Year (MWh)**	**2,216,204**	**4,639,682**
2.1.ii	Coal	1,777,934	3,416,166
2.2.ii	Natural Gas	0	0
2.3.ii	Nuclear	0	0
2.4.ii	Petroleum	0	0
2.5.ii	**Total Renewable Energy Resources**	438,270	1,223,516
2.5.1.ii	Biomass/Biogas	0	0
2.5.2.ii	Geothermal	0	0
2.5.3.ii	Hydroelectric	0	0
2.5.4.ii	Solar	0	0
2.5.5.ii	Wind	438,270	1,223,516
2.6.ii	Other	0	0

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Energy Supply*

Ref. No.	Emissions	2022	2023
5	**GHG Emissions: Carbon Dioxide (CO_2) & Carbon Dioxide Equivalent (CO_2e)**		
5.1	**Owned Generation[1,2]**		
5.1.1	Carbon Dioxide (CO_2)		
5.1.1.1	Total Owned Generation CO_2 Emissions (MT)	2,024,277	28,584
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.263	0.066
5.1.2	Carbon Dioxide Equivalent (CO_2e)		
5.1.2.1	Total Owned Generation CO_2e Emissions (MT)	2,040,558	28,769
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity (MT/Net MWh)	0.265	0.066

[1] Generation and emissions are adjusted for equity ownership share to reflect the percentage of output owned by reporting entity.

[2] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subparts C and D).

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Energy Supply*

Ref. No.	Emissions	2022	2023
5.2	**Purchased Power[3]**		
5.2.1	Carbon Dioxide (CO_2)		
5.2.1.1	Total Purchased Generation CO_2 Emissions (MT)	1,685,551	3,282,875
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.761	0.708
5.2.2	Carbon Dioxide Equivalent (CO_2e)		
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)	1,711,705	3,304,082
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.772	0.712
5.3	**Owned Generation + Purchased Power**		
5.3.1	Carbon Dioxide (CO_2)		
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions (MT)	3,709,828	3,311,459
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity (MT/Net MWh)	0.374	0.653
5.3.2	Carbon Dioxide Equivalent (CO_2e)		
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions (MT)	3,752,263	3,332,851
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity (MT/Net MWh)	0.379	0.657

[3] Purchased power emissions have been calculated using the most relevant and accurate method:
- Direct emissions data as reported to EPA for direct purchases, such as PPAs
- E-Grid Emission Factors used

MT = metric tons = tonne
1 lb = 453.59 grams
1 tonne = 1,000,000 grams
1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1
N_2O = 298
CH_4 = 25
SF_6 = 22,800

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Energy Supply*

Ref. No.	Emissions	2022	2023
5.4	**Non-Generation CO_2e Emissions[4]**		
5.4.1	Fugitive CO_2e Emissions of Sulfur Hexafluoride (MT)	52,021	48,712
5.4.2	Leak Rate of CO_2e Emissions of SF_6 (MT/Net MWh)	0.00676	0.11237
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**		
6.1	Generation Basis for Calculation[5]	**Total**	**Total**
6.2	**Nitrogen Oxide (NO_x)**		
6.2.1	Total NO_x Emissions (MT)	589	0
6.2.2	Total NO_x Emissions Intensity (MT/Net MWh)	0.000059	0
6.3	**Sulfur Dioxide (SO_2)**		
6.3.1	Total SO_2 Emissions (MT)	1,650	0
6.3.2	Total SO_2 Emissions Intensity (MT/Net MWh)	0.000167	0
6.4	**Mercury (Hg)**		
6.4.1	Total Hg Emissions (kg)	3.40	0
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0	0

[4] As reported to EPA under the mandatory GHG Reporting Protocols (40 CFR Part 98, Subpart DD). 2022 SF_6 data restated as submitted to the EPA.

[5] Owned and purchased generation.

MT = metric tons = tonne

1 lb = 453.59 grams

1 tonne = 1,000,000 grams

1 metric ton = 1.1023 short tons

CO_2e is calculated using the following global warming potentials (GWPs) from the IPCC Fourth Assessment Report:

CO_2 = 1

N_2O = 298

CH_4 = 25

SF_6 = 22,800

*In August 2023, AEP completed the sale of its 1,365-megawatt (MW) unregulated, contracted renewables portfolio.

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
1	**Owned Nameplate Generation Capacity at End of Year (MW)**	Provide generation capacity data that is consistent with other external reporting by your company. The alternative default is to use the summation of the nameplate capacity of installed owned generation in the company portfolio, as reported to the U.S. Energy Information Administration (EIA) on Form 860 Generator Information. Note that data should be provided in terms of equity ownership for shared facilities. Nameplate capacity is defined as the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.	Megawatt (MW): One million watts of electricity	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary Form 860 Instructions: www.eia.gov/survey/form/eia_860/instructions.pdf
1.1	Coal	Nameplate capacity of generation resources that produce electricity through the combustion of coal (a readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time).	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definitions	Units	Period	Source
1.2	Natural Gas	Nameplate capacity of generation resources that produce electricity through the combustion of natural gas (a gaseous mixture of hydrocarbon compounds, the primary one being methane).	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.3	Nuclear	Nameplate capacity of generation resources that produce electricity through the use of thermal energy released from the fission of nuclear fuel in a reactor.	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.4	Petroleum	Nameplate capacity of generation resources that produce electricity through the combustion of petroleum (a broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids).	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definitions	Units	Period	Source
1.5	**Total Renewable Energy Resources**	Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.5.1	Biomass/ Biogas	Nameplate capacity of generation resources that produce electricity through the combustion of biomass (an organic non-fossil material of biological origin constituting a renewable energy source).	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.5.2	Geothermal	Nameplate capacity of generation resources that produce electricity through the use of thermal energy released from hot water or steam extracted from geothermal reservoirs in the earth's crust.	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.5.3	Hydroelectric	Nameplate capacity of generation resources that produce electricity through the use of flowing water.	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definitions	Units	Period	Source
1.5.4	Solar	Nameplate capacity of generation resources that produce electricity through the use of the radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.5.5	Wind	Nameplate capacity of generation resources that produce electricity through the use of kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.	MW	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
1.6	Other	Nameplate capacity of generation resources that are not defined above.	MW	End of Year	

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
2	**Net Generation for the data year (MWh)** - Broken down by Owned, Purchased and Total	Net generation is defined as the summation of the amount of gross generation less the electrical energy consumed at the generating station(s) for station service or auxiliaries. Data can be provided in terms of total, owned, and/or purchased, depending on how the company prefers to disseminate data in this template. Provide net generation data that is consistent with other external reporting by your company. The alternative default is to provide owned generation data as reported to EIA on Form 923 Schedule 3 and align purchased power data with the Federal Energy Regulatory Commission (FERC) Form 1 Purchased Power Schedule, Reference Pages numbers 326-327. Note: Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross generation.	Megawatt hour (MWh): One thousand kilowatt-hours or one million watt-hours	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary Form 923 Instructions: www.eia.gov/survey/form/eia_923/instructions.pdf
2.1	Coal	Net electricity generated by the combustion of coal (a readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time).	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
2.2	Natural Gas	Net electricity generated by the combustion of natural gas (a gaseous mixture of hydrocarbon compounds, the primary one being methane).	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.3	Nuclear	Net electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.4	Petroleum	Net electricity generated by the combustion of petroleum (a broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids).	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
2.5	**Total Renewable Energy Resources**	Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.5.1	Biomass/ Biogas	Net electricity generated by the combustion of biomass (an organic non-fossil material of biological origin constituting a renewable energy source).	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.5.2	Geothermal	Net electricity generated by the use of thermal energy released from hot water or steam extracted from geothermal reservoirs in the earth's crust.	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.5.3	Hydroelectric	Net electricity generated by the use of flowing water.	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
2.5.4	Solar	Net electricity generated by the use of the radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.5.5	Wind	Net electricity generated by the use of kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.	MWh	Annual	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
2.6	Other	Net electricity generated by other resources that are not defined above. If applicable, this metric should also include market purchases where the generation resource is unknown.	MWh	Annual	

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
3	**Investing in the Future: Capital Expenditures, Energy Efficiency (EE), and Smart Meters**				
3.1	Total Annual Capital Expenditures	Align annual capital expenditures with data reported in recent investor presentations. A capital expenditure is the use of funds or assumption of a liability in order to obtain physical assets that are to be used for productive purposes for at least one year. This type of expenditure is made in order to expand the productive or competitive posture of a business.	Nominal Dollars	Annual	Accounting Tools, Q&A: www.accountingtools.com/questions-and-answers/what-is-a-capital-expenditure
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	Incremental Annual Electricity Savings for the reporting year as reported to EIA on Form 861. Incremental Annual Savings for the reporting year are those changes in energy use caused in the current reporting year by: (1) new participants in DSM programs that operated in the previous reporting year, and (2) participants in new DSM programs that operated for the first time in the current reporting year. A "New program" is a program for which the reporting year is the first year the program achieved savings, regardless of when program development and expenditures began.	MWh	End of Year	U.S. Energy Information Administration, Form EIA-861 Annual Electric Power Industry Report Instructions: www.eia.gov/survey/form/eia_861/instructions.pdf

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
3.3	Incremental Annual Investment in Electric EE Programs (Nominal Dollars)	Total annual investment in electric energy efficiency programs as reported to EIA on Form 861.	Nominal Dollars	End of Year	U.S. Energy Information Administration, Form EIA-861 Annual Electric Power Industry Report Instructions: www.eia.gov/survey/form/eia_861/instructions.pdf
3.4	Percent of Total Electric Customers with Smart Meters (At End of Year)	Number of electric smart meters installed at end-use customer locations, divided by number of total electric meters installed at end-use customer locations. Smart meters are defined as electricity meters that measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily. Align reporting with EIA Form 861 meter data, which lists all types of meter technology used in the system as well as total meters in the system.	Percent	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
4	**Retail Electric Customer Count (At End of Year)**	Electric customer counts should be aligned with the data provided to EIA on Form 861 - Sales to Utility Customers.			U.S. Energy Information Administration, Form EIA-861 Annual Electric Power Industry Report Instructions: www.eia.gov/survey/form/eia_861/instructions.pdf
4.1	Commercial	An energy-consuming sector that consists of service-providing facilities and equipment of businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.	Number of end-use retail customers receiving electricity (Individual homes and businesses count as one)	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Portfolio	Definition	Units	Period	Source
4.2	Industrial	An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity manufacturing (NAICS codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities. Various EIA programs differ in sectoral coverage.	Number of end-use retail customers receiving electricity (Individual homes and businesses count as one)	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary
4.3	Commercial	An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. Note: Various EIA programs differ in sectoral coverage.	Number of end-use retail customers receiving electricity (Individual homes and businesses count as one)	End of Year	U.S. Energy Information Administration, Online Glossary: www.eia.gov/tools/glossary

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
5	**GHG Emissions: Carbon Dioxide (CO_2) and Carbon Dioxide Equivalent (CO_2e)**				
5.1	**Owned Generation[1,2,3]**				
5.1.1	Carbon Dioxide (CO_2)				
5.1.1.1	Total Owned Generation CO_2 Emissions	Total direct CO_2 emissions from company equity-owned fossil fuel combustion generation in accordance with EPA's GHG Reporting Program (40 CFR, part 98, Subpart C – General Stationary Fuel Combustion and Subpart D – Electricity Production), using a continuous emission monitoring system (CEMS) or other approved methodology.	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subparts C and D)
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity	Total direct CO_2 emissions from 5.1.1.1, divided by total MWh of owned net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
5.1.2	Carbon Dioxide Equivalent (CO_2e)				
5.1.2.1	Total Owned Generation CO_2e Emissions	Total direct CO_2e emissions (CO_2, CH_4, and N_2O) from company equity-owned fossil fuel combustion generation in accordance with EPA's GHG Reporting Program (40 CFR, part 98, Subpart C – General Stationary Fuel Combustion and Subpart D – Electricity Production), using a continuous emission monitoring system (CEMS) or other approved methodology.	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subparts C and D)
5.1.2.2	Total Owned Generation CO_2e Emissions Intensity	Total direct CO_2e emissions from 5.1.2.1, divided by total MWh of owned net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
5.2	**Purchased Power[4]**				
5.2.1	Carbon Dioxide (CO_2)				
5.2.1.1	Total Purchased Generation CO_2 Emissions	Purchased power CO_2 emissions should be calculated using the most relevant and accurate of the following methods: (1) For direct purchases, such as PPAs, use the direct emissions data as reported to EPA. (2) For market purchases where emissions attributes are unknown, use applicable regional or national emissions rate: - ISO/RTO-level emission factors - Climate Registry emission factors - E-Grid emission factors	Metric Tons	Annual	
5.2.1.2	Total Purchased Generation CO_2 Emissions Intensity	Total purchased power CO_2 emissions from 5.2.1.1, divided by total MWh of purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
5.2.2	Carbon Dioxide Equivalent (CO_2e)				
5.2.2.1	Total Purchased Generation CO_2e Emissions	Purchased power CO_2e emissions should be calculated using the most relevant and accurate of the following methods: (1) For direct purchases, such as PPAs, use the direct emissions data as reported to EPA. (2) For market purchases where emissions attributes are unknown, use applicable regional or national emissions rate: - ISO/RTO-level emission factors - Climate Registry emission factors - E-Grid emission factors	Metric Tons	Annual	
5.2.2.2	Total Purchased Generation CO_2e Emissions Intensity	Total purchased power CO_2e emissions from 5.2.2.1, divided by total MWh of purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
5.3	**Owned Generation + Purchased Power**				
5.3.1	Carbon Dioxide (CO_2)				
5.3.1.1	Total Owned + Purchased Generation CO_2 Emissions	Sum of total CO_2 emissions reported under 5.1.1.1 and 5.2.1.1.	Metric Tons	Annual	
5.3.1.2	Total Owned + Purchased Generation CO_2 Emissions Intensity	Total emissions from 5.3.1.1, divided by total MWh of owned and purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.3.2	Carbon Dioxide Equivalent (CO_2e)	Sum of total CO_2e emissions reported under 5.1.2.1 and 5.2.2.1.			
5.3.2.1	Total Owned + Purchased Generation CO_2e Emissions	Sum of total CO_2e emissions reported under 5.1.2.1 and 5.2.2.1.	Metric Tons	Annual	

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
5.3.2.2	Total Owned + Purchased Generation CO_2e Emissions Intensity	Total emissions from 5.3.2.1, divided by total MWh of owned and purchased net generation reported in the Utility Portfolio section.	Metric Tons/ Net MWh	Annual	
5.4	**Non-Generation CO_2e Emissions of Sulfur Hexafluoride (SF_6)**				
5.4.1	Total CO_2e Emissions of SF_6	Total CO_2e emissions of SF_6 in accordance with EPA's GHG Reporting Program (40 CFR Part 98, Subpart DD).	Metric Tons	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subpart DD)
5.4.2	Leak Rate of CO_2e Emissions of SF_6	Leak rate of CO_2e emissions of SF_6 in accordance with EPA's GHG Reporting Program (40 CFR Part 98, Subpart DD).	Metric Tons/ Net MWh	Annual	U.S. Environmental Protection Agency, Greenhouse Gas Reporting Program (40 CFR, part 98, Subpart DD)

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
6	**Nitrogen Oxide (NO_x), Sulfur Dioxide (SO_2), Mercury (Hg)**				
6.1	Generation Basis for Calculation	Indicate the generation basis for calculating SO_2, NO_x, and Hg emissions and intensity. Fossil: Fossil Fuel Generation Only Total: Total System Generation Other: Other (please specify in comment section)			
6.2	**Nitrogen Oxide (NO_x)**				
6.2.1	Total NO_x Emissions	Total NO_x emissions from company equity-owned fossil fuel combustion generation. In accordance with EPA's Acid Rain Reporting Program (40 CFR, part 75) or regulatory equivalent.	Metric Tons	Annual	U.S. Environmental Protection Agency, Acid Rain Reporting Program (40 CFR, part 75)
6.2.2	Total NO_x Emissions Intensity	Total from above, divided by the MWh of generation basis as indicated in 6.1.	Metric Tons/ Net MWh	Annual	

Appendix

Ref. No.	Metric: Emissions	Definition	Units	Period	Source
6.3	**Sulfur Dioxide (SO_2)**				
6.3.1	Total SO_2 Emissions	Total SO_2 emissions from company equity-owned fossil fuel combustion generation. In accordance with EPA's Acid Rain Reporting Program (40 CFR, part 75) or regulatory equivalent.	Metric Tons	Annual	U.S. Environmental Protection Agency, Acid Rain Reporting Program (40 CFR, part 75)
6.3.2	Total SO_2 Emissions Intensity	Total from above, divided by the MWh of generation basis as indicated in 6.1.	Metric Tons/ Net MWh	Annual	
6.4	**Mercury (Hg)**				
6.4.1	Total Hg Emissions	Total Mercury emissions from company equity-owned fossil fuel combustion generation. Preferred methods of measurement are performance-based, direct measurement as outlined in the EPA Mercury and Air Toxics Standard (MATS). In the absence of performance-based measures, report value aligned with Toxics Release Inventory (TRI) or regulatory equivalent for international operations.	Kilograms	Annual	EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
6.4.2	Total Hg Emissions Intensity	Total from above, divided by the MWh of generation basis as indicated in 6.1.	Kilograms/ Net MWh	Annual	

Appendix

Ref. No.	Metric: Resources	Definition	Units	Period	Source
7	**Human Resources**				
7.1	Total Number of Employees	Average number of employees over the year. To calculate the annual average number of employees: (1) Calculate the total number of employees your establishment paid for all periods. Add the number of employees your establishment paid in every pay period during the data year. Count all employees that you paid at any time during the year and include full-time, part-time, temporary, seasonal, salaried, and hourly workers. Note that pay periods could be monthly, weekly, bi-weekly, and so on. (2) Divide the total number of employees (from step 1) by the number of pay periods your establishment had in during the data year. Be sure to count any pay periods when you had no (zero) employees. (3) Round the answer you computed in step 2 to the next highest whole number.	Number of Employees	Annual	U.S. Department of Labor, Bureau of Labor Statistics, Steps to estimate annual average number of employees: www.bls.gov/respondents/iif/annualavghours.htm EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
7.2	Percentage of Women in Total Workforce	Percentage of women (defined as employees who identify as female) in workforce.	Percent of Employees	Annual	U.S. Equal Employment Opportunity Commission, EEO Terminology: www.archives.gov/eeo/terminology.html EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report

Appendix

Ref. No.	Metric: Resources	Definition	Units	Period	Source
7.3	Percentage of Minorities in Total Workforce	Percentage of minorities in workforce. Minority employees are defined as "the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin." These groups are: "(1) American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community; (2) Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa; (3) Black (except Hispanic). A person having origins in any of the black racial groups of Africa; (4) Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race."	Percent of Employees	Annual	U.S. Equal Employment Opportunity Commission, EEO Terminology: www.archives.gov/eeo/terminology.html EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
7.4	Total Number of Board of Directors/ Trustees	Average number of employees on the Board of Directors/Trustees over the year.	Number of Employees	Annual	

Appendix

Ref. No.	Metric: Resources	Definition	Units	Period	Source
7.5	Percentage of Women on Board of Directors/ Trustees	Percentage of women (defined as employees who identify as female) on Board of Directors/Trustees.	Percent of Employees	Annual	U.S. Equal Employment Opportunity Commission, EEO Terminology: www.archives.gov/eeo/terminology.html EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
7.6	Percentage of Minorities on Board of Directors/ Trustees	Percentage of minorities on Board of Directors/ Trustees. Minority employees are defined as "the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin." These groups are: "(1) American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community; (2) Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa; (3) Black (except Hispanic). A person having origins in any of the black racial groups of Africa; (4) Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race."	Percent of Employees	Annual	U.S. Equal Employment Opportunity Commission, EEO Terminology: www.archives.gov/eeo/terminology.html EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report

Appendix

Ref. No.	Metric: Resources	Definition	Units	Period	Source
7.7	**Employee Safety Metrics**				
7.7.1	Recordable Incident Rate	Number of injuries or illnesses x 200,000 / Number of employee labor hours worked. Injury or illness is recordable if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. You must also consider a case to meet the general recording criteria if it involves a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness. Record the injuries and illnesses of all employees on your payroll, whether they are labor, executive, hourly, salary, part-time, seasonal, or migrant workers. You also must record the recordable injuries and illnesses that occur to employees who are not on your payroll if you supervise these employees on a day-to-day basis. If your business is organized as a sole proprietorship or partnership, the owner or partners are not considered employees for recordkeeping purposes. For temporary employees, you must record these injuries and illnesses if you supervise these employees on a day-to-day basis. If the contractor's employee is under the day-to-day supervision of the contractor, the contractor is responsible for recording the injury or illness. If you supervise the contractor employee's work on a day-to-day basis, you must record the injury or illness.	Percent	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report

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Ref. No.	Metric: Resources	Definition	Units	Period	Source
7.7.2	Lost-time Case Rate	Calculated as: Number of lost-time cases x 200,000 / Number of employee labor hours worked. Only report for employees of the company as defined for the "recordable incident rate for employees" metric. A lost-time incident is one that resulted in an employee's inability to work the next full work day.	Percent	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	Calculated as: Total number of DART incidents x 200,000 / Number of employee labor hours worked. A DART incident is one in which there were one or more lost days or one or more restricted days, or one that resulted in an employee transferring to a different job within the company.	Percent	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
7.7.4	Work-related Fatalities	Total employee fatalities. Record for all employees on your payroll, whether they are labor, executive, hourly, salary, part-time, seasonal, or migrant workers. Include fatalities to those that occur to employees who are not on your payroll if you supervise these employees on a day-to-day basis. For temporary employees, report fatalities if you supervise these employees on a day-to-day basis.	Number of Employees	Annual	U.S. Department of Labor, Occupational Health and Safety Administration, OSHA Recordable Incidents. EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report

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Ref. No.	Metric: Resources	Definition	Units	Period	Source
8	**Fresh Water Resources**				
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	Amount of freshwater consumed for use in thermal generation. "Freshwater" includes water sourced from fresh surface water, groundwater, rain water, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water. Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere.	Millions of Gallons	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	Amount of freshwater consumed for use in thermal generation."Freshwater" includes water sourced from fresh surface water, groundwater, rain water, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water. Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters nor bills or reference data exist) the organization's own estimates.	Millions of Gallons	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report

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Ref. No.	Metric: Resources	Definition	Units	Period	Source
8.3	Water Withdrawals - Consumptive (Millions of Gallons/Net MWh)	Rate of freshwater consumed for use in thermal generation. "Freshwater" includes water sourced from fresh surface water, groundwater, rain water, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water. Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere. Divide millions of gallons by equity-owned total net generation from all electric generation as reported under Metric 2, Net Generation for the data year (MWh).	Millions of Gallons/ Net MWh	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
8.4	Water Withdrawals - Non-Consumptive (Millions of Gallons/Net MWh)	Rate of fresh water withdrawn, but not consumed, for use in thermal generation."Freshwater" includes water sourced from fresh surface water, groundwater, rain water, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water. Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters nor bills or reference data exist) the organization's own estimates. Divide millions of gallons by equity-owned total net generation from all electric generation as reported under Metric 2, Net Generation for the data year (MWh).	Millions of Gallons/ Net MWh	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report

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Ref. No.	Metric: Resources	Definition	Units	Period	Source
9	**Waste Products**				
9.1	Amount of Hazardous Waste Manifested for Disposal	Metric tons of hazardous waste, as defined by the Resource Conservation and Recovery Act (RCRA), manifested for disposal at a Treatment Storage and Disposal (TSD) facility. Methods of disposal include disposing to landfill, surface impoundment, waste pile, and land treatment units. Hazardous wastes include either listed wastes (F, K, P and U lists) or characteristic wastes (wastes which exhibit at least one of the following characteristics — ignitability, corrosivity, reactivity, toxicity). Include hazardous waste from all company operations including generation, transmissions, distribution, and other operations.	Metric Tons	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report
9.2	Percent of Coal Combustion Products Beneficially Used	Percent of coal combustion products (CCPs) - fly ash, bottom ash, boiler slag, flue gas desulfurization materials, scrubber bi-product - diverted from disposal into beneficial uses, including being sold. Include any CCP that is generated during the data year and stored for beneficial use in a future year. Only include CCP generated at company equity-owned facilities. If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.	Percent	Annual	Partially sourced from EPRI, Metrics to Benchmark Electric Power Company Sustainability Performance, 2018 Technical Report