Duke Energy Annual Report 2023

Form 10-K (NYSE:DUK)

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022 or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from_____to_____

Commission File Number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Zip Code and Telephone Number	IRS Employer Identification No.
1-32853	**DUKE ENERGY CORPORATION** (a Delaware corporation) 526 South Church Street Charlotte, North Carolina 28202-1803 704-382-3853	20-2777218
1-4928	**DUKE ENERGY CAROLINAS, LLC** (a North Carolina limited liability company) 526 South Church Street Charlotte, North Carolina 28202-1803 704-382-3853	56-0205520
1-15929	**PROGRESS ENERGY, INC.** (a North Carolina corporation) 410 South Wilmington Street Raleigh, North Carolina 27601-1748 704-382-3853	56-2155481
1-3382	**DUKE ENERGY PROGRESS, LLC** (a North Carolina limited liability company) 410 South Wilmington Street Raleigh, North Carolina 27601-1748 704-382-3853	56-0165465
1-3274	**DUKE ENERGY FLORIDA, LLC** (a Florida limited liability company) 299 First Avenue North St. Petersburg, Florida 33701 704-382-3853	59-0247770
1-1232	**DUKE ENERGY OHIO, INC.** (an Ohio corporation) 139 East Fourth Street Cincinnati, Ohio 45202 704-382-3853	31-0240030
1-3543	**DUKE ENERGY INDIANA, LLC** (an Indiana limited liability company) 1000 East Main Street Plainfield, Indiana 46168 704-382-3853	35-0594457
1-6196	**PIEDMONT NATURAL GAS COMPANY, INC.** (a North Carolina corporation) 4720 Piedmont Row Drive Charlotte, North Carolina 28210 704-364-3120	56-0556998

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Registrant	Title of each class	Trading symbols	Name of each exchange on which registered
Duke Energy Corporation (Duke Energy)	Common Stock, $0.001 par value	DUK	New York Stock Exchange LLC
Duke Energy	5.625% Junior Subordinated Debentures due September 15, 2078	DUKB	New York Stock Exchange LLC
Duke Energy	Depositary Shares, each representing a 1/1,000th interest in a share of 5.75% Series A Cumulative Redeemable Perpetual Preferred Stock, par value $0.001 per share	DUK PR A	New York Stock Exchange LLC
Duke Energy	3.10% Senior Notes due 2028	DUK 28A	New York Stock Exchange LLC
Duke Energy	3.85% Senior Notes due 2034	DUK 34	New York Stock Exchange LLC

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Duke Energy	Yes ☒	No ☐	Duke Energy Florida, LLC (Duke Energy Florida)	Yes ☒	No ☐
Duke Energy Carolinas, LLC (Duke Energy Carolinas)	Yes ☒	No ☐	Duke Energy Ohio, Inc. (Duke Energy Ohio)	Yes ☒	No ☐
Progress Energy, Inc. (Progress Energy)	Yes ☐	No ☒	Duke Energy Indiana, LLC (Duke Energy Indiana)	Yes ☒	No ☐
Duke Energy Progress, LLC (Duke Energy Progress)	Yes ☒	No ☐	Piedmont Natural Gas Company, Inc. (Piedmont)	Yes ☒	No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒ (Response applicable to all registrants.)

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrants have submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ¨

Indicate by check mark whether Duke Energy is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.:
Large Accelerated Filer ☒ Accelerated Filer ¨ Non-accelerated Filer ☐ Smaller Reporting Company ☐ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether each of Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont is a large accelerated filer, accelerated filer, non-accelerated filer, smaller reporting company, or emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.:
Large Accelerated Filer ¨ Accelerated Filer ¨ Non-accelerated Filer ☒ Smaller Reporting Company ☐ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ¨

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b). ¨

Indicate by check mark whether each of the registrants is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No x

Estimated aggregate market value of the common equity held by nonaffiliates of Duke Energy at June 30, 2022.	$	82,471,565
Number of shares of Common Stock, $0.001 par value, outstanding at January 31, 2023.		770,080,285

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Duke Energy definitive proxy statement for the 2023 Annual Meeting of the Shareholders or an amendment to this Annual Report are incorporated by reference into PART III, Items 10, 11 and 13 hereof.

This combined Form 10-K is filed separately by eight registrants: Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont (collectively the Duke Energy Registrants). Information contained herein relating to any individual registrant is filed by such registrant solely on its own behalf. Each registrant makes no representation as to information relating exclusively to the other registrants.

Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont meet the conditions set forth in General Instructions I(1)(a) and (b) of Form 10-K and are, therefore, filing this Form 10-K with the reduced disclosure format specified in General Instructions I(2) of Form 10-K.

Auditor Firm ID: 34 Auditor Name: Deloitte & Touche LLP Auditor Location: Charlotte, NC

TABLE OF CONTENTS

FORM 10-K FOR THE YEAR ENDED December 31, 2022

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This document includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are based on management's beliefs and assumptions and can often be identified by terms and phrases that include "anticipate," "believe," "intend," "estimate," "expect," "continue," "should," "could," "may," "plan," "project," "predict," "will," "potential," "forecast," "target," "guidance," "outlook" or other similar terminology. Various factors may cause actual results to be materially different than the suggested outcomes within forward-looking statements; accordingly, there is no assurance that such results will be realized. These factors include, but are not limited to:

- The ability to implement our business strategy, including our carbon emission reduction goals;
- State, federal and foreign legislative and regulatory initiatives, including costs of compliance with existing and future environmental requirements, including those related to climate change, as well as rulings that affect cost and investment recovery or have an impact on rate structures or market prices;
- The extent and timing of costs and liabilities to comply with federal and state laws, regulations and legal requirements related to coal ash remediation, including amounts for required closure of certain ash impoundments, are uncertain and difficult to estimate;
- The ability to recover eligible costs, including amounts associated with coal ash impoundment retirement obligations, asset retirement and construction costs related to carbon emissions reductions, and costs related to significant weather events, and to earn an adequate return on investment through rate case proceedings and the regulatory process;
- The costs of decommissioning nuclear facilities could prove to be more extensive than amounts estimated and all costs may not be fully recoverable through the regulatory process;
- The impact of extraordinary external events, such as the pandemic health event resulting from COVID-19, and their collateral consequences, including the disruption of global supply chains or the economic activity in our service territories;
- Costs and effects of legal and administrative proceedings, settlements, investigations and claims;
- Industrial, commercial and residential growth or decline in service territories or customer bases resulting from sustained downturns of the economy, reduced customer usage due to cost pressures from inflation or fuel costs, and the economic health of our service territories or variations in customer usage patterns, including energy efficiency efforts, natural gas building and appliance electrification, and use of alternative energy sources, such as self-generation and distributed generation technologies;
- Federal and state regulations, laws and other efforts designed to promote and expand the use of energy efficiency measures, natural gas electrification, and distributed generation technologies, such as private solar and battery storage, in Duke Energy service territories could result in a reduced number of customers, excess generation resources as well as stranded costs;
- Advancements in technology;
- Additional competition in electric and natural gas markets and continued industry consolidation;
- The influence of weather and other natural phenomena on operations, including the economic, operational and other effects of severe storms, hurricanes, droughts, earthquakes and tornadoes, including extreme weather associated with climate change;
- Changing investor, customer and other stakeholder expectations and demands including heightened emphasis on environmental, social and governance concerns and costs related thereto;
- The ability to successfully operate electric generating facilities and deliver electricity to customers including direct or indirect effects to the company resulting from an incident that affects the United States electric grid or generating resources;
- Operational interruptions to our natural gas distribution and transmission activities;
- The availability of adequate interstate pipeline transportation capacity and natural gas supply;
- The impact on facilities and business from a terrorist or other attack, war, vandalism, cybersecurity threats, data security breaches, operational events, information technology failures or other catastrophic events, such as fires, explosions, pandemic health events or other similar occurrences;
- The inherent risks associated with the operation of nuclear facilities, including environmental, health, safety, regulatory and financial risks, including the financial stability of third-party service providers;
- The timing and extent of changes in commodity prices and interest rates and the ability to recover such costs through the regulatory process, where appropriate, and their impact on liquidity positions and the value of underlying assets;
- The results of financing efforts, including the ability to obtain financing on favorable terms, which can be affected by various factors, including credit ratings, interest rate fluctuations, compliance with debt covenants and conditions, an individual utility's generation mix, and general market and economic conditions;
- Credit ratings of the Duke Energy Registrants may be different from what is expected;
- Declines in the market prices of equity and fixed-income securities and resultant cash funding requirements for defined benefit pension plans, other post-retirement benefit plans and nuclear decommissioning trust funds;

- Construction and development risks associated with the completion of the Duke Energy Registrants' capital investment projects, including risks related to financing, timing and receipt of necessary regulatory approvals, obtaining and complying with terms of permits, meeting construction budgets and schedules and satisfying operating and environmental performance standards, as well as the ability to recover costs from customers in a timely manner, or at all;
- Changes in rules for regional transmission organizations, including changes in rate designs and new and evolving capacity markets, and risks related to obligations created by the default of other participants;
- The ability to control operation and maintenance costs;
- The level of creditworthiness of counterparties to transactions;
- The ability to obtain adequate insurance at acceptable costs;
- Employee workforce factors, including the potential inability to attract and retain key personnel;
- The ability of subsidiaries to pay dividends or distributions to Duke Energy Corporation holding company (the Parent);
- The performance of projects undertaken by our nonregulated businesses and the success of efforts to invest in and develop new opportunities, as well as the successful sale of the Commercial Renewables Disposal Groups;
- The effect of accounting and reporting pronouncements issued periodically by accounting standard-setting bodies and the SEC;
- The impact of United States tax legislation to our financial condition, results of operations or cash flows and our credit ratings;
- The impacts from potential impairments of goodwill or equity method investment carrying values;
- Asset or business acquisitions and dispositions may not yield the anticipated benefits;
- The actions of activist shareholders could disrupt our operations, impact our ability to execute on our business strategy, or cause fluctuations in the trading price of our common stock; and

Additional risks and uncertainties are identified and discussed in the Duke Energy Registrants' reports filed with the SEC and available at the SEC's website at sec.gov. In light of these risks, uncertainties and assumptions, the events described in the forward-looking statements might not occur or might occur to a different extent or at a different time than described. Forward-looking statements speak only as of the date they are made and the Duke Energy Registrants expressly disclaim an obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Glossary of Terms

The following terms or acronyms used in this Form 10-K are defined below:

Term or Acronym	Definition
2017 Settlement	Second Revised and Restated Settlement Agreement in 2017 among Duke Energy Florida, the Florida Office of Public Counsel and other customer advocates, which replaces and supplants the 2013 Settlement
2021 Settlement	Settlement Agreement in 2021 among Duke Energy Florida, the Florida Office of Public Counsel, the Florida Industrial Power Users Group, White Springs Agricultural Chemicals, Inc. d/b/a PSC Phosphate and NUCOR Steel Florida, Inc.
ACP	Atlantic Coast Pipeline, LLC, a limited liability company owned by Dominion and Duke Energy
ACP pipeline	The approximately 600-mile canceled interstate natural gas pipeline
AFS	Available for Sale
AFUDC	Allowance for funds used during construction
AMI	Advanced Metering Infrastructure
AMT	Alternative Minimum Tax
AOCI	Accumulated Other Comprehensive Income (Loss)
ARO	Asset Retirement Obligation
Audit Committee	Audit Committee of the Board of Directors
Belews Creek	Belews Creek Steam Station
Bison	Bison Insurance Company Limited
Board of Directors	Duke Energy Board of Directors
Brunswick	Brunswick Nuclear Plant
Cardinal	Cardinal Pipeline Company, LLC
Catawba	Catawba Nuclear Station
CC	Combined Cycle
CCR	Coal Combustion Residuals
CEP Rider	Duke Energy Ohio's Capital Expenditure Program Rider
Cinergy	Cinergy Corp. (collectively with its subsidiaries)
Citrus County CC	Citrus County Combined Cycle Facility
CO_2	Carbon Dioxide
Coal Ash Act	North Carolina Coal Ash Management Act of 2014
the company	Duke Energy Corporation and its subsidiaries
Commercial Renewables Disposal Groups	Commercial Renewables business segment, excluding the offshore wind contract for Carolina Long Bay, marketed as two separate disposal groups, the utility-scale solar and wind group and the distributed generation group
COVID-19	Coronavirus Disease 2019
CPCN	Certificate of Public Convenience and Necessity
CRC	Cinergy Receivables Company LLC
Crystal River Unit 3	Crystal River Unit 3 Nuclear Plant
CT	Combustion Turbine
DATC	Duke-American Transmission Company, LLC
DECON	A method of decommissioning in which structures, systems, and components that contain radioactive contamination are removed from a site and safely disposed at a commercially operated low-level waste disposal facility, or decontaminated to a level that permits the site to be released for unrestricted use shortly after it ceases operation
DEFR	Duke Energy Florida Receivables, LLC
Deloitte	Deloitte & Touche LLP, and the member firms of Deloitte Touche Tohmatsu and their respective affiliates
DEPR	Duke Energy Progress Receivables, LLC
DERF	Duke Energy Receivables Finance Company, LLC

DOE	U.S. Department of Energy
Dominion	Dominion Energy, Inc.
Dth	Dekatherms
Duke Energy	Duke Energy Corporation (collectively with its subsidiaries)
Duke Energy Carolinas	Duke Energy Carolinas, LLC
Duke Energy Florida	Duke Energy Florida, LLC
Duke Energy Indiana	Duke Energy Indiana, LLC
Duke Energy Kentucky	Duke Energy Kentucky, Inc.
Duke Energy Ohio	Duke Energy Ohio, Inc.
Duke Energy Progress	Duke Energy Progress, LLC
Duke Energy Registrants	Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont
East Bend	East Bend Generating Station
EDIT	Excess deferred income tax
EE	Energy efficiency
EPA	U.S. Environmental Protection Agency
EPS	Earnings Per Share
ETR	Effective tax rate
EU&I	Electric Utilities and Infrastructure
Exchange Act	Securities Exchange Act of 1934
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
Form S-3	Registration statement
FPSC	Florida Public Service Commission
FTR	Financial transmission rights
GAAP	Generally Accepted Accounting Principles in the United States
GAAP Reported Earnings	Net Income Available to Duke Energy Corporation common stockholders
GAAP Reported EPS	Basic EPS Available to Duke Energy Corporation common stockholders
GHG	Greenhouse Gas
GIC	GIC Private Limited, Singapore's sovereign wealth fund and an experienced investor in U.S. infrastructure
GU&I	Gas Utilities and Infrastructure
GWh	Gigawatt-hour
Hardy Storage	Hardy Storage Company, LLC
Harris	Shearon Harris Nuclear Plant
HB 951	The Energy Solutions for North Carolina, or House Bill 951, passed in October 2021
IMPA	Indiana Municipal Power Agency
IMR	Integrity Management Rider
IRP	Integrated Resource Plans
IRS	Internal Revenue Service
ISO	Independent System Operator
ITC	Investment Tax Credit
IURC	Indiana Utility Regulatory Commission
Investment Trusts	Grantor trusts of Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana
KO Transmission	KO Transmission Company
KPSC	Kentucky Public Service Commission

LLC	Limited Liability Company
McGuire	McGuire Nuclear Station
MGP	Manufactured gas plant
MGP Settlement	Stipulation and Recommendation filed jointly by Duke Energy Ohio the staff of the PUCO, the Office of the Ohio Consumers' Counsel and the Ohio Energy Group on August 31, 2021
MISO	Midcontinent Independent System Operator, Inc.
MTBE	Methyl tertiary butyl ether
MW	Megawatt
MWh	Megawatt-hour
MYRP	Multiyear rate plans
NCDEQ	North Carolina Department of Environmental Quality
NCUC	North Carolina Utilities Commission
NDTF	Nuclear decommissioning trust funds
New Source Review	Clean Air Act program that requires industrial facilities to install modern pollution control equipment when they are built or when making a change that increases emissions significantly
NMC	National Methanol Company
NOL	Net operating loss
NPNS	Normal purchase/normal sale
NRC	U.S. Nuclear Regulatory Commission
NYSE	New York Stock Exchange
Oconee	Oconee Nuclear Station
OPEB	Other Post-Retirement Benefit Obligations
OVEC	Ohio Valley Electric Corporation
the Parent	Duke Energy Corporation holding company
PBR	Performance-based regulation
PGA	Purchased Gas Adjustments
PHMSA	Pipeline and Hazardous Materials Safety Administration
Piedmont	Piedmont Natural Gas Company, Inc.
Pine Needle	Pine Needle LNG Company, LLC
Pioneer	Pioneer Transmission, LLC
PJM	PJM Interconnection, LLC
PMPA	Piedmont Municipal Power Agency
PISCC	Post-in-service carrying costs
PPA	Purchase Power Agreement
Progress Energy	Progress Energy, Inc.
PSCSC	Public Service Commission of South Carolina
PTC	Production Tax Credits
PUCO	Public Utilities Commission of Ohio
PURPA	Public Utility Regulatory Policies Act of 1978
QF	Qualifying Facility
REC	Renewable Energy Certificate
Relative TSR	TSR of Duke Energy stock relative to a predefined peer group
Robinson	Robinson Nuclear Plant
ROE	Return of equity
ROU	Right-of-use
RSU	Restricted Stock Unit

RTO	Regional Transmission Organization
Sabal Trail	Sabal Trail Transmission, LLC
SAFSTOR	A method of decommissioning in which a nuclear facility is placed and maintained in a condition that allows the facility to be safely stored and subsequently decontaminated to levels that permit release for unrestricted use
SEC	Securities and Exchange Commission
S&P	Standard & Poor's Rating Services
State utility commissions	NCUC, PSCSC, FPSC, PUCO, IURC, KPSC and TPUC (Collectively)
State electric utility commissions	NCUC, PSCSC, FPSC, PUCO, IURC and KPSC (Collectively)
State gas utility commissions	NCUC, PSCSC, PUCO, TPUC and KPSC (Collectively)
Subsidiary Registrants	Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont
Sutton	L.V. Sutton Combined Cycle Plant
the Tax Act	Tax Cuts and Jobs Act
TPUC	Tennessee Public Utility Commission
TSR	Total shareholder return
U.S.	United States
VIE	Variable Interest Entity
W.S. Lee CC	William States Lee Combined Cycle Facility
WVPA	Wabash Valley Power Association, Inc.

ITEM 1. BUSINESS

DUKE ENERGY

General

Duke Energy was incorporated on May 3, 2005, and is an energy company headquartered in Charlotte, North Carolina, subject to regulation by the FERC and other regulatory agencies listed below. Duke Energy operates in the U.S. primarily through its direct and indirect subsidiaries. Certain Duke Energy subsidiaries are also Subsidiary Registrants, including Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont. When discussing Duke Energy's consolidated financial information, it necessarily includes the results of its separate Subsidiary Registrants, which along with Duke Energy, are collectively referred to as the Duke Energy Registrants.

The Duke Energy Registrants electronically file reports with the SEC, including Annual Reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and amendments to such reports.

The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at sec.gov. Additionally, information about the Duke Energy Registrants, including reports filed with the SEC, is available through Duke Energy's website at duke-energy.com. Such reports are accessible at no charge and are made available as soon as reasonably practicable after such material is filed with or furnished to the SEC.

Business Segments

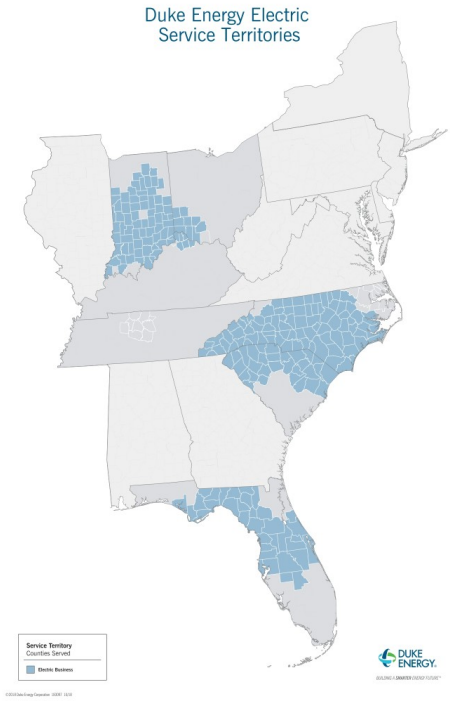
Duke Energy's segment structure includes two reportable business segments: Electric Utilities and Infrastructure (EU&I) and Gas Utilities and Infrastructure (GU&I). The remainder of Duke Energy's operations is presented as Other. Commercial Renewables is reported as discontinued operations and is no longer a reportable segment beginning in the fourth quarter of 2022. See Note 2 for further details. Duke Energy's chief operating decision-maker routinely reviews financial information about each of these business segments in deciding how to allocate resources and evaluate the performance of the business. For additional information on each of these business segments, including financial and geographic information, see Note 3 to the Consolidated Financial Statements, "Business Segments." The following sections describe the business and operations of each of Duke Energy's business segments, as well as Other.

ELECTRIC UTILITIES AND INFRASTRUCTURE

EU&I conducts operations primarily through the regulated public utilities of Duke Energy Carolinas, Duke Energy Progress, Duke Energy Florida, Duke Energy Indiana and Duke Energy Ohio. EU&I provides retail electric service through the generation, transmission, distribution and sale of electricity to approximately 8.2 million customers within the Southeast and Midwest regions of the U.S. The service territory is approximately 92,000 square miles across six states with a total estimated population of 26 million. The operations include electricity sold wholesale to municipalities, electric cooperative utilities and other load-serving entities.

During 2021, Duke Energy executed an agreement providing for an investment by an affiliate of GIC in Duke Energy Indiana in exchange for a 19.9% minority interest issued by Duke Energy Indiana Holdco, LLC, the holding company for Duke Energy Indiana. The transaction was completed following two closings. Additionally, in November 2022, Duke Energy committed to a plan to sell the Commercial Renewables business segment, excluding the offshore wind contract for Carolina Long Bay, which was moved to EU&I. See Note 2 to the Consolidated Financial Statements, "Dispositions," for additional information.

EU&I is also a joint owner in certain electric transmission projects. EU&I has a 50% ownership interest in DATC, a partnership with American Transmission Company, formed to design, build and operate transmission infrastructure. DATC owns 72% of the transmission service rights to Path 15, an 84-mile transmission line in central California. EU&I also has a 50% ownership interest in Pioneer, which builds, owns and operates electric transmission facilities in North America. The following map shows the service territory for EU&I as of December 31, 2022.



The electric operations and investments in projects are subject to the rules and regulations of the FERC, the NRC, the NCUC, the PSCSC, the FPSC, the IURC, the PUCO and the KPSC.

The following table represents the distribution of GWh billed sales by customer class for the year ended December 31, 2022.

	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana
Residential	33 %	26 %	47 %	38 %	30 %
General service	33 %	22 %	34 %	38 %	27 %
Industrial	23 %	16 %	8 %	22 %	28 %
Total retail sales	89 %	64 %	89 %	98 %	85 %
Wholesale and other sales	11 %	36 %	11 %	2 %	15 %
Total sales	100 %	100 %	100 %	100 %	100 %

The number of residential and general service customers within the EU&I service territory is expected to increase over time. Sales growth is expected within the service territory but continues to be impacted by adoption of energy efficiencies and self-generation. Migration into EU&I's service territories and continued remote work contributed to higher residential sales volumes in 2022 while higher data center usage contributed to growth in commercial sales volumes. This was partially offset by lower industrial sales volumes impacted by certain automotive customers experiencing supply chain constraints along with reduced volumes in the steel sector. The impact on customer's usage from these factors and other potential economic dynamics continues to be monitored. Over the longer time frame, it is still expected that the continued adoption of more efficient housing and appliances will have a negative impact on average usage per residential customer over time.

Seasonality and the Impact of Weather

Revenues and costs are influenced by seasonal weather patterns. Peak sales of electricity occur during the summer and winter months, which results in higher revenue and cash flows during these periods. By contrast, lower sales of electricity occur during the spring and fall, allowing for scheduled plant maintenance. Residential and general service customers are more impacted by weather than industrial customers. Estimated weather impacts are based on actual current period weather compared to normal weather conditions. Normal weather conditions are defined as the long-term average of actual historical weather conditions.

The estimated impact of weather on earnings is based on the temperature variances from a normal condition and customers' historic usage patterns. The methodology used to estimate the impact of weather does not consider all variables that may impact customer response to weather conditions such as humidity in the summer or wind chill in the winter. The precision of this estimate may also be impacted by applying long-term weather trends to shorter-term periods.

Heating degree days measure the variation in weather based on the extent the average daily temperature falls below a base temperature. Cooling degree days measure the variation in weather based on the extent the average daily temperature rises above the base temperature. Each degree of temperature below the base temperature counts as one heating degree day and each degree of temperature above the base temperature counts as one cooling degree day.

Competition

Retail

EU&I's businesses operate as the sole supplier of electricity within their service territories, with the exception of Ohio, which has a competitive electricity supply market for generation service. EU&I owns and operates facilities necessary to generate, transmit, distribute and sell electricity. Services are priced by state commission-approved rates designed to include the costs of providing these services and a reasonable return on invested capital. This regulatory policy is intended to provide safe and reliable electricity at fair prices.

In Ohio, EU&I conducts competitive auctions for electricity supply. The cost of energy purchased through these auctions is recovered from retail customers. EU&I earns retail margin in Ohio on the transmission and distribution of electricity, but not on the cost of the underlying energy.

Competition in the regulated electric distribution business is primarily from the development and deployment of alternative energy sources including on-site generation from industrial customers and distributed generation, such as private solar, at residential, general service and/or industrial customer sites.

Wholesale

Duke Energy competes with other utilities and merchant generators for bulk power sales, sales to municipalities and cooperatives and wholesale transactions under primarily cost-based contracts approved by FERC. The principal factors in competing for these sales are availability of capacity and power, reliability of service and price. Prices are influenced primarily by market conditions and fuel costs.

Increased competition in the wholesale electric utility industry and the availability of transmission access could affect EU&I's load forecasts, plans for power supply and wholesale energy sales and related revenues. Wholesale energy sales will be impacted by the extent to which additional generation is available to sell to the wholesale market and the ability of EU&I to attract new customers and to retain existing customers.

Energy Capacity and Resources

EU&I owns approximately 49,870 MW of generation capacity. For additional information on owned generation facilities, see Item 2, "Properties."

Energy and capacity are also supplied through contracts with other generators and purchased on the open market. Factors that could cause EU&I to purchase power for its customers may include, but are not limited to, generating plant outages, extreme weather conditions, generation reliability, demand growth and price. EU&I has interconnections and arrangements with its neighboring utilities to facilitate planning, emergency assistance, sale and purchase of capacity and energy and reliability of power supply.

EU&I's generation portfolio is a balanced mix of energy resources having different operating characteristics and fuel sources designed to provide energy at the lowest possible cost to meet its obligation to serve retail customers. All options, including owned generation resources and purchased power opportunities, are continually evaluated on a real-time basis to select and dispatch the lowest-cost resources available to meet system load requirements.

Sources of Electricity

EU&I relies principally on natural gas, nuclear fuel and coal for its generation of electricity. The following table lists sources of electricity and fuel costs for the three years ended December 31, 2022.

	Generation by Source			Cost of Delivered Fuel per Net Kilowatt-hour Generated (Cents)		
	2022	**2021**	**2020**	**2022**	**2021**	**2020**
Natural gas and fuel oil[(a)]	**34.2 %**	31.8 %	31.3 %	**6.35**	3.89	2.55
Nuclear[(a)]	**26.6 %**	29.8 %	29.6 %	**0.58**	0.58	0.58
Coal[(a)]	**13.5 %**	18.2 %	18.1 %	**3.43**	2.84	2.99
All fuels (cost based on weighted average)[(a)]	**74.3 %**	79.8 %	79.0 %	**3.75**	2.42	1.91
Hydroelectric and solar[(b)]	**1.5 %**	1.5 %	1.9 %			
Total generation	**75.8 %**	81.3 %	80.9 %			
Purchased power and net interchange	**24.2 %**	18.7 %	19.1 %			
Total sources of energy	**100.0 %**	100.0 %	100.0 %			

(a) Statistics related to all fuels reflect EU&I's public utility ownership interest in jointly owned generation facilities.
(b) Generating figures are net of output required to replenish pumped-storage facilities during off-peak periods.

Natural Gas and Fuel Oil

Natural gas and fuel oil supply, transportation and storage for EU&I's generation fleet is purchased under standard industry agreements from various suppliers, including Piedmont. Natural gas supply agreements typically provide for a percentage of forecasted burns being procured over time, with varied expiration dates. Electric Utilities and Infrastructure believes it has access to an adequate supply of natural gas and fuel oil for the reasonably foreseeable future.

EU&I has certain dual-fuel generating facilities that can operate utilizing both natural gas and fuel oil. The cost of EU&I's natural gas and fuel oil is fixed price or determined by published market prices as reported in certain industry publications, plus any transportation and freight costs. Duke Energy Carolinas, Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana use derivative instruments to manage a portion of their exposure to price fluctuations for natural gas. Duke Energy Florida has temporarily agreed to not hedge natural gas prices, but retains an ability to propose hedging again in annual fuel docket filings.

EU&I has firm interstate and intrastate natural gas transportation agreements and storage agreements in place to support generation needed for load requirements. EU&I may purchase additional shorter-term natural gas transportation and utilize natural gas interruptible transportation agreements to support generation needed for load requirements. The EU&I natural gas plants are served by various supply zones and multiple pipelines.

Nuclear

The industrial processes for producing nuclear generating fuel generally involve the mining and milling of uranium ore to produce uranium concentrates and services to convert, enrich and fabricate fuel assemblies.

EU&I has contracted for uranium materials and services to fuel its nuclear reactors. Uranium concentrates, conversion services and enrichment services are primarily met through a diversified portfolio of long-term supply contracts. The contracts are diversified by supplier, country of origin and pricing. EU&I staggers its contracting so that its portfolio of long-term contracts covers the majority of its fuel requirements in the near term and decreasing portions of its fuel requirements over time thereafter. Near-term requirements not met by long-term supply contracts have been and are expected to be fulfilled with spot market purchases. Due to the technical complexities of changing suppliers of fuel fabrication services, EU&I generally source these services to a single domestic supplier on a plant-by-plant basis using multiyear contracts.

EU&I has entered into fuel contracts that cover 100% of its uranium concentrates through at least 2024, 100% of its conversion services through at least 2026, 100% of its enrichment services through at least 2026, and 100% of its fabrication services requirements for these plants through at least 2027. For future requirements not already covered under long-term contracts, EU&I believes it will be able to renew contracts as they expire or enter into similar contractual arrangements with other suppliers of nuclear fuel materials and services.

Coal

EU&I meets its coal demand through a portfolio of long-term purchase contracts and short-term spot market purchase agreements. Large amounts of coal are purchased under long-term contracts with mining operators who mine both underground and at the surface. EU&I uses spot market purchases to meet coal requirements not met by long-term contracts. Expiration dates for its long-term contracts, which may have various price adjustment provisions and market reopeners, range from 2023 to 2027 for Duke Energy Carolinas and Duke Energy Indiana, 2023 to 2024 for Duke Energy Progress and 2023 to 2025 for Duke Energy Florida and Duke Energy Ohio. EU&I expects to renew these contracts or enter into similar contracts with other suppliers as existing contracts expire, though prices will fluctuate over time as coal markets change. EU&I has an adequate supply of coal under contract to meet its risk management guidelines regarding projected future consumption. As a result of volatility in natural gas prices and the associated impacts on coal-fired dispatch within the generation fleet, coal inventories will continue to fluctuate. EU&I continues to actively manage its portfolio and has worked with suppliers to obtain increased flexibility in its coal contracts.

Coal purchased for the Carolinas is primarily produced from mines in Central Appalachia, Northern Appalachia and the Illinois Basin. Coal purchased for Florida is primarily produced from mines in the Illinois Basin. Coal purchased for Kentucky is produced from mines along the Ohio River in Illinois, Ohio, West Virginia and Pennsylvania. Coal purchased for Indiana is primarily produced in Indiana and Illinois. There are adequate domestic coal reserves to serve EU&I's coal generation needs through end of life. The current average sulfur content of coal purchased by Electric Utilities and Infrastructure is between 0.5% and 3.5% for Duke Energy Carolinas and Duke Energy Progress, and between 0.5% and 4% for Duke Energy Florida, Duke Energy Ohio and Duke Energy Indiana. EU&I's environmental controls, in combination with the use of sulfur dioxide (SO_2) emission allowances, enable EU&I to satisfy current SO_2 emission limitations for its existing facilities.

Purchased Power

EU&I purchases a portion of its capacity and system requirements through purchase obligations, leases and purchase capacity contracts. EU&I believes it can obtain adequate purchased power capacity to meet future system load needs. However, during periods of high demand, the price and availability of purchased power may be significantly affected.

The following table summarizes purchased power for the previous three years:

	2022	2021	2020
Purchase obligations and leases (in millions of MWh)[(a)]	**41.2**	36.0	32.7
Purchase capacity under contract (in MW)[(b)]	**4,028**	4,259	4,716

(a) Represents approximately 16% of total system requirements for 2022, 14% for 2021 and 13% for 2020.
(b) For 2022, 2021 and 2020, these agreements include approximately 412 MW of firm capacity under contract by Duke Energy Florida with QFs.

Inventory

EU&I must maintain an adequate stock of fuel and materials and supplies in order to ensure continuous operation of generating facilities and reliable delivery to customers. As of December 31, 2022, the inventory balance for EU&I was approximately $3.4 billion. For additional information on inventory, see Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies."

Ash Basin Management

During 2015, EPA issued regulations related to the management of CCR from power plants. These regulations classify CCR as nonhazardous waste under the Resource Conservation and Recovery Act (RCRA) and apply to electric generating sites with new and existing landfills and new and existing surface impoundments and establish requirements regarding landfill design, structural integrity design and assessment criteria for surface impoundments, groundwater monitoring, protection and remedial procedures and other operational and reporting procedures for the disposal and management of CCR. In addition to the federal regulations, CCR landfills and surface impoundments (ash basins or impoundments) will continue to be regulated by existing state laws, regulations and permits, such as the North Carolina Coal Ash Management Act of 2014 (Coal Ash Act).

EU&I has and will periodically submit to applicable authorities required site-specific coal ash impoundment remediation or closure plans. Closure plans must be approved and all associated permits issued before any work can begin. Closure activities have begun in all of Duke Energy's jurisdictions. Excavation began in 2015 at the four sites specified as high priority by the Coal Ash Act and at the W.S. Lee Steam Station site in South Carolina in connection with other legal requirements. Excavation at these sites involves movement of CCR materials to appropriate engineered off-site or on-site lined landfills or for reuse in an approved beneficial application. Duke Energy has completed excavation of coal ash at the four high-priority North Carolina sites. At other sites where CCR management is required, planning and closure methods have been studied and factored into the estimated retirement and management costs, and closure activities have commenced.

The EPA CCR rule and the Coal Ash Act leave the decision on cost recovery determinations related to closure of coal ash surface impoundments to the normal ratemaking processes before utility regulatory commissions. Duke Energy's electric utilities have included compliance costs associated with federal and state requirements in their respective rate proceedings. During 2017, Duke Energy Carolinas' and Duke Energy Progress' wholesale contracts were amended to include the recovery of expenditures related to AROs for the closure of coal ash basins. The amended contracts have retail disallowance parity or provisions limiting challenges to CCR cost recovery actions at FERC. FERC approved the amended wholesale rate schedules in 2017. For additional information on the ash basins and recovery, see Item 7, "Other Matters" and Notes 4, 5 and 10 to the Consolidated Financial Statements, "Regulatory Matters," "Commitments and Contingencies" and "Asset Retirement Obligations," respectively.

Nuclear Matters

Duke Energy owns, wholly or partially, 11 operating nuclear reactors located at six operating stations. The Crystal River Unit 3 permanently ceased operation in February 2013. Nuclear insurance includes: nuclear liability coverage; property damage coverage; nuclear accident decontamination and premature decommissioning coverage; and accidental outage coverage for losses in the event of a major accidental outage. Joint owners reimburse Duke Energy for certain expenses associated with nuclear insurance in accordance with joint owner agreements. The Price-Anderson Act requires plant owners to provide for public nuclear liability claims resulting from nuclear incidents to the maximum total financial protection liability, which is approximately $13.7 billion. For additional information on nuclear insurance, see Note 5 to the Consolidated Financial Statements, “Commitments and Contingencies.”

Duke Energy has a significant future financial commitment to dispose of spent nuclear fuel and decommission and decontaminate each plant safely. The NCUC, PSCSC and FPSC require Duke Energy to update their cost estimates for decommissioning their nuclear plants every five years.

The following table summarizes the fair value of NDTF investments and the most recent site-specific nuclear decommissioning cost studies. Decommissioning costs are stated in 2018 or 2019 dollars, depending on the year of the cost study, and include costs to decommission plant components not subject to radioactive contamination.

	NDTF[a]		Decommissioning	
(in millions)	**December 31, 2022**	**December 31, 2021**	**Costs[a]**	**Year of Cost Study**
Duke Energy	**$ 8,637**	$ 10,401	**$ 9,105**	2018 or 2019
Duke Energy Carolinas[b][c]	**4,783**	5,759	**4,365**	2018
Duke Energy Progress[d]	**3,430**	4,089	**4,181**	2019
Duke Energy Florida[e]	**424**	553	**559**	N/A

(a) Amounts for Progress Energy equal the sum of Duke Energy Progress and Duke Energy Florida.
(b) Decommissioning cost for Duke Energy Carolinas reflects its ownership interest in jointly owned reactors. Other joint owners are responsible for decommissioning costs related to their interest in the reactors.
(c) Duke Energy Carolinas' site-specific nuclear decommissioning cost study completed in 2018 was filed with the NCUC and PSCSC in 2019. A new funding study was also completed and filed with the NCUC and PSCSC in 2019.
(d) Duke Energy Progress' site-specific nuclear decommissioning cost study completed in 2019 was filed with the NCUC and PSCSC in March 2020. Duke Energy Progress also completed a funding study, which was filed with the NCUC and PSCSC in July 2020. In October 2021, Duke Energy Progress filed the 2019 nuclear decommissioning cost study with the FERC, as well as a revised date schedule for decommissioning expense to be collected from wholesale customers. The FERC accepted the filing, as filed on December 9, 2021.
(e) During 2019, Duke Energy Florida reached an agreement to transfer decommissioning work for Crystal River Unit 3 to a third party and decommissioning costs are based on the agreement with this third party rather than a cost study. Regulatory approval was received from the NRC and the FPSC in April 2020 and August 2020, respectively. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters,” for more information.

The NCUC, PSCSC, FPSC and FERC have allowed EU&I to recover estimated decommissioning costs through retail and wholesale rates over the expected remaining service periods of their nuclear stations. EU&I believes the decommissioning costs being recovered through rates, when coupled with the existing fund balances and expected fund earnings, will be sufficient to provide for the cost of future decommissioning. For additional information, see Note 10 to the Consolidated Financial Statements, “Asset Retirement Obligations.”

The Nuclear Waste Policy Act of 1982 (as amended) provides the framework for development by the federal government of interim storage and permanent disposal facilities for high-level radioactive waste materials. The government has not yet developed a storage facility or disposal capacity, so EU&I will continue to store spent fuel on its reactor sites.

Under federal law, the DOE is responsible for the selection and construction of a facility for the permanent disposal of spent nuclear fuel and high-level radioactive waste. The DOE terminated the project to license and develop a geologic repository at Yucca Mountain, Nevada in 2010, and is currently taking no action to fulfill its responsibilities to dispose of spent fuel.

Until the DOE begins to accept the spent nuclear fuel, Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida will continue to safely manage their spent nuclear fuel. Under current regulatory guidelines, Harris has sufficient storage capacity in its spent fuel pools through the expiration of its renewed operating license. With certain modifications and approvals by the NRC to expand the on-site dry cask storage facilities, spent nuclear fuel dry storage facilities will be sufficient to provide storage space of spent fuel through the expiration of the operating licenses, including any license renewals, for Brunswick, Catawba, McGuire, Oconee and Robinson. Crystal River Unit 3 ceased operation in 2013 and was placed in a SAFSTOR condition in January 2018. As of January 2018, all spent fuel at Crystal River Unit 3 has been transferred from the spent fuel pool to dry storage at an on-site independent spent fuel storage installation. During 2020, the NRC and the FPSC approved an agreement to transfer ownership of spent fuel for Crystal River Unit 3 to a third party. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for more information.

The nuclear power industry faces uncertainties with respect to the cost and long-term availability of disposal sites for spent nuclear fuel and other radioactive waste, compliance with changing regulatory requirements, capital outlays for modifications and new plant construction.

EU&I is subject to the jurisdiction of the NRC for the design, construction and operation of its nuclear generating facilities. The following table includes the current year of expiration of nuclear operating licenses for nuclear stations in operation. In June 2021, Duke Energy Carolinas filed a subsequent license renewal application for the Oconee Nuclear Station (ONS) with the U.S. Nuclear Regulatory Commission to renew ONS's operating license for an additional 20 years. Duke Energy has announced its intention to seek 20-year operating license renewals for each of the reactors it operates in Duke Energy Carolinas and Duke Energy Progress. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Unit	Year of Expiration
Duke Energy Carolinas	
Catawba Units 1 and 2	2043
McGuire Unit 1	2041
McGuire Unit 2	2043
Oconee Units 1 and 2	2033
Oconee Unit 3	2034
Duke Energy Progress	
Brunswick Unit 1	2036
Brunswick Unit 2	2034
Harris	2046
Robinson	2030

The NRC has acknowledged permanent cessation of operation and permanent removal of fuel from the reactor vessel at Crystal River Unit 3. Therefore, the license no longer authorizes operation of the reactor. For additional information on nuclear decommissioning activity, see Notes 4 and 10 to the Consolidated Financial Statements, "Regulatory Matters" and "Asset Retirement Obligations," respectively.

Regulation

State

The state electric utility commissions approve rates for Duke Energy's retail electric service within their respective states. The state electric utility commissions, to varying degrees, have authority over the construction and operation of EU&I's generating facilities. CPCNs issued by the state electric utility commissions, as applicable, authorize EU&I to construct and operate its electric facilities and to sell electricity to retail and wholesale customers. Prior approval from the relevant state electric utility commission is required for the entities within EU&I to issue securities. The underlying concept of utility ratemaking is to set rates at a level that allows the utility to collect revenues equal to its cost of providing service plus earn a reasonable rate of return on its invested capital, including equity.

In addition to rates approved in base rate cases, each of the state electric utility commissions allow recovery of certain costs through various cost recovery clauses to the extent the respective commission determines in periodic hearings that such costs, including any past over or under-recovered costs, are prudent.

Fuel, fuel-related costs and certain purchased power costs are eligible for recovery by EU&I. EU&I uses coal, hydroelectric, natural gas, oil, renewable generation and nuclear fuel to generate electricity, thereby maintaining a diverse fuel mix that helps mitigate the impact of cost increases in any one fuel. Due to the associated regulatory treatment and the method allowed for recovery, changes in fuel costs from year to year have no material impact on operating results of EU&I, unless a commission finds a portion of such costs to have been imprudent. However, delays between the expenditure for fuel costs and recovery from customers can adversely impact the timing of cash flows of EU&I.

The table below reflects significant electric rate case applications approved and effective in the past three years and applications currently pending approval.

	Regulatory Body	Annual Increase (Decrease) (in millions)	Return on Equity	Equity Component of Capital Structure	Effective Date
Approved Rate Cases:					
Duke Energy Progress 2022 South Carolina Rate Case	PSCSC	$ 52	9.6 %	52.43 %	4/1/2023
Duke Energy Ohio 2021 Ohio Electric Rate Case	PUCO	23	9.5 %	50.5 %	1/3/2023
Duke Energy Progress 2019 North Carolina Rate Case	NCUC	178	9.6 %	52 %	6/1/2021
Duke Energy Carolinas 2019 North Carolina Rate Case	NCUC	33	9.6 %	52 %	6/1/2021
Duke Energy Indiana 2019 Indiana Rate Case[a]	IURC	146	9.7 %	54 %	7/30/2020
Duke Energy Kentucky 2019 Kentucky Electric Rate Case	KPSC	24	9.25 %	48.23 %	5/1/2020
Pending Rate Cases:					
Duke Energy Carolinas 2023 North Carolina Rate Case[b]	NCUC	$ 823	10.4 %	53 %	1/1/2024
Duke Energy Kentucky 2022 Kentucky Electric Rate Case	KPSC	75	10.35 %	52.5 %	7/15/2023
Duke Energy Progress 2022 North Carolina Rate Case[c]	NCUC	615	10.4 %	53 %	10/1/2023

(a) Step 1 rates are approximately 75% of the total and became effective July 30, 2020. Step 2 rates are approximately 25% of the total rate case increase. They were approved on July 28, 2021, and implemented in August 2021.
(b) Year 1 rates are approximately 61% of the total. Year 2 rates are approximately 21% of the total rate case increase. Year 3 rates are approximately 18% of the total rate increase.
(c) Year 1 rates are approximately 53% of the total. Year 2 rates are approximately 25% of the total rate case increase. Year 3 rates are approximately 22% of the total rate increase. Implementation of interim rates is planned for June 1, 2023.

Additionally, in January 2021, Duke Energy Florida filed a settlement agreement with the FPSC that will allow annual increases to its base rates, an agreed upon return on equity ("ROE") and includes a base rate stay-out provision through 2024, among other provisions. The FPSC approved the 2021 Settlement on May 4, 2021, issuing an order on June 4, 2021. Revised customer rates became effective January 1, 2022, with subsequent base rate increases effective January 1, 2023, and January 1, 2024. For more information on rate matters and other regulatory proceedings, see Note 4 to the Consolidated Financial Statements, "Regulatory Matters."

Federal

The FERC approves EU&I's cost-based rates for electric sales to certain power and transmission wholesale customers. Regulations of FERC and the state electric utility commissions govern access to regulated electric and other data by nonregulated entities and services provided between regulated and nonregulated energy affiliates. These regulations affect the activities of nonregulated affiliates with EU&I.

RTOs

PJM and MISO are the ISOs and FERC-approved RTOs for the regions in which Duke Energy Ohio and Duke Energy Indiana operate. PJM and MISO operate energy, capacity and other markets, and control the day-to-day operations of bulk power systems through central dispatch.

Duke Energy Ohio is a member of PJM and Duke Energy Indiana is a member of MISO. Transmission owners in these RTOs have turned over control of their transmission facilities and their transmission systems are currently under the dispatch control of the RTOs. Transmission service is provided on a regionwide, open-access basis using the transmission facilities of the RTO members at rates based on the costs of transmission service.

Environmental

EU&I is subject to the jurisdiction of the EPA and state and local environmental agencies. For a discussion of environmental regulation, see "Environmental Matters" in this section. See the "Other Matters" section of Item 7 Management's Discussion and Analysis for a discussion about potential Global Climate Change legislation and other EPA regulations under development and the potential impacts such legislation and regulation could have on Duke Energy's operations.

GAS UTILITIES AND INFRASTRUCTURE

GU&I conducts natural gas operations primarily through the regulated public utilities of Piedmont, Duke Energy Ohio and Duke Energy Kentucky. The natural gas operations are subject to the rules and regulations of the NCUC, PSCSC, PUCO, KPSC, TPUC, PHMSA and the FERC. GU&I serves residential, commercial, industrial and power generation natural gas customers, including customers served by municipalities who are wholesale customers. GU&I has over 1.6 million total customers, including 1.1 million customers located in North Carolina, South Carolina and Tennessee, and an additional 550,000 customers located within southwestern Ohio and northern Kentucky. In the Carolinas, Ohio and Kentucky, the service areas are comprised of numerous cities, towns and communities. In Tennessee, the service area is the metropolitan area of Nashville. The following map shows the service territory and investments in operating pipelines for GU&I as of December 31, 2022.

The number of residential, commercial and industrial customers within the GU&I service territory is expected to increase over time. Average usage per residential customer is expected to remain flat or decline for the foreseeable future; however, decoupled rates in North Carolina and various rate design mechanisms in other jurisdictions partially mitigate the impact of the declining usage per customer on overall profitability.

GU&I also has investments in various pipeline transmission projects, renewable natural gas projects and natural gas storage facilities.

Natural Gas for Retail Distribution

GU&I is responsible for the distribution of natural gas to retail customers in its North Carolina, South Carolina, Tennessee, Ohio and Kentucky service territories. GU&I's natural gas procurement strategy is to contract primarily with major and independent producers and marketers for natural gas supply. It also purchases a diverse portfolio of transportation and storage service from interstate pipelines. This strategy allows GU&I to assure reliable natural gas supply and transportation for its firm customers during peak winter conditions. When firm pipeline services or contracted natural gas supplies are temporarily not needed due to market demand fluctuations, GU&I may release these services and supplies in the secondary market under FERC-approved capacity release provisions or make wholesale secondary market sales. In 2022, firm supply purchase commitment agreements provided 100% of the natural gas supply for both Piedmont and Duke Energy Ohio. Approximately 90% of forecasted demand was under contract prior to the winter heating season, with firm daily spot purchases making up the balance.

Impact of Weather

GU&I revenues are generally protected from the impact of weather fluctuations due to the regulatory mechanisms that are available in most service territories. In North Carolina, margin decoupling provides protection from both weather and other usage variations like conservation for residential and small and medium general service customers. Margin decoupling provides a set margin per customer independent of actual usage. In South Carolina, Tennessee and Kentucky, weather normalization adjusts revenues either up or down depending on how much warmer or colder than normal a given month has been. Weather normalization adjustments occur from November through March in South Carolina, from October through April in Tennessee and from November through April in Kentucky. Duke Energy Ohio collects most of its non-fuel revenue through a fixed monthly charge that is not impacted by usage fluctuations that result from weather changes or conservation.

Competition

GU&I's businesses operate as the sole provider of natural gas service within their retail service territories. GU&I owns and operates facilities necessary to transport and distribute natural gas. GU&I earns retail margin on the transmission and distribution of natural gas and not on the cost of the underlying commodity. Services are priced by state commission-approved rates designed to include the costs of providing these services and a reasonable return on invested capital. This regulatory policy is intended to provide safe and reliable natural gas service at fair prices.

In residential, commercial and industrial customer markets, natural gas distribution operations compete with other companies that supply energy, primarily electric companies, propane and fuel oil dealers, renewable energy providers and coal companies in relation to sources of energy for electric power plants, as well as nuclear energy. A significant competitive factor is price. GU&I's primary product competition is with electricity for heating, water heating and cooking. Increases in the price of natural gas or decreases in the price of other energy sources could negatively impact competitive position by decreasing the price benefits of natural gas to the consumer. In the case of industrial customers, such as manufacturing plants, adverse economic or market conditions, including higher natural gas costs, could cause these customers to suspend business operations or to use alternative sources of energy in favor of energy sources with lower per-unit costs.

Higher natural gas costs or decreases in the price of other energy sources may allow competition from alternative energy sources for applications that have traditionally used natural gas, encouraging some customers to move away from natural gas-fired equipment to equipment fueled by other energy sources. Competition between natural gas and other forms of energy is also based on efficiency, performance, reliability, safety and other non-price factors. Technological improvements in other energy sources and events that impair the public perception of the non-price attributes of natural gas could erode our competitive advantage. These factors in turn could decrease the demand for natural gas, impair our ability to attract new customers and cause existing customers to switch to other forms of energy or to bypass our systems in favor of alternative competitive sources. This could result in slow or no customer growth and could cause customers to reduce or cease using our product, thereby reducing our ability to make capital expenditures and otherwise grow our business, adversely affecting our earnings.

Natural Gas Investments

Duke Energy, through its GU&I segment, has a 7.5% equity ownership interest in Sabal Trail. Sabal Trail is a joint venture that owns the Sabal Trail Natural Gas Pipeline (Sabal Trail pipeline) to transport natural gas to Florida, regulated by FERC. The Sabal Trail Phase I mainline was placed into service in July 2017 and traverses Alabama, Georgia and Florida. The remaining lateral line to the Duke Energy Florida's Citrus County CC was placed into service in March 2018. Phase II of Sabal Trail went into service in May 2020, adding approximately 200,000 Dth of capacity to the Sabal Trail pipeline.

Duke Energy, through its GU&I segment, has a 47% equity ownership interest in ACP, which planned to build the ACP pipeline, an approximately 600-mile interstate natural gas pipeline. The ACP pipeline was intended to transport diverse natural gas supplies into southeastern markets and would be regulated by FERC. Dominion Energy owns 53% of ACP and was contracted to construct and operate the ACP pipeline upon completion. On July 5, 2020, Dominion announced a sale of substantially all of its natural gas transmission and storage segment assets, which were critical to the ACP pipeline. Further, permitting delays and legal challenges had materially affected the timing and cost of the pipeline. As a result, Duke Energy determined that they would no longer invest in the construction of the ACP pipeline.

Duke Energy, also through its GU&I segment, has investments in various renewable natural gas joint ventures.

GU&I has a 21.49% equity ownership interest in Cardinal, an intrastate pipeline located in North Carolina regulated by the NCUC, a 45% equity ownership in Pine Needle, an interstate liquefied natural gas storage facility located in North Carolina and a 50% equity ownership interest in Hardy Storage, an underground interstate natural gas storage facility located in Hardy and Hampshire counties in West Virginia. Pine Needle and Hardy Storage are regulated by FERC.

KO Transmission Company (KO Transmission), a wholly owned subsidiary of Duke Energy Ohio, is an interstate pipeline company engaged in the business of transporting natural gas and is subject to the rules and regulations of FERC. KO Transmission's 90-mile pipeline supplies natural gas to Duke Energy Ohio and interconnects with the Columbia Gulf Transmission pipeline and Tennessee Gas Pipeline. An approximately 70-mile portion of KO Transmission's pipeline facilities is co-owned by Columbia Gas Transmission, LLC. KO Transmission sold all of its pipeline facilities and related real property to Columbia Gas Transmission, LLC on February 1, 2023, for approximately book value.

See Notes 4, 13 and 18 to the Consolidated Financial Statements, "Regulatory Matters," "Investments in Unconsolidated Affiliates" and "Variable Interest Entities," respectively, for further information on Duke Energy's and GU&I's natural gas investments.

Inventory

GU&I must maintain adequate natural gas inventory in order to provide reliable delivery to customers. As of December 31, 2022, the inventory balance for GU&I was $185 million. For more information on inventory, see Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies."

Regulation

State

The state gas utility commissions approve rates for Duke Energy's retail natural gas service within their respective states. The state gas utility commissions, to varying degrees, have authority over the construction and operation of GU&I's natural gas distribution facilities. CPCNs issued by the state gas utility commissions or other government agencies, as applicable, authorize GU&I to construct and operate its natural gas distribution facilities and to sell natural gas to retail and wholesale customers. Prior approval from the relevant state gas utility commission is required for GU&I to issue securities. The underlying concept of utility ratemaking is to set rates at a level that allows the utility to collect revenues equal to its cost of providing service plus a reasonable rate of return on its invested capital, including equity.

In addition to amounts collected from customers through approved base rates, each of the state gas utility commissions allow recovery of certain costs through various cost recovery clauses to the extent the respective commission determines in periodic hearings that such costs, including any past over- or under-recovered costs, are prudent.

Natural gas costs are eligible for recovery by GU&I. Due to the associated regulatory treatment and the method allowed for recovery, changes in natural gas costs from year to year have no material impact on operating results of GU&I, unless a commission finds a portion of such costs to have been imprudent. However, delays between the expenditure for natural gas and recovery from customers can adversely impact the timing of cash flows of GU&I.

The following table summarizes certain components underlying recently approved and effective base rates or rate stabilization filings in the last three years and applications currently pending approval.

	Annual Increase (Decrease) (in millions)	Return on Equity	Equity Component of Capital Structure	Effective Date
Approved Rate Cases:				
Piedmont 2020 Tennessee Natural Gas Base Rate Case	$ 16	9.8 %	50.5 %	January 2021
Piedmont 2021 North Carolina Natural Gas Base Rate Case	67	9.6 %	51.6 %	November 2021
Piedmont 2021 South Carolina Rate Stabilization Adjustment Filing	7	9.8 %	52.2 %	November 2021
Duke Energy Kentucky 2021 Natural Gas Base Rate Case[a]	9	9.38 %	51.3 %	January 2022
Piedmont 2022 South Carolina Natural Gas Base Rate Case[b]	2	9.3 %	52.2 %	November 2022
Pending Rate Cases:				
Duke Energy Ohio 2022 Natural Gas Base Rate Case	49	10.3 %	52.3 %	April 2023

(a) An ROE of 9.375% for natural gas base rates and 9.3% for natural gas riders was approved.
(b) Under the rate stabilization adjustment (RSA) mechanism, Piedmont resets rates in South Carolina based on updated costs and revenues on an annual basis. The SC RSA filing for 2022 did not reset the rates since Piedmont filed a General Rate Case in 2022.

GU&I has an IMR mechanism in North Carolina designed to separately track and recover certain costs associated with capital investments incurred to comply with federal pipeline safety and integrity programs. Piedmont has withdrawn from the Tennessee IMR mechanism subsequent to the authorization of the Tennessee Annual Review Mechanism effective January 2022. The following table summarizes information related to the recently approved IMR filing.

(in millions)	Cumulative Investment	Annual Revenues	Effective Date
Piedmont 2022 IMR Filing – North Carolina	$ 213	$ 20	December 2022

In Ohio, GU&I has a Capital Expenditure Program Rider (CEP Rider) designed to recover costs between rate cases on PUCO approved capital expenditures. Duke Energy Ohio submits a filing each year for incremental investments to increase the revenue requirement up to the cap of approximately $7 million. The cumulative investment under the CEP Rider is $359 million with total annual revenue requirement of $70 million.

For more information on rate matters and other regulatory proceedings, see Note 4 to the Consolidated Financial Statements, “Regulatory Matters.”

Federal

GU&I is subject to various federal regulations, including regulations that are particular to the natural gas industry. These federal regulations include but are not limited to the following:

- Regulations of the FERC affect the certification and siting of new interstate natural gas pipeline projects, the purchase and sale of, the prices paid for, and the terms and conditions of service for the interstate transportation and storage of natural gas.
- Regulations of the PHMSA affect the design, construction, operation, maintenance, integrity, safety and security of natural gas distribution and transmission systems.
- Regulations of the EPA relate to the environment including proposed air emissions regulations that would expand to include emissions of methane.

Regulations of the FERC and the state gas utility commissions govern access to regulated natural gas and other data by nonregulated entities and services provided between regulated and nonregulated energy affiliates. These regulations affect the activities of nonregulated affiliates with Gas Utilities and Infrastructure.

Environmental

GU&I is subject to the jurisdiction of the EPA and state and local environmental agencies. For a discussion of environmental regulation, see “Environmental Matters” in this section. See “Other Matters” section of Item 7 Management's Discussion and Analysis for a discussion about potential Global Climate Change legislation and other EPA regulations under development and the potential impacts such legislation and regulation could have on Duke Energy’s operations.

OTHER

The remainder of Duke Energy’s operations is presented as Other. While it is not a business segment, Other primarily includes interest expense on holding company debt, unallocated corporate costs, amounts related to certain companywide initiatives and contributions made to the Duke Energy Foundation. Other also includes Bison and an investment in NMC.

The Duke Energy Foundation is a nonprofit organization funded by Duke Energy shareholders that makes charitable contributions to selected nonprofits and government subdivisions.

Bison, a wholly owned subsidiary of Duke Energy, is a captive insurance company with the principal activity of providing Duke Energy subsidiaries with indemnification for financial losses primarily related to property, workers’ compensation and general liability.

Duke Energy owns a 17.5% equity interest in NMC. The joint venture company has production facilities in Jubail, Saudi Arabia, where it manufactures certain petrochemicals and plastics. The company annually produces approximately 1 million metric tons each of MTBE and methanol and has the capacity to produce 50,000 metric tons of polyacetal. The main feedstocks to produce these products are natural gas and butane. Duke Energy records the investment activity of NMC using the equity method of accounting and retains 25% of NMC's board of directors' representation and voting rights.

Human Capital Management

Governance

Our employees are critical to the success of our company. Our Human Resources organization is responsible for our human capital management strategy, which includes recruiting and hiring, onboarding and training, diversity and inclusion, workforce planning, talent and succession planning, performance management and employee development. Key areas of focus include fostering a high-performance and inclusive culture built on strong leadership and highly engaged and diverse employees, building a pipeline of skilled workers and ensuring knowledge transfer as employees retire.

Our Board of Directors provides oversight on certain human capital management matters, primarily through the Compensation and People Development Committee, which is responsible for reviewing strategies and policies related to human capital management, including with respect to matters such as diversity and inclusion, employee engagement and talent development.

Employees

On December 31, 2022, Duke Energy had a total of 27,859 full-time, part-time and temporary employees, the majority of which were full-time employees. The total includes 5,081 employees who are represented by labor unions under various collective bargaining agreements that generally cover wages, benefits, working practices, and other terms and conditions of employment.

Compensation

The company seeks to attract and retain an appropriately qualified workforce and leverages Duke Energy’s leadership imperatives to foster a culture focused on customers, innovation, and highly engaged employees. Our compensation program is market driven and designed to link pay to performance with the goal of attracting and retaining talented employees, rewarding individual performance, and encouraging long-term commitment to our business. Our market competitive pay program includes short-term and long-term variable pay components that help to align the interests of Duke Energy to our customers and shareholders. In addition to competitive base pay, we provide eligible employees with compensation and benefits under a variety of plans and programs, including health care benefits, retirement savings, pension, health savings and flexible spending accounts, wellness, family leaves, employee assistance, as well as other benefits including a charitable matching program. The company is committed to providing market competitive, fair, and equitable compensation and regularly conducts internal pay equity reviews, and benchmarking against peer companies to ensure our pay is competitive.

Diversity and Inclusion

Duke Energy is committed to continuing to build a diverse workforce that reflects the communities we serve while strengthening a culture of inclusion where employees and customers feel respected and valued. Our Enterprise Diversity and Inclusion Council, chaired by our Chief Operating Officer in 2022, monitors the effectiveness and execution of our diversity and inclusion strategy and programs. Employee-led councils are also embedded across the company in our business units and focus on the specific diversity and inclusion needs of the business and help drive inclusion deeper into the employee experience. Leaders and individual contributors also have the opportunity to participate in voluntary diversity and inclusion training programs and facilitated conversations on insightful topics offered to further our commitment to building and enabling an inclusive work environment.

Our aspirational goals include achieving workforce representation of at least 25% female and 20% racial and ethnic diversity. We continue to strive toward reaching these aspirational goals and as of December 31, 2022, our workforce consisted of approximately 23.9% female and 20.4% racial and ethnic diversity.

The company also has 10 Employee Resource Groups (ERGs), with 37 chapters and more than 6,500 employees participating. ERGs are networks of employees formed around a common dimension of diversity whose goals and objectives align with the company's goals and objectives. These groups focus on employee professional development and networking, community outreach, cultural awareness, recruiting and retention. They also serve as a resource to the company for advocacy and community outreach and improving customer service through innovation. ERG-sponsored forums include networking events, mentoring, scholarship banquets for aspiring college students, and workshops on topics such as time management, stress reduction, career planning and work-life balance. Our ERGs are open to all employees.

Among other efforts, the company has developed partnerships with community organizations, community colleges and historically Black colleges and universities to support our strategy of building a diverse and highly skilled talent pipeline.

Operational Excellence

The foundation for our growth and success is our continued focus on operational excellence, the leading indicator of which is safety. As such, the safety of our workforce remains our top priority. The company closely monitors the total incident case rate (TICR), which is a metric based on strict OSHA definitions that measures the number of occupational injuries and illnesses per 100 employees. This objective emphasizes our focus on achieving an event-free and injury-free workplace. As an indication of our commitment to safety, we include safety metrics in both the short-term and long-term incentive plans based on the TICR for employees. Our employees delivered strong safety results in 2022, consistent with our industry-leading performance levels from 2017 through 2021.

Information about Our Executive Officers

The following table sets forth the individuals who currently serve as executive officers. Executive officers serve until their successors are duly elected or appointed.

Name	Age[(a)]	Current and Recent Positions Held
Lynn J. Good	63	**Chair, President and Chief Executive Officer.** Ms. Good has served as Chair, President and Chief Executive Officer of Duke Energy since January 1, 2016, and was Vice Chairman, President and Chief Executive Officer of Duke Energy from July 2013 through December 2015. Prior to that, she served as Executive Vice President and Chief Financial Officer since 2009.
Brian D. Savoy	47	**Executive Vice President and Chief Financial Officer.** Mr. Savoy assumed the position of Executive Vice President and Chief Financial Officer in September 2022. Prior to that, he held the position of Executive Vice President, Chief Strategy and Commercial Officer from May 2021 through August 2022; Senior Vice President, Chief Transformation and Administrative Officer from October 2019 through April 2021; Senior Vice President, Business Transformation and Technology from May 2016 through September 2019; Senior Vice President, Controller and Chief Accounting Officer from September 2013 to May 2016; Director, Forecasting and Analysis from 2009 to September 2013; and Vice President and Controller of the Commercial Power segment from 2006 to 2009.
Kodwo Ghartey-Tagoe	59	**Executive Vice President, Chief Legal Officer and Corporate Secretary**. Mr. Ghartey-Tagoe assumed the position of Executive Vice President, Chief Legal Officer and Corporate Secretary in May 2020. He was appointed Executive Vice President and Chief Legal Officer in October 2019 after serving as President, South Carolina since 2017. Mr. Ghartey-Tagoe joined Duke Energy in 2002, and has held numerous management positions in Duke Energy's Legal Department, including Duke Energy's Senior Vice President of State and Federal Regulatory Legal Support.
T. Preston Gillespie	60	**Executive Vice President, Chief Generation Officer and Enterprise Operational Excellence.** Mr. Gillespie assumed the position of Executive Vice President, Chief Generation Officer and Enterprise Operational Excellence in January 2023. Prior to that, Mr. Gillespie served as the Chief Generation Officer since 2020.
R. Alexander Glenn	57	**Senior Vice President and Chief Executive Officer, Duke Energy Florida and Midwest.** Mr. Glenn assumed his current position in May 2021. Prior to that, Mr. Glenn served as Senior Vice President, State and Federal Regulatory Legal Support since 2017 and as State President of Duke Energy Florida's operations from 2012 to 2017.
Dhiaa M. Jamil	66	**Executive Vice President and Chief Operating Officer.** Mr. Jamil assumed the role of Chief Operating Officer in May 2016. Prior to his current position, he held the title Executive Vice President and President, Regulated Generation and Transmission since June 2015. Prior to that, he served as Executive Vice President and President, Regulated Generation since August 2014. He served as Executive Vice President and President of Duke Energy Nuclear from March 2013 to August 2014, and was Chief Nuclear Officer from February 2008 to February 2013.
Julia S. Janson	58	**Executive Vice President and Chief Executive Officer, Duke Energy Carolinas.** Ms. Janson assumed her current position in May 2021. Prior to that she held the position of Executive Vice President, External Affairs and President, Carolinas Region since October 2019 and the position of Executive Vice President, External Affairs and Chief Legal Officer since November 2018. She originally assumed the position of Executive Vice President, Chief Legal Officer and Corporate Secretary in December 2012, and then assumed the responsibilities for External Affairs in February 2016.
Cynthia S. Lee	56	**Vice President, Chief Accounting Officer and Controller.** Ms. Lee assumed her role as Vice President, Chief Accounting Officer and Controller in May 2021. Prior to that, she served as Director, Investor Relations since June 2019 and in various roles within the Corporate Controller's organization after joining the Corporation and its affiliates in 2002.
Ronald R. Reising	62	**Senior Vice President and Chief Human Resources Officer.** Mr. Reising assumed his current position in July 2020. Prior to that, he served as Senior Vice President of Operations Support since 2014. Prior to that, he served as Chief Procurement Officer since 2006.
Louis E. Renjel	49	**Senior Vice President, External Affairs and Communications.** Mr. Renjel assumed his current position in May 2021. Prior to that, he served as Senior Vice President of Federal Government and Corporate Affairs since 2019, and as Vice President, Federal Government Affairs and Strategic Policy since he joined Duke Energy in March 2017 until 2019. Prior to joining Duke Energy, Mr. Renjel served as Vice President of Strategic Infrastructure since 2009 for CSX Corp and as their Director of Environmental and Government Affairs from 2006 to 2008.
Harry K. Sideris	52	**Executive Vice President, Customer Experience, Solutions and Services.** Mr. Sideris assumed his current position in October 2019. Prior to that, he served as Senior Vice President and Chief Distribution Officer since June 2018; State President, Florida from January 2017 to June 2018; Senior Vice President of Environmental Health and Safety from August 2014 to January 2017; and Vice President of Power Generations for the company's Fossil/Hydro Operations in the western portions of North Carolina and South Carolina from July 2012 to August 2014.
Steven K. Young	64	**Executive Vice President, Chief Strategy and Commercial Officer.** Mr. Young assumed the position of Executive Vice President, Chief Strategy and Commercial Officer in September 2022. Prior to that, he held the position of Executive Vice President and Chief Financial Officer from August 2013 through August 2022; Vice President, Chief Accounting Officer and Controller, assuming the role of Chief Accounting Officer in July 2012 and the role of Controller in December 2006.

(a) The ages of the officers provided are as of January 31, 2023.

There are no family relationships between any of the executive officers, nor any arrangement or understanding between any executive officer and any other person involved in officer selection.

Environmental Matters

The Duke Energy Registrants are subject to federal, state and local laws and regulations with regard to air and water quality, hazardous and solid waste disposal and other environmental matters. Environmental laws and regulations affecting the Duke Energy Registrants include, but are not limited to:

- The Clean Air Act, as well as state laws and regulations impacting air emissions, including State Implementation Plans related to existing and new national ambient air quality standards for ozone and particulate matter. Owners and/or operators of air emission sources are responsible for obtaining permits and for annual compliance and reporting.
- The Clean Water Act, which requires permits for facilities that discharge wastewaters into navigable waters.
- The Comprehensive Environmental Response, Compensation and Liability Act, which can require any individual or entity that currently owns or in the past owned or operated a disposal site, as well as transporters or generators of hazardous substances sent to a disposal site, to share in remediation costs.
- The National Environmental Policy Act, which requires federal agencies to consider potential environmental impacts in their permitting and licensing decisions, including siting approvals.
- Coal Ash Act, as amended, which establishes requirements regarding the use and closure of existing ash basins, the disposal of ash at active coal plants and the handling of surface water and groundwater impacts from ash basins in North Carolina.
- The Solid Waste Disposal Act, as amended by RCRA, which creates a framework for the proper management of hazardous and nonhazardous solid waste; classifies CCR as nonhazardous waste; and establishes standards for landfill and surface impoundment placement, design, operation and closure, groundwater monitoring, corrective action, and post-closure care.
- The Toxic Substances Control Act, which gives EPA the authority to require reporting, recordkeeping and testing requirements, and to place restrictions relating to chemical substances and/or mixtures, including polychlorinated biphenyls.

For more information on environmental matters, see Notes 5 and 10 to the Consolidated Financial Statements, “Commitments and Contingencies – Environmental” and "Asset Retirement Obligations," respectively, and the “Other Matters” section of Item 7 Management's Discussion and Analysis. Except as otherwise described in these sections, costs to comply with current federal, state and local provisions regulating the discharge of materials into the environment or other potential costs related to protecting the environment are incorporated into the routine cost structure of our various business segments and are not expected to have a material adverse effect on the competitive position, consolidated results of operations, cash flows or financial position of the Duke Energy Registrants.

The "Other Matters" section of Item 7 Management's Discussion and Analysis includes more information on certain environmental regulations and a discussion of Global Climate Change including the potential impact of current and future legislation related to GHG emissions on the Duke Energy Registrants' operations. Recently passed and potential future environmental statutes and regulations could have a significant impact on the Duke Energy Registrants’ results of operations, cash flows or financial position. However, if and when such statutes and regulations become effective, the Duke Energy Registrants will seek appropriate regulatory recovery of costs to comply within its regulated operations.

DUKE ENERGY CAROLINAS

Duke Energy Carolinas is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of North Carolina and South Carolina. Duke Energy Carolinas’ service area covers approximately 24,000 square miles and supplies electric service to 2.8 million residential, commercial and industrial customers. For information about Duke Energy Carolinas’ generating facilities, see Item 2, “Properties.” Duke Energy Carolinas is subject to the regulatory provisions of the NCUC, PSCSC, NRC and FERC.

Substantially all of Duke Energy Carolinas' operations are regulated and qualify for regulatory accounting. Duke Energy Carolinas operates one reportable business segment, EU&I. For additional information regarding this business segment, including financial information, see Note 3 to the Consolidated Financial Statements, “Business Segments.”

PROGRESS ENERGY

Progress Energy is a public utility holding company primarily engaged in the regulated electric utility business and is subject to regulation by the FERC. Progress Energy conducts operations through its wholly owned subsidiaries, Duke Energy Progress and Duke Energy Florida. When discussing Progress Energy’s financial information, it necessarily includes the results of Duke Energy Progress and Duke Energy Florida.

Substantially all of Progress Energy’s operations are regulated and qualify for regulatory accounting. Progress Energy operates one reportable business segment, EU&I. For additional information regarding this business segment, including financial information, see Note 3 to the Consolidated Financial Statements, “Business Segments.”

DUKE ENERGY PROGRESS

Duke Energy Progress is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of North Carolina and South Carolina. Duke Energy Progress’ service area covers approximately 29,000 square miles and supplies electric service to approximately 1.7 million residential, commercial and industrial customers. For information about Duke Energy Progress’ generating facilities, see Item 2, “Properties.” Duke Energy Progress is subject to the regulatory provisions of the NCUC, PSCSC, NRC and FERC.

Substantially all of Duke Energy Progress’ operations are regulated and qualify for regulatory accounting. Duke Energy Progress operates one reportable business segment, EU&I. For additional information regarding this business segment, including financial information, see Note 3 to the Consolidated Financial Statements, “Business Segments.”

DUKE ENERGY FLORIDA

Duke Energy Florida is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of Florida. Duke Energy Florida's service area covers approximately 13,000 square miles and supplies electric service to approximately 1.9 million residential, commercial and industrial customers. For information about Duke Energy Florida's generating facilities, see Item 2, "Properties." Duke Energy Florida is subject to the regulatory provisions of the FPSC, NRC and FERC.

Substantially all of Duke Energy Florida's operations are regulated and qualify for regulatory accounting. Duke Energy Florida operates one reportable business segment, EU&I. For additional information regarding this business segment, including financial information, see Note 3 to the Consolidated Financial Statements, "Business Segments."

DUKE ENERGY OHIO

Duke Energy Ohio is a regulated public utility primarily engaged in the transmission and distribution of electricity in portions of Ohio and Kentucky, in the generation and sale of electricity in portions of Kentucky and the transportation and sale of natural gas in portions of Ohio and Kentucky. Duke Energy Ohio also conducts competitive auctions for retail electricity supply in Ohio whereby recovery of the energy price is from retail customers. Operations in Kentucky are conducted through its wholly owned subsidiary, Duke Energy Kentucky. References herein to Duke Energy Ohio include Duke Energy Ohio and its subsidiaries, unless otherwise noted. Duke Energy Ohio is subject to the regulatory provisions of the PUCO, KPSC, PHMSA and FERC.

Duke Energy Ohio's service area covers approximately 3,000 square miles and supplies electric service to approximately 900,000 residential, commercial and industrial customers and provides transmission and distribution services for natural gas to approximately 550,000 customers. For information about Duke Energy Ohio's generating facilities, see Item 2, "Properties."

KO Transmission, a wholly owned subsidiary of Duke Energy Ohio, is an interstate pipeline company engaged in the business of transporting natural gas and is subject to the rules and regulations of FERC. KO Transmission's 90-mile pipeline supplies natural gas to Duke Energy Ohio and interconnects with the Columbia Gulf Transmission pipeline and Tennessee Gas Pipeline. An approximately 70-mile portion of KO Transmission's pipeline facilities is co-owned by Columbia Gas Transmission, LLC. KO Transmission sold all of its pipeline facilities and related real property to Columbia Gas Transmission, LLC on February 1, 2023, for approximately book value.

Substantially all of Duke Energy Ohio's operations are regulated and qualify for regulatory accounting. Duke Energy Ohio has two reportable segments, EU&I and GU&I. For additional information on these business segments, including financial information, see Note 3 to the Consolidated Financial Statements, "Business Segments."

DUKE ENERGY INDIANA

Duke Energy Indiana is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of Indiana. Duke Energy Indiana's service area covers 23,000 square miles and supplies electric service to 890,000 residential, commercial and industrial customers. For information about Duke Energy Indiana's generating facilities, see Item 2, "Properties." Duke Energy Indiana is subject to the regulatory provisions of the IURC and FERC.

In 2021, Duke Energy executed an agreement providing for an investment in Duke Energy Indiana by GIC. The transaction was completed following two closings. For additional information, see Note 2 to the Consolidated Financial Statements, "Dispositions."

Substantially all of Duke Energy Indiana's operations are regulated and qualify for regulatory accounting. Duke Energy Indiana operates one reportable business segment, EU&I. For additional information regarding this business segment, including financial information, see Note 3 to the Consolidated Financial Statements, "Business Segments."

PIEDMONT

Piedmont is a regulated public utility primarily engaged in the distribution of natural gas to over 1.1 million residential, commercial, industrial and power generation customers in portions of North Carolina, South Carolina and Tennessee, including customers served by municipalities who are wholesale customers. For information about Piedmont's natural gas distribution facilities, see Item 2, "Properties." Piedmont is subject to the regulatory provisions of the NCUC, PSCSC, TPUC, PHMSA and FERC.

Substantially all of Piedmont's operations are regulated and qualify for regulatory accounting. Piedmont operates one reportable business segment, GU&I. For additional information regarding this business segment, including financial information, see Note 3 to the Consolidated Financial Statements, "Business Segments."

ITEM 1A. RISK FACTORS

In addition to other disclosures within this Form 10-K, including "Management's Discussion and Analysis of Financial Condition and Results of Operations – Matters Impacting Future Results" for each registrant in Item 7, and other documents filed with the SEC from time to time, the following factors should be considered in evaluating Duke Energy and its subsidiaries. Such factors could affect actual results of operations and cause results to differ substantially from those currently expected or sought. Unless otherwise indicated, risk factors discussed below generally relate to risks associated with all of the Duke Energy Registrants. Risks identified at the Subsidiary Registrant level are generally applicable to Duke Energy.

BUSINESS STRATEGY RISKS

Duke Energy's future results could be adversely affected if it is unable to implement its business strategy including achieving its carbon emissions reduction goals.

Duke Energy's results of operations depend, in significant part, on the extent to which it can implement its business strategy successfully. Duke Energy's clean energy transition, which includes achieving net-zero carbon emissions from electricity generation by 2050, modernizing the regulatory construct, transforming the customer experience, and digital transformation, is subject to business, policy, regulatory, technology, economic and competitive uncertainties and contingencies, many of which are beyond its control and may make those goals difficult to achieve.

Federal or state policies could be enacted that restrict the availability of fuels or generation technologies, such as natural gas or nuclear power, that enable Duke Energy to reduce its carbon emissions. Supportive policies may be needed to facilitate the siting and cost recovery of transmission and distribution upgrades needed to accommodate the build out of large volumes of renewables and energy storage. Further, the approval of our state regulators will be necessary for the company to continue to retire existing carbon emitting assets or make investments in new generating capacity. The company may be constrained by the ability to procure resources or labor needed to build new generation at a reasonable price as well as to construct projects on time. In addition, new technologies that are not yet commercially available or are unproven at utility scale will likely be needed including new resources capable of following electric load over long durations such as advanced nuclear, hydrogen and long-duration storage, If these technologies are not developed or are not available at reasonable prices, or if we invest in early stage technologies that are then supplanted by technological breakthroughs, Duke Energy's ability to achieve a net-zero target by 2050 at a cost-effective price could be at risk.

Achieving our carbon reduction goals will require continued operation of our existing carbon-free technologies including nuclear and renewables. The rapid transition to and expansion of certain low-carbon resources, such as renewables without cost-effective storage, may challenge our ability to meet customer expectations of reliability in a carbon constrained environment. Our nuclear fleet is central to our ability to meet these objectives and customer expectations. We are continuing to seek to renew the operating licenses of the 11 reactors we operate at six nuclear stations for an additional 20 years, extending their operating lives to and beyond midcentury. Failure to receive approval from the NRC for the relicensing of any of these reactors could affect our ability to achieve a net-zero target by 2050.

As a consequence, Duke Energy may not be able to fully implement or realize the anticipated results of its energy transition strategy, which may have an adverse effect on its financial condition.

REGULATORY, LEGISLATIVE AND LEGAL RISKS

The Duke Energy Registrants' regulated utility revenues, earnings and results of operations are dependent on state legislation and regulation that affect electric generation, electric and natural gas transmission, distribution and related activities, which may limit their ability to recover costs.

The Duke Energy Registrants' regulated electric and natural gas utility businesses are regulated on a cost-of-service/rate-of-return basis subject to statutes and regulatory commission rules and procedures of North Carolina, South Carolina, Florida, Ohio, Tennessee, Indiana and Kentucky. If the Duke Energy Registrants' regulated utility earnings exceed the returns established by the state utility commissions, retail electric and natural gas rates may be subject to review and possible reduction by the commissions, which may decrease the Duke Energy Registrants' earnings. Additionally, if regulatory or legislative bodies do not allow recovery of costs incurred in providing service, or do not do so on a timely basis, the Duke Energy Registrants' earnings could be negatively impacted. Differences in regulation between jurisdictions with concurrent operations, such as North Carolina and South Carolina in Duke Energy Carolinas' and Duke Energy Progress' service territory, may also result in failure to recover costs.

If legislative and regulatory structures were to evolve in such a way that the Duke Energy Registrants' exclusive rights to serve their regulated customers were eroded, their earnings could be negatively impacted. Federal and state regulations, laws, commercialization and reduction of costs and other efforts designed to promote and expand the use of EE measures and distributed generation technologies, such as private solar and battery storage, in Duke Energy service territories could reduce recovery of fixed costs in Duke Energy service territories or result in customers leaving the electric distribution system and an increase in customer net energy metering, which allows customers with private solar to receive bill credits for surplus power at the full retail amount. Over time, customer adoption of these technologies could result in Duke Energy not being able to fully recover the costs and investment in generation.

State regulators have approved various mechanisms to stabilize natural gas utility margins, including margin decoupling in North Carolina and rate stabilization in South Carolina. State regulators have approved other margin stabilizing mechanisms that, for example, allow for recovery of margin losses associated with negotiated transactions designed to retain large volume customers that could use alternative fuels or that may otherwise directly access natural gas supply through their own connection to an interstate pipeline. If regulators decided to discontinue the Duke Energy Registrants' use of tariff mechanisms, it would negatively impact results of operations, financial position and cash flows. In addition, regulatory authorities also review whether natural gas costs are prudently incurred and can disallow the recovery of a portion of natural gas costs that the Duke Energy Registrants seek to recover from customers, which would adversely impact earnings.

The rates that the Duke Energy Registrants' regulated utility businesses are allowed to charge are established by state utility commissions in rate case proceedings, which may limit their ability to recover costs and earn an appropriate return on investment.

The rates that the Duke Energy Registrants' regulated utility businesses are allowed to charge significantly influences the results of operations, financial position and cash flows of the Duke Energy Registrants. The regulation of the rates that the regulated utility businesses charge customers is determined, in large part, by state utility commissions in rate case proceedings. Negative decisions made by these regulators, or by any court on appeal of a rate case proceeding, have, and in the future could have, a material adverse effect on the Duke Energy Registrants' results of operations, financial position or cash flows and affect the ability of the Duke Energy Registrants to recover costs and an appropriate return on the significant infrastructure investments being made.

Deregulation or restructuring in the electric industry may result in increased competition and unrecovered costs that could adversely affect the Duke Energy Registrants' results of operations, financial position or cash flows and their utility businesses.

Increased competition resulting from deregulation or restructuring legislation could have a significant adverse impact on the Duke Energy Registrants' results of operations, financial position or cash flows and their utility businesses. If the retail jurisdictions served by the Duke Energy Registrants become subject to deregulation, the impairment of assets, loss of retail customers, lower profit margins or increased costs of capital, and recovery of stranded costs could have a significant adverse financial impact on the Duke Energy Registrants. Stranded costs primarily include the generation assets of the Duke Energy Registrants whose value in a competitive marketplace may be less than their current book value, as well as above-market purchased power commitments from QFs from whom the Duke Energy Registrants are legally obligated to purchase energy at an avoided cost rate under PURPA. The Duke Energy Registrants cannot predict the extent and timing of entry by additional competitors into the electric markets. The Duke Energy Registrants cannot predict if or when they will be subject to changes in legislation or regulation, nor can they predict the impact of these changes on their results of operations, financial position or cash flows.

The Duke Energy Registrants' businesses are subject to extensive federal regulation and a wide variety of laws and governmental policies, including taxes and environmental regulations, that may change over time in ways that affect operations and costs.

The Duke Energy Registrants are subject to regulations under a wide variety of U.S. federal and state regulations and policies, including by FERC, NRC, EPA and various other federal agencies as well as the North American Electric Reliability Corporation. Regulation affects almost every aspect of the Duke Energy Registrants' businesses, including, among other things, their ability to: take fundamental business management actions; determine the terms and rates of transmission and distribution services; make acquisitions; issue equity or debt securities; engage in transactions with other subsidiaries and affiliates; and pay dividends upstream to the Duke Energy Registrants. Changes to federal regulations are continuous and ongoing. There can be no assurance that laws, regulations and policies will not be changed in ways that result in material modifications of business models and objectives or affect returns on investment by restricting activities and products, subjecting them to escalating costs, causing delays, or prohibiting them outright.

The Duke Energy Registrants are subject to numerous environmental laws and regulations requiring significant capital expenditures that can increase the cost of operations, and which may impact or limit business plans, or cause exposure to environmental liabilities.

The Duke Energy Registrants are subject to numerous environmental laws and regulations affecting many aspects of their present and future operations, including CCRs, air emissions, water quality, wastewater discharges, solid waste and hazardous waste. These laws and regulations can result in increased capital, operating and other costs. These laws and regulations generally require the Duke Energy Registrants to obtain and comply with a wide variety of environmental licenses, permits, inspections and other approvals. Compliance with environmental laws and regulations can require significant expenditures, including expenditures for cleanup costs and damages arising from contaminated properties. Failure to comply with environmental regulations may result in the imposition of fines, penalties and injunctive measures affecting operating assets. The steps the Duke Energy Registrants could be required to take to ensure their facilities are in compliance could be prohibitively expensive. As a result, the Duke Energy Registrants may be required to shut down or alter the operation of their facilities, which may cause the Duke Energy Registrants to incur losses. Further, the Duke Energy Registrants may not be successful in recovering capital and operating costs incurred to comply with new environmental regulations through existing regulatory rate structures and their contracts with customers. Also, the Duke Energy Registrants may not be able to obtain or maintain from time to time all required environmental regulatory approvals for their operating assets or development projects. Delays in obtaining any required environmental regulatory approvals, failure to obtain and comply with them or changes in environmental laws or regulations to more stringent compliance levels could result in additional costs of operation for existing facilities or development of new facilities being prevented, delayed or subject to additional costs. Although it is not expected that the costs to comply with current environmental regulations will have a material adverse effect on the Duke Energy Registrants' results of operations, financial position and cash flows due to regulatory cost recovery, the Duke Energy Registrants are at risk that the costs of complying with environmental regulations in the future will have such an effect.

The EPA has enacted or proposed federal regulations governing the management of cooling water intake structures, wastewater and CO_2 emissions. New state legislation could impose carbon reduction goals that are more aggressive than the company's plans. These regulations may require the Duke Energy Registrants to make additional capital expenditures and increase operating and maintenance costs.

The Duke Energy Registrants' operations, capital expenditures and financial results may be affected by regulatory changes related to the impacts of global climate change.

There is continued concern, and increasing activism, both nationally and internationally, about climate change. The EPA and state regulators have, and may adopt and implement, additional regulations to restrict emissions of GHGs to address global climate change. Certain local and state jurisdictions have also enacted laws to restrict or prevent new natural gas infrastructure. Increased regulation of GHG emissions could impose significant additional costs on the Duke Energy Registrants' electric and natural gas operations, their suppliers and customers and affect demand for energy conservation and renewable products, which could impact both our electric and natural gas businesses. Regulatory changes could also result in generation facilities to be retired earlier than planned to meet our net-zero 2050 goal. Though we would plan to seek cost recovery for investments related to GHG emissions reductions through regulatory rate structures, changes in the regulatory climate could result in the delay in or failure to fully recover such costs and investment in generation.

OPERATIONAL RISKS

The Duke Energy Registrants' results of operations may be negatively affected by overall market, economic and other conditions that are beyond their control.

Sustained downturns or sluggishness in the economy generally affect the markets in which the Duke Energy Registrants operate and negatively influence operations. Declines in demand for electricity or natural gas as a result of economic downturns in the Duke Energy Registrants' regulated service territories will reduce overall sales and lessen cash flows, especially as industrial customers reduce production and, therefore, consumption of electricity and the use of natural gas. Although the Duke Energy Registrants' regulated electric and natural gas businesses are subject to regulated allowable rates of return and recovery of certain costs, such as fuel and purchased natural gas costs, under periodic adjustment clauses, overall declines in electricity or natural gas sold as a result of economic downturn or recession could reduce revenues and cash flows, thereby diminishing results of operations.

A continuation of adverse economic conditions including economic downturn or high commodity prices could also negatively impact the financial stability of certain of our customers and result in their inability to pay for electric and natural gas services. This could lead to increased bad debt expense and higher allowance for doubtful account reserves for the Duke Energy Registrants and result in delayed or unrecovered operating costs and lower financial results. Additionally, prolonged economic downturns that negatively impact the Duke Energy Registrants' results of operations and cash flows could result in future material impairment charges to write-down the carrying value of certain assets, including goodwill, to their respective fair values. The Duke Energy Registrants also monitor the impacts of inflation on the procurement of goods and services and seek to minimize its effects in future periods through pricing strategies, productivity improvements, and cost reductions. Rapidly rising prices as a result of inflation or other factors may impact the ability of the company to recover costs timely or execute on its business strategy including the achievement of growth objectives.

The Duke Energy Registrants sell electricity into the spot market or other competitive power markets on a contractual basis. With respect to such transactions, the Duke Energy Registrants are not guaranteed any rate of return on their capital investments through mandated rates, and revenues and results of operations are likely to depend, in large part, upon prevailing market prices. These market prices may fluctuate substantially over relatively short periods of time and could negatively impact the company's ability to accurately forecast the financial impact or reduce the Duke Energy Registrants' revenues and margins, thereby diminishing results of operations.

Factors that could impact sales volumes, generation of electricity and market prices at which the Duke Energy Registrants are able to sell electricity and natural gas are as follows:

- weather conditions, including abnormally mild winter or summer weather that cause lower energy or natural gas usage for heating or cooling purposes, as applicable, and periods of low rainfall that decrease the ability to operate facilities in an economical manner;
- supply of and demand for energy commodities;
- transmission or transportation constraints or inefficiencies that impact nonregulated energy operations;
- availability of purchased power;
- availability of competitively priced alternative energy sources, which are preferred by some customers over electricity produced from coal, nuclear or natural gas plants, and customer usage of energy-efficient equipment that reduces energy demand;
- natural gas, crude oil and refined products production levels and prices;
- ability to procure satisfactory levels of inventory, including materials, supplies, and fuel such as coal, natural gas and uranium; and
- capacity and transmission service into, or out of, the Duke Energy Registrants' markets.

Natural disasters or operational accidents may adversely affect the Duke Energy Registrants' operating results.

Natural disasters or operational accidents within the company or industry (such as forest fires, earthquakes, hurricanes or natural gas transmission pipeline explosions) could have direct or indirect impacts to the Duke Energy Registrants or to key contractors and suppliers. Further, the generation of electricity and the transportation and storage of natural gas involve inherent operating risks that may result in accidents involving serious injury or loss of life, environmental damage or property damage. Such events could impact the Duke Energy Registrants through changes to policies, laws and regulations whose compliance costs have a significant impact on the Duke Energy Registrants' results of operations, financial position and cash flows. In addition, if a serious operational accident were to occur, existing insurance policies may not cover all of the potential exposures or the actual amount of loss incurred, including potential litigation awards. Any losses not covered by insurance, or any increases in the cost of applicable insurance as a result of such accident, could have a material adverse effect on the results of operations, financial position, cash flows and reputation of the Duke Energy Registrants.

The reputation and financial condition of the Duke Energy Registrants could be negatively impacted due to their obligations to comply with federal and state regulations, laws, and other legal requirements that govern the operations, assessments, storage, closure, remediation, disposal and monitoring relating to CCR, the high costs and new rate impacts associated with implementing these new CCR-related requirements and the strategies and methods necessary to implement these requirements in compliance with these legal obligations.

As a result of electricity produced for decades at coal-fired power plants, the Duke Energy Registrants manage large amounts of CCR that are primarily stored in dry storage within landfills or combined with water in surface impoundments, all in compliance with applicable regulatory requirements. A CCR-related operational incident could have a material adverse impact on the reputation and results of operations, financial position and cash flows of the Duke Energy Registrants.

During 2015, EPA regulations were enacted related to the management of CCR from power plants. These regulations classify CCR as nonhazardous waste under the RCRA and apply to electric generating sites with new and existing landfills and, new and existing surface impoundments, and establish requirements regarding landfill design, structural integrity design and assessment criteria for surface impoundments, groundwater monitoring, protection and remedial procedures and other operational and reporting procedures for the disposal and management of CCR. In addition to the federal regulations, CCR landfills and surface impoundments will continue to be regulated by existing state laws, regulations and permits, as well as additional legal requirements that may be imposed in the future, such as the settlement reached with the NCDEQ to excavate seven of the nine remaining coal ash basins in North Carolina, and partially excavate the remaining two, and the EPA's January 11, 2022, issuance of a letter interpreting the CCR Rule, including its applicability and closure provisions. These federal and state laws, regulations and other legal requirements may require or result in additional expenditures, including increased operating and maintenance costs, which could affect the results of operations, financial position and cash flows of the Duke Energy Registrants. The Duke Energy Registrants will continue to seek full cost recovery for expenditures through the normal ratemaking process with state and federal utility commissions, who permit recovery in rates of necessary and prudently incurred costs associated with the Duke Energy Registrants' regulated operations, and through other wholesale contracts with terms that contemplate recovery of such costs, although there is no guarantee of full cost recovery. In addition, the timing for and amount of recovery of such costs could have a material adverse impact on Duke Energy's cash flows.

The Duke Energy Registrants have recognized significant AROs related to these CCR-related requirements. Closure activities began in 2015 at the four sites specified as high priority by the Coal Ash Act and at the W.S. Lee Steam Station site in South Carolina in connection with other legal requirements. Excavation at these sites involves movement of CCR materials to off-site locations for use as structural fill, to appropriately engineered off-site or on-site lined landfills or conversion of the ash for beneficial use. Duke Energy has completed excavation of coal ash at the four high-priority North Carolina sites. At other sites, planning and closure methods have been studied and factored into the estimated retirement and management costs, and closure activities have commenced. As the closure and CCR management work progresses and final closure plans and corrective action measures are developed and approved at each site, the scope and complexity of work and the amount of CCR material could be greater than estimates and could, therefore, materially increase compliance expenditures and rate impacts.

The Duke Energy Registrants' results of operations, financial position and cash flows may be negatively affected by a lack of growth or slower growth in the number of customers, or decline in customer demand or number of customers.

Growth in customer accounts and growth of customer usage each directly influence demand for electricity and natural gas and the need for additional power generation and delivery facilities. Customer growth and customer usage are affected by several factors outside the control of the Duke Energy Registrants, such as mandated EE measures, demand-side management goals, distributed generation resources and economic and demographic conditions, such as inflation and interest rate volatility, population changes, job and income growth, housing starts, new business formation and the overall level of economic activity.

In addition, certain regulatory and legislative bodies have passed legislation implementing the extension of certain tax credits to be used toward the costs of residential solar installation or have introduced or are considering requirements and/or incentives to reduce energy consumption by certain dates in response to concerns related to climate change. Additionally, technological advances driven by federal laws mandating new levels of EE in end-use electric and natural gas devices or other improvements in or applications of technology could lead to declines in per capita energy consumption.

Advances in distributed generation technologies that produce power, including fuel cells, microturbines, wind turbines and solar cells, may reduce the cost of alternative methods of producing power to a level competitive with central power station electric production utilized by the Duke Energy Registrants. In addition, the electrification of buildings and appliances currently relying on natural gas could reduce the number of customers in our natural gas distribution business.

Some or all of these factors could result in a lack of growth or decline in customer demand for electricity or number of customers and may cause the failure of the Duke Energy Registrants to fully realize anticipated benefits from significant capital investments and expenditures, which could have a material adverse effect on their results of operations, financial position and cash flows.

Furthermore, the Duke Energy Registrants currently have EE riders in place to recover the cost of EE programs in North Carolina, South Carolina, Florida, Indiana, Ohio and Kentucky. Should the Duke Energy Registrants be required to invest in conservation measures that result in reduced sales from effective conservation, regulatory lag in adjusting rates for the impact of these measures could have a negative financial impact.

The Duke Energy Registrants future results of operations may be impacted by changing expectations and demands including heightened emphasis on environmental, social and governance concerns.

Duke Energy's ability to execute its strategy and achieve anticipated financial outcomes are influenced by the expectations of our customers, regulators, investors, and stakeholders. Those expectations are based in part on the core fundamentals of reliability and affordability but are also increasingly focused on our ability to meet rapidly changing demands for new and varied products, services and offerings. Additionally, the risks of global climate change continues to shape our customers' sustainability goals and energy needs as well as the investment and financing criteria of investors. Failure to meet these increasing expectations or to adequately address the risks and external pressures from regulators, customers, investors and other stakeholders may impact Duke Energy's reputation and affect its ability to achieve favorable outcomes in future rate cases and the results of operations for the Duke Energy Registrants. Furthermore, the increasing use of social media may accelerate and increase the potential scope of negative publicity we might receive and could increase the negative impact on our reputation, business, results of operations, and financial condition.

As it relates to electric generation, a diversified fleet with increasingly clean generation resources may facilitate more efficient financing and lower costs. Conversely, jurisdictions utilizing more carbon-intensive generation such as coal may experience difficulty attracting certain investors and obtaining the most economical financing terms available. Furthermore, with this heightened emphasis on environmental, social, and governance concerns, and climate change in particular, there is an increased risk of litigation, activism, and legislation from groups both in support of and opposed to various environmental, social and governance initiatives, which could cause delays and increase the costs of our clean energy transition.

The Duke Energy Registrants' operating results may fluctuate on a seasonal and quarterly basis and can be negatively affected by changes in weather conditions and severe weather, including extreme weather conditions and changes in weather patterns from climate change.

Electric power generation and natural gas distribution are generally seasonal businesses. In most parts of the U.S., the demand for power peaks during the warmer summer months, with market prices also typically peaking at that time. In other areas, demand for power peaks during the winter. Demand for natural gas peaks during the winter months. Further, changing frequency or magnitude of extreme weather conditions such as hurricanes, droughts, heat waves, winter storms and severe weather, including from climate change, could cause these seasonal fluctuations to be more pronounced. As a result, the overall operating results of the Duke Energy Registrants' businesses may fluctuate substantially on a seasonal and quarterly basis and thus make period-to-period comparison less relevant.

Sustained severe drought conditions could impact generation by hydroelectric plants, as well as fossil and nuclear plant operations, as these facilities use water for cooling purposes and for the operation of environmental compliance equipment. Furthermore, destruction caused by severe weather events, such as hurricanes, flooding, tornadoes, severe thunderstorms, snow and ice storms, including from climate change, can result in lost operating revenues due to outages, property damage, including downed transmission and distribution lines, and additional and unexpected expenses to mitigate storm damage. The cost of storm restoration efforts may not be fully recoverable through the regulatory process.

The Duke Energy Registrants' sales may decrease if they are unable to gain adequate, reliable and affordable access to transmission assets.

The Duke Energy Registrants depend on transmission and distribution facilities owned and operated by utilities and other energy companies to deliver electricity sold to the wholesale market. In addition, the growth of renewables and energy storage will put strains on existing transmission assets and require transmission and distribution upgrades. The FERC's power transmission regulations require wholesale electric transmission services to be offered on an open-access, non-discriminatory basis. If transmission is disrupted, or if transmission capacity is inadequate, the Duke Energy Registrants' ability to sell and deliver products may be hindered.

The different regional power markets have changing regulatory structures, which could affect growth and performance in these regions. In addition, the ISOs who oversee the transmission systems in regional power markets have imposed in the past, and may impose in the future, price limitations and other mechanisms to address volatility in the power markets. These types of price limitations and other mechanisms may adversely impact the profitability of the Duke Energy Registrants' wholesale power marketing business.

The availability of adequate interstate pipeline transportation capacity and natural gas supply may decrease.

The Duke Energy Registrants purchase almost all of their natural gas supply from interstate sources that must be transported to the applicable service territories. Interstate pipeline companies transport the natural gas to the Duke Energy Registrants' systems under firm service agreements that are designed to meet the requirements of their core markets. A significant disruption to interstate pipelines capacity or reduction in natural gas supply due to events including, but not limited to, operational failures or disruptions, hurricanes, tornadoes, floods, freeze off of natural gas wells, terrorist or cyberattacks or other acts of war or legislative or regulatory actions or requirements, including remediation related to integrity inspections or regulations and laws enacted to address climate change, could reduce the normal interstate supply of natural gas and thereby reduce earnings. Moreover, if additional natural gas infrastructure, including, but not limited to, exploration and drilling rigs and platforms, processing and gathering systems, offshore pipelines, interstate pipelines and storage, cannot be built at a pace that meets demand, then growth opportunities could be limited.

Fluctuations in commodity prices or availability may adversely affect various aspects of the Duke Energy Registrants' operations as well as their results of operations, financial position and cash flows.

The Duke Energy Registrants are exposed to the effects of market fluctuations in the price of natural gas, coal, fuel oil, nuclear fuel, electricity and other energy-related commodities as a result of their ownership of energy-related assets. Fuel costs are recovered primarily through cost recovery clauses, subject to the approval of state utility commissions.

Additionally, the Duke Energy Registrants are exposed to risk that counterparties will not be able to fulfill their obligations. Disruption in the delivery of fuel, including disruptions as a result of, among other things, bankruptcies, transportation delays, weather, labor relations, force majeure events or environmental regulations affecting any of these fuel suppliers, could limit the Duke Energy Registrants' ability to operate their facilities. Should counterparties fail to perform, the Duke Energy Registrants might be forced to replace the underlying commitment at prevailing market prices possibly resulting in losses in addition to the amounts, if any, already paid to the counterparties.

Certain of the Duke Energy Registrants' hedge agreements may result in the receipt of, or posting of, collateral with counterparties, depending on the daily market-based calculation of financial exposure of the derivative positions. Fluctuations in commodity prices that lead to the return of collateral received and/or the posting of collateral with counterparties could negatively impact liquidity. Downgrades in the Duke Energy Registrants' credit ratings could lead to additional collateral posting requirements. The Duke Energy Registrants continually monitor derivative positions in relation to market price activity.

Cyberattacks and data security breaches could adversely affect the Duke Energy Registrants' businesses.

Cybersecurity risks have increased in recent years as a result of the proliferation of new technologies and the increased sophistication, magnitude and frequency of cyberattacks and data security breaches. Duke Energy relies on the continued operation of sophisticated digital information technology systems and network infrastructure, which are part of an interconnected regional grid. Additionally, connectivity to the internet continues to increase through grid modernization and other operational excellence initiatives. Because of the critical nature of the infrastructure, increased connectivity to the internet and technology systems' inherent vulnerability to disability or failures due to hacking, viruses, acts of war or terrorism or other types of data security breaches, the Duke Energy Registrants face a heightened risk of cyberattack from foreign or domestic sources and have been subject, and will likely continue to be subject, to attempts to gain unauthorized access to information and/or information systems or to disrupt utility operations through computer viruses and phishing attempts either directly or indirectly through its material vendors or related third parties. In the event of a significant cybersecurity breach on either the Duke Energy Registrants or with one of our material vendors or related third parties, the Duke Energy Registrants could (i) have business operations disrupted, including the disruption of the operation of our natural gas and electric assets and the power grid, theft of confidential company, employee, retiree, shareholder, vendor or customer information, and general business systems and process interruption or compromise, including preventing the Duke Energy Registrants from servicing customers, collecting revenues or the recording, processing and/or reporting financial information correctly, (ii) experience substantial loss of revenues, repair and restoration costs, penalties and costs for lack of compliance with relevant regulations, implementation costs for additional security measures to avert future cyberattacks and other financial loss and (iii) be subject to increased regulation, litigation and reputational damage. While Duke Energy maintains insurance relating to cybersecurity events, such insurance is subject to a number of exclusions and may be insufficient to offset any losses, costs or damage experienced. Also, the market for cybersecurity insurance is relatively new and coverage available for cybersecurity events is evolving as the industry matures.

The Duke Energy Registrants are subject to standards enacted by the North American Electric Reliability Corporation and enforced by FERC regarding protection of the physical and cybersecurity of critical infrastructure assets required for operating North America's bulk electric system. The Duke Energy Registrants are also subject to regulations set by the Nuclear Regulatory Commission regarding the protection of digital computer and communication systems and networks required for the operation of nuclear power plants. The Duke Energy Registrants that operate designated critical pipelines that transport natural gas are also subject to security directives issued by the Department of Homeland Security's Transportation Security Administration (TSA) requiring such registrants to implement specific cybersecurity mitigation measures. While the Duke Energy Registrants believe they are in compliance with, or, in the case of recent TSA security directives, are in the process of implementing such standards and regulations, the Duke Energy Registrants have from time to time been, and may in the future be, found to be in violation of such standards and regulations. In addition, compliance with or changes in the applicable standards and regulations may subject the Duke Energy Registrants to higher operating costs and/or increased capital expenditures as well as substantial fines for non-compliance.

The Duke Energy Registrants' operations have been and may be affected by pandemic health events, including COVID-19, in ways listed below and in ways the Duke Energy Registrants cannot predict at this time.

The COVID-19 pandemic and efforts to respond to it have resulted in widespread adverse consequences on the global economy and on the Duke Energy Registrants' customers, third-party vendors, and other parties with whom we do business. If the COVID-19 pandemic or other health epidemics and outbreaks that may occur are significantly prolonged, it could impact the Duke Energy Registrants' business strategy, results of operations, financial position and cash flows in the future as a result of delays in rate cases or other legal proceedings, an inability to obtain labor or equipment necessary for the construction of large capital projects, an inability to procure satisfactory levels of fuels or other necessary equipment for the continued production of electricity and delivery of natural gas, and the health and availability of our critical personnel and their ability to perform business functions.

Duke Energy Ohio's and Duke Energy Indiana's membership in an RTO presents risks that could have a material adverse effect on their results of operations, financial position and cash flows.

The rules governing the various regional power markets may change, which could affect Duke Energy Ohio's and Duke Energy Indiana's costs and/or revenues. To the degree Duke Energy Ohio and Duke Energy Indiana incur significant additional fees and increased costs to participate in an RTO, their results of operations may be impacted. Duke Energy Ohio and Duke Energy Indiana may be allocated a portion of the cost of transmission facilities built by others due to changes in RTO transmission rate design. Duke Energy Ohio and Duke Energy Indiana may be required to expand their transmission system according to decisions made by an RTO rather than their own internal planning process. In addition, RTOs have been developing rules associated with the allocation and methodology of assigning costs associated with improved transmission reliability, reduced transmission congestion and firm transmission rights that may have a financial impact on the results of operations, financial position and cash flows of Duke Energy Ohio and Duke Energy Indiana.

As members of an RTO, Duke Energy Ohio and Duke Energy Indiana are subject to certain additional risks, including those associated with the allocation among RTO members, of losses caused by unreimbursed defaults of other participants in the RTO markets and those associated with complaint cases filed against an RTO that may seek refunds of revenues previously earned by RTO members.

The Duke Energy Registrants may not recover costs incurred to begin construction on projects that are canceled.

Duke Energy's long-term strategy requires the construction of new projects, either wholly owned or partially owned, which involve a number of risks, including construction delays, delays in or failure to receive required regulatory approvals and/or sitting or environmental permits, nonperformance by equipment and other third-party suppliers, and increases in equipment and labor costs. To limit the risks of these construction projects, the Duke Energy Registrants enter into equipment purchase orders and construction contracts and incur engineering and design service costs in advance of receiving necessary regulatory approvals and/or siting or environmental permits. If any of these projects are canceled for any reason, including failure to receive necessary regulatory approvals and/or siting or environmental permits, significant cancellation penalties under the equipment purchase orders and construction contracts could occur. In addition, if any construction work or investments have been recorded as an asset, an impairment may need to be recorded in the event the project is canceled.

The Duke Energy Registrants are subject to risks associated with their ability to obtain adequate insurance at acceptable costs.

The financial condition of some insurance companies, actual or threatened physical or cyberattacks, and natural disasters, among other things, could have disruptive effects on insurance markets. The availability of insurance covering risks that the Duke Energy Registrants and their respective competitors typically insure against may decrease, and the insurance that the Duke Energy Registrants are able to obtain may have higher deductibles, higher premiums, and more restrictive policy terms. Further, the insurance policies may not cover all of the potential exposures or the actual amount of loss incurred. Any losses not covered by insurance, or any increases in the cost of applicable insurance, could adversely affect the results of operations, financial position or cash flows of the affected Duke Energy Registrant.

Our business could be negatively affected as a result of actions of activist shareholders.

While we strive to maintain constructive communications with our shareholders, activist shareholders may, from time to time, engage in proxy solicitations or advance shareholder proposals, or otherwise attempt to affect changes and assert influence on our Board and management. Perceived uncertainties as to the future direction or governance of the company may cause concern to our current or potential regulators, vendors or strategic partners, or make it more difficult to execute on our strategy or to attract and retain qualified personnel, which may have a material impact on our business and operating results.

In addition, actions such as those described above could cause fluctuations in the trading price of our common stock, based on temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

NUCLEAR GENERATION RISKS

Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida may incur substantial costs and liabilities due to their ownership and operation of nuclear generating facilities.

Ownership interests in and operation of nuclear stations by Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida subject them to various risks. These risks include, among other things: the potential harmful effects on the environment and human health resulting from the current or past operation of nuclear facilities and the storage, handling and disposal of radioactive materials; limitations on the amounts and types of insurance commercially available to cover losses that might arise in connection with nuclear operations; and uncertainties with respect to the technological and financial aspects of decommissioning nuclear plants at the end of their licensed lives.

Ownership and operation of nuclear generation facilities requires compliance with licensing and safety-related requirements imposed by the NRC. In the event of non-compliance, the NRC may increase regulatory oversight, impose fines or shut down a unit depending upon its assessment of the severity of the situation. Revised security and safety requirements promulgated by the NRC, which could be prompted by, among other things, events within or outside of the control of Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, such as a serious nuclear incident at a facility owned by a third party, could necessitate substantial capital and other expenditures, as well as assessments to cover third-party losses. In addition, if a serious nuclear incident were to occur, it could have a material adverse effect on the results of operations, financial position, cash flows and reputation of the Duke Energy Registrants.

LIQUIDITY, CAPITAL REQUIREMENTS AND COMMON STOCK RISKS

The Duke Energy Registrants rely on access to short-term borrowings and longer-term debt and equity markets to finance their capital requirements and support their liquidity needs. Access to those markets can be adversely affected by a number of conditions, many of which are beyond the Duke Energy Registrants' control.

The Duke Energy Registrants' businesses are significantly financed through issuances of debt and equity. The maturity and repayment profile of debt used to finance investments often does not correlate to cash flows from their assets. Accordingly, as a source of liquidity for capital requirements not satisfied by the cash flows from their operations and to fund investments originally financed through debt instruments with disparate maturities, the Duke Energy Registrants rely on access to short-term money markets as well as longer-term capital markets. The Subsidiary Registrants also rely on access to short-term intercompany borrowings. If the Duke Energy Registrants are not able to access debt or equity at competitive rates or at all, the ability to finance their operations and implement their strategy and business plan as scheduled could be adversely affected. An inability to access debt and equity may limit the Duke Energy Registrants' ability to pursue improvements or acquisitions that they may otherwise rely on for future growth.

Market disruptions may increase the cost of borrowing or adversely affect the ability to access one or more financial markets. Such disruptions could include: economic downturns, unfavorable capital market conditions, market prices for natural gas and coal, geopolitical risks, actual or threatened terrorist attacks, or the overall health of the energy industry. Additionally, rapidly rising interest rates could impact the ability to affordably finance the capital plan or increase rates to customers and could have an impact on our ability to execute on our clean energy transition. The availability of credit under Duke Energy's Master Credit Facility depends upon the ability of the banks providing commitments under the facility to provide funds when their obligations to do so arise. Systemic risk of the banking system and the financial markets could prevent a bank from meeting its obligations under the facility agreement.

Duke Energy maintains a revolving credit facility to provide backup for its commercial paper program and letters of credit to support variable rate demand tax-exempt bonds that may be put to the Duke Energy Registrant issuer at the option of the holder. The facility includes borrowing sublimits for the Duke Energy Registrants, each of whom is a party to the credit facility, and financial covenants that limit the amount of debt that can be outstanding as a percentage of the total capital for the specific entity. Failure to maintain these covenants at a particular entity could preclude Duke Energy from issuing commercial paper or the Duke Energy Registrants from issuing letters of credit or borrowing under the Master Credit Facility.

The Duke Energy Registrants must meet credit quality standards and there is no assurance they will maintain investment grade credit ratings. If the Duke Energy Registrants are unable to maintain investment grade credit ratings, they would be required under credit agreements to provide collateral in the form of letters of credit or cash, which may materially adversely affect their liquidity.

Each of the Duke Energy Registrants' senior long-term debt issuances is currently rated investment grade by various rating agencies. The Duke Energy Registrants cannot ensure their senior long-term debt will be rated investment grade in the future.

If the rating agencies were to rate the Duke Energy Registrants below investment grade, borrowing costs would increase, perhaps significantly. In addition, the potential pool of investors and funding sources would likely decrease. Further, if the short-term debt rating were to fall, access to the commercial paper market could be significantly limited.

A downgrade below investment grade could also require the posting of additional collateral in the form of letters of credit or cash under various credit, commodity and capacity agreements and trigger termination clauses in some interest rate derivative agreements, which would require cash payments. All of these events would likely reduce the Duke Energy Registrants' liquidity and profitability and could have a material effect on their results of operations, financial position and cash flows.

Non-compliance with debt covenants or conditions could adversely affect the Duke Energy Registrants' ability to execute future borrowings.

The Duke Energy Registrants' debt and credit agreements contain various financial and other covenants. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements.

Market performance and other changes may decrease the value of the NDTF investments of Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, which then could require significant additional funding.

Ownership and operation of nuclear generation facilities also requires the maintenance of funded trusts that are intended to pay for the decommissioning costs of the respective nuclear power plants. The performance of the capital markets affects the values of the assets held in trust to satisfy these future obligations. Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida have significant obligations in this area and hold significant assets in these trusts. These assets are subject to market fluctuations and will yield uncertain returns, which may fall below projected rates of return. Although a number of factors impact funding requirements, a decline in the market value of the assets may increase the funding requirements of the obligations for decommissioning nuclear plants. If Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are unable to successfully manage their NDTF assets, their results of operations, financial position and cash flows could be negatively affected.

Poor investment performance of the Duke Energy pension plan holdings and other factors impacting pension plan costs could unfavorably impact the Duke Energy Registrants' liquidity and results of operations.

The costs of providing non-contributory defined benefit pension plans are dependent upon a number of factors, such as the rates of return on plan assets, discount rates, the level of interest rates used to measure the required minimum funding levels of the plans, future government regulation and required or voluntary contributions made to the plans. The Subsidiary Registrants are allocated their proportionate share of the cost and obligations related to these plans. Without sustained growth in the pension investments over time to increase the value of plan assets and, depending upon the other factors impacting costs as listed above, Duke Energy could be required to fund its plans with significant amounts of cash. Such cash funding obligations, and the Subsidiary Registrants' proportionate share of such cash funding obligations, could have a material adverse impact on the Duke Energy Registrants' results of operations, financial position and cash flows.

Duke Energy is a holding company and depends on the cash flows from its subsidiaries to meet its financial obligations.

Because Duke Energy is a holding company with no operations or cash flows of its own, its ability to meet its financial obligations, including making interest and principal payments on outstanding indebtedness and to pay dividends on its common stock, is primarily dependent on the net income and cash flows of its subsidiaries and the ability of those subsidiaries to pay upstream dividends or to repay borrowed funds. Prior to funding Duke Energy, its subsidiaries have regulatory restrictions and financial obligations that must be satisfied. These subsidiaries are separate legal entities and have no obligation to provide Duke Energy with funds. In addition, Duke Energy may provide capital contributions or debt financing to its subsidiaries under certain circumstances, which would reduce the funds available to meet its financial obligations, including making interest and principal payments on outstanding indebtedness and to pay dividends on Duke Energy's common stock.

GENERAL RISKS

The failure of Duke Energy information technology systems, or the failure to enhance existing information technology systems and implement new technology, could adversely affect the Duke Energy Registrants' businesses.

Duke Energy's operations are dependent upon the proper functioning of its internal systems, including the information technology systems that support our underlying business processes. Any significant failure or malfunction of such information technology systems may result in disruptions of our operations. In the ordinary course of business, we rely on information technology systems, including the internet and third-party hosted services, to support a variety of business processes and activities and to store sensitive data, including (i) intellectual property, (ii) proprietary business information, (iii) personally identifiable information of our customers, employees, retirees and shareholders and (iv) data with respect to invoicing and the collection of payments, accounting, procurement, and supply chain activities. Our information technology systems are dependent upon global communications and cloud service providers, as well as their respective vendors, many of whom have at some point experienced significant system failures and outages in the past and may experience such failures and outages in the future. These providers' systems are susceptible to cybersecurity and data breaches, outages from fire, floods, power loss, telecommunications failures, break-ins and similar events. Failure to prevent or mitigate data loss from system failures or outages could materially affect the results of operations, financial position and cash flows of the Duke Energy Registrants.

In addition to maintaining our current information technology systems, Duke Energy believes the digital transformation of its business is key to driving internal efficiencies as well as providing additional capabilities to customers. Duke Energy's information technology systems are critical to cost-effective, reliable daily operations and our ability to effectively serve our customers. We expect our customers to continue to demand more sophisticated technology-driven solutions and we must enhance or replace our information technology systems in response. This involves significant development and implementation costs to keep pace with changing technologies and customer demand. If we fail to successfully implement critical technology, or if it does not provide the anticipated benefits or meet customer demands, such failure could materially adversely affect our business strategy as well as impact the results of operations, financial position and cash flows of the Duke Energy Registrants.

Potential terrorist activities, or military or other actions, could adversely affect the Duke Energy Registrants' businesses.

The continued threat of terrorism and the impact of retaliatory military and other action by the U.S. and its allies may lead to increased political, economic and financial market instability and volatility in prices for natural gas and oil, which may have material adverse effects in ways the Duke Energy Registrants cannot predict at this time. In addition, future acts of terrorism and possible reprisals as a consequence of action by the U.S. and its allies could be directed against companies operating in the U.S. Information technology systems, transportation systems for our fuel sources including natural gas pipelines, transmission and distribution and generation facilities such as nuclear plants could be potential targets of terrorist activities or harmful activities by individuals or groups that could have a material adverse effect on Duke Energy Registrants' businesses. In particular, the Duke Energy Registrants may experience increased capital and operating costs to implement increased security for their information technology systems, transmission and distribution and generation facilities, including nuclear power plants under the NRC's design basis threat requirements. These increased costs could include additional physical plant security and security personnel or additional capability following a terrorist incident.

Failure to attract and retain an appropriately qualified workforce could unfavorably impact the Duke Energy Registrants' results of operations.

Certain events, such as an aging workforce, mismatch of skill set or complement to future needs, or unavailability of contract resources may lead to operating challenges and increased costs. The challenges include lack of resources, loss of knowledge base and the lengthy time required for skill development. In this case, costs, including costs for contractors to replace employees, productivity costs and safety costs, may increase. Failure to hire and adequately train replacement employees, including the transfer of significant internal historical knowledge and expertise to new employees, or future availability and cost of contract labor may adversely affect the ability to manage and operate the business, especially considering the workforce needs associated with nuclear generation facilities and new skills required to operate a modernized, technology-enabled power grid. If the Duke Energy Registrants are unable to successfully attract and retain an appropriately qualified workforce, their results of operations, financial position and cash flows could be negatively affected.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

ELECTRIC UTILITIES AND INFRASTRUCTURE

The following table provides information related to the EU&I's generation stations as of December 31, 2022. The MW displayed in the table below are based on summer capacity. Ownership interest in all facilities is 100% unless otherwise indicated.

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Carolinas				
Oconee	Nuclear	Uranium	SC	2,554
McGuire	Nuclear	Uranium	NC	2,316
Catawba[a]	Nuclear	Uranium	SC	445
Belews Creek	Fossil	Coal/Gas	NC	2,220
Marshall	Fossil	Coal/Gas	NC	2,058
J.E. Rogers	Fossil	Coal/Gas	NC	1,388
Lincoln Combustion Turbine (CT)	Fossil	Gas/Oil	NC	1,161
Allen	Fossil	Coal	NC	421
Rockingham CT	Fossil	Gas/Oil	NC	825
W.S. Lee Combined Cycle (CC)[b]	Fossil	Gas	SC	686
Buck CC	Fossil	Gas	NC	668
Dan River CC	Fossil	Gas	NC	662
Mill Creek CT	Fossil	Gas/Oil	SC	563
W.S. Lee CT	Fossil	Gas/Oil	SC	84
Clemson CHP	Fossil	Gas	SC	13
Bad Creek	Hydro	Water	SC	1,520
Jocassee	Hydro	Water	SC	780
Cowans Ford	Hydro	Water	NC	324
Keowee	Hydro	Water	SC	152
Other small facilities (19 plants)	Hydro	Water	NC/SC	581
Distributed generation	Renewable	Solar	NC	71
Total Duke Energy Carolinas				**19,492**

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Progress				
Brunswick	Nuclear	Uranium	NC	1,870
Harris	Nuclear	Uranium	NC	964
Robinson	Nuclear	Uranium	SC	759
Roxboro	Fossil	Coal	NC	2,439
Smith CC	Fossil	Gas/Oil	NC	1,083
H.F. Lee CC	Fossil	Gas/Oil	NC	888
Wayne County CT	Fossil	Gas/Oil	NC	822
Smith CT	Fossil	Gas/Oil	NC	772
Mayo	Fossil	Coal	NC	704
L.V. Sutton CC	Fossil	Gas/Oil	NC	607
Asheville CC	Fossil	Gas/Oil	NC	476
Asheville CT	Fossil	Gas/Oil	NC	320
Darlington CT	Fossil	Gas/Oil	SC	234
Weatherspoon CT	Fossil	Gas/Oil	NC	124
L.V. Sutton CT	Fossil	Gas/Oil	NC	84
Blewett CT	Fossil	Oil	NC	52
Walters	Hydro	Water	NC	112
Other small facilities (3)	Hydro	Water	NC	116
Distributed generation	Renewable	Solar	NC	35
Asheville – Rock Hill Battery	Renewable	Storage	NC	2
Hot Springs Microgrid	Renewable	Storage	NC	1
Total Duke Energy Progress				**12,464**

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Florida				
Hines CC	Fossil	Gas/Oil	FL	2,061
Citrus County CC	Fossil	Gas	FL	1,610
Crystal River	Fossil	Coal	FL	1,410
Bartow CC	Fossil	Gas/Oil	FL	1,112
Anclote	Fossil	Gas	FL	1,013
Intercession City CT	Fossil	Gas/Oil	FL	940
Osprey CC	Fossil	Gas/Oil	FL	576
DeBary CT	Fossil	Gas/Oil	FL	524
Tiger Bay CC	Fossil	Gas/Oil	FL	199
Bayboro CT	Fossil	Oil	FL	171
Bartow CT	Fossil	Gas/Oil	FL	168
Suwannee River CT	Fossil	Gas	FL	145
University of Florida CoGen CT	Fossil	Gas	FL	44
Distributed generation	Renewable	Solar	FL	485
Trenton Battery	Renewable	Storage	FL	11
Micanopy Energy Storage	Renewable	Storage	FL	8
Jennings Battery	Renewable	Storage	FL	5.5
Cape San Blas Battery	Renewable	Storage	FL	5.5
Total Duke Energy Florida				**10,488**

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Ohio				
East Bend	Fossil	Coal	KY	600
Woodsdale CT	Fossil	Gas/Propane	OH	476
Beckjord Battery Storage	Renewable	Storage	OH	4
Total Duke Energy Ohio				**1,080**

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Indiana				
Gibson[(c)]	Fossil	Coal	IN	2,822
Cayuga[(d)]	Fossil	Coal/Oil	IN	1,005
Edwardsport	Fossil	Coal	IN	595
Madison CT	Fossil	Gas	OH	566
Wheatland CT	Fossil	Gas	IN	444
Vermillion CT[(e)]	Fossil	Gas	IN	360
Noblesville CC	Fossil	Gas/Oil	IN	264
Henry County CT	Fossil	Gas/Oil	IN	126
Cayuga CT	Fossil	Gas/Oil	IN	84
Purdue CHP	Fossil	Gas	IN	12
Markland	Hydro	Water	IN	54
Distributed generation	Renewable	Solar	IN	11
Camp Atterbury Battery	Renewable	Storage	IN	1
Nabb Battery	Renewable	Storage	IN	1
Crane Battery	Renewable	Storage	IN	1
Total Duke Energy Indiana				**6,346**

Totals by Type	Owned MW Capacity
Total Electric Utilities	**49,870**
Totals by Plant Type	
Nuclear	8,908
Fossil	36,681
Hydro	3,639
Renewable	642
Total Electric Utilities	**49,870**

(a) Jointly owned with North Carolina Municipal Power Agency Number 1, NCEMC and PMPA. Duke Energy Carolinas' ownership is 19.25% of the facility.
(b) Jointly owned with NCEMC. Duke Energy Carolinas' ownership is 87.27% of the facility.
(c) Duke Energy Indiana owns and operates Gibson Station Units 1 through 4 and is a joint owner of unit 5 with WVPA and IMPA. Duke Energy Indiana operates unit 5 and owns 50.05%.
(d) Includes Cayuga Internal Combustion.
(e) Jointly owned with WVPA. Duke Energy Indiana's ownership is 62.5% of the facility.

The following table provides information related to EU&I's electric transmission and distribution properties as of December 31, 2022.

	Duke Energy	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana
Electric Transmission Lines						
Miles of 500 to 525 kilovolt (kV)	1,100	600	300	200	—	—
Miles of 345 kV	1,100	—	—	—	400	700
Miles of 230 kV	8,500	2,700	3,400	1,700	—	700
Miles of 100 to 161 kV	12,500	6,800	2,600	1,000	700	1,400
Miles of 13 to 69 kV	8,300	2,900	—	2,200	700	2,500
Total conductor miles of electric transmission lines	31,500	13,000	6,300	5,100	1,800	5,300
Electric Distribution Lines						
Miles of overhead lines	173,600	66,600	46,300	25,300	13,300	22,100
Miles of underground line	116,100	41,900	35,200	22,700	6,500	9,800
Total conductor miles of electric distribution lines	289,700	108,500	81,500	48,000	19,800	31,900
Number of electric transmission and distribution substations	3,000	1,200	500	500	300	500

Substantially all of EU&I's electric plant in service is mortgaged under indentures relating to Duke Energy Carolinas', Duke Energy Progress', Duke Energy Florida's, Duke Energy Ohio's and Duke Energy Indiana's various series of First Mortgage Bonds.

GAS UTILITIES AND INFRASTRUCTURE

GU&I owns transmission pipelines and distribution mains that are generally underground, located near public streets and highways, or on property owned by others for which Duke Energy Ohio and Piedmont have obtained the necessary legal rights to place and operate facilities on such property located within the GU&I service territories. The following table provides information related to GU&I's natural gas distribution.

	Duke Energy	Duke Energy Ohio	Piedmont
Miles of natural gas distribution and transmission pipelines	35,200	7,600	27,600
Miles of natural gas service lines	28,300	6,600	21,700

OTHER

Duke Energy owns approximately 7.1 million square feet and leases approximately 2.7 million square feet of corporate, regional and district office space spread throughout its service territories. See Note 11, "Property, Plant and Equipment," for further information.

ITEM 3. LEGAL PROCEEDINGS

MTBE Litigation

On December 15, 2017, the state of Maryland filed suit in Baltimore City Circuit Court against Duke Energy Merchants and other defendants alleging contamination of state waters by MTBE leaking from gasoline storage tanks and is seeking an unspecified amount of monetary damages. MTBE is a gasoline additive intended to increase the oxygen levels in gasoline and make it burn cleaner. The case was removed from Baltimore City Circuit Court to federal District Court. Initial motions to dismiss filed by the defendants were denied by the court on September 4, 2019, and the matter is now in discovery. On December 18, 2020, the plaintiff and defendants selected 50 focus sites, none of which have any ties to Duke Energy Merchants. Discovery will be specific to those sites. At this time, Duke Energy Merchants has not engaged in settlement negotiations with the plaintiff and the plaintiff has not reached a settlement agreement with any defendant. Duke Energy cannot predict the outcome of this matter.

In addition, the Duke Energy Registrants are, from time to time, parties to various lawsuits and regulatory proceedings in the ordinary course of their business. For information regarding legal proceedings, including regulatory and environmental matters, see Note 4, “Regulatory Matters,” and Note 5, “Commitments and Contingencies,” to the Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

This is not applicable for any of the Duke Energy Registrants.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The common stock of Duke Energy is listed and traded on the NYSE (ticker symbol DUK). As of January 31, 2023, there were 127,329 Duke Energy common stockholders of record. For information on dividends, see the "Dividend Payments" section of Management's Discussion and Analysis.

There is no market for the common equity securities of the Subsidiary Registrants, all of which are directly or indirectly owned by Duke Energy. See Note 2, "Dispositions," to the Consolidated Financial Statements for information on the investment of a minority interest in Duke Energy Indiana.

Securities Authorized for Issuance Under Equity Compensation Plans

See Item 12 of Part III within this Annual Report for information regarding Securities Authorized for Issuance Under Equity Compensation Plans.

Issuer Purchases of Equity Securities for Fourth Quarter 2022

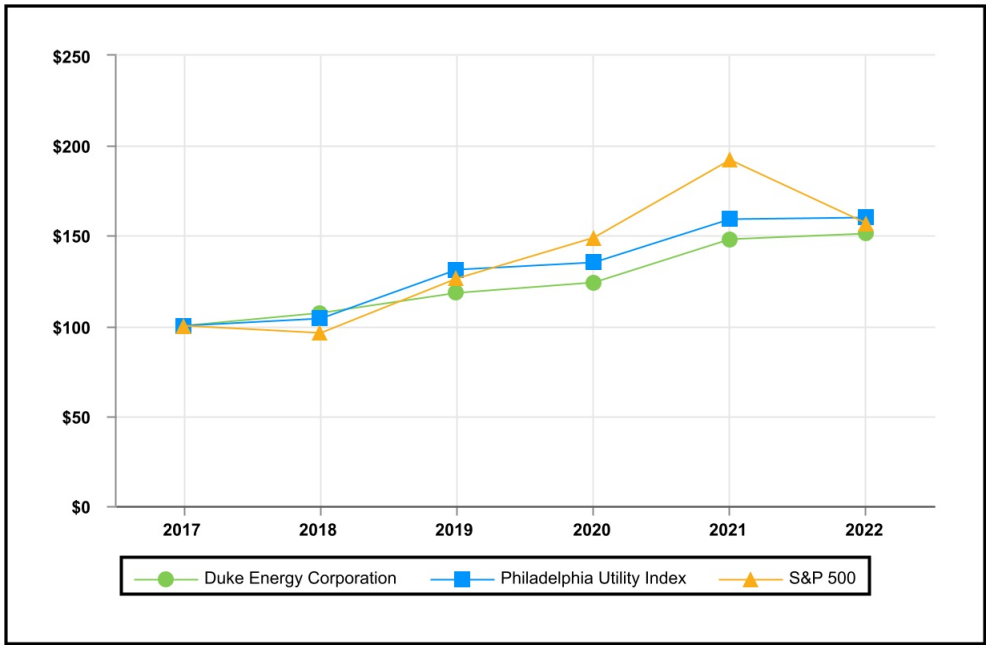
There were no repurchases of equity securities during the fourth quarter of 2022.

Unregistered Sales of Equity Securities and Use of Proceeds

None.

Stock Performance Graph

The following performance graph compares the cumulative TSR from Duke Energy Corporation common stock, as compared with the Standard & Poor's 500 Stock Index (S&P 500) and the Philadelphia Utility Index for the past five years. The graph assumes an initial investment of $100 on December 31, 2017, in Duke Energy common stock, in the S&P 500 and in the Philadelphia Utility Index and that all dividends were reinvested. The stockholder return shown below for the five-year historical period may not be indicative of future performance.



NYSE CEO Certification

Duke Energy has filed the certification of its Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 as exhibits to this Annual Report.

ITEM 6. SELECTED FINANCIAL DATA

This is not applicable for any of the Duke Energy Registrants.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's Discussion and Analysis includes financial information prepared in accordance with GAAP in the U.S., as well as certain non-GAAP financial measures such as adjusted earnings and adjusted EPS discussed below. Generally, a non-GAAP financial measure is a numerical measure of financial performance, financial position or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with GAAP. The non-GAAP financial measures should be viewed as a supplement to, and not a substitute for, financial measures presented in accordance with GAAP. Non-GAAP measures as presented herein may not be comparable to similarly titled measures used by other companies.

The following combined Management's Discussion and Analysis of Financial Condition and Results of Operations is separately filed by Duke Energy Corporation and its subsidiaries. Duke Energy Carolinas, LLC, Progress Energy, Inc., Duke Energy Progress, LLC, Duke Energy Florida, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC and Piedmont Natural Gas Company, Inc. However, none of the registrants make any representation as to information related solely to Duke Energy or the subsidiary registrants of Duke Energy other than itself.

Management's Discussion and Analysis should be read in conjunction with the Consolidated Financial Statements and Notes for the years ended December 31, 2022, 2021 and 2020.

See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," in Duke Energy's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 24, 2022, for a discussion of variance drivers for the year ended December 31, 2021, as compared to December 31, 2020.

DUKE ENERGY

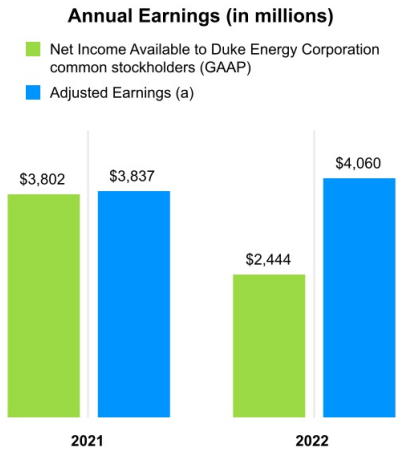
Duke Energy is an energy company headquartered in Charlotte, North Carolina. Duke Energy operates in the U.S. primarily through its direct and indirect subsidiaries, Duke Energy Carolinas, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont. When discussing Duke Energy's consolidated financial information, it necessarily includes the results of the Subsidiary Registrants, which along with Duke Energy, are collectively referred to as the Duke Energy Registrants.

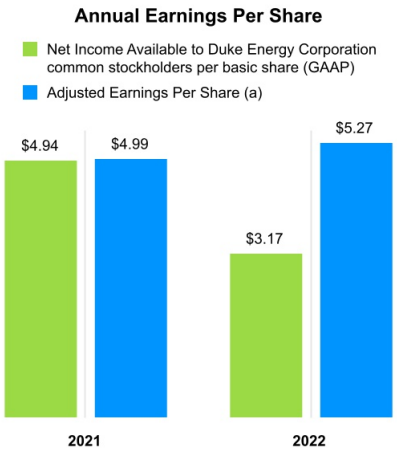
Executive Overview

At Duke Energy, we remain focused on continuing to advance our clean energy transition while maintaining affordability and reliability for our customers and delivering on our commitments to our communities, employees, investors, and other stakeholders. The fundamentals of our business are strong and allow us to deliver growth in earnings and dividends in a low-risk, predictable and transparent way. In 2022, we continued to make progress, navigating rising interest rates, volatile commodity prices and other macroeconomic headwinds while meeting our near-term financial commitments, executing on our strategic priorities, responding to severe weather and external events, and continuing to provide the safe and reliable service that our communities depend on.

In 2022, we announced the sale of our commercial renewables business, filed the Carbon Plan with the NCUC, and continued to engage with the communities in our jurisdictions. We also continue to make the investments necessary to support our ongoing clean energy transition and a business portfolio that delivers a reliable and growing dividend, with 2022 representing the 96th consecutive year Duke Energy paid a cash dividend on its common stock.

Financial Results





(a) See Results of Operations below for Duke Energy's definition of adjusted earnings and adjusted EPS as well as a reconciliation of this non-GAAP financial measure to net income available to Duke Energy and net income available to Duke Energy per basic share.

On February 9, 2023, Duke Energy announced 2022 full year reported earnings of $2,563 million, or $3.33 per share and adjusted earnings of $4,060 million, or $5.27 per share. On February 21, 2023, Duke Energy Indiana received an opinion from the Indiana Court of Appeals disallowing recovery of certain coal ash costs. As a result of this opinion, Duke Energy Indiana recognized a pretax charge of approximately $175 million to Impairment of assets and other charges for the year ended December 31, 2022. The 2022 full year reported earnings changed to $2,444 million, or $3.17 per share. There was no change to adjusted earnings or adjusted earnings per share.

Duke Energy's 2022 Net Income Available to Duke Energy Corporation (GAAP Reported Earnings) was impacted primarily by the estimated impairment on the sale of the Commercial Renewables business in the current year. See “Results of Operations” below for a detailed discussion of the consolidated results of operations and a detailed discussion of financial results for each of Duke Energy’s reportable business segments, as well as Other.

2022 Areas of Focus and Accomplishments

Clean Energy Transition. Our industry continues to experience an unprecedented level of change and 2022 was a dynamic year for our company as we navigated macroeconomic headwinds and continued to execute on our strategic priorities and deliver on our vision.

Generating Cleaner Energy

We’re targeting energy generated from coal to represent less than 5% by 2030 and a full exit by 2035, subject to regulatory approvals. We’ve made strong progress to date in reducing carbon emissions from electricity generation (a 44% reduction from 2005) and have committed to do more (at least 50% reduction by 2030 and net-zero by 2050). In October 2022, we announced an additional interim target to reduce carbon emissions from electric generation by 80% by 2040. We also adopted a goal of reducing Scope 2 and certain Scope 3 emissions, including emissions from upstream purchased power and fossil fuel purchases, as well as downstream customer use of natural gas, by 50% by 2035, on the way to net-zero by 2050.

Duke Energy is one of the first utilities to address the totality of its impact – approximately 95% of the company's greenhouse gas emissions are now tied to a measurable net-zero goal. Over the next decade, we expect to deploy over $145 billion of capital into our regulated businesses, driven by clean energy transition investments. These investments will drive substantial economic benefits for the communities we serve and reduce our customer’s exposure to fuel volatility. We’ve filed and refined comprehensive IRPs consistent with this strategy in multiple jurisdictions, allowing us to accelerate coal plant retirements, make needed grid investments to enable renewables and energy storage, and increase resiliency. To partially fund this plan, in December 2022, we closed on the second and final tranche of the approximate $2 billion investment in Duke Energy Indiana by GIC.

In 2022, we were awarded one of two North Carolina offshore wind sites held by the Bureau of Ocean Energy Management. The approximately 55,000-acre site in the Atlantic Ocean east of Wilmington could support up to 1.6 gigawatts of potential offshore wind energy, enough to power nearly 375,000 homes. Securing this contract creates optionality for future offshore wind if the NCUC determines it's part of the least cost path to achieve North Carolina's interim and long-term carbon reduction goals.

As we look beyond 2030, we will need additional tools to continue our progress. We will actively work to advocate for research and development and deployment of carbon-free, dispatchable resources. This includes longer-duration energy storage, advanced nuclear technologies, carbon capture and zero-carbon fuels.

Sale of Commercial Renewables

In November 2022, the Board approved pursuing the sale of our Commercial Renewables business, excluding the offshore wind contract for Carolina Long Bay. Since 2007, we have built a portfolio of approximately 5,000 megawatts of commercial wind, solar and battery projects across the U.S., and established a robust development pipeline. As we look forward to the remainder of this decade and beyond, we have line of sight to significant renewable, grid and other investment opportunities within our faster-growing regulated operations.

Carbon Plan

North Carolina House Bill 951 (HB 951) was passed in 2021 and reflects new state policy that accelerates a clean energy transition for generation serving customers in the Carolinas, including providing a framework for a goal of 70% carbon reduction in electric generation in the state from 2005 levels by 2030 and carbon neutrality by 2050 while continuing to prioritize affordability and reliability for our customers. The legislation established a framework overseen by the NCUC to advance state CO_2 emission reductions through the use of least cost planning, including stakeholder involvement, and also introduced modernized recovery mechanisms, including multiyear rate plans (MYRP), that promote more efficient recovery of investments and performance-based regulation (PBR), that align incentives between the company and the state’s energy policy objectives.

In May 2022, we filed a proposed Carbon Plan with the NCUC that outlined potential pathways toward achieving the HB 951 carbon reduction targets while balancing affordability and reliability for our customers. We presented four “portfolios” – a base portfolio of what it would take to achieve 70% carbon reduction by 2030 and other portfolios demonstrating the impact of an extension to the 2030 compliance deadline to allow the introduction of new technologies at a more affordable price. In December 2022, the NCUC issued an order adopting its initial Carbon Plan, which included a set of near-term actions to support meeting the state's carbon reduction goals. This is a constructive outcome that advances our clean energy transition, supporting a diverse, all-of-the-above approach that is essential for long-term resource planning.

Modernizing the Power Grid and Natural Gas Infrastructure

Our grid improvement programs continue to be a key component of our growth strategy. Modernization of the electric grid, including smart meters, storm hardening, self-healing and targeted undergrounding, helps to continue to ensure the system is better prepared for severe weather, improves the system's reliability and flexibility, and provides better information and services for customers. We continue to expand our self-optimizing grid capabilities, and in 2022, smart, self-healing technologies helped to avoid more than 1.4 million customer interruptions across our six-state electric service area, saving customers more than 443 million minutes of lost outage time.

Duke Energy has a demonstrated track record of driving efficiencies and productivity in the business and we continue to leverage new technology, digital tools and data analytics across the business in response to a transforming landscape. In 2022, we filed for approval of a new demand response pilot program expected to launch in 2023 for customers in the Duke Energy Carolinas service area. Pilot incentives will reduce vehicle lease payments for program participants who lease an eligible electric vehicle, including Ford F-150 Lightning trucks. In exchange, customers will allow their electric vehicles to feed energy back to the grid – helping to balance it during peak demand. Also, in August 2022, Duke Energy Florida announced a research and development pilot program to test and evaluate the viability of the new Ford F-150 Lightning all-electric truck's high-capacity batteries as a grid edge resource.

Recognizing the importance of natural gas to our plans, we continue to work toward a net-zero methane emission goal by 2030 related to our natural gas distribution business. In our LDC business, we are making great progress reducing methane emissions through our partnership with Accenture, Microsoft and Avanade to use satellites and build an emissions platform, the addition of other sensors and technologies to find and fix leaks in near real time, and the use of cross compression to avoid releasing natural gas into the atmosphere during certain operational activities. Investments in integrity management of our natural gas infrastructure continue to be of importance to ensure reliable, safe, and increasingly clean delivery of natural gas to our customers.

Response to Macroeconomic Headwinds. In addition to achieving financial results in the upper half of our revised guidance, we continued our cost-management journey with a focus on driving productivity, increasing flexibility and prioritizing spend based on risk and strategic value to our customers and investors. In 2022, to address rising interest rates, increased commodity prices, labor and material inflation, and supply chain constraints, we launched the Workload Reduction Initiative, building on our culture of continuous improvement to identify more ways to reduce operating costs. Including cost reductions from supply chain, we identified approximately $300 million of savings opportunities focused on organization simplification, elimination of work, automation, reducing service levels provided to internal customers, and outsourcing.

Commodity prices have impacted the price of electricity in all of our jurisdictions. We actively worked to manage and maintain prices at lower levels than they otherwise would be in light of increased commodity prices, working with our regulators to extend recovery periods in certain jurisdictions in a way that is manageable for our customers. We also continued our work with our vulnerable customers through increased communications, securing state and federal funding, and providing access to philanthropic support. Additionally, we've created a specialized team that's partnered with agencies across our service territories and has helped connect customers to nearly $300 million in energy assistance funding since 2021.

We successfully navigated supply chain challenges including inflation, longer lead times, and shortages of solar panels and other equipment. We've executed longer supply agreements and proactively secured equipment in early 2022 for hurricane season while placing orders for key needs for our customer delivery organization for 2023. Our procurement teams continue to execute on action plans to enhance planning, augment supply, amend operations and leverage our scale to continue to mitigate these risks to the extent possible.

Constructive Regulatory and Legislative Outcomes. One of our long-term strategic goals is to achieve modernized regulatory constructs in our jurisdictions. Modernized constructs provide benefits, which include improved earnings and cash flows through more timely recovery of investments, as well as stable pricing for customers. Grid investment riders in the Midwest and Florida enable more timely cost recovery and earnings growth and we have a MYRP in Florida through 2024. Additionally, as highlighted above, HB 951 provides the framework for many of the benefits of modernized regulatory constructs in North Carolina under the direction of the NCUC. Duke Energy Progress filed its first rate case utilizing these benefits, including both PBR and MYRP, in North Carolina in October 2022. In January 2023, we also filed a Duke Energy Carolinas rate case in North Carolina, which incorporates elements of PBR and MYRP.

In addition to the Duke Energy Progress and Duke Energy Carolinas rate cases in North Carolina, we continued to move a variety of other regulatory initiatives forward during 2022. Base rate cases were filed for both Duke Energy Progress and Piedmont in South Carolina, for Duke Energy Ohio's natural gas business, and for Duke Energy Kentucky's electric business. Constructive partial settlements were approved by the NCUC in January 2022 related to Piedmont's 2021 North Carolina rate case and by the PUCO in December 2022 related to Duke Energy Ohio's 2021 electric rate case. We also reached a constructive comprehensive settlement with all parties in the Duke Energy Progress South Carolina rate case in January 2023, which the PSCSC approved in February 2023. Duke Energy Indiana's TDSIC 2.0 was approved in June 2022 and Duke Energy Florida's 10 year storm protection plan was approved in October 2022, both of which provide for significant investments to improve the reliability and integrity of the grid in their respective jurisdictions. Overall, this was a very active year as it relates to regulatory filings, which reflects the important investments and ongoing clean energy transition across all our service territories.

In November 2022, the Southeast Energy Exchange Market (SEEM) announced it had initiated operations. The new SEEM platform facilitates sub-hourly, bilateral trading, allowing participants to buy and sell power close to the time the energy is consumed, utilizing available unreserved transmission and providing southeastern electricity customers cost, reliability and environmental benefits. Also in 2022, storm securitization legislation was passed in South Carolina, providing the opportunity to securitize deferred storm costs and lower the bill impacts for our customers. We also continue to evaluate the impacts of the Inflation Reduction Act, which is expected to have significant benefits to customers and lower the cost of the clean energy transition.

Customer Satisfaction. Duke Energy continues to transform the customer experience through our use of customer data to better inform operational priorities and performance levels. This data-driven approach allows us to identify the investments that are most important to the customer experience. In 2022, we successfully implemented the last of eight jurisdictional releases of Customer Connect, a new system that consolidates four legacy billing systems into one customer-service platform, allowing us to deliver the universal experience customers expect. While customer satisfaction across our industry continues to be impacted by the macroeconomic environment and the impacts of higher fuel prices on customer bills, our work continues to be recognized by our customers, with incremental improvements in customer satisfaction scores at certain jurisdictions including Piedmont, which was ranked number one in customer satisfaction by J.D. Power for residential natural gas service in the south.

***Operational Excellence, Safety and Reliability*.** The reliable and safe operation of our power plants, electric distribution system and natural gas infrastructure in our communities continues to be foundational to serving our customers, our financial results, and our credibility with stakeholders. This year presented unique challenges to the grid in our service territories, including attacks on two substations in Moore County, North Carolina and extreme winter weather that forced us to take unprecedented measures to ensure the integrity of our systems in North Carolina. Despite these recent challenges, our regulated generation fleet and nuclear sites had strong performance throughout the year and our electric distribution system performed well. The safety of our workforce is a core value. While our TICR was slightly above target, our employees continued to deliver strong safety results in 2022 and we remain an industry leader in personal safety. In addition, we continued our strong environmental performance, with no reportable environmental events.

Storm activity was severe in our service territories in 2022. Hurricane Ian, the fifth-strongest hurricane on record, impacted our service territories in Florida and the Carolinas with heavy rainfall, strong winds, and life-threatening storm surge and flooding. Across our service territories, we assembled more than 20,000 power line technicians, damage assessors, and vegetation workers to prepare and begin to restore power as soon as it was safe to do so. In total, we experienced 2 million outages, and thanks to their efforts, more than 97% of our Florida customers were restored within three days of the storm moving out of our Florida territories, and over 99% of our Carolinas customers within two days of the storm exiting the Carolinas. In November, Hurricane Nicole made landfall in Florida as a Category 1 hurricane causing nearly 300,000 customer outages. Our crews were able to restore more than 98% of those outages within 12 hours.

In December, high winds and extreme cold from Winter Storm Elliott, customer demand that was higher than forecasted, and inability to import additional power from out of state, resulted in the need to temporarily interrupt service to about 500,000 customers to maintain overall grid reliability and prevent further potential disruptions in the Carolinas. We will continue to further evaluate lessons learned to improve our strategy and communications, and incorporate any identified improvements to address this matter to better serve our customers now and in the future.

Our ability to effectively handle all facets of the 2022 storm response efforts, including navigating ongoing macroeconomic challenges and supply chain constraints, is a testament to our team's extensive preparation and coordination, applying lessons learned from previous storms, and to on-the-ground management throughout the restoration efforts. Duke Energy has received over 20 Emergency Response Awards since EEI began recognizing storm response in 1998 (including nine for assisting other utilities). We received EEI's Emergency Assistance Award for our support to other electric companies following Hurricane Ian, as well as EEI's Emergency Recovery Award for multiple events that include our own recovery from Hurricane Ian, Winter Storm Izzy, and the July storms in the Midwest.

Duke Energy Objectives – 2023 and Beyond

At Duke Energy, our climate strategy is our business strategy – to safely transform and ready our system by investing in new and existing carbon-free technology, modernizing our gas and electric infrastructure, and expanding and integrating efficiency and demand management programs. As we transition our business to cleaner sources of energy, we are focused on delivering sustainable value for our customers and shareholders by maintaining affordability and leveraging business transformation to exceed customer expectations, optimizing investments to drive attractive shareholder returns, and providing new product offerings and solutions that deliver growth and customer value. To achieve these major milestones, we are shaping the landscape by partnering with stakeholders, championing public policy that advances innovation, and advancing regulatory models that support carbon and methane emission reductions.

Matters Impacting Future Results

The matters discussed herein could materially impact the future operating results, financial condition and cash flows of the Duke Energy Registrants and Business Segments.

Regulatory Matters

Coal Ash Costs

Duke Energy Carolinas and Duke Energy Progress both have approximately $1.4 billion, in regulatory assets related to coal ash retirement obligations as of December 31, 2022. Future spending, including amounts recorded for depreciation and liability accretion, is expected to continue to be deferred and recovered in future rate cases or rider filings. The majority of spend is expected to occur over the next 10 to 15 years.

Duke Energy Indiana has interpreted the CCR rule to identify the coal ash basin sites impacted and has assessed the amounts of coal ash subject to the rule and a method of compliance. Interpretation of the requirements of the CCR rule is subject to further legal challenges and regulatory approvals, which could result in additional ash basin closure requirements, higher costs of compliance and greater AROs. Additionally, Duke Energy Indiana has retired facilities that are not subject to the CCR rule. Duke Energy Indiana may incur costs at these facilities to comply with environmental regulations or to mitigate risks associated with on-site storage of coal ash. In January 2022, Duke Energy Indiana received a letter from the EPA regarding interpretation of the CCR rule. Duke Energy Indiana has approximately $385 million in regulatory assets related to coal ash asset retirement obligations as of December 31, 2022. See Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies" for more information.

Fuel Cost Recovery

As a result of rapidly rising commodity costs, including natural gas, fuel and purchased power prices in excess of amounts included in fuel-related revenues has led to an increase in the undercollection of fuel costs from customers at certain jurisdictions including Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida. These amounts have been deferred in regulatory assets and have impacted the cash flows of the registrants, including increased borrowings to temporarily finance related expenditures until recovery. The Duke Energy Registrants are working with various state commissions on the timing of recovery of these amounts. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters" for more information.

Commercial Renewables

In November 2022, Duke Energy committed to a plan to sell the Commercial Renewables Disposal Groups. The bid process for the utility-scale solar and wind group is ongoing. Initial indicative bids were received for the distributed generation group in January 2023. Duke Energy expects to dispose of both groups in the second half of 2023. The Commercial Renewables Disposal Groups were classified as held for sale and as discontinued operations in the fourth quarter of 2022. Duke Energy recorded an impairment loss in the fourth quarter of 2022. If necessary, the loss on the sale of the assets will be updated based on market changes or the final sales price, after any adjustments at closing for working capital and capital expenditures and could be materially different than the estimated loss. Additionally, certain other costs resulting from the transactions may be recognized in the period incurred, including Duke Energy's share of debt extinguishment costs and costs incurred to modify or terminate PPAs. Proceeds from the sales are expected to be used for debt avoidance. For more information, see Note 2 to the Consolidated Financial Statements, "Dispositions."

In February 2021, a severe winter storm impacted certain Commercial Renewables assets in Texas. Extreme weather conditions limited the ability for these solar and wind facilities to generate and sell electricity into the Electric Reliability Council of Texas market. Duke Energy has been named in multiple lawsuits arising out of this winter storm. The legal actions related to these lawsuits will remain with Duke Energy and any future activity related to the matters will be presented in discontinued operations. For more information, see Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies."

Supply Chain

Duke Energy is monitoring supply chain disruptions, which could impact the timing of in-service dates and may result in adverse impacts on operating results. The company is also monitoring the potential impacts on future financial results and clean energy goals due to supply chain challenges regarding the availability of transformers and renewable components like solar panels and batteries.

Other

Duke Energy is monitoring general market conditions, including rising interest rates, and evaluating the impact to its results of operations, financial position and cash flows in the future.

Results of Operations

Non-GAAP Measures

Management evaluates financial performance in part based on non-GAAP financial measures, including adjusted earnings and adjusted EPS. These items represent income from continuing operations available to Duke Energy common stockholders in dollar and per share amounts, adjusted for the dollar and per share impact of special items. As discussed below, special items include certain charges and credits, which management believes are not indicative of Duke Energy's ongoing performance. Management believes the presentation of adjusted earnings and adjusted EPS provides useful information to investors, as it provides them with an additional relevant comparison of Duke Energy’s performance across periods.

Management uses these non-GAAP financial measures for planning and forecasting, and for reporting financial results to the Board of Directors, employees, stockholders, analysts and investors. Adjusted EPS is also used as a basis for employee incentive bonuses. The most directly comparable GAAP measures for adjusted earnings and adjusted EPS are GAAP Reported Earnings and EPS Available to Duke Energy Corporation common stockholders (GAAP Reported EPS), respectively.

Special items included in the periods presented include the following, which management believes do not reflect ongoing costs:

- Regulatory matters and litigation represents the net impact of charges related to the Indiana court rulings on coal ash and other unrelated ongoing litigation.
- Workplace and workforce realignment represents costs attributable to business transformation, including long-term real estate strategy changes and workforce reduction.
- Regulatory settlements represents an impairment charge related to the South Carolina Supreme Court decision on coal ash, insurance proceeds and Duke Energy Carolinas and Duke Energy Progress coal ash settlement.
- Gas pipeline investments represents additional exit obligations related to ACP.

Discontinued operations primarily includes results from Duke Energy's Commercial Renewables Disposal Groups, including an estimated impairment on the sale of the business in 2022.

Duke Energy’s adjusted earnings and adjusted EPS may not be comparable to similarly titled measures of another company because other companies may not calculate the measures in the same manner.

Reconciliation of GAAP Reported Amounts to Adjusted Amounts

The following table presents a reconciliation of adjusted earnings and adjusted EPS to the most directly comparable GAAP measures.

	Years Ended December 31,			
	2022		2021	
(in millions, except per share amounts)	**Earnings**	**EPS**	**Earnings**	**EPS**
GAAP Reported Earnings/EPS	**$ 2,444**	**$ 3.17**	$ 3,802	$ 4.94
Adjustments to Reported:				
Regulatory Matters and Litigation[a]	**295**	**0.39**	—	—
Workplace and Workforce Realignment[b]	**105**	**0.14**	148	0.20
Regulatory Settlements[c]	**—**	**—**	69	0.09
Gas Pipeline Investments[d]	**—**	**—**	15	0.02
Discontinued Operations[e]	**1,216**	**1.57**	(197)	(0.26)
Adjusted Earnings/Adjusted EPS	**$ 4,060**	**$ 5.27**	$ 3,837	$ 4.99

(a) Net of tax benefit of $128 million. $386 million recorded within Impairment of assets and other charges, $46 million within Regulated electric (Operating Revenues) and $34 million within Net Loss Attributable to Noncontrolling Interests. $25 million recorded within Operations, maintenance and other.

(b) Net of tax benefit of $31 million and tax benefit of $44 million for the years ended December 31, 2022, and 2021, respectively.$72 million recorded within Impairment of assets and other charges, $71 million recorded within Operations, maintenance and other and a $7 million gain recorded in Gains on sales of other assets and other for the year ended December 31, 2022. $133 million recorded within Impairment of assets and other charges, $42 million within Operations, maintenance and other, and $17 million within Depreciation and amortization for the year ended December 31, 2021.

(c) Net of tax benefit of $21 million. $202 million of expense recorded within Impairment of assets and other charges, $111 million of income within Other income and expenses, $12 million of expense within Operations, maintenance and other, $28 million of income within Regulated electric operating revenues, $8 million of expense within Interest expense and $7 million of expense within Depreciation and amortization.

(d) Net of tax benefit of $5 million. $20 million loss recorded within Equity in earnings (losses) of unconsolidated affiliates.

(e) Recorded in Loss from Discontinued Operations, net of tax, and Net Loss Attributable to Noncontrolling Interests.

Year Ended December 31, 2022, as compared to 2021

GAAP Reported EPS was $3.17 for the year ended December 31, 2022, compared to $4.94 for the year ended December 31, 2021. The decrease in GAAP Reported Earnings/EPS was primarily due to the estimated impairment on the sale of the Commercial Renewables Disposal Groups in the current year.

As discussed and shown in the table above, management also evaluates financial performance based on adjusted EPS. Duke Energy's adjusted EPS was $5.27 for the year ended December 31, 2022, compared to $4.99 for the year ended December 31, 2021. The increase in Adjusted Earnings/Adjusted EPS was primarily due to higher volumes, favorable weather and rate case contributions, partially offset by higher financing costs, higher depreciation and property taxes on a growing asset base, storm costs and unfavorable market impacts.

SEGMENT RESULTS

The remaining information presented in this discussion of results of operations is on a GAAP basis. Management evaluates segment performance based on segment income. Segment income is defined as income from continuing operations net of income attributable to noncontrolling interests and preferred stock dividends. Segment income includes intercompany revenues and expenses that are eliminated in the Consolidated Financial Statements.

Duke Energy's segment structure includes Electric Utilities and Infrastructure (EU&I) and Gas Utilities and Infrastructure (GU&I). The remainder of Duke Energy's operations is presented as Other. See Note 3 to the Consolidated Financial Statements, "Business Segments," for additional information on Duke Energy's segment structure.

Electric Utilities and Infrastructure

(in millions)	Years Ended December 31, 2022	2021	Variance
Operating Revenues	**$ 26,024**	$ 22,603	$ 3,421
Operating Expenses			
Fuel used in electric generation and purchased power	**8,862**	6,332	2,530
Operations, maintenance and other	**5,354**	5,340	14
Depreciation and amortization	**4,550**	4,251	299
Property and other taxes	**1,315**	1,233	82
Impairment of assets and other charges	**374**	204	170
Total operating expenses	**20,455**	17,360	3,095
Gains on Sales of Other Assets and Other, net	**7**	13	(6)
Operating Income	**5,576**	5,256	320
Other Income and Expenses, net	**467**	534	(67)
Interest Expense	**1,565**	1,432	133
Income Before Income Taxes	**4,478**	4,358	120
Income Tax Expense	**536**	494	42
Less: Income Attributable to Noncontrolling Interest	**13**	14	(1)
Segment Income	**$ 3,929**	$ 3,850	$ 79
Duke Energy Carolinas GWh sales	**90,915**	87,796	3,119
Duke Energy Progress GWh sales	**70,435**	66,797	3,638
Duke Energy Florida GWh sales	**46,214**	42,422	3,792
Duke Energy Ohio GWh sales	**24,269**	24,129	140
Duke Energy Indiana GWh sales	**31,979**	31,388	591
Total Electric Utilities and Infrastructure GWh sales	**263,812**	252,532	11,280
Net proportional MW capacity in operation	**49,539**	49,871	(332)

Year Ended December 31, 2022, as compared to 2021

EU&I's higher segment income is due to higher retail sales volumes and favorable weather, partially offset by higher depreciation and higher interest expense. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The variance was driven primarily by:

- a $2,332 million increase in fuel revenues primarily due to higher fuel prices and retail sales volumes;
- a $456 million increase in weather-normal retail sales volumes;
- a $293 million increase in retail base rate pricing due to general rate cases in North Carolina, net of rider impacts as well as multiyear rate adjustments in Florida;
- a $145 million increase in retail sales due to favorable weather compared to prior year;
- a $141 million increase in wholesale revenues primarily due to higher capacity volumes; and
- a $137 million increase in rider revenues primarily due to higher sales volumes and storm securitization in North Carolina.

Partially offset by:

- an $86 million decrease in capacity revenue primarily due to accelerated recovery of the retired coal units Crystal River 1 and 2 in 2021; and
- a $67 million decrease due to the Indiana Supreme Court ruling on recovery of certain coal ash costs.

Operating Expenses. The variance was driven primarily by:

- a $2,530 million increase in fuel used in electric generation and purchased power due to higher fuel prices and volumes from customer demand;
- a $299 million increase in depreciation and amortization primarily due to higher plant in service and resolution of prior year rate cases, partially offset by lower depreciation related to the extension of the lives of nuclear facilities;
- a $170 million increase in impairment of assets and other charges due to the Indiana court rulings on recovery of certain coal ash costs; and
- an $82 million increase in property and other taxes primarily due to higher property taxes as well as higher revenue related taxes.

Other Income and Expenses, net. The variance is primarily due to coal ash insurance litigation proceeds received in the prior year, partially offset by an increase in AFUDC equity due to higher capital expenditures.

Interest Expense. The variance was primarily driven by higher interest rates and outstanding debt balances.

Income Tax Expense. The increase in tax expense was primarily due to an increase in pretax income and a decrease in the amortization of excess deferred taxes. The ETRs for the years ended December 31, 2022, and 2021, were 12.0% and 11.3%, respectively. The increase in the ETR was primarily due to a decrease in the amortization of excess deferred taxes.

Gas Utilities and Infrastructure

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 2,840**	$ 2,112	$ 728
Operating Expenses			
Cost of natural gas	**1,276**	705	571
Operation, maintenance and other	**532**	442	90
Depreciation and amortization	**327**	303	24
Property and other taxes	**138**	120	18
Impairment of assets and other charges	**(12)**	19	(31)
Total operating expenses	**2,261**	1,589	672
Gains on Sales of Other Assets and Other, net	**1**	—	1
Operating Income	**580**	523	57
Other income and expenses, net	**78**	70	8
Interest Expense	**182**	142	40
Income Before Income Taxes	**476**	451	25
Income Tax Expense	**8**	55	(47)
Segment Income	**$ 468**	$ 396	$ 72
Piedmont Local Distribution Company (LDC) throughput (Dth)	**628,035,471**	542,759,891	85,275,580
Duke Energy Midwest LDC throughput (MCF)	**90,010,669**	85,787,624	4,223,045

Year Ended December 31, 2022, as compared to 2021

GU&I's results were impacted primarily by margin growth, partially offset by higher operation and maintenance costs and higher interest expense. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The variance was driven primarily by:

- a $383 million increase due to higher natural gas costs passed through to customers and higher volumes;
- a $213 million increase due to increased secondary marketing activity including higher off-system sales natural gas costs;
- a $64 million increase due to base rate increases;
- a $48 million increase due to rider revenues related to Ohio Capital Expenditure Program (CEP); and
- a $4 million increase due to customer growth.

Partially offset by:

- a $15 million decrease due to the MGP Settlement.

Operating Expenses. The variance was driven primarily by:

- a $383 million increase in cost of natural gas due to higher natural gas costs passed through to customers and higher volumes;
- a $188 million increase in cost of natural gas due to increased secondary marketing activity including higher off-system sales natural gas costs;
- a $90 million increase in operations, maintenance and other primarily due to the MGP settlement, higher spend on internal and contract labor costs, locates, fleet, and materials;
- a $24 million increase in depreciation and amortization due to additional plant in service and lower CEP deferrals; and
- an $18 million increase in property and other taxes due to lower CEP deferrals.

Partially offset by:

- a $31 million decrease in impairment of assets and other charges due to an impairment of propane caverns in 2021, which was partially reversed in 2022.

Interest Expense. The variance was primarily due to higher interest rates and outstanding debt balances and lower CEP Rider deferrals.

Income Tax Expense. The decrease in tax expense was primarily due to an increase in the amortization of excess deferred taxes related to the Ohio MGP Settlement, partially offset by an increase in pretax income. The ETRs for the years ended December 31, 2022, and 2021, were 1.7% and 12.2%, respectively. The decrease in the ETR was primarily due to an increase in the amortization of excess deferred taxes related to the Ohio MGP Settlement.

Other

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 122**	$ 113	$ 9
Operating Expenses	**298**	409	(111)
Gains (Losses) on Sales of Other Assets and Other, net	**14**	(1)	15
Operating Loss	**(162)**	(297)	135
Other Income and Expenses, net	**65**	125	(60)
Interest Expense	**778**	643	135
Loss Before Income Taxes	**(875)**	(815)	(60)
Income Tax Benefit	**(244)**	(281)	37
Less: Net Income Attributable to Noncontrolling Interests	**—**	1	(1)
Less: Preferred Dividends	**106**	106	—
Net Loss	**$ (737)**	$ (641)	$ (96)

Year Ended December 31, 2022, as compared to 2021

The higher net loss was driven by higher interest expense and lower return on investments, partially offset by higher equity earnings from the NMC investment and prior year obligations to the Duke Energy Foundation.

Operating Expenses. The decrease was primarily driven by prior year obligations to the Duke Energy Foundation, lower expense on certain employee benefit obligations and lower asset impairments to optimize the company's real estate portfolio and reduce office space.

Other Income and Expenses, net. The variance was primarily due to lower return on investments that fund certain employee benefit obligations, partially offset by higher equity earnings from the NMC investment.

Interest Expense. The variance was primarily due to higher interest rates and outstanding debt balances.

Income Tax Benefit. The decrease in the tax benefit was primarily due to a reduction of a valuation allowance relating to a capital loss carryforward in the prior year, partially offset by lower state tax benefit in the prior year. The ETRs for the years ended December 31, 2022, and 2021, were 27.9% and 34.5%, respectively. The decrease in the ETR was primarily due to a reduction of a valuation allowance relating to a capital loss carryforward in the prior year.

LOSS FROM DISCONTINUED OPERATIONS, NET OF TAX

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Loss From Discontinued Operations, net of tax	$ (1,323)	$ (144)	$ (1,179)

Year Ended December 31, 2022, as compared to December 31, 2021

The variance was primarily driven by the estimated impairment on the sale of the Commercial Renewables Disposal Groups in the current year.

SUBSIDIARY REGISTRANTS

Basis of Presentation

The results of operations and variance discussion for the Subsidiary Registrants is presented in a reduced disclosure format in accordance with General Instruction (I)(2)(a) of Form 10-K.

DUKE ENERGY CAROLINAS

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 7,857**	$ 7,102	$ 755
Operating Expenses			
Fuel used in electric generation and purchased power	**2,015**	1,601	414
Operation, maintenance and other	**1,892**	1,833	59
Depreciation and amortization	**1,526**	1,468	58
Property and other taxes	**340**	320	20
Impairment of assets and other charges	**26**	227	(201)
Total operating expenses	**5,799**	5,449	350
Gains on Sales of Other Assets and Other, net	**4**	2	2
Operating Income	**2,062**	1,655	407
Other Income and Expenses, net	**221**	270	(49)
Interest Expense	**557**	538	19
Income Before Income Taxes	**1,726**	1,387	339
Income Tax Expense	**126**	51	75
Net Income	**$ 1,600**	$ 1,336	$ 264

The following table shows the percent changes in GWh sales and average number of customers for Duke Energy Carolinas. The below percentages for retail customer classes represent billed sales only. Total sales includes billed and unbilled retail sales and wholesale sales to incorporated municipalities, public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	**2022**
Residential sales	**0.5 %**
General service sales	**4.0 %**
Industrial sales	**1.0 %**
Wholesale power sales	**1.3 %**
Joint dispatch sales	**0.9 %**
Total sales	**3.6 %**
Average number of customers	**1.8 %**

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by:

- a $396 million increase in fuel revenues driven by higher fuel prices and higher volumes;
- a $156 million increase in weather-normal retail sales volumes;
- a $78 million increase in retail sales due to favorable weather compared to prior year;
- a $63 million increase due to higher pricing from the North Carolina retail rate case, net of a return of EDIT to customers; and
- a $52 million increase in rider revenues primarily due to energy efficiency, storm securitization, and competitive procurement of renewable energy programs.

Operating Expenses. The variance was driven primarily by:

- a $414 million increase in fuel used in electric generation and purchased power primarily due to higher coal and natural gas prices and changes in the generation mix, partially offset by the recovery of fuel expenses;
- a $59 million increase in operation, maintenance and other expense primarily due to higher storm restoration costs, higher bad debt expense and higher nuclear outage and maintenance costs;
- a $58 million increase in depreciation and amortization primarily due to new depreciation rates associated with the North Carolina rate case and a higher depreciable base, partially offset by lower depreciation related to the extension of the lives of nuclear facilities; and
- a $20 million increase in property and other taxes due to higher franchise and property taxes and a prior year sales and use tax refund.

Partially offset by:

- a $201 million decrease in impairment of assets and other charges primarily due to the prior year South Carolina Supreme Court decision on coal ash.

Other Income and Expenses. The variance was driven by the coal ash insurance litigation proceeds received in the prior year, partially offset by an increase in AFUDC equity due to higher capital expenditures.

Interest Expense. The variance was driven by higher interest rates and outstanding debt balances.

Income Tax Expense. The increase in tax expense was primarily due to an increase in pretax income.

PROGRESS ENERGY

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 13,125**	$ 11,057	$ 2,068
Operating Expenses			
Fuel used in electric generation and purchased power	**5,078**	3,584	1,494
Operation, maintenance and other	**2,458**	2,529	(71)
Depreciation and amortization	**2,142**	1,929	213
Property and other taxes	**607**	542	65
Impairment of assets and other charges	**12**	82	(70)
Total operating expenses	**10,297**	8,666	1,631
Gains on Sales of Other Assets and Other, net	**11**	14	(3)
Operating Income	**2,839**	2,405	434
Other Income and Expenses, net	**181**	215	(34)
Interest Expense	**844**	794	50
Income Before Income Taxes	**2,176**	1,826	350
Income Tax Expense	**348**	227	121
Net Income	**1,828**	1,599	229
Less: Net Income Attributable to Noncontrolling Interests	**—**	1	(1)
Net Income Attributable to Parent	**$ 1,828**	$ 1,598	$ 230

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by:

- a $1,481 million increase in fuel revenues driven by higher fuel prices and higher volumes;
- a $249 million increase in weather-normal retail sales volumes;
- a $230 million increase in retail pricing due to the North Carolina rate case and base rate adjustments at Duke Energy Florida related to annual increases from the 2021 Settlement Agreement and the solar base rate adjustment;
- an $85 million increase in rider revenues due to higher revenues from the Storm Protection Plan at Duke Energy Florida and storm securitization and energy efficiency riders at Duke Energy Progress;
- a $53 million increase in wholesale revenues, net of fuel, due to higher capacity volumes; and
- a $43 million increase in retail sales due to favorable weather.

Partially offset by:

- an $86 million decrease in capacity revenue primarily due to accelerated recovery of retired Crystal River coal units in 2021.

Operating Expenses. The variance was driven primarily by:

- a $1,494 million increase in fuel used in electric generation and purchased power primarily due to higher demand and higher natural gas prices;
- a $213 million increase in depreciation and amortization primarily due to increased rates at Duke Energy Florida and higher amortization of deferred coal ash and storm costs at Duke Energy Progress, partially offset by the extension of the lives at nuclear facilities at Duke Energy Progress; and
- a $65 million increase in property and other taxes primarily due to an increase in gross receipts taxes at Duke Energy Florida and higher franchise and property taxes at Duke Energy Progress.

Partially offset by:

- a $71 million decrease in operation, maintenance and other expense primarily due to reduced storm amortization at Duke Energy Florida; and
- a $70 million decrease in impairment of assets and other charges due to the prior year South Carolina Supreme Court decision on coal ash and optimization of the company's real estate portfolio and reduction of office space.

Other Income and Expenses, net. The variance is primarily due to coal ash insurance litigation proceeds received in the prior year at Duke Energy Progress.

Interest Expense. The variance was driven primarily by higher interest expense and outstanding debt balances at Duke Energy Progress and Duke Energy Florida.

Income Tax Expense. The increase in tax expense was primarily due to an increase in pretax income and a decrease in the amortization of excess deferred taxes.

DUKE ENERGY PROGRESS

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 6,753**	$ 5,780	$ 973
Operating Expenses			
Fuel used in electric generation and purchased power	**2,492**	1,778	714
Operation, maintenance and other	**1,475**	1,467	8
Depreciation and amortization	**1,187**	1,097	90
Property and other taxes	**190**	159	31
Impairment of assets and other charges	**7**	63	(56)
Total operating expenses	**5,351**	4,564	787
Gains on Sales of Other Assets and Other, net	**4**	13	(9)
Operating Income	**1,406**	1,229	177
Other Income and Expenses, net	**114**	143	(29)
Interest Expense	**354**	306	48
Income Before Income Taxes	**1,166**	1,066	100
Income Tax Expense	**158**	75	83
Net Income	**$ 1,008**	$ 991	$ 17

The following table shows the percent changes in GWh sales and average number of customers for Duke Energy Progress. The below percentages for retail customer classes represent billed sales only. Total sales includes billed and unbilled retail sales and wholesale sales to incorporated municipalities, public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	**2022**
Residential sales	**(0.8)%**
General service sales	**7.5 %**
Industrial sales	**18.1 %**
Wholesale power sales	**2.5 %**
Joint dispatch sales	**27.5 %**
Total sales	**5.4 %**
Average number of customers	**1.9 %**

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by:

- a $699 million increase in fuel revenues driven by higher fuel prices and higher volumes;
- a $128 million increase due to higher pricing from the North Carolina retail rate case, net of a return of EDIT to customers;
- a $58 million increase in weather-normal retail sales volumes;
- a $39 million increase in rider revenues primarily due to storm securitization and energy efficiency riders, partially offset by the Renewable Energy Portfolio Standards rider;
- a $27 million increase in retail sales due to favorable weather compared to the prior year; and
- a $20 million increase in wholesale revenues, net of fuel, due to higher capacity volumes.

Operating Expenses. The variance was driven primarily by:

- a $714 million increase in fuel used in electric generation and purchased power primarily due to higher natural gas prices and changes in the generation mix, partially offset by the recovery of fuel expenses and lower coal expense;
- a $90 million increase in depreciation and amortization due to higher amortization of deferred coal ash costs and amortization related to deferred storm costs, partially offset by lower depreciation related to the extension of the lives of nuclear facilities; and
- a $31 million increase in property and other taxes due to higher franchise and property taxes and a prior year sales and use tax refund.

Partially offset by:

- a $56 million decrease in impairment of assets and other charges primarily due to the prior year South Carolina Supreme Court decision on coal ash and optimization of the company's real estate portfolio and reduction of office space.

Other Income and Expenses, net. The variance was primarily due to coal ash insurance litigation proceeds received in the prior year.

Interest Expense. The variance was driven primarily by higher outstanding debt balances.

Income Tax Expense. The increase in tax expense was primarily due to an increase in pretax income and a decrease in the amortization of excess deferred taxes.

DUKE ENERGY FLORIDA

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 6,353**	$ 5,259	$ 1,094
Operating Expenses			
Fuel used in electric generation and purchased power	**2,586**	1,806	780
Operation, maintenance and other	**967**	1,048	(81)
Depreciation and amortization	**955**	831	124
Property and other taxes	**421**	383	38
Impairment of assets and other charges	**4**	19	(15)
Total operating expenses	**4,933**	4,087	846
Gains on Sales of Other Assets and Other, net	**2**	1	1
Operating Income	**1,422**	1,173	249
Other Income and Expenses, net	**74**	71	3
Interest Expense	**362**	319	43
Income Before Income Taxes	**1,134**	925	209
Income Tax Expense	**225**	187	38
Net Income	**$ 909**	$ 738	$ 171

The following table shows the percent changes in GWh sales and average number of customers for Duke Energy Florida. The below percentages for retail customer classes represent billed sales only. Wholesale power sales include both billed and unbilled sales. Total sales includes billed and unbilled retail sales and wholesale sales to incorporated municipalities, public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	**2022**
Residential sales	**1.5 %**
General service sales	**3.5 %**
Industrial sales	**6.6 %**
Wholesale power sales	**38.7 %**
Total sales	**8.9 %**
Average number of customers	**1.7 %**

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by:

- a $782 million increase in fuel revenues driven by higher fuel prices and higher volumes;
- a $191 million increase in weather-normal retail sales volumes;
- a $102 million increase in retail pricing due to base rate adjustments related to annual increases from the 2021 Settlement agreement and the solar base rate adjustment;

- a $46 million increase in rider revenues primarily due to increased Storm Protection Plan rider revenue driven by higher debt and equity returns from increased capital expenditures in the current year;
- a $33 million increase in wholesale power revenues, net of fuel, primarily due to higher capacity revenues and bulk power sales; and
- a $16 million increase in retail sales due to favorable weather in the current year.

Partially offset by:

- an $86 million decrease in capacity revenue primarily due to accelerated recovery of the retired coal units Crystal River 1 and 2 in 2021.

Operating Expenses. The variance was driven primarily by:

- a $780 million increase in fuel used in electric generation and purchased power primarily due to higher natural gas prices;
- a $124 million increase in depreciation and amortization primarily due to an increase in depreciation rates starting in January 2022; and
- a $38 million increase in property and other taxes primarily due to an increase in gross receipt taxes driven by higher revenues.

Partially offset by:

- an $81 million decrease in operation, maintenance and other primarily due to reduced storm amortization and reduced vegetation management costs, partially offset by higher bad debt expense; and
- a $15 million decrease in impairment of assets and other charges due to the prior year optimization of the company's real estate portfolio and reduction of office space.

Interest Expense. The variance was driven by higher interest rates and outstanding debt balances.

Income Tax Expense. The increase in tax expense was primarily due to higher pretax income.

DUKE ENERGY OHIO

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues			
Regulated electric	**$ 1,798**	$ 1,493	$ 305
Regulated natural gas	**716**	544	172
Total operating revenues	**2,514**	2,037	477
Operating Expenses			
Fuel used in electric generation and purchased power	**657**	409	248
Cost of natural gas	**261**	136	125
Operation, maintenance and other	**523**	479	44
Depreciation and amortization	**324**	307	17
Property and other taxes	**369**	355	14
Impairment of assets and other charges	**(10)**	25	(35)
Total operating expenses	**2,124**	1,711	413
Gains on Sales of Other Assets and Other, net	**1**	1	—
Operating Income	**391**	327	64
Other Income and Expenses, net	**19**	18	1
Interest Expense	**129**	111	18
Income Before Income Taxes	**281**	234	47
Income Tax (Benefit) Expense	**(21)**	30	(51)
Net Income	**$ 302**	$ 204	$ 98

The following table shows the percent changes in GWh sales of electricity, MCF of natural gas delivered and average number of electric and natural gas customers for Duke Energy Ohio. The below percentages for retail customer classes represent billed sales only. Total sales includes billed and unbilled retail sales and wholesale sales to incorporated municipalities, public and private utilities and power marketers. Amounts are not weather-normalized.

	Electric	Natural Gas
Increase (Decrease) over prior year	**2022**	**2022**
Residential sales	**(0.5)%**	**13.7 %**
General service sales	**(2.1)%**	**1.3 %**
Industrial sales	**(6.8)%**	**0.7 %**
Wholesale electric power sales	**(11.0)%**	**n/a**
Other natural gas sales	**n/a**	**(3.6) %**
Total sales	**0.6 %**	**4.9 %**
Average number of customers	**1.3 %**	**0.6 %**

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by:

- a $372 million increase in fuel related revenues primarily due to higher retail sales volumes and higher fuel rates in the current year in response to an increase in natural gas prices and purchased power expense;
- a $55 million increase in retail revenue riders primarily due to the Ohio CEP and Distribution Capital Investment Rider (DCI);
- a $39 million increase in other electric revenues primarily due to Distribution Decoupling rider adjustments recorded in 2021;
- a $10 million increase in bulk power marketing sales; and
- a $10 million increase due to favorable weather in the current year.

Partially offset by:

- a $15 million decrease due to the MGP Settlement.

Operating Expenses. The variance was driven primarily by:

- a $373 million increase in fuel expense primarily driven by higher retail prices and increased volumes for natural gas and purchased power;
- a $44 million increase in operation, maintenance and other expense primarily due to the MGP Settlement, partially offset by employee related costs;
- a $17 million increase in depreciation and amortization primarily driven by increases in distribution plant in service and lower CEP deferrals, partially offset by rate case adjustments for the over amortization of meter assets in 2022; and
- a $14 million increase in property and other taxes primarily due to higher property taxes, higher kilowatt and natural gas distribution taxes and a lower Network Integration Transmission Services tax deferral.

Partially offset by:

- a $35 million decrease in impairment of assets and other charges primarily due to the prior year impairments related to the propane caverns in Ohio and the optimization of the company's real estate portfolio and reduction of office space, partially offset by the partial reversal of the propane cavern impairment in the current year.

Interest Expense. The variance was primarily due to higher interest rates, outstanding debt balances and post in-service carrying costs, partially offset by AFUDC debt.

Income Tax (Benefit) Expense. The decrease in tax expense was primarily due to an increase in the amortization of excess deferred taxes related to the MGP Settlement.

DUKE ENERGY INDIANA

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 3,922**	$ 3,174	$ 748
Operating Expenses			
Fuel used in electric generation and purchased power	**1,819**	985	834
Operation, maintenance and other	**729**	750	(21)
Depreciation and amortization	**645**	615	30
Property and other taxes	**75**	73	2
Impairment of assets and other charges	**388**	9	379
Total operating expenses	**3,656**	2,432	1,224
Operating Income	**266**	742	(476)
Other Income and Expenses, net	**36**	42	(6)
Interest Expense	**189**	196	(7)
Income Before Income Taxes	**113**	588	(475)
Income Tax (Benefit) Expense	**(24)**	107	(131)
Net Income	**$ 137**	$ 481	$ (344)

The following table shows the percent changes in GWh sales and average number of customers for Duke Energy Indiana. The below percentages for retail customer classes represent billed sales only. Total sales includes billed and unbilled retail sales and wholesale sales to incorporated municipalities, public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	**2022**
Residential sales	**(0.4)%**
General service sales	**1.8 %**
Industrial sales	**(12.1)%**
Wholesale power sales	**5.4 %**
Total sales	**1.9 %**
Average number of customers	**1.4 %**

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by*:*

- a $700 million increase in retail fuel revenues primarily due to higher fuel cost recovery driven by higher retail sales volumes and fuel prices;
- a $74 million increase primarily due to wholesale revenues, including fuel revenues, driven by higher rates and the bulk power marketing sharing provision;
- a $46 million increase in weather-normal retail sales volumes primarily due to higher nonresidential customer demand; and
- a $20 million increase in retail sales due to favorable weather.

Partially offset by:

- a $67 million decrease due to the Indiana Supreme Court ruling on recovery of certain coal ash costs;
- a $13 million decrease primarily due to the Utility Receipts Tax repeal; and
- a $12 million decrease primarily due to fixed bill plans and other electric revenues.

Operating Expenses. The variance was driven primarily by:

- an $834 million increase in fuel used in electric generation and purchased power primarily due to higher purchased power expense and higher natural gas and coal costs;
- a $379 million increase in impairment of assets and other charges primarily due to the Indiana court rulings on recovery of certain coal ash costs; and
- a $30 million increase in depreciation and amortization primarily due to additional plant in service, Step 2 rates true-up adjustment to depreciation expense and coal ash depreciation.

Partially offset by:

- a $21 million decrease in operation, maintenance and other primarily due to lower outage, base maintenance work and employee related costs.

Income Tax (Benefit) Expense. The decrease in tax expense was primarily due to a decrease in pretax income and an increase in the amortization of excess deferred income taxes.

PIEDMONT

Results of Operations

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Operating Revenues	**$ 2,124**	$ 1,569	$ 555
Operating Expenses			
Cost of natural gas	**1,015**	569	446
Operation, maintenance and other	**368**	327	41
Depreciation and amortization	**222**	213	9
Property and other taxes	**57**	55	2
Impairment of assets and other charges	**18**	10	8
Total operating expenses	**1,680**	1,174	506
Gains on Sales of Other Assets and Other, net	**4**	—	4
Operating Income	**448**	395	53
Other Income and Expenses, net	**54**	64	(10)
Interest Expense	**140**	119	21
Income Before Income Taxes	**362**	340	22
Income Tax Expense	**39**	30	9
Net Income	**$ 323**	$ 310	$ 13

The following table shows the percent changes in Dth delivered and average number of customers. The percentages for all throughput deliveries represent billed and unbilled sales. Amounts are not weather-normalized.

Increase (Decrease) over prior year	**2022**
Residential deliveries	5.0 %
Commercial deliveries	8.5 %
Industrial deliveries	1.2 %
Power generation deliveries	23.3 %
For resale	(4.3)%
Total throughput deliveries	15.7 %
Secondary market volumes	18.9 %
Average number of customers	1.4 %

The margin decoupling mechanism adjusts for variations in residential and commercial use per customer, including those due to weather and conservation. The weather normalization adjustment mechanisms mostly offset the impact of weather on bills rendered, but do not ensure full recovery of approved margin during periods when winter weather is significantly warmer or colder than normal.

Year Ended December 31, 2022, as compared to 2021

Operating Revenues. The variance was driven primarily by:

- a $257 million increase due to higher natural gas costs passed through to customers and higher volumes;
- a $213 million increase due to increased secondary marketing activity including higher off-system sales natural gas costs; and
- a $64 million increase due to base rate increases.

Operating Expenses. The variance was driven primarily by:

- a $257 million increase in cost of natural gas due to higher natural gas costs passed through to customers and higher volumes;
- a $189 million increase in cost of natural gas due to increased secondary marketing activity including higher off-system sales higher natural gas costs; and
- a $41 million increase in operation, maintenance and other due to higher spend on internal and contract labor costs, locates, fleet, materials and other.

Other Income and Expenses, net. The variance was driven primarily by a decrease in AFUDC equity base.

Interest Expense. The variance was primarily due to higher debt outstanding and interest rates.

Income Tax Expense. The increase in tax expense was primarily due to an increase in pretax income and a decrease in the amortization of excess deferred taxes.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Preparation of financial statements requires the application of accounting policies, judgments, assumptions and estimates that can significantly affect the reported results of operations, cash flows or the amounts of assets and liabilities recognized in the financial statements. Judgments made include the likelihood of success of particular projects, possible legal and regulatory challenges, earnings assumptions on pension and other benefit fund investments and anticipated recovery of costs, especially through regulated operations.

Management discusses these policies, estimates and assumptions with senior members of management on a regular basis and provides periodic updates on management decisions to the Audit Committee. Management believes the areas described below require significant judgment in the application of accounting policy or in making estimates and assumptions that are inherently uncertain and that may change in subsequent periods.

For further information, see Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies."

Regulated Operations Accounting

Substantially all of Duke Energy's regulated operations meet the criteria for application of regulated operations accounting treatment. As a result, Duke Energy is required to record assets and liabilities that would not be recorded for nonregulated entities. Regulatory assets generally represent incurred costs that have been deferred because such costs are probable of future recovery in customer rates. Regulatory liabilities are recorded when it is probable that a regulator will require Duke Energy to make refunds to customers or reduce rates to customers for previous collections or deferred revenue for costs that have yet to be incurred.

Management continually assesses whether recorded regulatory assets are probable of future recovery by considering factors such as:

- applicable regulatory environment changes;
- historical regulatory treatment for similar costs in Duke Energy's jurisdictions;
- litigation of rate orders;
- recent rate orders to other regulated entities;
- levels of actual return on equity compared to approved rates of return on equity; and
- the status of any pending or potential deregulation legislation.

If future recovery of costs ceases to be probable, asset write-offs would be recognized in operating income. Additionally, regulatory agencies can provide flexibility in the manner and timing of the depreciation of property, plant and equipment, recognition of asset retirement costs and amortization of regulatory assets, or may disallow recovery of all or a portion of certain assets.

As required by regulated operations accounting rules, significant judgment can be required to determine if an otherwise recognizable incurred cost qualifies to be deferred for future recovery as a regulatory asset. Significant judgment can also be required to determine if revenues previously recognized are for entity specific costs that are no longer expected to be incurred or have not yet been incurred and are therefore a regulatory liability.

For further information, see Note 4 to the Consolidated Financial Statements, "Regulatory Matters."

Goodwill Impairment Assessments

Duke Energy performed its annual goodwill impairment tests for all reporting units as of August 31, 2022. Additionally, Duke Energy monitors all relevant events and circumstances during the year to determine if an interim impairment test is required. Such events and circumstances include an adverse regulatory outcome, declining financial performance and deterioration of industry or market conditions. As of August 31, 2022, all of the reporting units' estimated fair value of equity substantially exceeded the carrying value of equity. The fair values of the reporting units were calculated using a weighted combination of the income approach, which estimates fair value based on discounted cash flows, and the market approach, which estimates fair value based on market comparables within the utility and energy industries.

Estimated future cash flows under the income approach are based on Duke Energy's internal business plan. Significant assumptions used are growth rates, future rates of return expected to result from ongoing rate regulation and discount rates. Management determines the appropriate discount rate for each of its reporting units based on the Weighted Average Cost of Capital (WACC) for each individual reporting unit. The WACC takes into account both the after-tax cost of debt and cost of equity. A major component of the cost of equity is the current risk-free rate on 20-year U.S. Treasury bonds. In the 2022 impairment tests, Duke Energy considered implied WACCs for certain peer companies in determining the appropriate WACC rates to use in its analysis. As each reporting unit has a different risk profile based on the nature of its operations, including factors such as regulation, the WACC for each reporting unit may differ. Accordingly, the WACCs were adjusted, as appropriate, to account for company specific risk premiums. The discount rates used for calculating the fair values as of August 31, 2022, for each of Duke Energy's reporting units ranged from 6.6% to 6.9%. The underlying assumptions and estimates are made as of a point in time. Subsequent changes, particularly changes in the discount rates, authorized regulated rates of return or growth rates inherent in management's estimates of future cash flows, could result in future impairment charges.

One of the most significant assumptions utilized in determining the fair value of reporting units under the market approach is implied market multiples for certain peer companies. Management selects comparable peers based on each peer's primary business mix, operations, and market capitalization compared to the applicable reporting unit and calculates implied market multiples based on available projected earnings guidance and peer company market values as of August 31. The implied market multiples used for calculating the fair values as of August 31, 2022, for each of Duke Energy's reporting units ranged from 10.3 to 13.6.

Duke Energy primarily operates in environments that are rate-regulated. In such environments, revenue requirements are adjusted periodically by regulators based on factors including levels of costs, sales volumes and costs of capital. Accordingly, Duke Energy's regulated utilities operate to some degree with a buffer from the direct effects, positive or negative, of significant swings in market or economic conditions. However, significant changes in discount rates or implied market multiples over a prolonged period may have a material impact on the fair value of equity.

Duke Energy has $19.3 billion in Goodwill at both December 31, 2022, and 2021. For further information, see Note 12 to the Consolidated Financial Statements, "Goodwill and Intangible Assets."

Asset Retirement Obligations

AROs are recognized for legal obligations associated with the retirement of property, plant and equipment at the present value of the projected liability in the period in which it is incurred, if a reasonable estimate of fair value can be made. Duke Energy has $12.7 billion and $12.6 billion of AROs as of December 31, 2022, and 2021, respectively. See Note 10, "Asset Retirement Obligations," for further details including a rollforward of related liabilities.

The present value of the initial obligation and subsequent updates are based on discounted cash flows, which include estimates regarding the amount and timing of future cash flows, regulatory, legal, and legislative decisions, selection of discount rates and cost escalation rates, among other factors. These estimates are subject to change.

Obligations for nuclear decommissioning are based on site-specific cost studies. Duke Energy Carolinas and Duke Energy Progress assume prompt dismantlement of the nuclear facilities after operations are ceased. During 2020, Duke Energy Florida, closed an agreement for the accelerated decommissioning of the Crystal River Unit 3 nuclear power station after receiving approval from the NRC and FPSC. The retirement obligations for the decommissioning of Crystal River Unit 3 nuclear power station are measured based on accelerated decommissioning from 2020 continuing through 2027. Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida also assume that spent fuel will be stored on-site until such time that it can be transferred to a yet to be built DOE facility.

Obligations for closure of ash basins are based upon discounted cash flows of estimated costs for site-specific plans. In prior years, certain ash basins have had probability weightings applied to them based on different potential closure methods and the probabilities surrounding pending legal changes.

For further information, see Notes 4, 5 and 10 to the Consolidated Financial Statements, "Regulatory Matters," "Commitments and Contingencies" and "Asset Retirement Obligations."

Discontinued Operations

Duke Energy calculated an estimated impairment on the disposition of its Commercial Renewables Disposal Groups as of December 31, 2022. The impairment was recorded to write-down the carrying amount to fair value, less cost to sell. The fair value was primarily determined from the income approach using discounted cash flows, but also considered market information obtained through the bidding process. Estimated future cash flows under the income approach were based on Duke Energy's forecast, which was informed by existing power purchase agreements with offtakers and forward merchant curves. Significant assumptions used in the income approach include forward merchant curves and discount rates. The discount rates take into account both the after-tax cost of debt and cost of equity.

The actual loss will be recorded based on final sales agreements and could be materially different than the estimated loss.

For further information, See Note 2 to the Consolidated Financial Statements, "Dispositions."

LIQUIDITY AND CAPITAL RESOURCES

Sources and Uses of Cash

Duke Energy relies primarily upon cash flows from operations, debt and equity issuances and its existing cash and cash equivalents to fund its liquidity and capital requirements. Duke Energy's capital requirements arise primarily from capital and investment expenditures, repaying long-term debt and paying dividends to shareholders. Additionally, due to its existing tax attributes and projected tax credits to be generated relating to the IRA, Duke Energy does not expect to be a significant federal cash taxpayer until around 2030.

Capital Expenditures

Duke Energy continues to focus on reducing risk and positioning its business for future success and will invest principally in its strongest business sectcrs. Duke Energy's projected capital and investment expenditures, including AFUDC debt and capitalized interest, for the next three fiscal years are included in the table below.

(in millions)		2023	2024	2025
Electric Generation[(a)]	$	1,650	$ 1,950	$ 3,150
Electric Transmission		1,550	1,925	1,850
Electric Distribution		3,750	3,750	4,100
Environmental and Other		675	500	475
EU&I Growth Capital		7,625	8,125	9,575
Maintenance		2,800	2,625	2,425
Total EU&I		10,425	10,750	12,000
GU&I		1,375	1,150	975
Other		400	375	425
Total projected capital and investment expenditures	$	12,200	$ 12,275	$ 13,400

(a) Includes nuclear fuel of approximately $1.9 billion in 2023-2025.

Debt

Long-term debt maturities and the interest payable on long-term debt each represent a significant cash requirement for the Duke Energy Registrants. See Note 7 to the Consolidated Financial Statements, "Debt and Credit Facilities," for information regarding the Duke Energy Registrants' long-term debt at December 31, 2022, the weighted average interest rate applicable to each long-term debt category and a schedule of long-term debt maturities over the next five years.

Fuel and Purchased Power

Fuel and purchased power includes firm capacity payments that provide Duke Energy with uninterrupted firm access to electricity transmission capacity and natural gas transportation contracts, as well as undesignated contracts and contracts that qualify as NPNS. Duke Energy's contractual cash obligations for fuel and purchased power as of December 31, 2022, are as follows:

		Payments Due by Period			
(in millions)	Total	Less than 1 year (2023)	2-3 years (2024 & 2025)	4-5 years (2026 & 2027)	More than 5 years (2028 & beyond)
Fuel and purchased power	$ 23,255	$ 5,840	$ 7,277	$ 3,674	$ 6,464

Other Purchase Obligations

Other purchase obligations includes contracts for software, telephone, data and consulting or advisory services, contractual obligations for Engineering, Procurement, and Construction agreement costs for new generation plants, solar facilities, plant refurbishments, maintenance and day-to-day contract work and commitments to buy certain products. Amount excludes certain open purchase orders for services that are provided on demand for which the timing of the purchase cannot be determined. Total cash commitments for related other purchase obligation expenditures are $12,095 million, with $11,118 million expected to be paid in the next 12 months.

See Note 6 to the Consolidated Financial Statements, "Leases" for a schedule of both finance lease and operating lease payments over the next five years. See Note 10 to the Consolidated Financial Statements, "Asset Retirement Obligations" for information on nuclear decommissioning trust funding obligations and the closure of ash impoundments.

Duke Energy performs ongoing assessments of its respective guarantee obligations to determine whether any liabilities have been incurred as a result of potential increased nonperformance risk by third parties for which Duke Energy has issued guarantees. See Note 8 to the Consolidated Financial Statements, "Guarantees and Indemnifications," for further details of the guarantee arrangements. Issuance of these guarantee arrangements is not required for the majority of Duke Energy's operations. Thus, if Duke Energy discontinued issuing these guarantees, there would not be a material impact to the consolidated results of operations, cash flows or financial position. Other than the guarantee arrangements discussed in Note 8 and off-balance sheet debt related to non-consolidated VIEs, Duke Energy does not have any material off-balance sheet financing entities or structures. For additional information, see Note 18 to the Consolidated Financial Statements, "Variable Interest Entities."

Cash and Liquidity

The Subsidiary Registrants generally maintain minimal cash balances and use short-term borrowings to meet their working capital needs and other cash requirements. The Subsidiary Registrants, excluding Progress Energy, support their short-term borrowing needs through participation with Duke Energy and certain of its other subsidiaries in a money pool arrangement. The companies with short-term funds may provide short-term loans to affiliates participating under this arrangement. See Note 7 to the Consolidated Financial Statements, "Debt and Credit Facilities," for additional discussion of the money pool arrangement.

Duke Energy and the Subsidiary Registrants, excluding Progress Energy, may also use short-term debt, including commercial paper and the money pool, as a bridge to long-term debt financings. The levels of borrowing may vary significantly over the course of the year due to the timing of long-term debt financings and the impact of fluctuations in cash flows from operations. From time to time, Duke Energy's current liabilities exceed current assets resulting from the use of short-term debt as a funding source to meet scheduled maturities of long-term debt, as well as cash needs, which can fluctuate due to the seasonality of its businesses.

As of December 31, 2022, Duke Energy had approximately $409 million of cash on hand, $5.2 billion available under its $9 billion Master Credit Facility. Duke Energy expects to have sufficient liquidity in the form of cash on hand, cash from operations and available credit capacity to support its funding needs. Refer to Notes 7 and 20 to the Consolidated Financial Statements, "Debt and Credit Facilities" and "Stockholders' Equity," respectively, for information regarding Duke Energy's debt and equity issuances, debt maturities and available credit facilities including the Master Credit Facility.

Credit Facilities and Registration Statements

See Note 7 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding credit facilities and shelf registration statements available to Duke Energy and the Duke Energy Registrants.

Dividend Payments

In 2022, Duke Energy paid quarterly cash dividends for the 96th consecutive year and expects to continue its policy of paying regular cash dividends in the future. There is no assurance as to the amount of future dividends because they depend on future earnings, capital requirements, financial condition and are subject to the discretion of the Board of Directors.

Duke Energy targets a dividend payout ratio of between 65% and 75%, based upon adjusted EPS. Duke Energy increased the dividend by approximately 2% annually in both 2022 and 2021, and the company remains committed to continued growth of the dividend.

Dividend and Other Funding Restrictions of Duke Energy Subsidiaries

As discussed in Note 4 to the Consolidated Financial Statements, “Regulatory Matters,” Duke Energy’s public utility operating companies have restrictions on the amount of funds that can be transferred to Duke Energy through dividends, advances or loans as a result of conditions imposed by various regulators in conjunction with merger transactions. Duke Energy Progress and Duke Energy Florida also have restrictions imposed by their first mortgage bond indentures and Articles of Incorporation, which in certain circumstances, limit their ability to make cash dividends or distributions on common stock. Additionally, certain other Duke Energy subsidiaries have other restrictions, such as minimum working capital and tangible net worth requirements pursuant to debt and other agreements that limit the amount of funds that can be transferred to Duke Energy. At December 31, 2022, the amount of restricted net assets of subsidiaries of Duke Energy that may not be distributed to Duke Energy in the form of a loan or dividend does not exceed a material amount of Duke Energy’s net assets. Duke Energy does not have any legal or other restrictions on paying common stock dividends to shareholders out of its consolidated equity accounts. Although these restrictions cap the amount of funding the various operating subsidiaries can provide to Duke Energy, management does not believe these restrictions will have a significant impact on Duke Energy’s ability to access cash to meet its payment of dividends on common stock and other future funding obligations.

Cash Flows From Operating Activities

Cash flows from operations of EU&I and GU&I are primarily driven by sales of electricity and natural gas, respectively, and costs of operations. These cash flows from operations are relatively stable and comprise a substantial portion of Duke Energy’s operating cash flows. Weather conditions, working capital and commodity price fluctuations and unanticipated expenses including unplanned plant outages, storms, legal costs and related settlements can affect the timing and level of cash flows from operations.

As part of Duke Energy’s continued effort to improve its cash flows from operations and liquidity, Duke Energy works with vendors to improve terms and conditions, including the extension of payment terms. To support this effort, Duke Energy established a supply chain finance program (the “program”) in 2020, under which suppliers, at their sole discretion, may sell their receivables from Duke Energy to the participating financial institution. The financial institution administers the program. Duke Energy does not issue any guarantees with respect to the program and does not participate in negotiations between suppliers and the financial institution. Duke Energy does not have an economic interest in the supplier’s decision to participate in the program and receives no interest, fees or other benefit from the financial institution based on supplier participation in the program. Suppliers’ decisions on which invoices are sold do not impact Duke Energy’s payment terms, which are based on commercial terms negotiated between Duke Energy and the supplier regardless of program participation. A significant deterioration in the credit quality of Duke Energy, economic downturn or changes in the financial markets could limit the financial institutions willingness to participate in the program. Duke Energy does not believe such risk would have a material impact on our cash flows from operations or liquidity, as substantially all our payments are made outside the program.

Duke Energy believes it has sufficient liquidity resources through the commercial paper markets, and ultimately, the Master Credit Facility, to support these operations. Cash flows from operations are subject to a number of other factors, including, but not limited to, regulatory constraints, economic trends and market volatility (see Item 1A, “Risk Factors,” for additional information).

Debt Issuances

Depending on availability based on the issuing entity, the credit rating of the issuing entity, and market conditions, the Subsidiary Registrants prefer to issue first mortgage bonds and secured debt, followed by unsecured debt. This preference is the result of generally higher credit ratings for first mortgage bonds and secured debt, which typically result in lower interest costs. Duke Energy Corporation primarily issues unsecured debt.

In 2023, Duke Energy anticipates issuing additional securities of $6.7 billion through debt capital markets. In certain instances Duke Energy may utilize instruments other than senior notes, including equity-content securities such as subordinated debt or preferred stock. Proceeds will primarily be for the purpose of funding capital expenditures and debt maturities. See to Note 7 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding significant debt issuances.

Duke Energy's capitalization is balanced between debt and equity as shown in the table below.

	Projected 2023	Actual 2022	Actual 2021
Equity	41 %	**41 %**	43 %
Debt	59 %	**59 %**	57 %

Restrictive Debt Covenants

Duke Energy's debt and credit agreements contain various financial and other covenants. Duke Energy's Master Credit Facility contains a covenant requiring the debt-to-total capitalization ratio to not exceed 65% for each borrower, excluding Piedmont, and 70% for Piedmont. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements or sublimits thereto. As of December 31, 2022, Duke Energy presented approximately $131 million of long-term debt as current on the Consolidated Balance Sheet as a result of a technical default due to the bankruptcy filing of a Duke Energy customer. The Duke Energy Registrants were in compliance with all other covenants related to their debt agreements as of December 31, 2022. In addition, some credit agreements may allow for acceleration of payments or termination of the agreements due to nonpayment, or acceleration of other significant indebtedness of the borrower or some of its subsidiaries. None of the debt or credit agreements contain material adverse change clauses.

Credit Ratings

Moody's Investors Service, Inc. and S&P provide credit ratings for various Duke Energy Registrants. The following table includes Duke Energy and certain subsidiaries' credit ratings and ratings outlook as of February 2023.

	Moody's	S&P
Duke Energy Corporation	Stable	Stable
Issuer Credit Rating	Baa2	BBB+
Senior Unsecured Debt	Baa2	BBB
Junior Subordinated Debt/Preferred Stock	Baa3	BBB-
Commercial Paper	P-2	A-2
Duke Energy Carolinas	Stable	Stable
Senior Secured Debt	Aa3	A
Senior Unsecured Debt	A2	BBB+
Progress Energy	Stable	Stable
Senior Unsecured Debt	Baa1	BBB
Duke Energy Progress	Stable	Stable
Senior Secured Debt	Aa3	A
Duke Energy Florida	Stable	Stable
Senior Secured Debt	A1	A
Senior Unsecured Debt	A3	BBB+
Duke Energy Ohio	Stable	Stable
Senior Secured Debt	A2	A
Senior Unsecured Debt	Baa1	BBB+
Duke Energy Indiana	Stable	Stable
Senior Secured Debt	Aa3	A
Senior Unsecured Debt	A2	BBB+
Duke Energy Kentucky	Stable	Stable
Senior Unsecured Debt	Baa1	BBB+
Piedmont Natural Gas	Stable	Stable
Senior Unsecured	A3	BBB+

Credit ratings are intended to provide credit lenders a framework for comparing the credit quality of securities and are not a recommendation to buy, sell or hold. The Duke Energy Registrants' credit ratings are dependent on the rating agencies' assessments of their ability to meet their debt principal and interest obligations when they come due. If, as a result of market conditions or other factors, the Duke Energy Registrants are unable to maintain current balance sheet strength, or if earnings and cash flow outlook materially deteriorates, credit ratings could be negatively impacted.

Cash Flow Information

The following table summarizes Duke Energy's cash flows for the two most recently completed fiscal years.

	Years Ended December 31,	
(in millions)	**2022**	**2021**
Cash flows provided by (used in):		
Operating activities	**$ 5,927**	$ 8,290
Investing activities	**(11,973)**	(10,935)
Financing activities	**6,129**	2,609
Net increase (decrease) in cash, cash equivalents and restricted cash	**83**	(36)
Cash, cash equivalents and restricted cash at beginning of period	**520**	556
Cash, cash equivalents and restricted cash at end of period	**$ 603**	$ 520

OPERATING CASH FLOWS

The following table summarizes key components of Duke Energy's operating cash flows for the two most recently completed fiscal years.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Net income	**$ 2,455**	$ 3,579	$ (1,124)
Non-cash adjustments to net income	**7,385**	5,941	1,444
Contributions to qualified pension plans	**(58)**	—	(58)
Payments for AROs	**(584)**	(540)	(44)
Working capital	**(2,081)**	(897)	(1,184)
Other assets and Other liabilities	**(1,190)**	207	(1,397)
Net cash provided by operating activities	**$ 5,927**	$ 8,290	$ (2,363)

The variance was driven primarily by:

- a $1,184 million increase in cash outflows from working capital and a $1,397 million increase in cash outflows from Other assets and Other liabilities primarily due to an increase in under-collected fuel used in generation due to higher commodity costs.

Partially offset by:

- a $320 million increase in net income after adjustment for non-cash items primarily due to higher revenues from rate cases in various jurisdictions, favorable weather and volumes, partially offset by an estimated impairment on the Commercial Renewables Disposal Groups.

INVESTING CASH FLOWS

The following table summarizes key components of Duke Energy's investing cash flows for the two most recently completed fiscal years.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Capital, investment and acquisition expenditures, net of return of investment capital	**$ (11,419)**	$ (9,752)	$ (1,667)
Debt and equity securities, net	**90**	5	85
Disbursements to canceled equity method investments	**—**	(855)	855
Other investing items	**(644)**	(333)	(311)
Net cash used in investing activities	**$ (11,973)**	$ (10,935)	$ (1,038)

The variance relates primarily to an increase in capital expenditures due to higher investments in EU&I, partially offset by a payment made in 2021 to fund ACP's outstanding debt. The primary use of cash related to investing activities is typically capital, investment and acquisition expenditures, net of return of investment capital detailed by reportable business segment in the following table.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Electric Utilities and Infrastructure	**$ 8,985**	$ 7,653	$ 1,332
Gas Utilities and Infrastructure	**1,295**	1,271	24
Other	**1,139**	828	311
Total capital, investment and acquisition expenditures, net of return of investment capital	**$ 11,419**	$ 9,752	$ 1,667

FINANCING CASH FLOWS

The following table summarizes key components of Duke Energy's financing cash flows for the two most recently completed fiscal years.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**Variance**
Issuances of long-term debt, net	**$ 7,478**	$ 3,758	$ 3,720
Notes payable and commercial paper	**574**	479	95
Dividends paid	**(3,179)**	(3,114)	(65)
Contributions from noncontrolling interests	**1,377**	1,575	(198)
Other financing items	**(121)**	(89)	(32)
Net cash provided by financing activities	**$ 6,129**	$ 2,609	$ 3,520

The variance was driven primarily by:

- a $3,720 million net increase in proceeds from issuances of long-term debt, primarily due to timing of issuances and redemptions of long-term debt.

Partially offset by:

- a $198 million decrease in contributions from noncontrolling interests, primarily due to fewer project investments financed by tax equity being placed into service in the current year.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Risk Management Policies

The Enterprise Risk Management policy framework at Duke Energy includes strategy, operational, project execution and financial or transaction related risks. Enterprise Risk Management includes market risk as part of the financial and transaction related risks in its framework.

Duke Energy is exposed to market risks associated with commodity prices, interest rates and equity prices. Duke Energy has established comprehensive risk management policies to monitor and manage these market risks. Duke Energy's Chief Executive Officer and Chief Financial Officer are responsible for the overall approval of market risk management policies and the delegation of approval and authorization levels. The Finance and Risk Management Committee of the Board of Directors receives periodic updates from the Chief Risk Officer and other members of management on market risk positions, corporate exposures and overall risk management activities. The Chief Risk Officer is responsible for the overall governance of managing commodity price risk, including monitoring exposure limits.

The following disclosures about market risk contain forward-looking statements that involve estimates, projections, goals, forecasts, assumptions, risks and uncertainties that could cause actual results or outcomes to differ materially from those expressed in the forward-looking statements. See Item 1A, "Risk Factors," and "Cautionary Statement Regarding Forward-Looking Information" for a discussion of the factors that may impact any such forward-looking statements made herein.

Commodity Price Risk

Price risk represents the potential risk of loss from adverse changes in the market price of electricity or other energy commodities. Duke Energy's exposure to commodity price risk is influenced by a number of factors, including the effects of regulation, commodity contract size and length, market liquidity, market conditions, location and unique or specific contract terms. Duke Energy is exposed to the impact of market fluctuations in the prices of electricity, coal, natural gas and other energy-related products marketed and purchased as a result of its ownership of energy-related assets.

Duke Energy's exposure to these fluctuations through its regulated utility operations is limited since these operations are subject to cost-based regulation and are typically allowed to recover substantially all of these costs through various cost recovery clauses, including fuel clauses, formula-based contracts, or other cost-sharing mechanisms. While there may be a delay in timing between when these costs are incurred and when they are recovered through rates, changes from year to year generally do not have a material impact on operating results of these regulated operations.

Duke Energy employs established policies and procedures to manage risks associated with these market fluctuations, which may include using various commodity derivatives, such as swaps, futures, forwards and options. For additional information, see Note 15 to the Consolidated Financial Statements, "Derivatives and Hedging."

Generation Portfolio Risks

For the EU&I segment, the generation portfolio not utilized to serve retail operations or committed load is subject to commodity price fluctuations. However, the impact on the Consolidated Statements of Operations is limited due to mechanisms in these regulated jurisdictions that result in the sharing of most of the net profits from these activities with retail customers.

Hedging Strategies

Duke Energy monitors risks associated with commodity price changes on its future operations and, where appropriate, uses various commodity instruments such as electricity, coal and natural gas hedging contracts and options to mitigate the effect of such fluctuations on operations. Duke Energy's primary use of energy commodity derivatives is to hedge against exposure to the prices of power, fuel for generation and natural gas for customers.

Duke Energy also manages its exposure to basis risk through the use of congestion hedge products in RTOs such as financial transmission rights (PJM and MISO), which result in payments based on differentials in locational marginal prices. The majority of instruments used to manage Duke Energy's commodity price exposure are either not designated as hedges or do not qualify for hedge accounting. These instruments are referred to as undesignated contracts. Mark-to-market changes for undesignated contracts entered into by regulated businesses are reflected as regulatory assets or liabilities on the Consolidated Balance Sheets.

Duke Energy may also enter into other contracts that qualify for the NPNS exception. When a contract meets the criteria to qualify as NPNS, Duke Energy applies such exception. Income recognition and realization related to NPNS contracts generally coincide with the physical delivery of the commodity. For contracts qualifying for the NPNS exception, no recognition of the contract's fair value in the Consolidated Financial Statements is required until settlement of the contract as long as the transaction remains probable of occurring.

Interest Rate Risk

Duke Energy is exposed to risk resulting from changes in interest rates as a result of its issuance or anticipated issuance of variable and fixed-rate debt and commercial paper. Duke Energy manages interest rate exposure by limiting variable-rate exposures to a percentage of total debt and by monitoring the effects of market changes in interest rates. Duke Energy also enters into financial derivative instruments, which may include instruments such as, but not limited to, interest rate swaps, swaptions and U.S. Treasury lock agreements to manage and mitigate interest rate risk exposure. See Notes 1, 7, 15 and 17 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies," "Debt and Credit Facilities," "Derivatives and Hedging," and "Fair Value Measurements."

Duke Energy had $9.2 billion of unhedged long- and short-term floating interest rate exposure at December 31, 2022. The impact of a 100-basis point change in interest rates on pretax income is approximately $92 million at December 31, 2022. This amount was estimated by considering the impact of the hypothetical interest rates on variable-rate securities outstanding, adjusted for interest rate hedges as of December 31, 2022.

Foreign Currency Exchange Risk

Duke Energy is exposed to risk resulting from changes in the foreign currency exchange rates as a result of its issuances of long-term debt denominated in a foreign currency. Duke Energy manages foreign currency exchange risk exposure by entering into cross-currency swaps, a type of financial derivative instrument, which mitigate foreign currency exchange exposure. See Notes 7, 15 and 17 to the Consolidated Financial Statements, "Debt and Credit Facilities," "Derivatives and Hedging" and "Fair Value Measurements," respectively.

Credit Risk

Credit risk represents the loss that the Duke Energy Registrants would incur if a counterparty fails to perform under its contractual obligations. Where exposed to credit risk, the Duke Energy Registrants analyze the counterparty's financial condition prior to entering into an agreement and monitor exposure on an ongoing basis. The Duke Energy Registrants establish credit limits where appropriate in the context of contractual arrangements and monitor such limits.

To reduce credit exposure, the Duke Energy Registrants seek to include netting provisions with counterparties, which permit the offset of receivables and payables with such counterparties. The Duke Energy Registrants also frequently use master agreements with credit support annexes to further mitigate certain credit exposures. The master agreements provide for a counterparty to post cash or letters of credit to the exposed party for exposure in excess of an established threshold. The threshold amount represents a negotiated unsecured credit limit for each party to the agreement, determined in accordance with the Duke Energy Registrants' internal corporate credit practices and standards. Collateral agreements generally also provide that the failure to post collateral when required is sufficient cause to terminate transactions and liquidate all positions.

The Duke Energy Registrants also obtain cash, letters of credit, or surety bonds from certain counterparties to provide credit support outside of collateral agreements, where appropriate, based on a financial analysis of the counterparty and the regulatory or contractual terms and conditions applicable to each transaction. See Note 15 to the Consolidated Financial Statements, "Derivatives and Hedging," for additional information regarding credit risk related to derivative instruments.

The Duke Energy Registrants' principal counterparties for its electric and natural gas businesses are RTOs, distribution companies, municipalities, electric cooperatives and utilities located throughout the U.S. Exposure to these entities consists primarily of amounts due to Duke Energy Registrants for delivered electricity. Additionally, there may be potential risks associated with remarketing of energy and capacity in the event of default by wholesale power customers. The Duke Energy Registrants have concentrations of receivables from certain of such entities that may affect the Duke Energy Registrants' credit risk.

The Duke Energy Registrants are also subject to credit risk from transactions with their suppliers that involve prepayments or milestone payments in conjunction with outsourcing arrangements, major construction projects and certain commodity purchases. The Duke Energy Registrants' credit exposure to such suppliers may take the form of increased costs or project delays in the event of nonperformance. The Duke Energy Registrants' frequently require guarantees or letters of credit from suppliers to mitigate this credit risk.

Credit risk associated with the Duke Energy Registrants' service to residential, commercial and industrial customers is generally limited to outstanding accounts receivable. The Duke Energy Registrants mitigate this credit risk by requiring tariff customers to provide a cash deposit, letter of credit or surety bond until a satisfactory payment history is established, subject to the rules and regulations in effect in each retail jurisdiction at which time the deposit is typically refunded. Charge-offs for retail customers have historically been insignificant to the operations of the Duke Energy Registrants and are typically recovered through retail rates. Management continually monitors customer charge-offs, payment patterns and the impact of current economic conditions on customers' ability to pay their outstanding balance to ensure the adequacy of bad debt reserves.

In response to the COVID-19 pandemic that began in March 2020, the Duke Energy Registrants announced a suspension of disconnections for nonpayment to assist customers during the national emergency. While disconnections have resumed, the company continued to offer flexible options to customers struggling with the pandemic and the economic fallout, including extended payment arrangements to satisfy delinquent balances through June 2021. Since then, the company has resumed standard payment arrangement options. The Duke Energy Registrants are monitoring the effects of the resultant economic slowdown on counterparties' abilities to perform under their contractual obligations. The Duke Energy Registrants experienced higher charge-offs during 2022, and higher utility account balances in arrears as of December 31, 2022. There is an expectation for the increase in charge-offs to continue in the near term. The Duke Energy Registrants have reserved for these estimated losses in the allowance for doubtful account balance. See Notes 4 and 19 to the Consolidated Financial Statements, "Regulatory Matters" and "Revenue," respectively, for more information. Duke Energy Ohio and Duke Energy Indiana sell certain of their accounts receivable and related collections through CRC, a Duke Energy consolidated VIE. Losses on collection are first absorbed by the equity of CRC and next by the subordinated retained interests held by Duke Energy Ohio, Duke Energy Kentucky and Duke Energy Indiana. See Note 18 to the Consolidated Financial Statements, "Variable Interest Entities."

The Duke Energy Registrants provide certain non-tariff services, primarily to large commercial and industrial customers in which incurred costs, including invested capital, are intended to be recovered from the individual customer and therefore are not subject to rate recovery in the event of customer default. Customer creditworthiness is assessed prior to entering into these transactions. Credit concentration related to these transactions exists for certain of these customers.

Duke Energy Carolinas has third-party insurance to cover certain losses related to asbestos-related injuries and damages above an aggregate self-insured retention. See Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies" for information on asbestos-related injuries and damages claims.

The Duke Energy Registrants also have credit risk exposure through issuance of performance and financial guarantees, letters of credit and surety bonds on behalf of less than wholly owned entities and third parties. Where the Duke Energy Registrants have issued these guarantees, it is possible that they could be required to perform under these guarantee obligations in the event the obligor under the guarantee fails to perform. Where the Duke Energy Registrants have issued guarantees related to assets or operations that have been disposed of via sale, they attempt to secure indemnification from the buyer against all future performance obligations under the guarantees. See Note 8 to the Consolidated Financial Statements, "Guarantees and Indemnifications," for further information on guarantees issued by the Duke Energy Registrants.

Duke Energy is subject to credit risk from transactions with counterparties to cross-currency swaps related to future interest and principal payments. The credit exposure to such counterparties may take the form of higher costs to meet Duke Energy's future euro-denominated interest and principal payments in the event of counterparty default. Duke Energy selects highly rated banks as counterparties and allocates the hedge for each debt issuance across multiple counterparties. The master agreements with the counterparties impose collateral requirements on the parties in certain circumstances indicative of material deterioration in a party's creditworthiness.

Based on the Duke Energy Registrants' policies for managing credit risk, their exposures and their credit and other reserves, the Duke Energy Registrants do not currently anticipate a materially adverse effect on their consolidated financial position or results of operations as a result of nonperformance by any counterparty.

Marketable Securities Price Risk

As described further in Note 16 to the Consolidated Financial Statements, "Investments in Debt and Equity Securities," Duke Energy invests in debt and equity securities as part of various investment portfolios to fund certain obligations. The vast majority of investments in equity securities are within the NDTF and assets of the various pension and other post-retirement benefit plans.

Pension Plan Assets

Duke Energy maintains investments to facilitate funding the costs of providing non-contributory defined benefit retirement and other post-retirement benefit plans. These investments are exposed to price fluctuations in equity markets and changes in interest rates. The equity securities held in these pension plans are diversified to achieve broad market participation and reduce the impact of any single investment, sector or geographic region. Duke Energy has established asset allocation targets for its pension plan holdings, which take into consideration the investment objectives and the risk profile with respect to the trust in which the assets are held. See Note 23 to the Consolidated Financial Statements, "Employee Benefit Plans," for additional information regarding investment strategy of pension plan assets.

A significant decline in the value of plan asset holdings could require Duke Energy to increase funding of its pension plans in future periods, which could adversely affect cash flows in those periods. Additionally, a decline in the fair value of plan assets, absent additional cash contributions to the plan, could increase the amount of pension cost required to be recorded in future periods, which could adversely affect Duke Energy's results of operations in those periods.

Nuclear Decommissioning Trust Funds

As required by the NRC, NCUC, PSCSC and FPSC, subsidiaries of Duke Energy maintain trust funds to fund the costs of nuclear decommissioning. As of December 31, 2022, these funds were invested primarily in domestic and international equity securities, debt securities, cash and cash equivalents and short-term investments. Per the NRC, Internal Revenue Code, NCUC, PSCSC and FPSC requirements, these funds may be used only for activities related to nuclear decommissioning. These investments are exposed to price fluctuations in equity markets and changes in interest rates. Duke Energy actively monitors its portfolios by benchmarking the performance of its investments against certain indices and by maintaining, and periodically reviewing, target allocation percentages for various asset classes.

Accounting for nuclear decommissioning recognizes that costs are recovered through retail and wholesale rates; therefore, fluctuations in investment prices do not materially affect the Consolidated Statements of Operations, as changes in the fair value of these investments are primarily deferred as regulatory assets or regulatory liabilities pursuant to Orders by the NCUC, PSCSC, FPSC and FERC. Earnings or losses of the funds will ultimately impact the amount of costs recovered through retail and wholesale rates. See Note 10 to the Consolidated Financial Statements, "Asset Retirement Obligations," for additional information regarding nuclear decommissioning costs. See Note 16 to the Consolidated Financial Statements, "Investments in Debt and Equity Securities," for additional information regarding NDTF assets.

OTHER MATTERS

Environmental Regulations

The Duke Energy Registrants are subject to federal, state and local regulations regarding air and water quality, hazardous and solid waste disposal, coal ash and other environmental matters. These regulations can be changed from time to time and result in new obligations of the Duke Energy Registrants.

The following sections outline various proposed and recently enacted legislation and regulations that may impact the Duke Energy Registrants. Refer to Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for further information regarding potential plant retirements and regulatory filings related to the Duke Energy Registrants.

Coal Combustion Residuals

In April 2015, EPA published a rule to regulate the disposal of CCR from electric utilities as solid waste. The federal regulation classifies CCR as nonhazardous waste and allows for beneficial use of CCR with some restrictions. The regulation applies to all new and existing landfills, new and existing surface impoundments receiving CCR and existing surface impoundments located at stations generating electricity (regardless of fuel source), which were no longer receiving CCR but contained liquids as of the effective date of the rule. The rule establishes requirements regarding landfill design, structural integrity design and assessment criteria for surface impoundments, groundwater monitoring, protection and remedial procedures and other operational and reporting procedures to ensure the safe disposal and management of CCR.

In addition to the requirements of the federal CCR rule, CCR landfills and surface impoundments will continue to be regulated by the states. Cost recovery for future expenditures will be pursued through the normal ratemaking process with federal and state utility commissions and via wholesale contracts, which permit recovery of necessary and prudently incurred costs associated with Duke Energy's regulated operations. For more information, see Notes 4 and 10 to the Consolidated Financial Statements, "Regulatory Matters" and "Asset Retirement Obligations," respectively.

Coal Ash Act

AROs recorded on the Duke Energy Carolinas and Duke Energy Progress Consolidated Balance Sheets at December 31, 2022, and December 31, 2021, include the legal obligation for closure of coal ash basins and the disposal of related ash as a result of the Coal Ash Act, the EPA CCR rule and other agreements. The Coal Ash Act includes a variance procedure for compliance deadlines and other issues surrounding the management of CCR and CCR surface impoundments and prohibits cost recovery in customer rates for unlawful discharge of ash impoundment waters occurring after January 1, 2014. The Coal Ash Act leaves the decision on cost recovery determinations related to closure of ash impoundments to the normal ratemaking processes before utility regulatory commissions.

Consistent with the requirements of the Coal Ash Act, Duke Energy previously submitted comprehensive site assessments and groundwater corrective action plans to NCDEQ. On December 31, 2019, Duke Energy submitted updated groundwater corrective action plans for six sites in North Carolina and site-specific coal ash impoundment closure plans for all 14 North Carolina sites to NCDEQ. In addition, from 2020 through 2022, Duke Energy submitted updated comprehensive site assessments and groundwater corrective action plans for the remaining North Carolina sites, except for Buck Steam Station, which Duke Energy expects to submit in June 2023.

On April 1, 2019, NCDEQ issued a closure determination requiring Duke Energy Carolinas and Duke Energy Progress to excavate all remaining coal ash impoundments at the Allen, Belews Creek, Rogers, Marshall, Mayo and Roxboro facilities in North Carolina. On April 26, 2019, Duke Energy Carolinas and Duke Energy Progress filed Petitions for Contested Case Hearings in the Office of Administrative Hearings to challenge NCDEQ's April 1 Order. On December 31, 2019, Duke Energy Carolinas and Duke Energy Progress entered into a settlement agreement with NCDEQ and certain community groups under which Duke Energy Carolinas and Duke Energy Progress agreed to excavate seven of the nine remaining coal ash basins at these sites with ash moved to on-site lined landfills, including two at Allen, one at Belews Creek, one at Mayo, one at Roxboro, and two at Rogers. At the two remaining basins at Marshall and Roxboro, uncapped basin ash will be excavated and moved to lined landfills. Those portions of the basins at Marshall and Roxboro, which were previously filled with ash and on which permitted facilities were constructed, will not be disturbed and will be closed pursuant to other state regulations.

Following NCDEQ's April 1 Order, Duke Energy estimated the incremental undiscounted cost to close the nine remaining impoundments by excavation would be approximately $4 billion to $5 billion, potentially increasing the total estimated costs to permanently close all ash basins in North Carolina and South Carolina to $9.5 billion to $10.5 billion. The settlement lowered the estimated total undiscounted cost to close the nine remaining basins by excavation by approximately $1.5 billion as compared to Duke Energy's original estimate that followed the order. As a result, the estimated total cost to permanently close all ash basins in North Carolina and South Carolina was estimated to be approximately $8 billion to $9 billion, of which approximately $3.5 billion has been spent through 2022. The majority of the remaining spend is expected to occur over the next 10 to 15 years.

Duke Energy has completed excavation of all coal ash at the Riverbend, Dan River, Asheville and Sutton plants.

For further information on ash basins and recovery, see Notes 4 and 10 to the Consolidated Financial Statements, "Regulatory Matters" and "Asset Retirement Obligations," respectively.

North Carolina House Bill 951

On October 13, 2021, North Carolina House Bill 951 (HB 951) was signed into law (the "Legislation"). This Legislation establishes a framework overseen by the NCUC to advance state CO_2 emission reductions from electric generating facilities in the state through the use of least cost planning while providing for continued reliability and affordable rates for customers served by such generation. It also authorizes the use of performance-based regulation in North Carolina. Among other things, the Legislation requires the NCUC to:

- develop an initial carbon plan that would target a 70% reduction in CO_2 emissions from public utilities' electric generation in the state by 2030 and carbon neutrality by 2050, considering all resource options and the latest technology;
- adopt rules to implement the requirements of the Legislation authorizing PBR that includes MYRP with a maximum three-year term, performance incentive mechanisms to track utility performance, and revenue decoupling for the residential customer class;
- establish rules to securitize costs associated with the early retirement of subcritical coal-fired electric generating facilities necessary to achieve the authorized carbon reduction goals at 50% of remaining net book value, with the remaining net book value recovered through normal cost-of-service basis; and
- initiate a process for updating rates and terms of certain existing solar power purchase agreements executed under PURPA.

In October 2022 and January 2023, Duke Energy Progress and Duke Energy Carolinas, respectively, filed applications with the NCUC, which proposed implementation of the Legislation's provisions around PBR, including MYRP, residential decoupling and performance incentive mechanisms. Additionally, on December 30, 2022, the NCUC issued an order adopting the first Carbon Plan as directed by the Legislation.

See Note 4, "Regulatory Matters" to the Consolidated Financial Statements for more information.

Other Environmental Regulations

The Duke Energy Registrants are also subject to various federal, state and local laws regarding air and water quality, hazardous and solid waste disposal and other environmental matters. Duke Energy continues to comply with enacted environmental statutes and regulations even as certain of these regulations are in various stages of clarification, revision or legal challenge. The Duke Energy Registrants cannot predict the outcome of these matters.

Global Climate Change and Regulation of GHG Emissions

In 2021, President Biden recommitted the United States to the Paris Agreement and announced a new target for the United States of 50% to 52% reduction in economywide net GHG emissions from 2005 levels by 2030. The U.S. submittal to support this Paris target includes a goal for 100% carbon-free electricity by 2035. These actions have been supplemented by a number of executive orders by President Biden and an indication by a number of regulatory agencies, including the EPA, that they would impose additional regulations on CO_2 and methane emissions to which Duke Energy will be subject. The Duke Energy Registrants are monitoring these matters and cannot predict the outcome, however, there could be a material impact on our clean energy transition.

CO_2 Emissions Reductions

The Duke Energy Registrants' direct GHG emissions consist primarily of CO_2 that results primarily from operating a fleet of coal-fired and natural gas-fired power plants to serve its customers reliably and affordably. In 2019, Duke Energy announced an updated climate strategy with new goals of at least 50% reduction in carbon emissions from 2005 levels from electric generation by 2030 and net-zero carbon emissions from electric generation by 2050. In February 2022, we added Scope 2 and certain Scope 3 emissions, including emissions from upstream purchased power and fossil fuel purchases, as well as downstream customer use of natural gas, to our 2050 net-zero goal. In October 2022, we announced an additional interim target to reduce carbon emissions from electric generation by 80% from 2005 levels by 2040. Duke Energy also adopted an interim goal of reducing Scope 2 and Scope 3 emissions mentioned above by 50% below 2021 levels by 2035.

The Duke Energy Registrants have taken actions that have resulted in a reduction of CO_2 emissions over time. Between 2005 and 2022, the Duke Energy Registrants have collectively lowered the CO_2 emissions from their electricity generation by 44%. Timelines and initiatives, as well as implementation of new technologies, for future reductions of GHG emissions will vary in each state in which the company operates and will involve collaboration with regulators, customers and other stakeholders. The goals announced in 2019, and updated in 2022, as well as the actions taken to reduce CO_2 emissions, potentially lower the exposure to any future mandatory CO_2 emission reduction requirements, whether as a result of federal legislation, EPA regulation, state regulation or other as yet unknown emission reduction requirement.

Actions to reduce CO_2 emissions have included the retirement of 56 coal-fired electric generating units with a combined generating capacity of 7,500 MW, while investing in renewables and state-of-the-art highly efficient natural gas-fired generation that produces far fewer CO_2 emissions per unit of electricity generated than coal. Duke Energy also has made investments to increase EE offerings and ensure continued operations of its zero-CO_2 emissions hydropower and nuclear plants. These efforts have diversified its system and significantly reduced CO_2 emissions.

Duke Energy will continue to explore the use of currently available and commercially demonstrated technology to reduce CO_2 emissions, including EE, wind, solar and storage, as well as evolving technologies like carbon capture, utilization and storage, the use of hydrogen and other low-carbon fuels, long-duration storage and advanced nuclear, in its efforts to achieve its net-zero goal as well as to comply with any future regulations. Duke Energy plans to adjust to and incorporate evolving and innovative technologies in a way that balances the reliability and affordability while meeting regulatory requirements and customer demands. Under any future scenario involving mandatory CO_2 limitations, the Duke Energy Registrants would plan to seek recovery of their compliance costs through appropriate regulatory mechanisms. Future levels of GHG emissions by the Duke Energy Registrants will be influenced by variables that include capacity needs in the jurisdictions in which they operate, public policy, tax incentives, economic conditions that affect electricity demand, fuel prices, market prices, availability of resources and labor, compliance with new or existing regulations, the ability to make enhancements to transmission and distribution systems to support increased renewables, and the existence of new technologies that can be deployed to generate the electricity necessary to meet customer demand.

Currently, the Duke Energy Registrants do not purchase carbon credits or offsets for use in connection with the company's net-zero emissions goals. Though they may purchase carbon credits or offsets for such uses in the future, the amount or cost of which is not expected to be material at this time.

Generation Mix Planning Process

The Duke Energy Registrants annually, biennially or triennially prepare lengthy, forward-looking IRPs. These detailed, highly technical plans are based on the company's thorough analysis of numerous factors that can impact the cost of producing and delivering electricity that influence long-term generation resource planning decisions. The IRP process helps to evaluate a range of options, taking into account stakeholder input as well as forecasts of future electricity demand, fuel prices, transmission improvements, new generating capacity, integration of renewables, energy storage, EE and demand response initiatives. The IRP process also helps evaluate potential environmental and regulatory scenarios to better mitigate policy and economic risks. The IRPs we file with regulators look out 10 to 20 years depending on the jurisdiction.

For a number of years, the Duke Energy Registrants have included a price on CO_2 emissions in their IRP planning process to account for the potential regulation of CO_2 emissions. Incorporating a price on CO_2 emissions in the IRPs allows for the evaluation of existing and future resource needs against potential climate change policy risk in the absence of policy certainty. One of the challenges with using a CO_2 price, especially in the absence of a clear and certain policy, is determining the appropriate price to use. To address this uncertainty and ensure the company remains agile, the Duke Energy Registrants typically use a range of potential CO_2 prices to reflect a range of potential policy outcomes.

In September 2020, Duke Energy Carolinas and Duke Energy Progress filed their IRPs in North Carolina and South Carolina, and, in December 2021, Duke Energy Indiana filed its IRP, outlining an accelerated energy transition, which aligns with the company's 2030 CO_2 emissions goal. In December 2021, the PSCSC rejected Duke Energy Carolinas and Duke Energy Progress' preferred accelerated coal retirements IRP scenario and instead found that the base case without a price on CO_2 emissions was the most reasonable IRP scenario.

In 2021, the state of North Carolina passed HB 951, which among other things, directs the NCUC to develop and approve a carbon reduction plan by the end of 2022 that would target a 70% reduction in CO_2 emissions from Duke Energy Progress' and Duke Energy Carolinas' electric generation in the state by 2030 and carbon neutrality by 2050, considering all resource options and the latest technology. In light of this legislation, in November 2021, the NCUC declined to make a determination on the portfolios presented in the 2020 IRP noting that the legislation may impact the schedule for coal plant retirements and new resources and limited its order to short-term actions for use on an interim basis pending preparation of the carbon plan. The NCUC approved its initial carbon reduction plan in December 2022, which considered feedback from extensive stakeholder engagement and was informed by Duke Energy's initial proposed carbon plan, filed with the NCUC on May 16, 2022, and built on the IRPs that were filed in 2020 by Duke Energy Carolinas and Duke Energy Progress.

CO_2 and Methane Emissions Reductions from the Natural Gas Distribution Business

In addition to CO_2 emissions resulting primarily from our operations of coal-fired and natural gas-fired power plants, the Duke Energy Registrants are also responsible for certain methane emissions from the distribution of natural gas to customers. In October 2020, Duke Energy announced a new goal to achieve net-zero methane emissions from its natural gas distribution business by 2030. The Duke Energy Registrants have taken actions that have resulted in methane emission reductions, including the replacement of cast iron and bare steel pipelines and associated services with plastic or coated steel, advanced methane leak detection efforts, reducing time to repair nonhazardous leaks and operational releases of methane, and investment in renewable natural gas.

Timelines and initiatives, as well as implementation of new technologies, for future reductions of upstream methane emissions will vary in each state in which the company's natural gas distribution business operates and will involve collaboration with regulators, customers and other stakeholders. EPA has also proposed regulations that would require reduction of methane emissions upstream of the Duke Energy Registrants' natural gas distribution business. The impact of these regulations on natural gas fuel prices is not currently quantifiable.

In addition to possible EPA regulation of methane emissions, certain local governments, none within the jurisdictions in which the Duke Energy Registrants operate, have enacted or are considering initiatives to eliminate natural gas use in new buildings and focus on electrification. Enactment of similar regulations in the areas in which the Duke Energy Registrants' natural gas distribution operates could have a significant impact on the natural gas distribution business and its operations. At this time, such impacts are not able to be quantified; however, the net-zero methane goals announced in 2020 for the natural gas distribution business, as well as the actions taken to reduce these GHG emissions, potentially lowers the exposure to any future mandatory GHG emission reduction requirements. The Duke Energy Registrants would plan to seek recovery of their compliance costs with any new regulations through the regulatory process.

Physical Impacts of Climate Change

The Duke Energy Registrants recognize that scientists associate severe weather events with increasing levels of GHGs in the atmosphere. It is possible that these weather events could have a material impact on future results of operations should they occur more frequently and with greater severity. However, the uncertain nature of potential changes in extreme weather events (such as increased frequency, duration and severity), the long period of time over which any potential changes might take place and the inability to predict potential changes with any degree of accuracy, make estimating with any certainty any potential future financial risk to the Duke Energy Registrants' operations difficult. Additionally, the Duke Energy Registrants would plan to continue to seek recovery of storm costs through the appropriate regulatory mechanisms. For more information on storm securitization in North Carolina and storm cost recovery in Florida, see Note 4 to the Consolidated Financial Statements, "Regulatory Matters."

The Duke Energy Registrants routinely take steps to reduce the potential impact of severe weather events on their electric transmission and distribution systems and natural gas facilities. The steps include modernizing the electric grid through smart meters, storm hardening, self-healing systems and targeted undergrounding and applying lessons learned from previous storms to restoration efforts. The Duke Energy Registrants' electric generating facilities and natural gas facilities are designed to withstand extreme weather events without significant damage. The Duke Energy Registrants maintain inventories of coal, oil and liquified natural gas to mitigate the effects of any potential short-term disruption in fuel supply so they can continue to provide customers with an uninterrupted supply of electricity and/or natural gas.

New Accounting Standards

See Note 1 to the Consolidated Financial Statements, “Summary of Significant Accounting Policies,” for a discussion of the impact of new accounting standards.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See “Management’s Discussion and Analysis of Results of Operations and Financial Condition – Quantitative and Qualitative Disclosures About Market Risk.”

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Combined Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Duke Energy Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Corporation and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 27, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing a separate opinion on the critical audit matters or on the accounts or disclosures to which they relate.

Dispositions – Assessment of Held for Sale and Discontinued Operations Classification and Impairment Charge – Refer to Note 2 to the financial statements.

Critical Audit Matter Description

In November 2022, Duke Energy committed to a plan to sell the Commercial Renewables business segment, excluding the offshore wind contract for Carolina Long Bay (“Commercial Renewables business segment”). As a result, the Commercial Renewables business segment was classified as held for sale and reported as discontinued operations and pretax impairment charges of approximately $1.7 billion were recorded to reduce the carrying amount of the assets to their estimated fair value, based on the expected selling price less cost to sell.

We identified the assessment of held for sale and discontinued operations classification and associated impairment charges as a critical audit matter because of the extensive effort required to audit the subjective and complex judgments associated with those matters, including:

- The assessment of whether the sale is probable and the transfer of assets will be completed within one year from period-end;
- The assessment of whether the sale of the segment represents a discontinued operation;
- The determination of the impairment charges; and
- The assessment of the fair value of the Commercial Renewables business segment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the classification of the Commercial Renewables business segment as held for sale and the associated impairment charges included the following, among others:

- We tested the effectiveness of management’s controls over (1) the evaluation and disclosure of the held for sale and discontinued operations classification and (2) the determination of the impairment charges, including controls over the reasonableness of the inputs and assumptions used in management’s estimates.
- We evaluated management’s assessment of held for sale and discontinued operations classification as follows:
  - Inquired of executive officers, key members of management and members of the Board of Directors to obtain an understanding of plans to sell the Commercial Renewables business segment.

  - Assessed management's judgments in determining whether the Commercial Renewables business segment meets the held for sale and discontinued operations classification criteria through procedures performed, including, but not limited to, reviewing minutes from meetings of the Board of Directors, reviewing communications regarding the progression of the selling process, and assessing the Commercial Renewables business segment relative to the Company's operations and financial results.
  - Compared management's conclusions against relevant guidance and tested the completeness and accuracy of information used in the Company's evaluation.
- We evaluated the reasonableness of the determination of the fair value of the long-lived assets by using an internal fair value specialist to assess the reasonableness of the overall methodology and discount rates. Additionally, we evaluated the mathematical accuracy of the underlying calculations. Further, we tested forecasted information used to determine fair value.
- We evaluated the accuracy and completeness of the Company's reclassification of balances and activity and related disclosures.
- We obtained representation from management asserting to the appropriate presentation, measurement and timing of the Commercial Renewables business segment.

***Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1, 4 and 10 to the financial*statements*.**

Critical Audit Matter Description

The Company is subject to regulation by federal and state utility regulatory agencies (the "Commissions"), which have jurisdiction with respect to the rates of the Company's electric and natural gas distribution companies. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As discussed in Note 4, regulatory proceedings in recent years have focused on the recoverability of storm costs, fuel costs, and asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders requires significant management judgment. As of December 31, 2022, the Company has approximately $18.1 billion of recorded regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions; to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matters Were Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We also evaluated the external information and compared it to management's recorded balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.

- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 1947.

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(in millions, except per share amounts)	Years Ended December 31, 2022	2021	2020
Operating Revenues			
Regulated electric	**$ 25,759**	$ 22,319	$ 21,461
Regulated natural gas	**2,724**	2,008	1,642
Nonregulated electric and other	**285**	294	263
Total operating revenues	**28,768**	24,621	23,366
Operating Expenses			
Fuel used in electric generation and purchased power	**8,782**	6,255	6,051
Cost of natural gas	**1,276**	705	460
Operation, maintenance and other	**5,734**	5,703	5,502
Depreciation and amortization	**5,086**	4,762	4,504
Property and other taxes	**1,466**	1,355	1,311
Impairment of assets and other charges	**434**	353	978
Total operating expenses	**22,778**	19,133	18,806
Gains on Sales of Other Assets and Other, net	**22**	12	11
Operating Income	**6,012**	5,500	4,571
Other Income and Expenses			
Equity in earnings (losses) of unconsolidated affiliates	**113**	62	(2,005)
Other income and expenses, net	**392**	636	451
Total other income and expenses	**505**	698	(1,554)
Interest Expense	**2,439**	2,207	2,097
Income From Continuing Operations Before Income Taxes	**4,078**	3,991	920
Income Tax Expense (Benefit) From Continuing Operations	**300**	268	(169)
Income From Continuing Operations	**3,778**	3,723	1,089
Loss From Discontinued Operations, net of tax	**(1,323)**	(144)	(7)
Net Income	**2,455**	3,579	1,082
Add: Net Loss Attributable to Noncontrolling Interests	**95**	329	295
Net Income Attributable to Duke Energy Corporation	**2,550**	3,908	1,377
Less: Preferred Dividends	**106**	106	107
Net Income Available to Duke Energy Corporation Common Stockholders	**$ 2,444**	$ 3,802	$ 1,270
Earnings Per Share – Basic and Diluted			
Income from continuing operations available to Duke Energy Corporation common stockholders			
Basic and Diluted	**$ 4.74**	$ 4.68	$ 1.33
(Loss) Income from discontinued operations attributable to Duke Energy Corporation common stockholders			
Basic and Diluted	**$ (1.57)**	$ 0.26	$ 0.39
Net income available to Duke Energy Corporation common stockholders			
Basic and Diluted	**$ 3.17**	$ 4.94	$ 1.72
Weighted average shares outstanding			
Basic	**770**	769	737
Diluted	**770**	769	738

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	2021	2020
Net Income	**$ 2,455**	$ 3,579	$ 1,082
Other Comprehensive Income (Loss), net of tax[a]			
Pension and OPEB adjustments	**(19)**	7	6
Net unrealized gains (losses) on cash flow hedges	**285**	(68)	(138)
Reclassification into earnings from cash flow hedges	**(38)**	13	11
Net unrealized losses on fair value hedges	**(33)**	—	—
Unrealized (losses) gains on available-for-sale securities	**(21)**	(8)	3
Other Comprehensive Income (Loss), net of tax	**174**	(56)	(118)
Comprehensive Income	**2,629**	3,523	964
Add: Comprehensive Loss Attributable to Noncontrolling Interests	**84**	319	306
Comprehensive Income Attributable to Duke Energy Corporation	**2,713**	3,842	1,270
Less: Preferred Dividends	**106**	106	107
Comprehensive Income Available to Duke Energy Corporation Common Stockholders	**$ 2,607**	$ 3,736	$ 1,163

(a) Net of income tax expense of approximately $52 million for the year ended December 31, 2022, and income tax benefit of approximately $17 million and $35 million for the years ended December 31, 2021, and 2020, respectively.

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 409**	$ 341
Receivables (net of allowance for doubtful accounts of $40 at 2022 and $45 at 2021)	**1,309**	1,085
Receivables of VIEs (net of allowance for doubtful accounts of $176 at 2022 and $76 at 2021)	**3,106**	2,437
Inventory	**3,584**	3,111
Regulatory assets (includes $106 at 2022 and $105 at 2021 related to VIEs)	**3,485**	2,150
Assets held for sale	**262**	232
Other (includes $116 at 2022 and $41 at 2021 related to VIEs)	**1,067**	584
Total current assets	**13,222**	9,940
Property, Plant and Equipment		
Cost	**163,839**	154,496
Accumulated depreciation and amortization	**(52,100)**	(49,104)
Facilities to be retired, net	**9**	144
Net property, plant and equipment	**111,748**	105,536
Other Noncurrent Assets		
Goodwill	**19,303**	19,303
Regulatory assets (includes $1,715 at 2022 and $1,824 at 2021 related to VIEs)	**14,645**	12,487
Nuclear decommissioning trust funds	**8,637**	10,401
Operating lease right-of-use assets, net	**1,042**	1,136
Investments in equity method unconsolidated affiliates	**455**	457
Assets held for sale	**5,634**	6,695
Other (includes $52 at 2022 and $30 at 2021 related to VIEs)	**3,400**	3,632
Total other noncurrent assets	**53,116**	54,111
Total Assets	**$ 178,086**	$ 169,587
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 4,754**	$ 3,531
Notes payable and commercial paper	**3,952**	3,304
Taxes accrued	**722**	731
Interest accrued	**626**	530
Current maturities of long-term debt (includes $350 at 2022 and $76 at 2021 related to VIEs)	**4,154**	3,387
Asset retirement obligations	**773**	647
Regulatory liabilities	**1,466**	1,211
Liabilities associated with assets held for sale	**259**	167
Other	**2,167**	2,423
Total current liabilities	**18,873**	15,931
Long-Term Debt (includes $3,108 at 2022 and $3,379 at 2021 related to VIEs)	**67,061**	60,448
Other Noncurrent Liabilities		
Deferred income taxes	**9,964**	9,379
Asset retirement obligations	**11,955**	11,953
Regulatory liabilities	**13,582**	16,152
Operating lease liabilities	**876**	940
Accrued pension and other post-retirement benefit costs	**832**	855
Investment tax credits	**849**	833
Liabilities associated with assets held for sale	**739**	612
Other	**1,502**	1,348
Total other noncurrent liabilities	**40,299**	42,072
Commitments and Contingencies		
Equity		
Preferred stock, Series A, $0.001 par value, 40 million depositary shares authorized and outstanding at 2022 and 2021	**973**	973
Preferred stock, Series B, $0.001 par value, 1 million shares authorized and outstanding at 2022 and 2021	**989**	989
Common stock, $0.001 par value, 2 billion shares authorized; 770 million and 769 million shares outstanding at 2022 and 2021	**1**	1
Additional paid-in capital	**44,862**	44,371
Retained earnings	**2,637**	3,265
Accumulated other comprehensive loss	**(140)**	(303)
Total Duke Energy Corporation stockholders' equity	**49,322**	49,296
Noncontrolling interests	**2,531**	1,840
Total equity	**51,853**	51,136
Total Liabilities and Equity	**$ 178,086**	$ 169,587

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 2,455**	$ 3,579	$ 1,082
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	**5,843**	5,663	5,486
Equity in (earnings) losses of unconsolidated affiliates	**(114)**	(28)	2,005
Equity component of AFUDC	**(197)**	(171)	(154)
Impairment of assets and other charges	**2,183**	356	984
Deferred income taxes	**(200)**	191	54
Contributions to qualified pension plans	**(58)**	—	—
Payments for asset retirement obligations	**(584)**	(540)	(610)
Provision for rate refunds	**(130)**	(70)	(22)
Refund of AMT credit carryforwards	**—**	—	572
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**19**	50	63
Receivables	**(788)**	(297)	(56)
Inventory	**(476)**	(34)	66
Other current assets[a]	**(1,498)**	(1,136)	205
Increase (decrease) in			
Accounts payable	**805**	249	(21)
Taxes accrued	**10**	284	117
Other current liabilities	**(153)**	(13)	(65)
Other assets[a]	**(1,600)**	112	(408)
Other liabilities	**410**	95	(442)
Net cash provided by operating activities	**5,927**	8,290	8,856
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(11,367)**	(9,715)	(9,907)
Contributions to equity method investments	**(58)**	(81)	(370)
Return of investment capital	**6**	44	133
Purchases of debt and equity securities	**(4,243)**	(6,098)	(8,011)
Proceeds from sales and maturities of debt and equity securities	**4,333**	6,103	7,949
Disbursements to canceled equity method investments	**—**	(855)	—
Other	**(644)**	(333)	(398)
Net cash used in investing activities	**(11,973)**	(10,935)	(10,604)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the:			
Issuance of long-term debt	**11,874**	9,052	6,330
Issuance of common stock	**9**	5	2,745
Payments for the redemption of long-term debt	**(4,396)**	(5,294)	(4,506)
Proceeds from the issuance of short-term debt with original maturities greater than 90 days	**80**	332	3,009
Payments for the redemption of short-term debt with original maturities greater than 90 days	**(287)**	(997)	(2,147)
Notes payable and commercial paper	**781**	1,144	(1,181)
Contributions from noncontrolling interests	**1,377**	1,575	426
Dividends paid	**(3,179)**	(3,114)	(2,812)
Other	**(130)**	(94)	(133)
Net cash provided by financing activities	**6,129**	2,609	1,731
Net increase (decrease) in cash, cash equivalents and restricted cash	**83**	(36)	(17)
Cash, cash equivalents and restricted cash at beginning of period	**520**	556	573
Cash, cash equivalents and restricted cash at end of period	**$ 603**	$ 520	$ 556
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 2,361**	$ 2,248	$ 2,186
Cash received from income taxes	**(6)**	(3)	(585)
Significant non-cash transactions:			
Accrued capital expenditures	**1,766**	1,325	1,116
Non-cash dividends	**—**	—	110

(a) Includes approximately $2.6 billion for impacts of under-collected deferred fuel regulatory assets for the year ended December 31, 2022.

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Preferred Stock	Common Stock Shares	Common Stock	Additional Paid-in Capital	Retained Earnings	Duke Energy Corporation Stockholders' Accumulated Other Comprehensive Income (Loss): Net Gains (Losses) on Hedges[d]	Net Unrealized Gains (Losses) on Available-for-Sale Securities	Pension and OPEB Adjustments	Total Duke Energy Corporation Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2019	$ 1,962	733	$ 1	$ 40,881	$ 4,108	$ (51)	$ 3	$ (82)	$ 46,822	$ 1,129	$47,951
Net income (loss)	—	—	—	—	1,270	—	—	—	1,270	(295)	975
Other comprehensive (loss) income	—	—	—	—	—	(116)	3	6	(107)	(11)	(118)
Common stock issuances, including dividend reinvestment and employee benefits	—	36	—	2,902	—	—	—	—	2,902	—	2,902
Common stock dividends	—	—	—	—	(2,815)	—	—	—	(2,815)	—	(2,815)
Contribution from noncontrolling interest[a]	—	—	—	(17)	—	—	—	—	(17)	426	409
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(30)	(30)
Other[b]	—	—	—	1	(92)	—	—	—	(91)	1	(90)
Balance at December 31, 2020	$ 1,962	769	$ 1	$ 43,767	$ 2,471	$ (167)	$ 6	$ (76)	$ 47,964	$ 1,220	$49,184
Net income (loss)	—	—	—	—	3,802	—	—	—	3,802	(329)	3,473
Other comprehensive (loss) income	—	—	—	—	—	(65)	(8)	7	(66)	10	(56)
Common stock issuances, including dividend reinvestment and employee benefits	—	—	—	68	—	—	—	—	68	—	68
Common stock dividends	—	—	—	—	(3,008)	—	—	—	(3,008)	—	(3,008)
Sale of noncontrolling interest[c]	—	—	—	545	—	—	—	—	545	454	999
Contribution from noncontrolling interest, net of transaction costs[a]	—	—	—	—	—	—	—	—	—	550	550
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(66)	(66)
Other	—	—	—	(9)	—	—	—	—	(9)	1	(8)
Balance at December 31, 2021	$ 1,962	769	$ 1	$ 44,371	$ 3,265	$ (232)	$ (2)	$ (69)	$ 49,296	$ 1,840	$51,136
Net income (loss)	**—**	**—**	**—**	**—**	**2,444**	**—**	**—**	**—**	**2,444**	**(95)**	**2,349**
Other comprehensive income (loss)	**—**	**—**	**—**	**—**	**—**	**203**	**(21)**	**(19)**	**163**	**11**	**174**
Common stock issuances, including dividend reinvestment and employee benefits	**—**	**1**	**—**	**76**	**—**	**—**	**—**	**—**	**76**	**—**	**76**
Common stock dividends	**—**	**—**	**—**	**—**	**(3,073)**	**—**	**—**	**—**	**(3,073)**	**—**	**(3,073)**
Sale of noncontrolling interest[c]	**—**	**—**	**—**	**465**	**—**	**—**	**—**	**—**	**465**	**569**	**1,034**
Purchase of noncontrolling interest	**—**	**—**	**—**	**(51)**	**—**	**—**	**—**	**—**	**(51)**	**31**	**(20)**
Contribution from noncontrolling interest, net of transaction costs[a]	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**314**	**314**
Distributions to noncontrolling interests in subsidiaries	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(140)**	**(140)**
Other	**—**	**—**	**—**	**1**	**1**	**—**	**—**	**—**	**2**	**1**	**3**
Balance at December 31, 2022	**$ 1,962**	**770**	**$ 1**	**$ 44,862**	**$ 2,637**	**$ (29)**	**$ (23)**	**$ (88)**	**$ 49,322**	**$ 2,531**	**$51,853**

(a) Relates to tax equity financing activity in the Commercial Renewables Disposal Groups.
(b) Amounts in Retained earnings primarily represent impacts due to implementation of a new accounting standard related to Current Estimated Credit Losses. See Note 1 for additional discussion.
(c) Relates primarily to the sale of a noncontrolling interest in Duke Energy Indiana. See Note 2 for additional discussion.
(d) See Duke Energy Consolidated Statements of Comprehensive Income for detailed activity related to Cash Flow and Fair Value Hedges.

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Duke Energy Carolinas, LLC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Carolinas, LLC and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1, 4 and 10 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission and by the South Carolina Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As discussed in Note 4, regulatory proceedings in recent years have focused on the recoverability of storm costs, fuel costs, and asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders requires significant management judgment. As of December 31, 2022, the Company has approximately $5.4 billion recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.

- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commission, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 1947.

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating Revenues	**$ 7,857**	$ 7,102	$ 7,015
Operating Expenses			
Fuel used in electric generation and purchased power	**2,015**	1,601	1,682
Operation, maintenance and other	**1,892**	1,833	1,743
Depreciation and amortization	**1,526**	1,468	1,462
Property and other taxes	**340**	320	299
Impairment of assets and other charges	**26**	227	476
Total operating expenses	**5,799**	5,449	5,662
Gains on Sales of Other Assets and Other, net	**4**	2	1
Operating Income	**2,062**	1,655	1,354
Other Income and Expenses, net	**221**	270	177
Interest Expense	**557**	538	487
Income Before Income Taxes	**1,726**	1,387	1,044
Income Tax Expense	**126**	51	88
Net Income	**$ 1,600**	$ 1,336	$ 956
Other Comprehensive Income, net of tax			
Net unrealized gain on cash flow hedges	**—**	1	—
Other Comprehensive Income, net of tax	**—**	1	—
Comprehensive Income	**$ 1,600**	$ 1,337	$ 956

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 44**	$ 7
Receivables (net of allowance for doubtful accounts of $3 at 2022 and $1 at 2021)	**338**	300
Receivables of VIEs (net of allowance for doubtful accounts of $65 at 2022 and $41 at 2021)	**928**	844
Receivables from affiliated companies	**390**	190
Inventory	**1,164**	1,026
Regulatory assets (includes $12 at 2022 and 2021 related to VIEs)	**1,095**	544
Other (includes $8 at 2022 related to VIEs)	**216**	95
Total current assets	**4,175**	3,006
Property, Plant and Equipment		
Cost	**54,650**	51,874
Accumulated depreciation and amortization	**(18,669)**	(17,854)
Facilities to be retired, net	**—**	102
Net property, plant and equipment	**35,981**	34,122
Other Noncurrent Assets		
Regulatory assets (includes $208 at 2022 and $220 at 2021 related to VIEs)	**4,293**	2,935
Nuclear decommissioning trust funds	**4,783**	5,759
Operating lease right-of-use assets, net	**78**	92
Other	**1,036**	1,248
Total other noncurrent assets	**10,190**	10,034
Total Assets	**$ 50,346**	$ 47,162
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 1,472**	$ 988
Accounts payable to affiliated companies	**209**	266
Notes payable to affiliated companies	**1,233**	226
Taxes accrued	**228**	274
Interest accrued	**120**	125
Current maturities of long-term debt (includes $10 at 2022 and $5 at 2021 related to VIEs)	**1,018**	362
Asset retirement obligations	**261**	249
Regulatory liabilities	**530**	487
Other	**580**	546
Total current liabilities	**5,651**	3,523
Long-Term Debt (includes $689 at 2022 and $703 at 2021 related to VIEs)	**12,948**	12,595
Long-Term Debt Payable to Affiliated Companies	**300**	318
Other Noncurrent Liabilities		
Deferred income taxes	**4,153**	3,634
Asset retirement obligations	**5,121**	5,052
Regulatory liabilities	**5,783**	7,198
Operating lease liabilities	**83**	78
Accrued pension and other post-retirement benefit costs	**38**	50
Investment tax credits	**300**	287
Other	**527**	536
Total other noncurrent liabilities	**16,005**	16,835
Commitments and Contingencies		
Equity		
Member's equity	**15,448**	13,897
Accumulated other comprehensive loss	**(6)**	(6)
Total equity	**15,442**	13,891
Total Liabilities and Equity	**$ 50,346**	$ 47,162

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 1,600**	$ 1,336	$ 956
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	**1,787**	1,743	1,731
Equity component of AFUDC	**(98)**	(65)	(62)
Impairment of assets and other charges	**26**	227	476
Deferred income taxes	**210**	(213)	(260)
Contributions to qualified pension plans	**(15)**	—	—
Payments for asset retirement obligations	**(200)**	(182)	(162)
Provision for rate refunds	**(74)**	(46)	(5)
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**—**	—	(4)
Receivables	**(102)**	(99)	52
Receivables from affiliated companies	**(200)**	(66)	(10)
Inventory	**(138)**	(16)	(14)
Other current assets[(a)]	**(592)**	(309)	209
Increase (decrease) in			
Accounts payable	**377**	5	55
Accounts payable to affiliated companies	**(75)**	85	(11)
Taxes accrued	**(46)**	206	30
Other current liabilities	**(91)**	(39)	(56)
Other assets[(a)]	**(764)**	21	(102)
Other liabilities	**(36)**	116	(47)
Net cash provided by operating activities	**1,569**	2,704	2,776
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(3,304)**	(2,693)	(2,669)
Purchases of debt and equity securities	**(2,633)**	(3,425)	(1,602)
Proceeds from sales and maturities of debt and equity securities	**2,633**	3,425	1,602
Other	**(181)**	(177)	(164)
Net cash used in investing activities	**(3,485)**	(2,870)	(2,833)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**1,441**	1,651	998
Payments for the redemption of long-term debt	**(436)**	(617)	(813)
Notes payable to affiliated companies	**1,007**	(280)	477
Distributions to parent	**(50)**	(600)	(600)
Other	**(1)**	(1)	(2)
Net cash provided by financing activities	**1,961**	153	60
Net increase (decrease) in cash, cash equivalents and restricted cash	**45**	(13)	3
Cash, cash equivalents and restricted cash at beginning of period	**8**	21	18
Cash, cash equivalents and restricted cash at end of period	**$ 53**	$ 8	$ 21
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 546**	$ 508	$ 481
Cash (received from) paid for income taxes	**(60)**	233	321
Significant non-cash transactions:			
Accrued capital expenditures	**475**	359	365

(a) Includes approximately $1.3 billion for impacts of under-collected deferred fuel regulatory assets for the year ended December 31, 2022.

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity	Accumulated Other Comprehensive Income (Loss) Net Gains (Losses) on Cash Flow Hedges	Total Equity
Balance at December 31, 2019	$ 12,818	$ (7)	$ 12,811
Net income	956	—	956
Distributions to parent	(600)	—	(600)
Other[a]	(13)	—	(13)
Balance at December 31, 2020	$ 13,161	$ (7)	$ 13,154
Net income	1,336	—	1,336
Other comprehensive income	—	1	1
Distributions to parent	(600)	—	(600)
Balance at December 31, 2021	$ 13,897	$ (6)	$ 13,891
Net income	**1,600**	**—**	**1,600**
Distributions to parent	**(50)**	**—**	**(50)**
Other	**1**	**—**	**1**
Balance at December 31, 2022	**$ 15,448**	**$ (6)**	**$ 15,442**

(a) Amounts primarily represent impacts due to implementation of a new accounting standard related to Credit Losses. See Note 1 for additional discussion.

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Progress Energy, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Progress Energy, Inc. and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1, 4 and 10 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission, South Carolina Public Service Commission and Florida Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As discussed in Note 4, regulatory proceedings in recent years have focused on the recoverability of storm costs, fuel costs, and asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders requires significant management judgment. As of December 31, 2022, the Company has approximately $9 billion recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.

- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 1930.

PROGRESS ENERGY, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

(in millions)	Years Ended December 31, 2022	2021	2020
Operating Revenues	**$ 13,125**	$ 11,057	$ 10,627
Operating Expenses			
Fuel used in electric generation and purchased power	**5,078**	3,584	3,479
Operation, maintenance and other	**2,458**	2,529	2,479
Depreciation and amortization	**2,142**	1,929	1,818
Property and other taxes	**607**	542	545
Impairment of assets and other charges	**12**	82	495
Total operating expenses	**10,297**	8,666	8,816
Gains on Sales of Other Assets and Other, net	**11**	14	9
Operating Income	**2,839**	2,405	1,820
Other Income and Expenses, net	**181**	215	129
Interest Expense	**844**	794	790
Income Before Income Taxes	**2,176**	1,826	1,159
Income Tax Expense	**348**	227	113
Net Income	**1,828**	1,599	1,046
Less: Net Income Attributable to Noncontrolling Interests	**—**	1	1
Net Income Attributable to Parent	**$ 1,828**	$ 1,598	$ 1,045
Net Income	**$ 1,828**	$ 1,599	$ 1,046
Other Comprehensive Income, net of tax			
Pension and OPEB adjustments	**5**	1	(1)
Net unrealized gain on cash flow hedges	**1**	3	5
Unrealized (losses) gains on available-for-sale securities	**(6)**	—	(1)
Other Comprehensive Income, net of tax	**—**	4	3
Comprehensive Income	**1,828**	1,603	1,049
Less: Comprehensive Income Attributable to Noncontrolling Interests	**—**	1	1
Comprehensive Income Attributable to Parent	**$ 1,828**	$ 1,602	$ 1,048

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	$ 108	$ 70
Receivables (net of allowance for doubtful accounts of $13 at 2022 and $11 at 2021)	318	247
Receivables of VIEs (net of allowance for doubtful accounts of $68 at 2022 and $25 at 2021)	1,289	1,006
Receivables from affiliated companies	22	121
Inventory	1,579	1,398
Regulatory assets (includes $94 at 2022 and $93 at 2021 related to VIEs)	1,833	1,030
Other (includes $88 at 2022 and $39 at 2021 related to VIEs)	342	125
Total current assets	5,491	3,997
Property, Plant and Equipment		
Cost	64,822	60,894
Accumulated depreciation and amortization	(20,584)	(19,214)
Facilities to be retired, net	—	26
Net property, plant and equipment	44,238	41,706
Other Noncurrent Assets		
Goodwill	3,655	3,655
Regulatory assets (includes $1,507 at 2022 and $1,603 at 2021 related to VIEs)	7,146	5,909
Nuclear decommissioning trust funds	3,855	4,642
Operating lease right-of-use assets, net	628	691
Other	1,066	1,242
Total other noncurrent assets	16,350	16,139
Total Assets	$ 66,079	$ 61,842
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 1,481	$ 1,099
Accounts payable to affiliated companies	712	506
Notes payable to affiliated companies	843	2,809
Taxes accrued	135	128
Interest accrued	206	192
Current maturities of long-term debt (includes $340 at 2022 and $71 at 2021 related to VIEs)	697	1,082
Asset retirement obligations	289	275
Regulatory liabilities	576	478
Other	782	868
Total current liabilities	5,721	7,437
Long-Term Debt (includes $2,003 at 2022 and $2,293 at 2021 related to VIEs)	21,592	19,591
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	5,147	4,564
Asset retirement obligations	5,892	5,837
Regulatory liabilities	4,753	5,566
Operating lease liabilities	546	606
Accrued pension and other post-retirement benefit costs	292	417
Investment tax credits	358	364
Other	222	162
Total other noncurrent liabilities	17,210	17,516
Commitments and Contingencies		
Equity		
Common stock, $0.01 par value, 100 shares authorized and outstanding at 2022 and 2021	—	—
Additional paid-in capital	11,832	9,149
Retained earnings	9,585	8,007
Accumulated other comprehensive loss	(11)	(11)
Total Progress Energy, Inc. stockholder's equity	21,406	17,145
Noncontrolling interests	—	3
Total equity	21,406	17,148
Total Liabilities and Equity	$ 66,079	$ 61,842

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 1,828**	$ 1,599	$ 1,046
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	**2,405**	2,302	2,327
Equity component of AFUDC	**(68)**	(51)	(42)
Impairment of assets and other charges	**12**	82	495
Deferred income taxes	**364**	247	(197)
Contributions to qualified pension plans	**(13)**	—	—
Payments for asset retirement obligations	**(291)**	(288)	(384)
Provision for rate refunds	**(58)**	(36)	2
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**—**	51	(9)
Receivables	**(322)**	(97)	(69)
Receivables from affiliated companies	**117**	18	(81)
Inventory	**(183)**	(26)	49
Other current assets[a]	**(937)**	(551)	223
Increase (decrease) in			
Accounts payable	**222**	59	(62)
Accounts payable to affiliated companies	**206**	217	(21)
Taxes accrued	**8**	13	75
Other current liabilities	**96**	(32)	139
Other assets[a]	**(1,116)**	(110)	(137)
Other liabilities	**573**	(99)	(177)
Net cash provided by operating activities	**2,843**	3,298	3,177
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(4,317)**	(3,668)	(3,488)
Purchases of debt and equity securities	**(1,341)**	(2,233)	(5,998)
Proceeds from sales and maturities of debt and equity securities	**1,417**	2,322	6,010
Notes receivable from affiliated companies	**—**	—	164
Other	**(137)**	(156)	(160)
Net cash used in investing activities	**(4,378)**	(3,735)	(3,472)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**2,775**	3,095	1,791
Payments for the redemption of long-term debt	**(1,173)**	(1,883)	(2,157)
Notes payable to affiliated companies	**465**	(160)	1,148
Dividends to parent	**(425)**	(700)	(400)
Other	**(36)**	(2)	(13)
Net cash provided by financing activities	**1,606**	350	369
Net increase (decrease) in cash, cash equivalents and restricted cash	**71**	(87)	74
Cash, cash equivalents and restricted cash at beginning of period	**113**	200	126
Cash, cash equivalents and restricted cash at end of period	**$ 184**	$ 113	$ 200
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 854**	$ 813	$ 819
Cash paid for income taxes	**79**	14	149
Significant non-cash transactions:			
Accrued capital expenditures	**663**	501	363

(a) Includes approximately $1.3 billion for impacts of under-collected deferred fuel regulatory assets for the year ended December 31, 2022.

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss): Net Gains (Losses) on Cash Flow Hedges	Accumulated Other Comprehensive Income (Loss): Net Unrealized Gains (Losses) on Available-for-Sale Securities	Accumulated Other Comprehensive Income (Loss): Pension and OPEB Adjustments	Total Progress Energy, Inc. Stockholder's Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2019	$ 9,143	$ 6,465	$ (10)	$ (1)	$ (7)	$ 15,590	$ 3	$ 15,593
Net income	—	1,045	—	—	—	1,045	1	1,046
Other comprehensive income (loss)	—	—	5	(1)	(1)	3	—	3
Dividends to parent	—	(400)	—	—	—	(400)	—	(400)
Other	—	(1)	—	—	—	(1)	—	(1)
Balance at December 31, 2020	$ 9,143	$ 7,109	$ (5)	$ (2)	$ (8)	$ 16,237	$ 4	$ 16,241
Net income	—	1,598	—	—	—	1,598	1	1,599
Other comprehensive income	—	—	3	—	1	4	—	4
Distributions to noncontrolling interests	—	—	—	—	—	—	(1)	(1)
Dividends to parent	—	(700)	—	—	—	(700)	—	(700)
Other	6	—	—	—	—	6	(1)	5
Balance at December 31, 2021	$ 9,149	$ 8,007	$ (2)	$ (2)	$ (7)	$ 17,145	$ 3	$ 17,148
Net income	**—**	**1,828**	**—**	**—**	**—**	**1,828**	**—**	**1,828**
Other comprehensive income (loss)	**—**	**—**	**1**	**(6)**	**5**	**—**	**—**	**—**
Distributions to noncontrolling interests	**—**	**—**	**—**	**—**	**—**	**—**	**(34)**	**(34)**
Dividends to parent	**(175)**	**(250)**	**—**	**—**	**—**	**(425)**	**—**	**(425)**
Equitization of certain notes payable to affiliates	**2,907**	**—**	**—**	**—**	**—**	**2,907**	**—**	**2,907**
Purchase of a noncontrolling interest	**(51)**	**—**	**—**	**—**	**—**	**(51)**	**31**	**(20)**
Other	**2**	**—**	**—**	**—**	**—**	**2**	**—**	**2**
Balance at December 31, 2022	**$ 11,832**	**$ 9,585**	**$ (1)**	**$ (8)**	**$ (2)**	**$ 21,406**	**$ —**	**$ 21,406**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Duke Energy Progress, LLC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Progress, LLC and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1, 4 and 10 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission and by the South Carolina Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As discussed in Note 4, regulatory proceedings in recent years have focused on the recoverability of storm costs, fuel costs, and asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders requires significant management judgment. As of December 31, 2022, the Company has approximately $5.4 billion recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.

- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 1930.

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating Revenues	**$ 6,753**	$ 5,780	$ 5,422
Operating Expenses			
Fuel used in electric generation and purchased power	**2,492**	1,778	1,743
Operation, maintenance and other	**1,475**	1,467	1,332
Depreciation and amortization	**1,187**	1,097	1,116
Property and other taxes	**190**	159	167
Impairment of assets and other charges	**7**	63	499
Total operating expenses	**5,351**	4,564	4,857
Gains on Sales of Other Assets and Other, net	**4**	13	8
Operating Income	**1,406**	1,229	573
Other Income and Expenses, net	**114**	143	75
Interest Expense	**354**	306	269
Income Before Income Taxes	**1,166**	1,066	379
Income Tax Expense (Benefit)	**158**	75	(36)
Net Income and Comprehensive Income	**$ 1,008**	$ 991	$ 415

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 49**	$ 35
Receivables (net of allowance for doubtful accounts of $4 at 2022 and 2021)	**167**	127
Receivables of VIEs (net of allowance for doubtful accounts of $40 at 2022 and $17 at 2021)	**793**	574
Receivables from affiliated companies	**25**	65
Inventory	**1,006**	921
Regulatory assets (includes $39 at 2022 and 2021 related to VIEs)	**690**	533
Other (includes $42 at 2022 related to VIEs)	**174**	83
Total current assets	**2,904**	2,338
Property, Plant and Equipment		
Cost	**38,875**	37,018
Accumulated depreciation and amortization	**(14,201)**	(13,387)
Facilities to be retired, net	**—**	26
Net property, plant and equipment	**24,674**	23,657
Other Noncurrent Assets		
Regulatory assets (includes $681 at 2022 and $720 at 2021 related to VIEs)	**4,724**	4,118
Nuclear decommissioning trust funds	**3,430**	4,089
Operating lease right-of-use assets, net	**370**	389
Other	**650**	792
Total other noncurrent assets	**9,174**	9,388
Total Assets	**$ 36,752**	$ 35,383
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 601**	$ 476
Accounts payable to affiliated companies	**508**	310
Notes payable to affiliated companies	**238**	172
Taxes accrued	**77**	163
Interest accrued	**101**	96
Current maturities of long-term debt (includes $34 at 2022 and $15 at 2021 related to VIEs)	**369**	556
Asset retirement obligations	**288**	274
Regulatory liabilities	**332**	381
Other	**384**	448
Total current liabilities	**2,898**	2,876
Long-Term Debt (includes $1,114 at 2022 and $1,097 at 2021 related to VIEs)	**10,568**	9,543
Long-Term Debt Payable to Affiliated Companies	**150**	150
Other Noncurrent Liabilities		
Deferred income taxes	**2,477**	2,208
Asset retirement obligations	**5,535**	5,401
Regulatory liabilities	**4,120**	4,868
Operating lease liabilities	**335**	350
Accrued pension and other post-retirement benefit costs	**160**	221
Investment tax credits	**124**	128
Other	**76**	87
Total other noncurrent liabilities	**12,827**	13,263
Commitments and Contingencies		
Equity		
Member's Equity	**10,309**	9,551
Total Liabilities and Equity	**$ 36,752**	$ 35,383

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 1,008**	$ 991	$ 415
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	**1,371**	1,286	1,299
Equity component of AFUDC	**(52)**	(34)	(29)
Impairment of assets and other charges	**7**	63	499
Deferred income taxes	**121**	(46)	(234)
Contributions to qualified pension plans	**(8)**	—	—
Payments for asset retirement obligations	**(193)**	(187)	(304)
Provisions for rate refunds	**(58)**	(36)	2
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**—**	48	1
Receivables	**(228)**	(52)	(4)
Receivables from affiliated companies	**58**	(33)	2
Inventory	**(85)**	(11)	23
Other current assets[(a)]	**(207)**	(147)	98
Increase (decrease) in			
Accounts payable	**20**	12	(127)
Accounts payable to affiliated companies	**198**	95	12
Taxes accrued	**(86)**	83	68
Other current liabilities	**13**	(23)	157
Other assets[(a)]	**(416)**	(37)	(215)
Other liabilities	**38**	(16)	3
Net cash provided by operating activities	**1,501**	1,956	1,666
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(2,070)**	(1,746)	(1,581)
Purchases of debt and equity securities	**(1,148)**	(1,931)	(1,555)
Proceeds from sales and maturities of debt and equity securities	**1,138**	1,914	1,516
Other	**(29)**	(20)	(57)
Net cash used in investing activities	**(2,109)**	(1,783)	(1,677)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**1,477**	1,959	1,296
Payments for the redemption of long-term debt	**(645)**	(1,308)	(1,085)
Notes payable to affiliated companies	**67**	(123)	229
Distributions to parent	**(250)**	(700)	(400)
Other	**(1)**	(1)	(12)
Net cash provided by (used in) financing activities	**648**	(173)	28
Net increase in cash, cash equivalents and restricted cash	**40**	—	17
Cash, cash equivalents and restricted cash at beginning of period	**39**	39	22
Cash, cash equivalents and restricted cash at end of period	**$ 79**	$ 39	$ 39
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 386**	$ 335	$ 301
Cash paid for income taxes	**157**	83	123
Significant non-cash transactions:			
Accrued capital expenditures	**269**	163	149

(a) Includes approximately $402 million for impacts of under-collected deferred fuel regulatory assets for the year ended December 31, 2022.

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)		Member's Equity
Balance at December 31, 2019	$	9,246
Net income		415
Distribution to parent		(400)
Other		(1)
Balance at December 31, 2020	$	9,260
Net income		991
Distribution to parent		(700)
Balance at December 31, 2021	$	9,551
Net income		**1,008**
Distribution to parent		**(250)**
Balance at December 31, 2022	**$**	**10,309**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Duke Energy Florida, LLC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Florida, LLC and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1 and 4 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the Florida Public Service Commission (the "Commission"), which has jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As discussed in Note 4, regulatory proceedings in recent years have focused on the recoverability of storm and fuel costs. As a result, assessing the potential outcomes of future regulatory orders in Florida requires significant management judgment. As of December 31, 2022, the Company has approximately $3.6 billion recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commission, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commission, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commission, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commission's treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commission, that may impact the Company's future rates, for any evidence that might contradict management's assertions.

- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 2001.

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating Revenues	**$ 6,353**	$ 5,259	$ 5,188
Operating Expenses			
Fuel used in electric generation and purchased power	**2,586**	1,806	1,737
Operation, maintenance and other	**967**	1,048	1,131
Depreciation and amortization	**955**	831	702
Property and other taxes	**421**	383	381
Impairment of assets and other charges	**4**	19	(4)
Total operating expenses	**4,933**	4,087	3,947
Gains on Sales of Other Assets and Other, net	**2**	1	1
Operating Income	**1,422**	1,173	1,242
Other Income and Expenses, net	**74**	71	53
Interest Expense	**362**	319	326
Income Before Income Taxes	**1,134**	925	969
Income Tax Expense	**225**	187	198
Net Income	**$ 909**	$ 738	$ 771
Other Comprehensive Loss, net of tax			
Unrealized losses on available-for-sale securities	**(5)**	(1)	(1)
Other Comprehensive Loss, net of tax	**(5)**	(1)	(1)
Comprehensive Income	**$ 904**	$ 737	$ 770

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 45**	$ 23
Receivables (net of allowance for doubtful accounts of $8 at 2022 and 2021)	**148**	117
Receivables of VIEs (net of allowance for doubtful accounts of $28 at 2022 and $8 at 2021)	**496**	432
Receivables from affiliated companies	**2**	16
Inventory	**573**	477
Regulatory assets (includes $55 at 2022 and $54 at 2021 related to VIEs)	**1,143**	497
Other (includes $46 at 2022 and $39 at 2021 related to VIEs)	**108**	80
Total current assets	**2,515**	1,642
Property, Plant and Equipment		
Cost	**25,940**	23,865
Accumulated depreciation and amortization	**(6,377)**	(5,819)
Net property, plant and equipment	**19,563**	18,046
Other Noncurrent Assets		
Regulatory assets (includes $826 at 2022 and $883 at 2021 related to VIEs)	**2,422**	1,791
Nuclear decommissioning trust funds	**424**	553
Operating lease right-of-use assets, net	**258**	302
Other	**372**	399
Total other noncurrent assets	**3,476**	**3,045**
Total Assets	**$ 25,554**	$ 22,733
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 880**	$ 623
Accounts payable to affiliated companies	**177**	209
Notes payable to affiliated companies	**605**	199
Taxes accrued	**53**	51
Interest accrued	**80**	68
Current maturities of long-term debt (includes $306 at 2022 and $56 at 2021 related to VIEs)	**328**	76
Asset retirement obligations	**1**	1
Regulatory liabilities	**244**	98
Other	**363**	408
Total current liabilities	**2,731**	1,733
Long-Term Debt (includes $890 at 2022 and $1,196 at 2021 related to VIEs)	**9,381**	8,406
Other Noncurrent Liabilities		
Deferred income taxes	**2,789**	2,434
Asset retirement obligations	**357**	436
Regulatory liabilities	**633**	698
Operating lease liabilities	**211**	256
Accrued pension and other post-retirement benefit costs	**111**	166
Investment tax credits	**234**	236
Other	**84**	73
Total other noncurrent liabilities	**4,419**	4,299
Commitments and Contingencies		
Equity		
Member's equity	**9,031**	8,298
Accumulated other comprehensive loss	**(8)**	(3)
Total equity	**9,023**	8,295
Total Liabilities and Equity	**$ 25,554**	$ 22,733

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 909**	$ 738	$ 771
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	**1,032**	1,011	1,019
Equity component of AFUDC	**(16)**	(16)	(12)
Impairment of assets and other charges	**4**	19	(4)
Deferred income taxes	**285**	279	27
Contributions to qualified pension plans	**(5)**	—	—
Payments for asset retirement obligations	**(98)**	(101)	(80)
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**—**	—	(14)
Receivables	**(93)**	(45)	(64)
Receivables from affiliated companies	**14**	(13)	(3)
Inventory	**(98)**	(15)	26
Other current assets[(a)]	**(640)**	(451)	40
Increase (decrease) in			
Accounts payable	**202**	47	66
Accounts payable to affiliated companies	**(32)**	124	(46)
Taxes accrued	**2**	(30)	39
Other current liabilities	**62**	(7)	(7)
Other assets[(a)]	**(704)**	(69)	84
Other liabilities	**18**	(69)	(181)
Net cash provided by operating activities	**842**	1,402	1,661
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(2,247)**	(1,923)	(1,907)
Purchases of debt and equity securities	**(193)**	(302)	(4,443)
Proceeds from sales and maturities of debt and equity securities	**279**	408	4,495
Notes receivable from affiliated companies	**—**	—	173
Other	**(108)**	(136)	(103)
Net cash used in investing activities	**(2,269)**	(1,953)	(1,785)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**1,298**	1,135	495
Payments for the redemption of long-term debt	**(77)**	(575)	(572)
Notes payable to affiliated companies	**406**	3	196
Distributions to parent	**(175)**	—	—
Other	**(1)**	—	(1)
Net cash provided by financing activities	**1,451**	563	118
Net increase (decrease) in cash, cash equivalents and restricted cash	**24**	12	(6)
Cash, cash equivalents and restricted cash at beginning of period	**62**	50	56
Cash, cash equivalents and restricted cash at end of period	**$ 86**	$ 62	$ 50
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 339**	$ 308	$ 321
Cash (received from) paid for income taxes	**(83)**	(15)	138
Significant non-cash transactions:			
Accrued capital expenditures	**394**	337	214

(a) Includes approximately $942 million for impacts of under-collected deferred fuel regulatory assets for the year ended December 31, 2022.

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity	Accumulated Other Comprehensive Income (Loss) — Net Unrealized Gains (Losses) on Available-for-Sale Securities	Total Equity
Balance at December 31, 2019	$ 6,789	$ (1)	$ 6,788
Net income	771	—	771
Other comprehensive loss	—	(1)	(1)
Balance at December 31, 2020	$ 7,560	$ (2)	$ 7,558
Net income	738	—	738
Other comprehensive loss	—	(1)	(1)
Balance at December 31, 2021	$ 8,298	$ (3)	$ 8,295
Net income	**909**	**—**	**909**
Other comprehensive loss	**—**	**(5)**	**(5)**
Distribution to parent	**(175)**	**—**	**(175)**
Other	**(1)**	**—**	**(1)**
Balance at December 31, 2022	**$ 9,031**	**$ (8)**	**$ 9,023**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Duke Energy Ohio, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Ohio, Inc. and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1 and 4 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the Public Utilities Commission of Ohio and by the Kentucky Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric and natural gas rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2022, the Company has approximately $684 million recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.

- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 2002.

DUKE ENERGY OHIO, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating Revenues			
Regulated electric	**$ 1,798**	$ 1,493	$ 1,405
Regulated natural gas	**716**	544	453
Total operating revenues	**2,514**	2,037	1,858
Operating Expenses			
Fuel used in electric generation and purchased power	**657**	409	339
Cost of natural gas	**261**	136	73
Operation, maintenance and other	**523**	479	463
Depreciation and amortization	**324**	307	278
Property and other taxes	**369**	355	324
Impairment of assets and other charges	**(10)**	25	—
Total operating expenses	**2,124**	1,711	1,477
Gains on Sales of Other Assets and Other, net	**1**	1	—
Operating Income	**391**	327	381
Other Income and Expenses, net	**19**	18	16
Interest Expense	**129**	111	102
Income Before Income Taxes	**281**	234	295
Income Tax (Benefit) Expense	**(21)**	30	43
Net Income and Comprehensive Income	**$ 302**	$ 204	$ 252

See Notes to Consolidated Financial Statements

DUKE ENERGY OHIO, INC.
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 16**	$ 13
Receivables (net of allowance for doubtful accounts of $6 at 2022 and $4 at 2021)	**73**	96
Receivables from affiliated companies	**247**	122
Notes receivable from affiliated companies	**—**	15
Inventory	**144**	116
Regulatory assets	**103**	72
Other	**86**	57
Total current assets	**669**	491
Property, Plant and Equipment		
Cost	**12,497**	11,725
Accumulated depreciation and amortization	**(3,250)**	(3,106)
Facilities to be retired, net	**—**	6
Net property, plant and equipment	**9,247**	8,625
Other Noncurrent Assets		
Goodwill	**920**	920
Regulatory assets	**581**	635
Operating lease right-of-use assets, net	**18**	19
Other	**71**	84
Total other noncurrent assets	**1,590**	1,658
Total Assets	**$ 11,506**	$ 10,774
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 380**	$ 348
Accounts payable to affiliated companies	**72**	64
Notes payable to affiliated companies	**497**	103
Taxes accrued	**317**	275
Interest accrued	**29**	30
Current maturities of long-term debt	**475**	—
Asset retirement obligations	**17**	13
Regulatory liabilities	**99**	62
Other	**74**	82
Total current liabilities	**1,960**	977
Long-Term Debt	**2,745**	3,168
Long-Term Debt Payable to Affiliated Companies	**25**	25
Other Noncurrent Liabilities		
Deferred income taxes	**1,136**	1,050
Asset retirement obligations	**137**	123
Regulatory liabilities	**534**	739
Operating lease liabilities	**17**	18
Accrued pension and other post-retirement benefit costs	**90**	109
Other	**96**	101
Total other noncurrent liabilities	**2,010**	2,140
Commitments and Contingencies		
Equity		
Common stock, $8.50 par value, 120 million shares authorized; 90 million shares outstanding at 2022 and 2021	**762**	762
Additional paid-in capital	**3,100**	3,100
Retained earnings	**904**	602
Total equity	**4,766**	4,464
Total Liabilities and Equity	**$ 11,506**	$ 10,774

See Notes to Consolidated Financial Statements

DUKE ENERGY OHIO, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 302**	$ 204	$ 252
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	**328**	311	283
Equity component of AFUDC	**(7)**	(7)	(7)
Impairment of assets and other charges	**(10)**	25	—
Deferred income taxes	**(22)**	42	31
Contributions to qualified pension plans	**(3)**	—	—
Payments for asset retirement obligations	**(12)**	(2)	(2)
Provision for rate refunds	**5**	16	14
(Increase) decrease in			
Receivables	**23**	6	(13)
Receivables from affiliated companies	**(5)**	(25)	9
Inventory	**(28)**	(6)	25
Other current assets	**(55)**	(60)	(18)
Increase (decrease) in			
Accounts payable	**44**	38	2
Accounts payable to affiliated companies	**8**	(4)	—
Taxes accrued	**42**	26	30
Other current liabilities	**(63)**	11	3
Other assets	**(29)**	(43)	(32)
Other liabilities	**64**	27	(2)
Net cash provided by operating activities	**582**	559	575
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(850)**	(848)	(834)
Notes receivable from affiliated companies	**(105)**	(10)	(19)
Other	**(67)**	(60)	(48)
Net cash used in investing activities	**(1,022)**	(918)	(901)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**50**	150	467
Payments for the redemption of long-term debt	**—**	(50)	—
Notes payable to affiliated companies	**395**	(67)	(144)
Capital contribution from parent	**—**	325	—
Other	**(2)**	—	—
Net cash provided by financing activities	**443**	358	323
Net increase (decrease) in cash and cash equivalents	**3**	(1)	(3)
Cash and cash equivalents at beginning of period	**13**	14	17
Cash and cash equivalents at end of period	**$ 16**	$ 13	$ 14
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 126**	$ 107	$ 97
Cash (received from) paid for income taxes	**(35)**	9	—
Significant non-cash transactions:			
Accrued capital expenditures	**123**	135	104

See Notes to Consolidated Financial Statements

DUKE ENERGY OHIO, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Common Stock	Additional Paid-in Capital	Retained Earnings	Total Equity
Balance at December 31, 2019	$ 762	$ 2,776	$ 145	$ 3,683
Net income	—	—	252	252
Balance at December 31, 2020	$ 762	$ 2,776	$ 397	$ 3,935
Net income	—	—	204	204
Contribution from parent	—	325	—	325
Other	—	(1)	1	—
Balance at December 31, 2021	$ 762	$ 3,100	$ 602	$ 4,464
Net income	**—**	**—**	**302**	**302**
Balance at December 31, 2022	**$ 762**	**$ 3,100**	**$ 904**	**$ 4,766**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Duke Energy Indiana, LLC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Indiana, LLC and subsidiary (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1, 4 and 10 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the Indiana Utility Regulatory Commission (the "Commission"), which has jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As discussed in Note 4, regulatory proceedings in recent years in Indiana have focused on the recoverability of fuel costs and asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders requires significant management judgment. As of December 31, 2022, the Company has approximately $1.1 billion recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commission, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commission, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commission, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commission's treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.

- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commission, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 2002.

DUKE ENERGY INDIANA, LLC
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating Revenues	**$ 3,922**	$ 3,174	$ 2,795
Operating Expenses			
Fuel used in electric generation and purchased power	**1,819**	985	767
Operation, maintenance and other	**729**	750	762
Depreciation and amortization	**645**	615	569
Property and other taxes	**75**	73	81
Impairment of assets and other charges	**388**	9	—
Total operating expenses	**3,656**	2,432	2,179
Operating Income	**266**	742	616
Other Income and Expenses, net	**36**	42	37
Interest Expense	**189**	196	161
Income Before Income Taxes	**113**	588	492
Income Tax (Benefit) Expense	**(24)**	107	84
Net Income and Comprehensive Income	**$ 137**	$ 481	$ 408

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 31**	$ 6
Receivables (net of allowance for doubtful accounts of $4 at 2022 and $3 at 2021)	**112**	100
Receivables from affiliated companies	**298**	98
Notes receivable from affiliated companies	**—**	134
Inventory	**489**	418
Regulatory assets	**249**	277
Other	**197**	68
Total current assets	**1,376**	1,101
Property, Plant and Equipment		
Cost	**18,121**	17,343
Accumulated depreciation and amortization	**(6,021)**	(5,583)
Net property, plant and equipment	**12,100**	11,760
Other Noncurrent Assets		
Regulatory assets	**875**	1,278
Operating lease right-of-use assets, net	**49**	53
Other	**254**	296
Total other noncurrent assets	**1,178**	1,627
Total Assets	**$ 14,654**	$ 14,488
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 391**	$ 282
Accounts payable to affiliated companies	**206**	221
Notes payable to affiliated companies	**435**	—
Taxes accrued	**92**	73
Interest accrued	**48**	49
Current maturities of long-term debt	**303**	84
Asset retirement obligations	**207**	110
Regulatory liabilities	**187**	127
Other	**161**	105
Total current liabilities	**2,030**	1,051
Long-Term Debt	**3,854**	4,089
Long-Term Debt Payable to Affiliated Companies	**150**	150
Other Noncurrent Liabilities		
Deferred income taxes	**1,299**	1,303
Asset retirement obligations	**744**	877
Regulatory liabilities	**1,454**	1,565
Operating lease liabilities	**47**	50
Accrued pension and other post-retirement benefit costs	**122**	167
Investment tax credits	**186**	177
Other	**65**	44
Total other noncurrent liabilities	**3,917**	4,183
Commitments and Contingencies		
Equity		
Member's equity	**4,702**	5,015
Accumulated other comprehensive income	**1**	—
Total equity	**4,703**	5,015
Total Liabilities and Equity	**$ 14,654**	$ 14,488

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 137**	$ 481	$ 408
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	**648**	619	572
Equity component of AFUDC	**(13)**	(27)	(23)
Impairment of assets and other charges	**388**	9	—
Deferred income taxes	**(64)**	34	29
Contributions to qualified pension plans	**(5)**	—	—
Payments for asset retirement obligations	**(82)**	(67)	(63)
(Increase) decrease in			
Receivables	**(3)**	(33)	8
Receivables from affiliated companies	**20**	—	—
Inventory	**(70)**	55	44
Other current assets	**(3)**	(181)	(3)
Increase (decrease) in			
Accounts payable	**105**	76	(12)
Accounts payable to affiliated companies	**(3)**	8	1
Taxes accrued	**34**	12	13
Other current liabilities	**9**	13	6
Other assets	**(10)**	20	(68)
Other liabilities	**13**	(15)	26
Net cash provided by operating activities	**1,101**	1,004	938
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(877)**	(818)	(888)
Purchases of debt and equity securities	**(61)**	(142)	(37)
Proceeds from sales and maturities of debt and equity securities	**48**	65	22
Notes receivable from affiliated companies	**(86)**	(120)	(33)
Other	**(55)**	36	48
Net cash used in investing activities	**(1,031)**	(979)	(888)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**67**	300	544
Payments for the redemption of long-term debt	**(84)**	(70)	(513)
Notes payable to affiliated companies	**435**	(131)	101
Distributions to parent	**(462)**	(125)	(200)
Other	**(1)**	—	—
Net cash used in financing activities	**(45)**	(26)	(68)
Net increase (decrease) in cash and cash equivalents	**25**	(1)	(18)
Cash and cash equivalents at beginning of period	**6**	7	25
Cash and cash equivalents at end of period	**$ 31**	$ 6	$ 7
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 186**	$ 194	$ 164
Cash paid for income taxes	**35**	56	36
Significant non-cash transactions:			
Accrued capital expenditures	**122**	118	101

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity	Accumulated Other Comprehensive Income: Pension and OPEB Adjustments	Total Equity
Balance at December 31, 2019	$ 4,575	$ —	$ 4,575
Net income	408	—	408
Distributions to parent	(200)	—	(200)
Balance at December 31, 2020	$ 4,783	$ —	$ 4,783
Net income	481	—	481
Distributions to parent	(250)	—	(250)
Other	1	—	1
Balance at December 31, 2021	$ 5,015	$ —	$ 5,015
Net income	**137**	**—**	**137**
Distributions to parent	**(450)**	**—**	**(450)**
Other	**—**	**1**	**1**
Balance at December 31, 2022	**$ 4,702**	**$ 1**	**$ 4,703**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and the Board of Directors of Piedmont Natural Gas Company, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Piedmont Natural Gas Company, Inc. and subsidiaries (the "Company") as of December 31, 2022, and 2021, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Matters – Impact of Rate Regulation on the Financial Statements – Refer to Notes 1 and 4 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission, the Public Service Commission of South Carolina, and the Tennessee Public Utility Commission (collectively the "Commissions"), which have jurisdiction with respect to the gas rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2022, the Company has approximately $511 million recorded as regulatory assets.

We identified the impact of rate regulation related to regulatory assets as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions, to support its assertions on the likelihood of future recovery for deferred costs. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the ratemaking process due to its inherent complexities as it relates to regulatory assets.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recovery of regulatory assets included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of recovery in future rates and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commission, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.

- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained representation from management asserting that regulatory assets recorded in the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 27, 2023

We have served as the Company's auditor since 1951.

PIEDMONT NATURAL GAS COMPANY, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating Revenues			
Regulated natural gas	**$ 2,100**	$ 1,555	$ 1,286
Nonregulated natural gas and other	**24**	14	11
Total operating revenues	**2,124**	1,569	1,297
Operating Expenses			
Cost of natural gas	**1,015**	569	386
Operation, maintenance and other	**368**	327	322
Depreciation and amortization	**222**	213	180
Property and other taxes	**57**	55	53
Impairment of assets and other charges	**18**	10	7
Total operating expenses	**1,680**	1,174	948
Gains on Sales of Other Assets and Other, net	**4**	**—**	—
Operating Income	**448**	395	349
Equity in earnings of unconsolidated affiliates	**8**	9	9
Other income and expense, net	**46**	55	51
Total other income and expenses	**54**	64	60
Interest Expense	**140**	119	118
Income Before Income Taxes	**362**	340	291
Income Tax Expense	**39**	30	18
Net Income and Comprehensive Income	**$ 323**	$ 310	$ 273

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2022	2021
ASSETS		
Current Assets		
Receivables (net of allowance for doubtful accounts of $14 at 2022 and $15 at 2021)	$ 436	$ 318
Receivables from affiliated companies	11	11
Inventory	172	109
Regulatory assets	119	141
Other	4	9
Total current assets	742	588
Property, Plant and Equipment		
Cost	10,869	9,918
Accumulated depreciation and amortization	(2,081)	(1,899)
Facilities to be retired, net	9	11
Net property, plant and equipment	8,797	8,030
Other Noncurrent Assets		
Goodwill	49	49
Regulatory assets	392	316
Operating lease right-of-use assets, net	4	16
Investments in equity method unconsolidated affiliates	79	95
Other	272	288
Total other noncurrent assets	796	764
Total Assets	$ 10,335	$ 9,382
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 345	$ 196
Accounts payable to affiliated companies	51	40
Notes payable to affiliated companies	514	518
Taxes accrued	74	63
Interest accrued	40	37
Current maturities of long-term debt	45	—
Regulatory liabilities	74	56
Other	81	81
Total current liabilities	1,224	991
Long-Term Debt	3,318	2,968
Other Noncurrent Liabilities		
Deferred income taxes	870	815
Asset retirement obligations	26	22
Regulatory liabilities	1,024	1,058
Operating lease liabilities	13	14
Accrued pension and other post-retirement benefit costs	7	7
Other	180	158
Total other noncurrent liabilities	2,120	2,074
Commitments and Contingencies		
Equity		
Common stock, no par value: 100 shares authorized and outstanding at 2022 and 2021	1,635	1,635
Retained earnings	2,037	1,714
Total Piedmont Natural Gas Company, Inc. stockholder's equity	3,672	3,349
Noncontrolling interests	1	—
Total equity	3,673	3,349
Total Liabilities and Equity	$ 10,335	$ 9,382

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31, 2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 323**	$ 310	$ 273
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	**225**	216	182
Equity component of AFUDC	**(11)**	(20)	(19)
Gains on sales of other assets	**(4)**	—	—
Impairment of assets and other charges	**18**	10	7
Deferred income taxes	**5**	4	53
Contributions to qualified pension plans	**(2)**	—	—
Equity in earnings from unconsolidated affiliates	**(8)**	(9)	(9)
Provision for rate refunds	**(3)**	(4)	(33)
(Increase) decrease in			
Receivables	**(111)**	(77)	10
Receivables from affiliated companies	**—**	(1)	—
Inventory	**(63)**	(40)	3
Other current assets	**32**	33	(66)
Increase (decrease) in			
Accounts payable	**40**	(25)	16
Accounts payable to affiliated companies	**11**	(39)	76
Taxes accrued	**11**	37	3
Other current liabilities	**36**	(26)	(11)
Other assets	**9**	26	(11)
Other liabilities	**(1)**	(4)	7
Net cash provided by operating activities	**507**	391	481
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(862)**	(850)	(901)
Contributions to equity method investments	**(8)**	(9)	—
Other	**(26)**	(31)	(28)
Net cash used in investing activities	**(896)**	(890)	(929)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**394**	347	394
Payments for the redemption of long-term debt	**—**	(160)	—
Notes payable to affiliated companies	**(4)**	(13)	54
Capital contribution from parent	**—**	325	—
Other	**(1)**	—	—
Net cash provided by financing activities	**389**	499	448
Net increase (decrease) in cash and cash equivalents	**—**	—	—
Cash and cash equivalents at beginning of period	**—**	—	—
Cash and cash equivalents at end of period	**$ —**	$ —	$ —
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 135**	$ 114	$ 115
Cash paid for (received from) income taxes	**23**	(13)	(36)
Significant non-cash transactions:			
Accrued capital expenditures	**207**	97	106

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Common Stock	Retained Earnings	Total Piedmont Natural Gas Company, Inc. Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2019	$ 1,310	$ 1,133	$ 2,443	$ —	$ 2,443
Net income	—	273	273	—	273
Other	—	(1)	(1)	—	(1)
Balance at December 31, 2020	$ 1,310	$ 1,405	$ 2,715	$ —	$ 2,715
Net income	—	310	310	—	310
Contribution from parent	325	—	325	—	325
Other	—	(1)	(1)	—	(1)
Balance at December 31, 2021	$ 1,635	$ 1,714	$ 3,349	$ —	$ 3,349
Net income	**—**	**323**	**323**	**—**	**323**
Other	**—**	**—**	**—**	**1**	**1**
Balance at December 31, 2022	**$ 1,635**	**$ 2,037**	**$ 3,672**	**$ 1**	**$ 3,673**

See Notes to Consolidated Financial Statements

Index to Combined Notes To Consolidated Financial Statements

The notes to the consolidated financial statements are a combined presentation. The following table indicates the registrants to which the notes apply.

	Applicable Notes																										
Registrant	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**
Duke Energy	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
Duke Energy Carolinas	•		•	•	•	•	•		•	•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	
Progress Energy	•		•	•	•	•	•			•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	
Duke Energy Progress	•		•	•	•	•	•			•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	
Duke Energy Florida	•		•	•	•	•	•			•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	
Duke Energy Ohio	•		•	•	•	•	•			•	•	•		•	•		•	•	•		•	•	•	•	•	•	
Duke Energy Indiana	•	•	•	•	•	•	•		•	•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	
Piedmont	•		•	•	•	•	•			•	•	•	•	•	•		•		•		•	•	•	•	•	•	

Tables within the notes may not sum across due to (i) Progress Energy's consolidation of Duke Energy Progress, Duke Energy Florida and other subsidiaries that are not registrants and (ii) subsidiaries that are not registrants but included in the consolidated Duke Energy balances.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations and Basis of Consolidation

Duke Energy is an energy company headquartered in Charlotte, North Carolina, subject to regulation by the FERC and other regulatory agencies listed below. Duke Energy operates in the U.S. primarily through its direct and indirect subsidiaries. Certain Duke Energy subsidiaries are also subsidiary registrants, including Duke Energy Carolinas; Progress Energy; Duke Energy Progress; Duke Energy Florida; Duke Energy Ohio; Duke Energy Indiana and Piedmont. When discussing Duke Energy's consolidated financial information, it necessarily includes the results of its separate Subsidiary Registrants, which along with Duke Energy, are collectively referred to as the Duke Energy Registrants.

The information in these combined notes relates to each of the Duke Energy Registrants as noted in the Index to Combined Notes to Consolidated Financial Statements. However, none of the Subsidiary Registrants make any representation as to information related solely to Duke Energy or the Subsidiary Registrants of Duke Energy other than itself.

These Consolidated Financial Statements include, after eliminating intercompany transactions and balances, the accounts of the Duke Energy Registrants and subsidiaries or VIEs where the respective Duke Energy Registrants have control. See Note 18 for additional information on VIEs. These Consolidated Financial Statements also reflect the Duke Energy Registrants' proportionate share of certain jointly owned generation and transmission facilities. See Note 9 for additional information on joint ownership. Substantially all of the Subsidiary Registrants' operations qualify for regulatory accounting.

Duke Energy Carolinas is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of North Carolina and South Carolina. Duke Energy Carolinas is subject to the regulatory provisions of the NCUC, PSCSC, NRC and FERC.

Progress Energy is a public utility holding company, which conducts operations through its wholly owned subsidiaries, Duke Energy Progress and Duke Energy Florida. Progress Energy is subject to regulation by FERC and other regulatory agencies listed below.

Duke Energy Progress is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of North Carolina and South Carolina. Duke Energy Progress is subject to the regulatory provisions of the NCUC, PSCSC, NRC and FERC.

Duke Energy Florida is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of Florida. Duke Energy Florida is subject to the regulatory provisions of the FPSC, NRC and FERC.

Duke Energy Ohio is a regulated public utility primarily engaged in the transmission and distribution of electricity in portions of Ohio and Kentucky, the generation and sale of electricity in portions of Kentucky and the transportation and sale of natural gas in portions of Ohio and Kentucky. Duke Energy Ohio conducts competitive auctions for retail electricity supply in Ohio whereby the energy price is recovered from retail customers and recorded in Operating Revenues on the Consolidated Statements of Operations and Comprehensive Income. Operations in Kentucky are conducted through its wholly owned subsidiary, Duke Energy Kentucky. References herein to Duke Energy Ohio collectively include Duke Energy Ohio and its subsidiaries, unless otherwise noted. Duke Energy Ohio is subject to the regulatory provisions of the PUCO, KPSC and FERC.

Duke Energy Indiana is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of Indiana. Duke Energy Indiana is subject to the regulatory provisions of the IURC and FERC.

Piedmont is a regulated public utility primarily engaged in the distribution of natural gas in portions of North Carolina, South Carolina and Tennessee. Piedmont is subject to the regulatory provisions of the NCUC, PSCSC, TPUC and FERC.

Certain prior year amounts have been reclassified to conform to the current year presentation.

Other Current Assets and Liabilities

The following table provides a description of amounts included in Other within Current Assets or Current Liabilities that exceed 5% of total Current Assets or Current Liabilities on the Duke Energy Registrants' Consolidated Balance Sheets at either December 31, 2022, or 2021.

		December 31,	
(in millions)	**Location**	**2022**	**2021**
Duke Energy			
Accrued compensation	Current Liabilities	**$ 778**	$ 915
Duke Energy Carolinas			
Accrued compensation	Current Liabilities	**$ 247**	$ 277
Duke Energy Progress			
Customer deposits	Current Liabilities	**$ 106**	$ 144
Other accrued liabilities	Current Liabilities	**124**	163
Duke Energy Florida			
Customer deposits	Current Liabilities	**$ 200**	$ 200
Other accrued liabilities	Current Liabilities	**61**	89
Duke Energy Ohio			
Gas Storage	Current Assets	**$ 57**	$ 25
Collateral liabilities	Current Liabilities	**53**	57
Duke Energy Indiana			
Mark-to-market transactions	Current Assets	**$ 110**	$ 23

Discontinued Operations

Duke Energy has elected to present cash flows of discontinued operations combined with cash flows of continuing operations. Unless otherwise noted, the notes to these consolidated financial statements exclude amounts related to discontinued operations for all periods presented. For the years ended December 31, 2022, 2021 and 2020, the Loss From Discontinued Operations, net of tax on Duke Energy's Consolidated Statements of Operations includes amounts related to noncontrolling interests. A portion of Noncontrolling interests on Duke Energy's Consolidated Balance Sheets relates to discontinued operations for the periods presented. See Note 2 for discussion of discontinued operations related to the Commercial Renewables Disposal Groups.

Noncontrolling Interest

Duke Energy maintains a controlling financial interest in certain less than wholly owned regulated and nonregulated subsidiaries. As a result, Duke Energy consolidates these subsidiaries and presents the third-party investors' portion of Duke Energy's net income (loss), net assets and comprehensive income (loss) as noncontrolling interest. Noncontrolling interest is included as a component of equity on the Consolidated Balance Sheet. Operating agreements of Duke Energy's subsidiaries with noncontrolling interest allocate profit and loss based on their pro rata shares of the ownership interest in the respective subsidiary. Therefore, Duke Energy allocates net income or loss and other comprehensive income or loss of these subsidiaries to the owners based on their pro rata shares.

Significant Accounting Policies

Use of Estimates

In preparing financial statements that conform to GAAP, the Duke Energy Registrants must make estimates and assumptions that affect the reported amounts of assets and liabilities, the reported amounts of revenues and expenses and the disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Regulatory Accounting

The majority of the Duke Energy Registrants' operations are subject to price regulation for the sale of electricity and natural gas by state utility commissions or FERC. When prices are set on the basis of specific costs of the regulated operations and an effective franchise is in place such that sufficient natural gas or electric services can be sold to recover those costs, the Duke Energy Registrants apply regulatory accounting. Regulatory accounting changes the timing of the recognition of costs or revenues relative to a company that does not apply regulatory accounting. As a result, regulatory assets and regulatory liabilities are recognized on the Consolidated Balance Sheets. Regulatory assets and liabilities are amortized consistent with the treatment of the related cost in the ratemaking process. Regulatory assets are reviewed for recoverability each reporting period. If a regulatory asset is no longer deemed probable of recovery, the deferred cost is charged to earnings. See Note 4 for further information.

Regulatory accounting rules also require recognition of a disallowance (also called "impairment") loss if it becomes probable that part of the cost of a plant under construction (or a recently completed plant or an abandoned plant) will be disallowed for ratemaking purposes and a reasonable estimate of the amount of the disallowance can be made. For example, if a cost cap is set for a plant still under construction, the amount of the disallowance is a result of a judgment as to the ultimate cost of the plant. These disallowances can require judgments on allowed future rate recovery.

When it becomes probable that regulated generation, transmission or distribution assets will be abandoned, the cost of the asset is removed from plant in service. The value that may be retained as a regulatory asset on the balance sheet for the abandoned property is dependent upon amounts that may be recovered through regulated rates, including any return. As such, an impairment charge could be partially or fully offset by the establishment of a regulatory asset if rate recovery is probable. The impairment charge for a disallowance of costs for regulated plants under construction, recently completed or abandoned is based on discounted cash flows.

The Duke Energy Registrants utilize cost-tracking mechanisms, commonly referred to as fuel adjustment clauses or PGA clauses. These clauses allow for the recovery of fuel and fuel-related costs, portions of purchased power, natural gas costs and hedging costs through surcharges on customer rates. The difference between the costs incurred and the surcharge revenues is recorded either as an adjustment to Operating Revenues, Operating Expenses – Fuel used in electric generation or Operating Expenses – Cost of natural gas on the Consolidated Statements of Operations, with an off-setting impact on regulatory assets or liabilities.

Cash, Cash Equivalents and Restricted Cash

All highly liquid investments with maturities of three months or less at the date of acquisition are considered cash equivalents. Duke Energy, Progress Energy and Duke Energy Florida have restricted cash balances related primarily to collateral assets, escrow deposits and VIEs. Duke Energy Carolinas and Duke Energy Progress have restricted cash balances related to VIEs from storm recovery bonds issued. See Note 18 for additional information. Restricted cash amounts are included in Other within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets. The following table presents the components of cash, cash equivalents and restricted cash included in the Consolidated Balance Sheets.

	December 31, 2022				
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida
Current Assets					
Cash and cash equivalents	**$ 409**	**$ 44**	**$ 108**	**$ 49**	**$ 45**
Other	**173**	**8**	**74**	**28**	**41**
Other Noncurrent Assets					
Other	**11**	**1**	**2**	**2**	**—**
Total cash, cash equivalents and restricted cash	**$ 593**	**$ 53**	**$ 184**	**$ 79**	**$ 86**

	December 31, 2021				
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida
Current Assets					
Cash and cash equivalents	$ 341	$ 7	$ 70	$ 35	$ 23
Other	170	—	39	—	39
Other Noncurrent Assets					
Other	6	1	4	4	—
Total cash, cash equivalents and restricted cash	$ 517	$ 8	$ 113	$ 39	$ 62

Inventory

Inventory related to regulated operations is valued at historical cost. Inventory related to nonregulated operations is valued at the lower of cost or market. Inventory is charged to expense or capitalized to property, plant and equipment when issued, primarily using the average cost method. Excess or obsolete inventory is written down to the lower of cost or net realizable value. Once inventory has been written down, it creates a new cost basis for the inventory that is not subsequently written up. Provisions for inventory write-offs were not material at December 31, 2022, and 2021, respectively. The components of inventory are presented in the tables below.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Materials and supplies	**$ 2,604**	**$ 876**	**$ 1,232**	**$ 819**	**$ 413**	**$ 105**	**$ 342**	**$ 12**
Coal	**620**	**253**	**190**	**99**	**91**	**34**	**144**	**—**
Natural gas, oil and other	**360**	**35**	**157**	**88**	**69**	**5**	**3**	**160**
Total inventory	**$ 3,584**	**$ 1,164**	**$ 1,579**	**$ 1,006**	**$ 573**	**$ 144**	**$ 489**	**$ 172**

	December 31, 2021								
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Materials and supplies	$ 2,309	$ 793	$ 1,067	$ 729	$ 338	$ 80	$ 311	$ 14
Coal	486	195	167	94	73	19	105	—
Natural gas, oil and other	316	38	164	98	66	17	2	95
Total inventory	$ 3,111	$ 1,026	$ 1,398	$ 921	$ 477	$ 116	$ 418	$ 109

Investments in Debt and Equity Securities

The Duke Energy Registrants classify investments in equity securities as FV-NI and investments in debt securities as AFS. Both categories are recorded at fair value on the Consolidated Balance Sheets. Realized and unrealized gains and losses on securities classified as FV-NI are reported through net income. Unrealized gains and losses for debt securities classified as AFS are included in AOCI until realized, unless it is determined the carrying value of an investment has a credit loss. For certain investments of regulated operations, such as substantially all of the NDTF, realized and unrealized gains and losses (including any credit losses) on debt securities are recorded as a regulatory asset or liability. The credit loss portion of debt securities of nonregulated operations are included in earnings. Investments in debt and equity securities are classified as either current or noncurrent based on management's intent and ability to sell these securities, taking into consideration current market liquidity. See Note 16 for further information.

Goodwill

Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont perform annual goodwill impairment tests as of August 31 each year at the reporting unit level, which is determined to be a business segment or one level below. Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont update these tests between annual tests if events or circumstances occur that would more likely than not reduce the fair value of a reporting unit below its carrying value. See Note 12 for further information.

Intangible Assets

Intangible assets are included in Other in Other Noncurrent Assets on the Consolidated Balance Sheets. Generally, intangible assets are amortized using an amortization method that reflects the pattern in which the economic benefits of the intangible asset are consumed or on a straight-line basis if that pattern is not readily determinable. Amortization of intangibles is reflected in Depreciation and amortization on the Consolidated Statements of Operations. Intangible assets are subject to impairment testing and if impaired, the carrying value is accordingly reduced.

RECs are used to measure compliance with renewable energy standards and are held primarily for consumption. See Note 12 for further information.

Long-Lived Asset Impairments

The Duke Energy Registrants evaluate long-lived assets that are held and used, excluding goodwill, for impairment when circumstances indicate the carrying value of those assets may not be recoverable. An impairment exists when a long-lived asset's carrying value exceeds the estimated undiscounted cash flows expected to result from the use and eventual disposition of the asset. The estimated cash flows may be based on alternative expected outcomes that are probability weighted. If the carrying value of the long-lived asset is not recoverable based on these estimated future undiscounted cash flows, the carrying value of the asset is written down to its then current estimated fair value and an impairment charge is recognized.

The Duke Energy Registrants assess fair value of long-lived assets that are held and used using various methods, including recent comparable third-party sales, internally developed discounted cash flow analysis and analysis from outside advisors. Triggering events to reassess cash flows may include, but are not limited to, significant changes in commodity prices, the condition of an asset or management's interest in selling the asset.

Property, Plant and Equipment

Property, plant and equipment are stated at the lower of depreciated historical cost net of any disallowances or fair value, if impaired. The Duke Energy Registrants capitalize all construction-related direct labor and material costs, as well as indirect construction costs such as general engineering, taxes and financing costs. See "Allowance for Funds Used During Construction and Interest Capitalized" section below for information on capitalized financing costs. Costs of renewals and betterments that extend the useful life of property, plant and equipment are also capitalized. The cost of repairs, replacements and major maintenance projects, which do not extend the useful life or increase the expected output of the asset, are expensed as incurred. Depreciation is generally computed over the estimated useful life of the asset using the composite straight-line method. Depreciation studies are conducted periodically to update composite rates and are approved by state utility commissions and/or the FERC when required. The composite weighted average depreciation rates, excluding nuclear fuel, are included in the table that follows.

	Years Ended December 31,		
	2022	**2021**	**2020**
Duke Energy	**3.0 %**	2.9 %	3.0 %
Duke Energy Carolinas	**2.7 %**	2.7 %	2.8 %
Progress Energy	**3.2 %**	3.1 %	3.2 %
Duke Energy Progress	**3.0 %**	3.0 %	3.1 %
Duke Energy Florida	**3.5 %**	3.3 %	3.3 %
Duke Energy Ohio	**2.9 %**	2.9 %	2.9 %
Duke Energy Indiana	**3.6 %**	3.6 %	3.5 %
Piedmont	**2.1 %**	2.1 %	2.3 %

In general, when the Duke Energy Registrants retire regulated property, plant and equipment, the original cost plus the cost of retirement, less salvage value and any depreciation already recognized, is charged to accumulated depreciation. However, when it becomes probable the asset will be retired substantially in advance of its original expected useful life or is abandoned, the cost of the asset and the corresponding accumulated depreciation is recognized as a separate asset. If the asset is still in operation, the net amount is classified as Facilities to be retired, net on the Consolidated Balance Sheets. If the asset is no longer operating, the net amount is classified in Regulatory assets on the Consolidated Balance Sheets if deemed recoverable (see discussion of long-lived asset impairments above). The carrying value of the asset is based on historical cost if the Duke Energy Registrants are allowed to recover the remaining net book value and a return equal to at least the incremental borrowing rate. If not, an impairment is recognized to the extent the net book value of the asset exceeds the present value of future revenues discounted at the incremental borrowing rate.

When the Duke Energy Registrants sell entire regulated operating units, or retire or sell nonregulated properties, the original cost and accumulated depreciation and amortization balances are removed from Property, Plant and Equipment on the Consolidated Balance Sheets. Any gain or loss is recorded in earnings, unless otherwise required by the applicable regulatory body. See Note 11 for additional information.

Other Noncurrent Assets

Duke Energy, through a nonregulated subsidiary, was the winner of the Carolina Long Bay offshore wind auction in May 2022 and recorded an asset of $150 million related to the contract in Other within Other noncurrent assets. In November 2022, Duke Energy committed to a plan to sell the Commercial Renewables business segment, excluding the offshore wind contract for Carolina Long Bay, which was moved to the Electric Utilities and Infrastructure (EU&I) segment. See Notes 2 and 3 for further information.

Leases

Duke Energy determines if an arrangement is a lease at contract inception based on whether the arrangement involves the use of a physically distinct identified asset and whether Duke Energy has the right to obtain substantially all of the economic benefits from the use of the asset throughout the period as well as the right to direct the use of the asset. As a policy election, Duke Energy does not evaluate arrangements with initial contract terms of less than one year as leases.

Operating leases are included in Operating lease ROU assets, net, Other current liabilities and Operating lease liabilities on the Consolidated Balance Sheets. Finance leases are included in Property, plant and equipment, Current maturities of long-term debt and Long-Term Debt on the Consolidated Balance Sheets.

For lessee and lessor arrangements, Duke Energy has elected a policy to not separate lease and non-lease components for all asset classes. For lessor arrangements, lease and non-lease components are only combined under one arrangement and accounted for under the lease accounting framework if the non-lease components are not the predominant component of the arrangement and the lease component would be classified as an operating lease.

Nuclear Fuel

Nuclear fuel is classified as Property, Plant and Equipment on the Consolidated Balance Sheets.

Nuclear fuel in the front-end fuel processing phase is considered work in progress and not amortized until placed in service. Amortization of nuclear fuel is included within Fuel used in electric generation and purchased power on the Consolidated Statements of Operations. Amortization is recorded using the units-of-production method.

Allowance for Funds Used During Construction and Interest Capitalized

For regulated operations, the debt and equity costs of financing the construction of property, plant and equipment are reflected as AFUDC and capitalized as a component of the cost of property, plant and equipment. AFUDC equity is reported on the Consolidated Statements of Operations as non-cash income in Other income and expenses, net. AFUDC debt is reported as a non-cash offset to Interest Expense. After construction is completed, the Duke Energy Registrants are permitted to recover these costs through their inclusion in rate base and the corresponding subsequent depreciation or amortization of those regulated assets.

AFUDC equity, a permanent difference for income taxes, reduces the ETR when capitalized and increases the ETR when depreciated or amortized. See Note 24 for additional information.

Asset Retirement Obligations

AROs are recognized for legal obligations associated with the retirement of property, plant and equipment. Substantially all AROs are related to regulated operations. When recording an ARO, the present value of the projected liability is recognized in the period in which it is incurred, if a reasonable estimate of fair value can be made. The liability is accreted over time. For operating plants, the present value of the liability is added to the cost of the associated asset and depreciated over the remaining life of the asset. For retired plants, the present value of the liability is recorded as a regulatory asset unless determined not to be probable of recovery.

The present value of the initial obligation and subsequent updates are based on discounted cash flows, which include estimates regarding timing of future cash flows, selection of discount rates and cost escalation rates, among other factors. These estimates are subject to change. Depreciation expense is adjusted prospectively for any changes to the carrying amount of the associated asset. The Duke Energy Registrants receive amounts to fund the cost of the ARO for regulated operations through a combination of regulated revenues and earnings on the NDTF. As a result, amounts recovered in regulated revenues, earnings on the NDTF, accretion expense and depreciation of the associated asset are netted and deferred as a regulatory asset or liability.

Accounts Payable

During 2020, Duke Energy established a supply chain finance program (the “program”) with a global financial institution. The program is voluntary and allows Duke Energy suppliers, at their sole discretion, to sell their receivables from Duke Energy to the financial institution at a rate that leverages Duke Energy’s credit rating and, which may result in favorable terms compared to the rate available to the supplier on their own credit rating. Suppliers participating in the program, determine at their sole discretion which invoices they will sell to the financial institution. Suppliers’ decisions on which invoices are sold do not impact Duke Energy’s payment terms, which are based on commercial terms negotiated between Duke Energy and the supplier regardless of program participation. The commercial terms negotiated between Duke Energy and its suppliers are consistent regardless of whether the supplier elects to participate in the program. Duke Energy does not issue any guarantees with respect to the program and does not participate in negotiations between suppliers and the financial institution. Duke Energy does not have an economic interest in the supplier’s decision to participate in the program and receives no interest, fees or other benefit from the financial institution based on supplier participation in the program.

The following table presents the outstanding accounts payable balance sold to the financial institution by our suppliers and the supplier invoices sold to the financial institution under the program included within Net cash provided by operating activities on the Consolidated Statements of Cash Flows as of December 31, 2022, and December 31, 2021.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Outstanding Accounts Payable Balance Sold	$ 87	$ 6	$ 19	$ 8	$ 11	$ 5	$ —	$ 57
Suppliers Invoices Settled Through The Program	301	29	85	26	59	38	2	147

	December 30, 2021				
(in millions)	Duke Energy	Progress Energy	Duke Energy Florida	Duke Energy Ohio	Piedmont
Outstanding Accounts Payable Balance Sold	$ 19	$ 9	$ 9	$ 6	$ 4
Suppliers Invoices Settled Through The Program	122	10	10	12	100

Revenue Recognition

Duke Energy recognizes revenue as customers obtain control of promised goods and services in an amount that reflects consideration expected in exchange for those goods or services. Generally, the delivery of electricity and natural gas results in the transfer of control to customers at the time the commodity is delivered and the amount of revenue recognized is equal to the amount billed to each customer, including estimated volumes delivered when billings have not yet occurred. See Note 19 for further information.

Derivatives and Hedging

Derivative and non-derivative instruments may be used in connection with commodity price and interest rate activities, including swaps, futures, forwards and options. All derivative instruments, except those that qualify for the NPNS exception, are recorded on the Consolidated Balance Sheets at fair value. Qualifying derivative instruments may be designated as either cash flow hedges or fair value hedges. Other derivative instruments (undesignated contracts) either have not been designated or do not qualify as hedges. The effective portion of the change in the fair value of cash flow hedges is recorded in AOCI. The effective portion of the change in the fair value of a fair value hedge is offset in net income by changes in the hedged item. For activity subject to regulatory accounting, gains and losses on derivative contracts are reflected as regulatory assets or liabilities and not as other comprehensive income or current period income. As a result, changes in fair value of these derivatives have no immediate earnings impact.

Formal documentation, including transaction type and risk management strategy, is maintained for all contracts accounted for as a hedge. At inception and at least every three months thereafter, the hedge contract is assessed to see if it is highly effective in offsetting changes in cash flows or fair values of hedged items.

See Note 15 for further information.

Captive Insurance Reserves

Duke Energy has captive insurance subsidiaries that provide coverage, on an indemnity basis, to the Subsidiary Registrants as well as certain third parties, on a limited basis, for financial losses, primarily related to property, workers' compensation and general liability. Liabilities include provisions for estimated losses incurred but not reported (IBNR), as well as estimated provisions for known claims. IBNR reserve estimates are primarily based upon historical loss experience, industry data and other actuarial assumptions. Reserve estimates are adjusted in future periods as actual losses differ from experience.

Duke Energy, through its captive insurance entities, also has reinsurance coverage with third parties for certain losses above a per occurrence and/or aggregate retention. Receivables for reinsurance coverage are recognized when realization is deemed probable.

Preferred Stock

Preferred stock is reviewed to determine the appropriate balance sheet classification and embedded features, such as call options, are evaluated to determine if they should be bifurcated and accounted for separately. Costs directly related to the issuance of preferred stock are recorded as a reduction of the proceeds received. The liability for the dividend is recognized when declared. The accumulated dividends on the cumulative preferred stock is recognized to net income available to Duke Energy Corporation in the EPS calculation. See Note 20 for further information.

Loss Contingencies and Environmental Liabilities

Contingent losses are recorded when it is probable a loss has occurred and the loss can be reasonably estimated. When a range of the probable loss exists and no amount within the range is a better estimate than any other amount, the minimum amount in the range is recorded. Unless otherwise required by GAAP, legal fees are expensed as incurred.

Environmental liabilities are recorded on an undiscounted basis when environmental remediation or other liabilities become probable and can be reasonably estimated. Environmental expenditures related to past operations that do not generate current or future revenues are expensed. Environmental expenditures related to operations that generate current or future revenues are expensed or capitalized, as appropriate. Certain environmental expenditures receive regulatory accounting treatment and are recorded as regulatory assets.

See Notes 4 and 5 for further information.

Severance and Special Termination Benefits

Duke Energy maintains severance plans for the general employee population under which, in general, the longer a terminated employee worked prior to termination the greater the amount of severance benefits provided. A liability for involuntary severance is recorded once an involuntary severance plan is committed to by management if involuntary severances are probable and can be reasonably estimated. For involuntary severance benefits incremental to its ongoing severance plan benefits, the fair value of the obligation is expensed at the communication date if there are no future service requirements or over the required future service period. Duke Energy also offers special termination benefits under voluntary severance programs. Special termination benefits are recorded immediately upon employee acceptance absent a significant retention period. Otherwise, the cost is recorded over the remaining service period. Employee acceptance of voluntary severance benefits is determined by management based on the facts and circumstances of the benefits being offered. See Note 21 for further information.

Guarantees

If necessary, liabilities are recognized at the time of issuance or material modification of a guarantee for the estimated fair value of the obligation it assumes. Fair value is estimated using a probability weighted approach. The obligation is reduced over the term of the guarantee or related contract in a systematic and rational method as risk is reduced. Duke Energy recognizes a liability for the best estimate of its loss due to the nonperformance of the guaranteed party. This liability is recognized at the inception of a guarantee and is updated periodically. See Note 8 for further information.

Income Taxes

Duke Energy and its subsidiaries file a consolidated federal income tax return and other state and foreign jurisdictional returns. The Subsidiary Registrants are parties to a tax-sharing agreement with Duke Energy. Income taxes recorded represent amounts the Subsidiary Registrants would incur as separate C-Corporations. Deferred income taxes have been provided for temporary differences between GAAP and tax bases of assets and liabilities because the differences create taxable or tax-deductible amounts for future periods. ITCs associated with regulated operations are deferred and amortized as a reduction of income tax expense over the estimated useful lives of the related properties.

Accumulated deferred income taxes are valued using the enacted tax rate expected to apply to taxable income in the periods in which the deferred tax asset or liability is expected to be settled or realized. In the event of a change in tax rates, deferred tax assets and liabilities are remeasured as of the enactment date of the new rate. To the extent that the change in the value of the deferred tax represents an obligation to customers, the impact of the remeasurement is deferred to a regulatory liability. Remaining impacts are recorded in income from continuing operations. Duke Energy's results of operations could be impacted if the estimate of the tax effect of reversing temporary differences is not reflective of actual outcomes, is modified to reflect new developments or interpretations of the tax law, revised to incorporate new accounting principles, or changes in the expected timing or manner of a reversal.

Tax-related interest and penalties are recorded in Interest Expense and Other Income and Expenses, net in the Consolidated Statements of Operations.

See Note 24 for further information.

Excise Taxes

Certain excise taxes levied by state or local governments are required to be paid even if not collected from the customer. These taxes are recognized on a gross basis. Taxes for which Duke Energy operates merely as a collection agent for the state and local government are accounted for on a net basis. Excise taxes accounted for on a gross basis within both Operating Revenues and Property and other taxes in the Consolidated Statements of Operations were as follows.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Duke Energy	**$ 449**	$ 420	$ 415
Duke Energy Carolinas	**47**	44	43
Progress Energy	**290**	250	249
Duke Energy Progress	**25**	22	26
Duke Energy Florida	**265**	228	223
Duke Energy Ohio	**104**	102	96
Duke Energy Indiana	**7**	23	25
Piedmont	**1**	1	2

Dividend Restrictions and Unappropriated Retained Earnings

Duke Energy does not have any current legal, regulatory or other restrictions on paying common stock dividends to shareholders. However, if Duke Energy were to defer dividend payments on the preferred stock, the declaration of common stock dividends would be prohibited. See Note 20 for more information. Additionally, as further described in Note 4, Duke Energy Carolinas, Duke Energy Progress, Duke Energy Ohio, Duke Energy Indiana and Piedmont have restrictions on paying dividends or otherwise advancing funds to Duke Energy due to conditions established by regulators in conjunction with merger transaction approvals. At December 31, 2022, and 2021, an insignificant amount of Duke Energy's consolidated Retained earnings balance represents undistributed earnings of equity method investments.

New Accounting Standards

The following accounting standard was adopted by the Duke Energy Registrants in 2021.

Leases with Variable Lease Payments. In July 2021, the FASB issued new accounting guidance requiring lessors to classify a lease with variable lease payments that do not depend on a reference index or rate as an operating lease if both of the following are met: (1) the lease would have to be classified as a sales-type or direct financing lease under prior guidance, and (2) the lessor would have recognized a day-one loss. Duke Energy elected to adopt the guidance immediately upon issuance of the new standard and will be applying the new standard prospectively to new lease arrangements meeting the criteria. Duke Energy did not have any lease arrangements that this new accounting guidance materially impacted.

The following accounting standard was adopted by the Duke Energy Registrants in 2020.

Current Expected Credit Losses. In June 2016, the FASB issued new accounting guidance for credit losses. Duke Energy adopted the new accounting guidance for credit losses effective January 1, 2020, using the modified retrospective method of adoption, which does not require restatement of prior year results. Duke Energy did not adopt any practical expedients.

Duke Energy recognizes allowances for credit losses based on management's estimate of losses expected to be incurred over the lives of certain assets or guarantees. Management monitors credit quality, changes in expected credit losses and the appropriateness of the allowance for credit losses on a forward-looking basis. Management reviews the risk of loss periodically as part of the existing assessment of collectability of receivables.

Duke Energy reviews the credit quality of its counterparties as part of its regular risk management process and requires credit enhancements, such as deposits or letters of credit, as appropriate and as allowed by regulators.

Duke Energy recorded cumulative effects of changes in accounting principles related to the adoption of the new credit loss standard for allowances and credit losses of trade and other receivables, insurance receivables and financial guarantees. These amounts are included in the Consolidated Balance Sheets in Receivables, Receivables of VIEs, Other Noncurrent Assets and Other Noncurrent Liabilities. See Notes 8 and 19 for more information.

Duke Energy recorded an adjustment for the cumulative effect of a change in accounting principle due to the adoption of this standard on January 1, 2020, as shown in the table below:

	January 1, 2020					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Piedmont
Total pretax impact to Retained Earnings	$ 120	$ 16	$ 2	$ 1	$ 1	$ 1

2. DISPOSITIONS

The following table summarizes the Loss from Discontinued Operations, net of tax recorded on Duke Energy's Consolidated Statements of Operations:

	Years Ended December 31,		
(in millions)	2022	2021	2020
Commercial Renewables Disposal Groups	$ **(1,349)**	$ (151)	$ (14)
Other[a]	**26**	7	7
Loss from Discontinued Operations, net of tax	$ **(1,323)**	$ (144)	$ (7)

(a) Amount represents an income tax benefit resulting from tax adjustments for previously sold businesses not related to the Commercial Renewables Disposal Groups.

Sale of Commercial Renewables Segment

In August 2022, Duke Energy announced a strategic review of its commercial renewables business. Since 2007, Duke Energy has built a portfolio of commercial wind, solar and battery projects across the U.S., and established a development pipeline. Duke Energy has developed a strategy to focus on renewables, grid and other investment opportunities within its regulated operations. In November 2022, Duke Energy committed to a plan to sell the Commercial Renewables business segment, excluding the offshore wind contract for Carolina Long Bay, which was moved to the Electric Utilities and Infrastructure (EU&I) segment. Duke Energy is actively marketing the business as two separate disposal groups, the utility-scale solar and wind group and the distributed generation group (collectively, Commercial Renewables Disposal Groups). The sales processes for both Disposal Groups are ongoing and Duke Energy expects to dispose of these groups in the second half of 2023.

Assets Held For Sale and Discontinued Operations

The Commercial Renewables Disposal Groups were classified as held for sale and as discontinued operations in the fourth quarter of 2022. No adjustments were made to the historical activity within the Consolidated Statements of Comprehensive Income, Consolidated Statements of Cash Flows or the Consolidated Statements of Changes in Equity. Unless otherwise noted, the notes to these consolidated financial statements exclude amounts related to discontinued operations for all periods presented.

The following table presents the carrying values of the major classes of Assets held for sale and Liabilities associated with assets held for sale included in Duke Energy's Consolidated Balance Sheets.

	December 31,	
(in millions)	**2022**	**2021**
Current Assets Held for Sale		
Cash and cash equivalents	**$ 10**	$ 3
Receivables, net	**107**	87
Inventory	**88**	86
Other	**57**	56
Total current assets held for sale	**262**	232
Noncurrent Assets Held for Sale		
Property, Plant and Equipment		
Cost	**6,444**	7,323
Accumulated depreciation and amortization	**(1,651)**	(1,452)
Net property, plant and equipment	**4,793**	5,871
Operating lease right-of-use assets, net	**140**	130
Investments in equity method unconsolidated affiliates	**522**	513
Other	**179**	181
Total other noncurrent assets held for sale	**841**	824
Total Assets Held for Sale	**$ 5,896**	$ 6,927
Current Liabilities Associated with Assets Held for Sale		
Accounts payable	**$ 122**	$ 98
Taxes accrued	**17**	18
Other	**120**	51
Total current liabilities associated with assets held for sale	**259**	167
Noncurrent Liabilities Associated with Assets Held for Sale		
Operating lease liabilities	**150**	134
Asset retirement obligations	**190**	175
Other	**399**	303
Total other noncurrent liabilities associated with assets held for sale	**739**	612
Total Liabilities Associated with Assets Held for Sale	**$ 998**	$ 779

As of December 31, 2022, the noncontrolling interest balance is $1.6 billion.

The following table presents the results of the Commercial Renewables Disposal Groups, which are included in Loss from Discontinued Operations, net of tax in Duke Energy's Consolidated Statements of Operations.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Operating revenues	**$ 465**	$ 476	$ 502
Operation, maintenance and other	**337**	343	292
Depreciation and amortization[(a)]	**201**	227	200
Property and other taxes	**36**	34	26
Other income and expenses, net	**2**	(27)	1
Interest expense	**10**	72	66
Loss on disposal	**1,748**	—	—
Loss before income taxes	**(1,865)**	(227)	(81)
Income tax benefit	**(516)**	(76)	(67)
Loss from discontinued operations	**$ (1,349)**	$ (151)	$ (14)
Add: Net loss attributable to noncontrolling interest included in discontinued operations	**108**	344	296
Net income from discontinued operations attributable to Duke Energy Corporation	**$ (1,241)**	$ 193	$ 282

(a) Upon meeting the criteria for assets held for sale, beginning in November 2022 depreciation and amortization expense were ceased.

The Commercial Renewables Disposal Groups' held for sale assets included pretax impairments of approximately $1.7 billion for the year ended December 31, 2022. The impairment was recorded to write-down the carrying amount of the property, plant and equipment assets to the estimated fair value of the business, based on the expected selling price less estimated cost to sell. These losses were included in Loss from Discontinued Operations, net of tax in Duke Energy's Consolidated Statements of Operations and Comprehensive Income. The fair value was primarily determined from the income approach using discounted cash flows but also considered market information obtained through the bidding process. The discounted cash flow model utilized Level 2 and Level 3 inputs. The fair value hierarchy levels are further discussed in Note 17. The impairment will be updated, if necessary, based on the final sales price, after any adjustments at closing for working capital and capital expenditures.

Duke Energy has elected not to separately disclose discontinued operations on Duke Energy's Consolidated Statements of Cash Flows. The following table summarizes Duke Energy's cash flows from discontinued operations related to the Commercial Renewables Disposal Groups.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Cash flows provided by (used in):			
Operating activities	**$ 213**	$ 62	$ 466
Investing activities	**(802)**	(542)	(1,102)

Other Sale Related Matters

Several Duke Energy renewables project companies, located in the Electric Reliability Council of Texas (ERCOT) market, were named in several lawsuits arising out of Texas Storm Uri, which occurred in February 2021. The legal actions related to these lawsuits will remain with Duke Energy and any future activity related to the matters will be presented in discontinued operations. See Note 5 for more information.

The Commercial Renewables Disposal Groups' debt and related interest rate swaps have not been classified as held for sale as they are not currently expected transfer to the buyer, but would be required to be extinguished as a result of the disposition. As of December 31, 2022, the balance of long-term debt including current maturities is $1.5 billion. If the debt and related interest rate swaps do not transfer to the buyer and are terminated early, the expected total loss on extinguishment is approximately $100 million, of which approximately $55 million is expected to be attributable to Duke Energy. The loss would be recorded in discontinued operations when the debt and swaps are terminated. Hedge accounting was discontinued on the related interest rate swaps when the Commercial Renewables Disposal Groups were classified as held for sale as the forecasted transactions being hedged are no longer probable. As a result, a gain of $72 million was recorded in Loss from Discontinued Operations, net of tax in Duke Energy's Consolidated Statements of Operations as of December 31, 2022, of which $54 million is attributable to Duke Energy.

Interest expense and debt issuance costs directly associated with the Commercial Renewables Disposal Groups was allocated to discontinued operations. No interest from corporate level debt was allocated to discontinued operations.

The Commercial Renewables Disposal Groups have entered into negotiations to modify or terminate certain PPAs under which the Commercial Renewables Disposal Groups sell power and RECs from renewable projects to offtakers. Duke Energy expects to pay offtakers approximately $95 million to modify the agreements. Charges related to the modifications will be reflected within Loss From Discontinued Operations in Duke Energy's Consolidated Statements of Operations.

Sale of Minority Interest in Duke Energy Indiana Holdco, LLC

On January 28, 2021, Duke Energy executed an agreement providing for an investment by an affiliate of GIC in Duke Energy Indiana in exchange for a 19.9% minority interest issued by Duke Energy Indiana Holdco, LLC, the holding company for Duke Energy Indiana. The transaction was completed following two closings for an aggregate purchase price of approximately $2.05 billion. The first closing, which occurred on September 8, 2021, resulted in Duke Energy Indiana Holdco, LLC issuing 11.05% of its membership interests in exchange for approximately $1.03 billion or 50% of the purchase price. The difference between the cash consideration received, net of transaction costs of approximately $27 million, and the carrying value of the noncontrolling interest is $545 million and was recorded as an increase to equity. The second closing was completed in December 2022 and resulted in Duke Energy Indiana Holdco, LLC issuing an additional 8.85% of its membership interests in exchange for approximately $1.03 billion. The difference between the cash consideration received, net of transaction costs of approximately $6 million, and the carrying value of the noncontrolling interest is $492 million and was recorded as an increase to equity. Duke Energy retained indirect control of these assets, and, therefore, no gain or loss was recognized on the Consolidated Statements of Operations for either transaction.

3. BUSINESS SEGMENTS

Reportable segments are determined based on information used by the chief operating decision-maker in deciding how to allocate resources and evaluate the performance of the business. Duke Energy evaluates segment performance based on segment income. Segment income is defined as income from continuing operations net of income attributable to noncontrolling interests and preferred stock dividends. Segment income, as discussed below, includes intercompany revenues and expenses that are eliminated on the Consolidated Financial Statements. Certain governance costs are allocated to each segment. In addition, direct interest expense and income taxes are included in segment income.

Products and services are sold between affiliate companies and reportable segments of Duke Energy at cost. Segment assets as presented in the tables that follow exclude all intercompany assets.

Duke Energy

Due to Duke Energy's commitment in the fourth quarter of 2022 to sell the Commercial Renewables business segment, Duke Energy's segment structure now includes the following two segments: EU&I and GU&I. Prior period information has been recast to conform to the current segment structure. See Note 2 for further information on the Commercial Renewables Disposal Groups.

The EU&I segment includes Duke Energy's regulated electric utilities in the Carolinas, Florida and the Midwest. The regulated electric utilities conduct operations through the Subsidiary Registrants that are substantially all regulated and, accordingly, qualify for regulatory accounting treatment. EU&I also includes Duke Energy's electric transmission infrastructure investments and the offshore wind contract for Carolina Long Bay. Refer to Note 2 for further information.

The GU&I segment includes Piedmont, Duke Energy's natural gas local distribution companies in Ohio and Kentucky, and Duke Energy's natural gas storage, midstream pipeline, and renewable natural gas investments. GU&I's operations are substantially all regulated and, accordingly, qualify for regulatory accounting treatment.

The remainder of Duke Energy's operations is presented as Other, which is primarily comprised of interest expense on holding company debt, unallocated corporate costs and Duke Energy's wholly owned captive insurance company, Bison. Other also includes Duke Energy's interest in NMC. See Note 13 for additional information on the investment in NMC.

Business segment information is presented in the following tables. Segment assets presented exclude intercompany assets.

	Year Ended December 31, 2022					
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Unaffiliated Revenues	$ 25,990	$ 2,748	$ 28,738	$ 30	$ —	$ 28,768
Intersegment Revenues	34	92	126	92	(218)	—
Total Revenues	$ 26,024	$ 2,840	$ 28,864	$ 122	$ (218)	$ 28,768
Interest Expense	$ 1,565	$ 182	$ 1,747	$ 778	$ (86)	$ 2,439
Depreciation and amortization	4,550	327	4,877	236	(27)	5,086
Equity in earnings of unconsolidated affiliates	7	20	27	86	—	113
Income tax expense (benefit)	536	8	544	(244)	—	300
Segment income (loss)[a][b]	3,929	468	4,397	(737)	(1)	3,659
Less noncontrolling interest						95
Add back preferred stock dividend						106
Discontinued operations						(1,215)
Net income						$ 2,455
Capital investments expenditures and acquisitions[c]	$ 8,985	$ 1,295	$ 10,280	$ 1,139	$ —	$ 11,419
Segment assets[d]	152,104	16,411	168,515	9,571	—	178,086

(a) EU&I includes $386 million recorded within Impairment of assets and other charges, $46 million within Regulated electric revenues and $34 million within Noncontrolling Interests related to the Duke Energy Indiana court rulings on coal ash on the Consolidated Statements of Operations. See Note 4 for additional information.

(b) Other includes $72 million recorded within Impairment of assets and other charges, $71 million within Operations, maintenance and other and a $7 million gain within Gains on sales of other assets related to costs attributable to business transformation, including long-term real estate strategy changes and workforce realignment on the Consolidated Statements of Operations; it also includes $25 million recorded within Operations, maintenance and other related to litigation on the Consolidated Statements of Operations.

(c) Other includes capital investments expenditures and acquisitions related to the Commercial Renewables Disposal Groups.

(d) Other includes Assets Held for Sale balances related to the Commercial Renewables Disposal Groups. Refer to Note 2 for further information.

	Year Ended December 31, 2021					
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Unaffiliated Revenues	$ 22,570	$ 2,022	$ 24,592	$ 29	$ —	$ 24,621
Intersegment Revenues	33	90	123	84	(207)	—
Total Revenues	$ 22,603	$ 2,112	$ 24,715	$ 113	$ (207)	$ 24,621
Interest Expense	$ 1,432	$ 142	$ 1,574	$ 643	$ (10)	$ 2,207
Depreciation and amortization	4,251	303	4,554	236	(28)	4,762
Equity in earnings of unconsolidated affiliates	7	8	15	47	—	62
Income tax expense (benefit)	494	55	549	(281)	—	268
Segment income (loss)[a][b][c]	3,850	396	4,246	(641)	(3)	3,602
Less noncontrolling interest						329
Add back preferred stock dividend						106
Discontinued operations						200
Net income						$ 3,579
Capital investments expenditures and acquisitions[d]	$ 7,653	$ 1,271	$ 8,924	$ 828	$ —	$ 9,752
Segment assets[e]	143,841	15,179	159,020	10,567	—	169,587

(a) EU&I includes $160 million of expense recorded within Impairment of assets and other charges, $77 million of income within Other Income and expenses, $5 million of expense within Operations, maintenance and other, $13 million of income within regulated operating revenues, $3 million of expense within interest expense and $6 million of expense within Depreciation and amortization on the Duke Energy Carolinas' Consolidated Statement of Operations related to the South Carolina Supreme Court decision on coal ash and insurance proceeds; it also includes $42 million of expense recorded within Impairment of assets and other charges, $34 million of income within Other Income and expenses, $7 million of expense within Operations, maintenance, and other, $15 million of income within Regulated electric operating revenues, $5 million of expense within interest expense and $1 million of expense within Depreciation and amortization on the Duke Energy Progress' Consolidated Statement of Operations. See Notes 4 and 5 for more information.

(b) GU&I includes $20 million, recorded within Equity in earnings (losses) of unconsolidated affiliates on the Consolidated Statements of Operations, related to natural gas pipeline investments. See Note 4 for additional information.

(c) Other includes $133 million recorded within Impairment of assets and other charges, $42 million within Operations, maintenance and other, and $17 million within Depreciation and amortization on the Consolidated Statements of Operations, related to the workplace and workforce realignment. See Note 11 for additional information.

(d) Other includes capital investments expenditures and acquisitions related to the Commercial Renewables Disposal Groups.

(e) Other includes Assets Held for Sale balances related to the Commercial Renewables Disposal Groups. Refer to Note 2 for further information.

	Year Ended December 31, 2020					
ons)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
ted Revenues	$ 21,687	$ 1,653	$ 23,340	$ 26	$ —	23,366
ment Revenues	33	95	128	73	(201)	—
evenues	$ 21,720	$ 1,748	$ 23,468	$ 99	$ (201)	23,366
Expense	$ 1,320	$ 135	$ 1,455	$ 657	$ (15)	2,097
ation and amortization	4,068	258	4,326	207	(29)	4,504
n (losses) earnings of unconsolidated affiliates	(1)	(2,017)	(2,018)	13	—	(2,005)
tax expense (benefit)	340	(349)	(9)	(160)	—	(169)
t income (loss)[a][b][c]	2,669	(1,266)	1,403	(418)	(4)	981
ncontrolling interest						295
k preferred stock dividend						107
nued operations						289
me					$	1,082
nvestments expenditures and acquisitions[d]	$ 7,629	$ 1,809	$ 8,938	$ 1,483	$ —	10,421
t assets[e]	138,225	13,849	152,074	10,314	—	162,388

(a) EU&I includes $948 million of Impairment of assets and other charges and a reversal of $152 million included in Regulated electric operating revenue related to the CCR Settlement Agreement filed with the NCUC. Additionally, EU&I includes $19 million of Impairment of assets and other charges related to the Clemson University Combined Heat and Power Plant, $5 million of Impairment charges related to the natural gas pipeline assets and $16 million of shareholder contributions within Operations, maintenance and other related to Duke Energy Carolinas' and Duke Energy Progress' 2019 North Carolina rate cases. See Note 4 for additional information.
(b) GU&I includes $2.1 billion recorded within Equity in (losses) earnings of unconsolidated affiliates and $7 million of Impairment of assets and other charges related to natural gas pipeline investments. See Notes 4 and 13 for additional information.
(c) Other includes a $98 million reversal of 2018 severance costs due to a partial settlement in the Duke Energy Carolinas' 2019 North Carolina rate case. See Note 21 for additional information.
(d) Other includes capital investments expenditures and acquisitions related to the Commercial Renewables Disposal Groups.
(e) Other includes Assets Held for Sale balances related to the Commercial Renewables Disposal Groups. Refer to Note 2 for further information.

Geographical Information

Substantially all assets and revenues from continuing operations are within the U.S.

Major Customers

For the year ended December 31, 2022, revenues from one customer of Duke Energy Progress are $684 million. Duke Energy Progress has one reportable segment, Electric Utilities and Infrastructure. No other Subsidiary Registrant has an individual customer representing more than 10% of its revenues for the year ended December 31, 2022.

Products and Services

The following table summarizes revenues of the reportable segments by type.

(in millions)	Retail Electric	Wholesale Electric	Retail Natural Gas	Other	Total Revenues
2022					
Electric Utilities and Infrastructure	**$ 22,036**	**$ 2,882**	**$ —**	**$ 1,106**	**$ 26,024**
Gas Utilities and Infrastructure	**—**	**—**	**2,535**	**305**	**2,840**
Total Reportable Segments	**$ 22,036**	**$ 2,882**	**$ 2,535**	**$ 1,411**	**$ 28,864**
2021					
Electric Utilities and Infrastructure	$ 19,410	$ 2,216	$ —	$ 977	$ 22,603
Gas Utilities and Infrastructure	—	—	2,025	87	2,112
Total Reportable Segments	$ 19,410	$ 2,216	$ 2,025	$ 1,064	$ 24,715
2020					
Electric Utilities and Infrastructure	$ 18,898	$ 1,878	$ —	$ 944	$ 21,720
Gas Utilities and Infrastructure	—	—	1,691	57	1,748
Total Reportable Segments	$ 18,898	$ 1,878	$ 1,691	$ 1,001	$ 23,468

Duke Energy Ohio

Duke Energy Ohio has two reportable segments, EU&I and GU&I.

EU&I transmits and distributes electricity in portions of Ohio and generates, distributes and sells electricity in portions of Northern Kentucky. GU&I transports and sells natural gas in portions of Ohio and Northern Kentucky. Both reportable segments conduct operations primarily through Duke Energy Ohio and its wholly owned subsidiary, Duke Energy Kentucky. The remainder of Duke Energy Ohio's operations is presented as Other.

All Duke Energy Ohio assets and revenues from continuing operations are within the U.S.

	Year Ended December 31, 2022					
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	**$ 1,798**	**$ 716**	**$ 2,514**	**$ —**	**$ —**	**$ 2,514**
Interest expense	**$ 86**	**$ 43**	**$ 129**	**$ —**	**$ —**	**$ 129**
Depreciation and amortization	**221**	**103**	**324**	**—**	**—**	**324**
Income tax expense (benefit)	**24**	**(43)**	**(19)**	**(2)**	**—**	**(21)**
Segment income (loss)/Net income	**189**	**121**	**310**	**(8)**	**—**	**302**
Capital expenditures	**$ 488**	**$ 362**	**$ 850**	**$ —**	**$ —**	**$ 850**
Segment assets	**7,504**	**4,164**	**11,668**	**14**	**(176)**	**11,506**

	Year Ended December 31, 2021					
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	$ 1,493	$ 544	$ 2,037	$ —	$ —	$ 2,037
Interest expense	$ 87	$ 24	$ 111	$ —	$ —	$ 111
Depreciation and amortization	217	90	307	—	—	307
Income tax expense (benefit)	15	19	34	(4)	—	30
Segment income (loss)/Net Income	141	78	219	(15)	—	204
Capital expenditures	$ 486	$ 362	$ 848	$ —	$ —	$ 848
Segment assets	6,882	3,892	10,774	29	(29)	10,774

	Year Ended December 31, 2020					
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	$ 1,405	$ 453	$ 1,858	$ —	$ —	$ 1,858
Interest expense	$ 85	$ 17	$ 102	$ —	$ —	$ 102
Depreciation and amortization	200	78	278	—	—	278
Income tax expense (benefit)	19	26	45	(2)	—	43
Segment income (loss)	162	96	258	(6)	—	252
Capital expenditures	$ 548	$ 286	$ 834	$ —	$ —	$ 834
Segment assets	6,615	3,380	9,995	32	(2)	10,025

4. REGULATORY MATTERS

REGULATORY ASSETS AND LIABILITIES

The Duke Energy Registrants record regulatory assets and liabilities that result from the ratemaking process. See Note 1 for further information.

The following tables present the regulatory assets and liabilities recorded on the Consolidated Balance Sheets of Duke Energy and Progress Energy. See separate tables below for balances by individual registrant.

	Duke Energy		Progress Energy	
	December 31,		December 31,	
(in millions)	2022	2021	2022	2021
Regulatory Assets				
AROs – coal ash	**$ 3,205**	$ 3,408	**$ 1,429**	$ 1,399
AROs – nuclear and other	**945**	684	**884**	620
Deferred fuel and purchased power	**3,866**	1,253	**2,060**	718
Accrued pension and OPEB	**2,336**	2,017	**759**	725
Storm cost securitized balance, net	**940**	991	**720**	759
Nuclear asset securitized balance, net	**881**	937	**881**	937
Debt fair value adjustment	**829**	884	**—**	—
Storm cost deferrals	**666**	213	**559**	189
Hedge costs deferrals	**378**	348	**128**	137
Post-in-service carrying costs (PISCC) and deferred operating expenses	**342**	356	**42**	47
Retired generation facilities	**316**	357	**243**	265
Deferred asset – Lee and Harris COLA	**288**	317	**21**	21
Advanced metering infrastructure (AMI)	**283**	311	**111**	130
Customer connect project	**271**	242	**136**	124
Costs of removal regulatory asset	**221**	107	**221**	107
Vacation accrual	**222**	221	**43**	42
Incremental COVID-19 expenses	**210**	87	**78**	28
CEP deferral	**190**	161	**—**	—
Demand side management (DSM)/Energy efficiency (EE)	**189**	235	**188**	230
Derivatives – natural gas supply contracts	**168**	139	**—**	—
NCEMPA deferrals	**157**	165	**157**	165
Nuclear deferral	**154**	120	**64**	42
Deferred pipeline integrity costs	**121**	108	**—**	—
COR settlement	**120**	123	**32**	32
Deferred coal ash handling system costs	**92**	90	**25**	23
Qualifying facility contract buyouts	**81**	94	**81**	94
Amounts due from customers	**57**	85	**—**	—
Propane caverns	**26**	—	**—**	—
Deferred severance charges	**21**	54	**7**	18
Manufactured gas plant (MGP)	**—**	104	**—**	—
Other	**555**	426	**110**	87
Total regulatory assets	**18,130**	14,637	**8,979**	6,939
Less: current portion	**3,485**	2,150	**1,833**	1,030
Total noncurrent regulatory assets	**$ 14,645**	$ 12,487	**$ 7,146**	$ 5,909
Regulatory Liabilities				
Net regulatory liability related to income taxes	**$ 6,462**	$ 7,199	**$ 2,192**	$ 2,394
Costs of removal	**5,151**	6,150	**2,269**	2,955
AROs – nuclear and other	**1,038**	2,053	**—**	—
Hedge cost deferrals	**683**	364	**252**	155
Accrued pension and OPEB	**211**	213	**—**	—
DOE Settlement	**154**	—	**154**	—
Provision for rate refunds	**78**	274	28	87
Amounts to be refunded to customers	**45**	—	**—**	—
Other	**1,226**	1,110	**434**	453
Total regulatory liabilities	**15,048**	17,363	**5,329**	6,044
Less: current portion	**1,466**	1,211	**576**	478
Total noncurrent regulatory liabilities	**$ 13,582**	$ 16,152	**$ 4,753**	$ 5,566

Descriptions of regulatory assets and liabilities summarized in the tables above and below follow. See tables below for recovery and amortization periods at the separate registrants.

AROs – coal ash. Represents deferred depreciation and accretion related to the legal obligation to close ash basins. The costs are deferred until recovery treatment has been determined. See Notes 1 and 10 for additional information.

AROs – nuclear and other. Represents regulatory assets or liabilities, including deferred depreciation and accretion, related to legal obligations associated with the future retirement of property, plant and equipment, excluding amounts related to coal ash. The AROs relate primarily to decommissioning nuclear power facilities. The amounts also include certain deferred gains and losses on NDTF investments. See Notes 1 and 10 for additional information.

Deferred fuel and purchased power. Represents certain energy-related costs that are recoverable or refundable as approved by the applicable regulatory body.

Accrued pension and OPEB. Accrued pension and OPEB represent regulatory assets and liabilities related to each of the Duke Energy Registrants' respective shares of unrecognized actuarial gains and losses and unrecognized prior service cost and credit attributable to Duke Energy's pension plans and OPEB plans. The regulatory asset or liability is amortized with the recognition of actuarial gains and losses and prior service cost and credit to net periodic benefit costs for pension and OPEB plans. The accrued pension and OPEB regulatory assets are expected to be recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.

Storm cost securitized balance, net. Represents the North Carolina portion of storm restoration expenditures related to Hurricane Florence, Hurricane Michael, Hurricane Dorian and Winter Storm Diego (2018 and 2019 events).

Nuclear asset securitized balance, net. Represents the balance associated with Crystal River Unit 3 retirement approved for recovery by the FPSC on September 15, 2015, and the upfront financing costs securitized in 2016 with issuance of the associated bonds. The regulatory asset balance is net of the AFUDC equity portion.

Debt fair value adjustment. Purchase accounting adjustments recorded to state the carrying value of Progress Energy and Piedmont at fair value in connection with the 2012 and 2016 mergers, respectively. Amount is amortized over the life of the related debt.

Storm cost deferrals. Represents deferred incremental costs incurred related to major weather-related events.

Hedge costs deferrals. Amounts relate to unrealized gains and losses on derivatives recorded as a regulatory asset or liability, respectively, until the contracts are settled.

Post-in-service carrying costs (PISCC) and deferred operating expenses. Represents deferred depreciation and operating expenses as well as carrying costs on the portion of capital expenditures placed in service but not yet reflected in retail rates as plant in service.

Retired generation facilities. Represents amounts to be recovered for facilities that have been retired and are probable of recovery.

Deferred asset – Lee and Harris COLA. Represents deferred costs incurred for the canceled Lee and Harris nuclear projects.

AMI. Represents deferred costs related to the installation of AMI meters and remaining net book value of non-AMI meters to be replaced at Duke Energy Carolinas, net book value of existing meters at Duke Energy Florida, Duke Energy Progress and Duke Energy Ohio and future recovery of net book value of electromechanical meters that have been replaced with AMI meters at Duke Energy Indiana.

Customer connect project. Represents incremental operating expenses and carrying costs on deferred amounts related to the deployment of the new customer information system.

Vacation accrual. Represents vacation entitlement, which is generally recovered in the following year.

Incremental COVID-19 expenses. Represents incremental costs related to ensuring continuity and quality of service in a safe manner during the COVID-19 pandemic.

CEP deferral. Represents deferred depreciation, PISCC and deferred property tax for Duke Energy Ohio Gas capital assets for the Capital Expenditure Program (CEP).

DSM/EE. Deferred costs related to various DSM and EE programs recoverable through various mechanisms.

Derivatives – natural gas supply contracts. Represents costs for certain long-dated, fixed quantity forward natural gas supply contracts, which are recoverable through PGA clauses.

NCEMPA deferrals. Represents retail allocated cost deferrals and returns associated with the additional ownership interest in assets acquired from NCEMPA in 2015.

Nuclear deferral. Includes amounts related to levelizing nuclear plant outage costs, which allows for the recognition of nuclear outage expenses over the refueling cycle rather than when the outage occurs, resulting in the deferral of operations and maintenance costs associated with refueling.

Deferred pipeline integrity costs. Represents pipeline integrity management costs in compliance with federal regulations.

COR settlement. Represents approved COR settlements that are being amortized over the average remaining lives, at the time of approval, of the associated assets.

Deferred coal ash handling system costs. Represents deferred depreciation and returns associated with capital assets related to converting the ash handling system from wet to dry.

Qualifying facility contract buyouts. Represents termination payments for regulatory recovery through the capacity clause.

Amounts due from customers. Relates primarily to margin decoupling and IMR recovery mechanisms.

Costs of removal regulatory asset. Represents the excess of spend over funds received from customers to cover the future removal of property, plant and equipment from retired or abandoned sites as property is retired, net of certain deferred gains on NDTF investments.

Propane Caverns. Represents amounts for costs related to propane inventory, the net book value of remaining assets and decommissioning costs at Duke Energy Ohio.

MGP. Represents remediation costs incurred at former MGP sites and the deferral of costs to be incurred at Duke Energy Ohio's East End and West End sites.

Net regulatory liability related to income taxes. Amounts for all registrants include regulatory liabilities related primarily to impacts from the Tax Act. See Note 24 for additional information. Amounts have no immediate impact on rate base as regulatory assets are offset by deferred tax liabilities.

Costs of removal. Represents funds received from customers to cover the future removal of property, plant and equipment from retired or abandoned sites as property is retired. Also includes certain deferred gains on NDTF investments.

DOE Settlement. Represents litigation settlement funds received resulting from the DOE’s failure to accept spent nuclear fuel and other radioactive waste from the Crystal River Unit 3 during 2014-2018 as required under the Nuclear Waste Policy Act.

Provision for rate refunds. Represents estimated amounts due to customers based on recording interim rates subject to refund.

RESTRICTIONS ON THE ABILITY OF CERTAIN SUBSIDIARIES TO MAKE DIVIDENDS, ADVANCES AND LOANS TO DUKE ENERGY

As a condition to the approval of merger transactions, the NCUC, PSCSC, PUCO, KPSC and IURC imposed conditions on the ability of Duke Energy Carolinas, Duke Energy Progress, Duke Energy Ohio, Duke Energy Kentucky, Duke Energy Indiana and Piedmont to transfer funds to Duke Energy through loans or advances, as well as restricted amounts available to pay dividends to Duke Energy. Certain subsidiaries may transfer funds to the Parent by obtaining approval of the respective state regulatory commissions. These conditions imposed restrictions on the ability of the public utility subsidiaries to pay cash dividends as discussed below.

Duke Energy Progress and Duke Energy Florida also have restrictions imposed by their first mortgage bond indentures, which in certain circumstances, limit their ability to make cash dividends or distributions on common stock. Amounts restricted as a result of these provisions were not material at December 31, 2022.

Additionally, certain other subsidiaries of Duke Energy have restrictions on their ability to dividend, loan or advance funds to Duke Energy due to specific legal or regulatory restrictions, including, but not limited to, minimum working capital and tangible net worth requirements.

The restrictions discussed below were not a material amount of Duke Energy's and Progress Energy's net assets at December 31, 2022.

Duke Energy Carolinas

Duke Energy Carolinas must limit cumulative distributions subsequent to mergers to (i) the amount of retained earnings on the day prior to the closing of the mergers, plus (ii) any future earnings recorded.

Duke Energy Progress

Duke Energy Progress must limit cumulative distributions subsequent to the mergers between Duke Energy and Progress Energy and Duke Energy and Piedmont to (i) the amount of retained earnings on the day prior to the closing of the respective mergers, plus (ii) any future earnings recorded.

Duke Energy Ohio

Duke Energy Ohio will not declare and pay dividends out of capital or unearned surplus without the prior authorization of the PUCO. Duke Energy Ohio received FERC and PUCO approval to pay dividends from its equity accounts that are reflective of the amount that it would have in its retained earnings account had push-down accounting for the Cinergy merger not been applied to Duke Energy Ohio’s balance sheet. The conditions include a commitment from Duke Energy Ohio that equity, adjusted to remove the impacts of push-down accounting, will not fall below 30% of total capital.

Duke Energy Kentucky is required to pay dividends solely out of retained earnings and to maintain a minimum of 35% equity in its capital structure.

Duke Energy Indiana

Duke Energy Indiana must limit cumulative distributions subsequent to the merger between Duke Energy and Cinergy to (i) the amount of retained earnings on the day prior to the closing of the merger, plus (ii) any future earnings recorded. In addition, Duke Energy Indiana will not declare and pay dividends out of capital or unearned surplus without prior authorization of the IURC.

Piedmont

Piedmont must limit cumulative distributions subsequent to the acquisition of Piedmont by Duke Energy to (i) the amount of retained earnings on the day prior to the closing of the merger, plus (ii) any future earnings recorded.

RATE-RELATED INFORMATION

The NCUC, PSCSC, FPSC, IURC, PUCO, TPUC and KPSC approve rates for retail electric and natural gas services within their states. The FERC approves rates for electric sales to wholesale customers served under cost-based rates (excluding Ohio and Indiana), as well as sales of transmission service. The FERC also regulates certification and siting of new interstate natural gas pipeline projects.

Duke Energy Carolinas and Duke Energy Progress

Hurricane Ian

In late September and early October 2022, Hurricane Ian inflicted severe damage to the Duke Energy Carolinas and Duke Energy Progress territories in North Carolina and South Carolina. Approximately 950,000 customers were impacted. Total estimated operation and maintenance expenses incurred for restoration efforts for the year ended December 31, 2022, were approximately $100 million, with an additional $9 million in capital investments. Approximately $83 million of the operation and maintenance expenses are deferred in Regulatory assets within Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2022 ($40 million and $43 million for Duke Energy Carolinas and Duke Energy Progress, respectively). Duke Energy Carolinas and Duke Energy Progress have regulatory tools to recover storm costs including deferral and securitization. These estimates could change as Duke Energy Carolinas and Duke Energy Progress receive additional information on actual costs.

Carbon Plan Proceeding

On October 13, 2021, North Carolina enacted legislation (Energy Solutions for North Carolina or HB 951) that established a framework overseen by the NCUC to advance North Carolina CO_2 emission reductions from electric generating facilities in the state through the use of least cost planning while providing for continued reliability and affordable rates for customers. Among other things, HB 951 directed that the NCUC approve an initial carbon plan (Carbon Plan) by December 31, 2022, taking all reasonable steps to achieve a 70% reduction in CO_2 emissions from public utilities' electric generating facilities in the state by 2030 (from 2005 levels) and achieve carbon neutrality from electric generating facilities by 2050 while maintaining affordability and reliability for customers. On May 16, 2022, Duke Energy Carolinas and Duke Energy Progress filed their proposed Carolinas Carbon Plan (Proposed Plan) with the NCUC.

The NCUC issued an order on December 30, 2022, adopting the first Carbon Plan. The order recognizes the value of an "all-of-the-above" approach to achieving CO_2 emission reductions and established a set of near-term procurement and development activities needed to continue progress towards the targeted CO_2 reductions, along with the schedule for the future biennial updates to the Carbon Plan. The approved near-term action plan includes procurement and development of solar, storage and hydrogen-capable natural gas generation at levels consistent with the Proposed Plan, along with upgrading key transmission facilities to strengthen the grid, improve resilience for customers and interconnect new solar generation and stakeholder engagement activities for onshore wind generation (in all cases, subject to any further applicable regulatory processes). The order also approved early development activities for long lead-time resources, including new nuclear, pumped-hydro storage and offshore wind transmission development. The NCUC affirmed the utility ownership structure required in HB 951; all new generation facilities or other resources selected by the NCUC to achieve the CO_2 emission reductions shall be owned and recovered on a cost-of-service basis by the utilities, with a carveout for 45% of solar and solar plus storage generation to be procured through long-term purchase power agreements with third parties. The order approves continued utilization of the remaining coal-fired generation assets, ensuring that appropriate replacement generating units and associated transmission infrastructure are in service before existing generating units are retired and providing an orderly transition out of coal generation by 2035.

Storm Cost Securitization Legislation

On June 15, 2022, the South Carolina General Assembly unanimously adopted S. 1077 (Act 227) in both the House and Senate and the bill was signed into law on June 17, 2022. The legislation enables the PSCSC to permit the issuance of bonds for the payment of storm costs and the creation of a storm charge for repayment.

On August 5, 2022, Duke Energy Progress filed a petition with the PSCSC for review and approval of deferred storm costs to be securitized of approximately $223 million. The evidentiary hearing is scheduled to begin on or after March 1, 2023. On February 7, 2023, a stipulation was reached with all parties in the proceeding regarding certain items identified through the Office of Regulatory Staff (ORS) audit of storm costs. The final amount for securitization will depend on the outcome of the hearing. Duke Energy Progress cannot predict the outcome of this matter.

Duke Energy Carolinas

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Carolinas' Consolidated Balance Sheets.

(in millions)	December 31, 2022	December 31, 2021	Earns/Pays a Return	Recovery/Refund Period Ends
Regulatory Assets[a]				
AROs – coal ash	**$ 1,391**	$ 1,227	(g)	(b)
Deferred fuel and purchased power[i]	**1,614**	339	(e)	2024
Accrued pension and OPEB[c]	**614**	365	Yes	(h)
Storm cost securitized balance, net	**220**	232		2041
Storm cost deferrals	**93**	22	Yes	(b)
Hedge costs deferrals[c]	**228**	171	Yes	(b)
PISCC and deferred operating expenses[c]	**30**	31	Yes	(b)
Retired generation facilities[c]	**39**	54	Yes	(b)
Deferred asset – Lee COLA	**267**	296		(b)
AMI	**139**	140	Yes	(b)
Customer connect project	**62**	66	Yes	(b)
Vacation accrual	**84**	83		2023
Incremental COVID-19 expenses	**127**	51	Yes	(b)
Nuclear deferral	**90**	78		2024
COR settlement	**88**	91	Yes	(b)
Deferred coal ash handling system costs	**67**	67	Yes	(b)
Other	**235**	166		(b)
Total regulatory assets	**5,388**	3,479		
Less: current portion	**1,095**	544		
Total noncurrent regulatory assets	**$ 4,293**	$ 2,935		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes[d]	**$ 2,475**	$ 2,785		(b)
Costs of removal[c]	**1,769**	2,009	Yes	(f)
AROs – nuclear and other	**1,038**	2,053		(b)
Hedge cost deferrals	**350**	209		(b)
Accrued pension and OPEB[c]	**44**	44	Yes	(h)
Provision for rate refunds	**50**	124	Yes	(b)
Other	**587**	461		(b)
Total regulatory liabilities	**6,313**	7,685		
Less: current portion	**530**	487		
Total noncurrent regulatory liabilities	**$ 5,783**	$ 7,198		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Includes regulatory liabilities related to the change in the federal tax rate as a result of the Tax Act and the change in the North Carolina tax rate, both discussed in Note 24. Portions are included in rate base.
(e) Pays interest on over-recovered costs in North Carolina. Includes certain purchased power costs in North Carolina and South Carolina and costs of distributed energy in South Carolina.
(f) Recovered over the life of the associated assets.
(g) Earns a debt and equity return on coal ash expenditures for North Carolina and South Carolina retail customers as permitted by various regulatory orders.
(h) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.
(i) Duke Energy Carolinas submitted a fuel filing to the NCUC in May 2022 for recovery of $327 million, which included deferrals through January 2022. This amount is expected to be recovered through August 2023. The next filing will be made in the first quarter of 2023. Duke Energy Carolinas submitted a fuel filing to the PSCSC in July 2022 for recovery of $79 million, which included deferrals through May 2022. The amount is expected to be recovered through September 2023. The next filing will be made in the third quarter of 2023.

2023 North Carolina Rate Case

On January 19, 2023, Duke Energy Carolinas filed a PBR application with the NCUC to request an increase in base rate retail revenues. The PBR Application includes an MYRP to recover projected capital investments during the three year MYRP period. In addition to the MYRP, the PBR Application includes an Earnings Sharing Mechanism, Residential Decoupling Mechanism and Performance Incentive Mechanisms as required by HB 951. If approved, the overall retail revenue increase would be $501 million in Year 1, $172 million in Year 2 and $150 million in Year 3, for a combined total of $823 million or 15.7% by early 2026. The rate increase is driven primarily by major transmission and distribution investments since the last rate case and projected in the MYRP, as well as investments in energy storage and solar assets included in the MYRP consistent with the Carbon Plan. Duke Energy Carolinas plans to implement temporary rates, subject to refund, on September 1, 2023, and has requested permanent rates be effective by January 1, 2024. Duke Energy Carolinas cannot predict the outcome of this matter.

Oconee Nuclear Station Subsequent License Renewal

On June 7, 2021, Duke Energy Carolinas filed a subsequent license renewal (SLR) application for the Oconee Nuclear Station (ONS) with the U.S. Nuclear Regulatory Commission (NRC) to renew ONS's operating license for an additional 20 years. The SLR would extend operations of the facility from 60 to 80 years. The current licenses for units 1 and 2 expire in 2033 and the license for unit 3 expires in 2034. By a Federal Register Notice dated July 28, 2021, the NRC provided a 60-day comment period for persons whose interest may be affected by the issuance of a subsequent renewed license for ONS to file a request for a hearing and a petition for leave to intervene. On September 27, 2021, Beyond Nuclear and Sierra Club (Petitioners) filed a Hearing Request and Petition to Intervene (Hearing Request) and a Petition for Waiver. The Hearing Request proposed three contentions and claimed that Duke Energy Carolinas did not satisfy the National Environmental Policy Act (NEPA) of 1969, as amended, or the NRC's NEPA-implementing regulations. Following Duke Energy Carolinas' answer and the Petitioners' reply, on February 11, 2022, the Atomic Safety and Licensing Board (ASLB) issued its decision on the Hearing Request and found that the Petitioners failed to establish that the proposed contentions are litigable. The ASLB also denied the Petitioners' Petition for Waiver and terminated the proceeding.

On February 24, 2022, the NRC issued a decision in the SLR appeal related to Florida Power and Light's Turkey Point nuclear generating station in Florida. The NRC ruled that the NRC's license renewal Generic Environmental Impact Statement (GEIS) does not apply to SLR because the GEIS does not address SLR. The decision overturned a 2020 NRC decision that found the GEIS applies to SLR. Although Turkey Point is not owned or operated by a Duke Energy Registrant, the NRC's order applies to all SLR applicants, including ONS. The NRC order also indicated no subsequent renewed licenses will be issued until the NRC staff has completed an adequate NEPA review for each application. On April 5, 2022, the NRC approved a 24-month rulemaking plan that will enable the NRC staff to complete an adequate NEPA review. Although an SLR applicant may wait until the rulemaking is completed, the NRC also noted that an applicant may submit a supplement to its environmental report providing information on environmental impacts during the SLR period prior to the rulemaking being completed. On November 7, 2022, Duke Energy Carolinas submitted a supplement to its environmental report addressing environmental impacts during the SLR period. On December 19, 2022, the NRC published a notice in the Federal Register that the NRC will conduct a limited scoping process to gather additional information necessary to prepare an environmental impact statement (EIS) to evaluate the environmental impacts at ONS during the SLR period. The NRC received comments from the EPA and the Petitioners and these comments identify eighteen potential impacts that should be considered by the NRC in the EIS, which include, but are not limited to, climate change and flooding, environmental justice, severe accidents, and external events. Currently, the NRC expects to publish a draft EIS in October 2023.

On December 19, 2022, the NRC issued the Safety Evaluation Report (SER) for the safety portion of the SLR application. The NRC determined Duke Energy Carolinas met the requirements of the applicable regulations and identified actions that have been taken or will be taken to manage the effects of aging and address time-limited analyses. Duke Energy Carolinas and the NRC met with the Advisory Committee on Reactor Safeguards (ACRS) on February 2, 2023, to discuss issues regarding the SER and SLR application, after which the ACRS will issue a report discussing the result of its review.

Although the NRC's GEIS applicability decision will delay completion of the SLR proceeding, Duke Energy Carolinas does not believe it changes the probability that the ONS subsequent renewed licenses will ultimately be issued, although Duke Energy Carolinas cannot guarantee the outcome of the license application process.

Duke Energy Carolinas and Duke Energy Progress intend to seek renewal of operating licenses and 20-year license extensions for all of their nuclear stations. New depreciation rates were implemented for all of the nuclear facilities during the second quarter of 2021. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of these additional relicensing proceedings.

Duke Energy Progress

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Progress' Consolidated Balance Sheets.

(in millions)	December 31, 2022	2021	Earns/Pays a Return	Recovery/Refund Period Ends
Regulatory Assets[a]				
AROs – coal ash	**$ 1,418**	$ 1,389	(g)	(b)
AROs – nuclear and other	**869**	613		(c)
Deferred fuel and purchased power[l]	**705**	303	(e)	2024
Accrued pension and OPEB[d]	**417**	351	Yes	(j)
Storm cost securitized balance, net	**720**	759		2041
Storm cost deferrals	**234**	170	Yes	(b)
Hedge costs deferrals	**55**	60		(b)
PISCC and deferred operating expenses	**42**	47	Yes	2054
Retired generation facilities	**149**	171	Yes	(b)
Deferred asset - Harris COLA	**21**	21		(b)
AMI	**81**	92	Yes	(b)
Customer connect project	**54**	57	Yes	(b)
Vacation accrual	**43**	42		2023
Incremental COVID-19 expenses	**78**	28	Yes	(b)
DSM/EE[d]	**180**	218	(h)	(h)
NCEMPA deferrals	**157**	165	(f)	2042
Nuclear deferral	**64**	42		2024
COR settlement	**32**	32	Yes	(b)
Deferred coal ash handling system costs	**25**	23	Yes	(b)
Other	**70**	68		(b)
Total regulatory assets	**5,414**	4,651		
Less: current portion	**690**	533		
Total noncurrent regulatory assets	**$ 4,724**	$ 4,118		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes[k]	**$ 1,559**	$ 1,695		(b)
Costs of removal[d]	**2,269**	2,955	Yes	(i)
Hedge cost deferrals	**252**	155		(b)
Provision for rate refunds	**28**	87	Yes	(b)
Other	**344**	357		(b)
Total regulatory liabilities	**4,452**	5,249		
Less: current portion	**332**	381		
Total noncurrent regulatory liabilities	**$ 4,120**	$ 4,868		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Recovery period for costs related to nuclear facilities runs through the decommissioning period of each unit.
(d) Included in rate base.
(e) Pays interest on over-recovered costs in North Carolina. Includes certain purchased power costs in North Carolina and South Carolina and costs of distributed energy in South Carolina.
(f) South Carolina retail allocated costs are earning a return.
(g) Earns a debt and equity return on coal ash expenditures for North Carolina and South Carolina retail customers as permitted by various regulatory orders.
(h) Includes incentives on DSM/EE investments and is recovered through an annual rider mechanism.
(i) Recovered over the life of the associated assets.
(j) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.
(k) Includes regulatory liabilities related to the change in the federal tax rate as a result of the Tax Act and the change in the North Carolina tax rate, both discussed in Note 24. Portions are included in rate base.
(l) Duke Energy Progress submitted a fuel filing to the NCUC in August 2022 for recovery of $251 million, which included deferrals through June 2022. This amount is expected to be recovered through November 2023. The next filing will be made in the second quarter of 2023. Duke Energy Progress submitted a fuel filing to the PSCSC in April 2022 for recovery of $44 million, which included deferrals through February 2022. This amount is expected to be recovered through June 2023. The next filing will be made in the second quarter of 2023.

2022 North Carolina Rate Case

On October 6, 2022, Duke Energy Progress filed a PBR application with the NCUC to request an increase in base rate retail revenues. The rate request before the NCUC includes an MYRP to recover projected capital investments during the three year MYRP period. In addition to the MYRP, the PBR Application includes an Earnings Sharing Mechanism, Residential Decoupling Mechanism and Performance Incentive Mechanisms as required by HB 951. If approved, the overall retail revenue increase would be $326 million in Year 1, $151 million in Year 2 and $138 million in Year 3, for a combined total of $615 million or 16% by late 2025. The rate increase is driven primarily by major transmission and distribution investments since the last rate case and projected in the MYRP, as well as investments in energy storage and solar assets included in the MYRP consistent with the Carbon Plan. Duke Energy Progress plans to implement temporary rates, subject to refund, on June 1, 2023, and has requested permanent rates be effective by October 1, 2023. The evidentiary hearing has been scheduled to begin on May 1, 2023. Duke Energy Progress cannot predict the outcome of this matter.

2022 South Carolina Rate Case

On September 1, 2022, Duke Energy Progress filed an application with the PSCSC to request an increase in base rate retail revenues. On January 12, 2023, Duke Energy Progress and the ORS, as well as other consumer, environmental, and industrial intervening parties, filed a comprehensive Agreement and Stipulation of Settlement resolving all issues in the base rate proceeding. The major components of the stipulation include:

- A $52 million annual customer rate increase prior to the reduction from the accelerated return to customers of federal unprotected Property, Plant and Equipment related EDIT. After extending the remaining EDIT giveback to customers to 33 months, the net annual retail rate increase is approximately $36 million.
- ROE of 9.6% based upon a capital structure of 52.43% equity and 47.57% debt.
- Continuation of deferral treatment of coal ash basin closure costs. Supports an amortization period for remaining coal ash closure costs in this rate case of seven years. Duke Energy Progress agreed not to seek recovery of approximately $50 million of deferred coal ash expenditures related to retired sites in this rate case (South Carolina retail allocation).
- Accepts the 2021 Depreciation Study as proposed in this case, as adjusted for certain recommendations from ORS and includes accelerated retirement dates for certain coal units as originally proposed.
- Establishment of a storm reserve to help offset the costs of major storms.

The PSCSC held a hearing on January 17, 2023, to consider evidence supporting the stipulation and unanimously voted to approve the comprehensive agreement on February 9, 2023. The PSCSC voted to allow Duke Energy Progress to implement new customer rates by April 1, 2023. A final written order is due from the PSCSC by March 1, 2023.

FERC Return on Equity Complaint

On October 16, 2020, North Carolina Electric Membership Corporation (NCEMC) filed a complaint at the FERC against Duke Energy Progress pursuant to Section 206 of the Federal Power Act (FPA), alleging that the 11% stated ROE component in the demand formula rate in the Power Supply and Coordination Agreement between NCEMC and Duke Energy Progress is unjust and unreasonable. On June 16, 2022, Duke Energy Progress submitted to the FERC an Offer of Settlement and Settlement Agreement (Settlement Agreement) between NCEMC and Duke Energy Progress. The Settlement Agreement provides for an ROE of 10%, effective January 1, 2022, among other contract modifications. On November 7, 2022, the FERC approved the Settlement Agreement.

Duke Energy Florida

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Florida's Consolidated Balance Sheets.

(in millions)	December 31, 2022	2021	Earns/Pays a Return	Recovery/Refund Period Ends
Regulatory Assets[a]				
AROs – coal ash	**$ 11**	$ 10		(b)
AROs – nuclear and other	**15**	7		(b)
Deferred fuel and purchased power[h]	**1,355**	415	(f)	2024
Accrued pension and OPEB[c]	**342**	374	Yes	(g)
Nuclear asset securitized balance, net	**881**	937		2036
Storm cost deferrals[c]	**325**	19	(f)	(b)
Hedge costs deferrals[c]	**73**	77	Yes	2038
Retired generation facilities[c]	**94**	94	Yes	2044
AMI[c]	**30**	38	Yes	2032
Customer connect project[c]	**82**	67	Yes	2037
Costs of removal regulatory asset[c]	**221**	107	(d)	(b)
Qualifying facility contract buyouts[c]	**81**	94	Yes	2034
Other	**55**	49	(d)	(b)
Total regulatory assets	**3,565**	2,288		
Less: current portion	**1,143**	497		
Total noncurrent regulatory assets	**$ 2,422**	$ 1,791		
Net regulatory liability related to income taxes[c]	**$ 633**	$ 699		(b)
DOE Settlement	**154**	—		
Other	**90**	97	(d)	(b)
Total regulatory liabilities	**877**	796		
Less: current portion	**244**	98		
Total noncurrent regulatory liabilities	**$ 633**	$ 698		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Certain costs earn/pay a return.
(e) Earns a debt return/interest once collections begin.
(f) Earns commercial paper rate.
(g) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.
(h) Duke Energy Florida submitted a fuel filing to the FPSC in January 2023 for recovery of $795 million, which included the 2022 actual under-recovery of $1.2 billion, offset by projected declining fuel costs in 2023 due to lower natural gas prices. The expected recovery period is April 2023 through March 2024.

2021 Settlement Agreement

On January 14, 2021, Duke Energy Florida filed a Settlement Agreement (the “2021 Settlement”) with the FPSC. The parties to the 2021 Settlement include Duke Energy Florida, the Office of Public Counsel (OPC), the Florida Industrial Power Users Group, White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate and NUCOR Steel Florida, Inc. (collectively, the “Parties”).

Pursuant to the 2021 Settlement, the Parties agreed to a base rate stay-out provision that expires year-end 2024; however, Duke Energy Florida is allowed an increase to its base rates of an incremental $67 million in 2022, $49 million in 2023 and $79 million in 2024, subject to adjustment in the event of tax reform during the years 2021, 2022 and 2023. The Parties also agreed to an ROE band of 8.85% to 10.85% with a midpoint of 9.85% based on a capital structure of 53% equity and 47% debt. The ROE band can be increased by 25 basis points if the average 30-year U.S. Treasury rate increases 50 basis points or more over a six-month period in which case the midpoint ROE would rise from 9.85% to 10.10%. On July 25, 2022, this provision was triggered. Duke Energy Florida filed a petition with the FPSC on August 12, 2022, to increase the ROE effective August 2022 with a base rate increase effective January 1, 2023. The FPSC approved this request on October 4, 2022. The 2021 Settlement Agreement also provided that Duke Energy Florida will be able to retain the $173 million retail portion of the expected DOE award from its lawsuit to recover spent nuclear fuel to mitigate customer rates over the term of the 2021 Settlement. In return, Duke Energy Florida is permitted to recognize the $173 million into earnings through the approved settlement period. The full amount of the $173 million is expected to be recognized between the years of 2023 and 2024, while also remaining within the approved ROE band. Duke Energy Florida settled the DOE lawsuit and received payment of approximately $180 million on June 15, 2022, of which the retail portion was approximately $154 million. The 2021 Settlement authorizes Duke Energy Florida to collect the difference between $173 million and the $154 million retail portion of the amount received through the capacity cost recovery clause.

The 2021 Settlement also contained a provision to recover or flow-back the effects of tax law changes. As a result of the IRA enacted on August 16, 2022, Duke Energy Florida is eligible for PTCs associated with solar facilities placed in service beginning in January 2022. Duke Energy Florida filed a petition with the FPSC on October 17, 2022, to reduce base rates effective January 1, 2023, by $56 million to flow back the expected 2023 PTCs and to flow back the expected 2022 PTCs via an adjustment to the capacity cost recovery clause. On December 14, 2022, the FPSC issued an order approving Duke Energy Florida's petition. See Note 24 for additional information on the IRA.

In addition to these terms, the 2021 Settlement contained provisions related to the accelerated depreciation of Crystal River Units 4-5, the approval of approximately $1 billion in future investments in new cost-effective solar power, the implementation of a new Electric Vehicle Charging Station Program and the deferral and recovery of costs in connection with the implementation of Duke Energy Florida's Vision Florida program, which explores various emerging non-carbon emitting generation technology, distributed technologies and resiliency projects, among other things. The 2021 Settlement also resolved remaining unrecovered storm costs for Hurricane Michael and Hurricane Dorian.

The FPSC approved the 2021 Settlement on May 4, 2021, issuing an order on June 4, 2021. Revised customer rates became effective January 1, 2022, with subsequent base rate increases effective January 1, 2023, and January 1, 2024.

Clean Energy Connection

On July 1, 2020, Duke Energy Florida petitioned the FPSC for approval of a voluntary solar program. The program consists of 10 new solar generating facilities with combined capacity of approximately 750 MW. The program allows participants to support cost-effective solar development in Florida by paying a subscription fee based on per kilowatt subscriptions and receiving a credit on their bill based on the actual generation associated with their portion of the solar portfolio. The estimated cost of the 10 new solar generation facilities is approximately $1 billion and the projects are expected to be completed by the end of 2024. This investment will be included in base rates offset by the revenue from the subscription fees and the credits will be included for recovery in the fuel cost recovery clause. The FPSC approved the program in January 2021.

On February 24, 2021, the League of United Latin American Citizens (LULAC) filed a notice of appeal of the FPSC's order approving the Clean Energy Connection to the Supreme Court of Florida. The Supreme Court of Florida heard the oral argument on February 9, 2022. On May 27, 2022, the Supreme Court of Florida issued an order remanding the case back to the FPSC so that the FPSC can amend its order to better address some of the arguments raised by LULAC. On September 23, 2022, the FPSC issued a revised order and submitted it on September 26, 2022, to the Supreme Court of Florida. The Supreme Court of Florida requested that the parties file supplemental briefs regarding the revised order, which were filed February 6, 2023. The FPSC approval order remains in effect pending the outcome of the appeal. Duke Energy Florida cannot predict the outcome of this matter.

Storm Protection Plan

On April 11, 2022, Duke Energy Florida filed a Storm Protection Plan for approval with the FPSC. The plan, which covers investments for the 2023-2032 time frame, reflects approximately $7 billion of capital investment in transmission and distribution meant to strengthen its infrastructure, reduce outage times associated with extreme weather events, reduce restoration costs and improve overall service reliability. The evidentiary hearing began on August 2, 2022. On October 4, 2022, the FPSC voted to approve Duke Energy Florida's plan with one modification to remove the transmission loop radially fed program, representing a reduction of approximately $80 million over the 10-year period starting in 2025. On December 9, 2022, the Office of Public Counsel filed a notice of appeal of this order to the Florida Supreme Court. Duke Energy Florida cannot predict the outcome of this matter.

Hurricane Ian

On September 28, 2022, much of Duke Energy Florida's service territory was impacted by Hurricane Ian, which caused significant damage resulting in more than 1.1 million outages. Duke Energy Florida's December 31, 2022 Consolidated Balance Sheets include an estimate of approximately $353 million related to deferred Hurricane Ian storm costs, consistent with the FPSC's storm rule, in Regulatory assets within Other Noncurrent Assets. After depleting any existing storm reserves, which were approximately $107 million before Hurricane Ian, Duke Energy Florida is permitted to petition the FPSC for recovery of additional incremental operation and maintenance costs resulting from the storm and to replenish the retail customer storm reserve to approximately $132 million. Duke Energy Florida filed its petition for cost recovery of various storms, including Hurricane Ian, and replenishment of the storm reserve on January 23, 2023, seeking recovery of $442 million, for recovery over 12 months beginning with the first billing cycle in April 2023. Duke Energy Florida cannot predict the outcome of this matter.

Duke Energy Ohio

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Ohio's Consolidated Balance Sheets.

(in millions)	December 31, 2022	2021	Earns/Pays a Return	Recovery/Refund Period Ends
Regulatory Assets[a]				
AROs – coal ash	**$ —**	$ 33	Yes	(b)
Deferred fuel and purchased power	**54**	38		2023
Accrued pension and OPEB	**129**	133		(e)
Storm cost deferrals	**14**	2		2023
Hedge costs deferrals	**2**	5		(b)
PISCC and deferred operating expenses[c]	**15**	16	Yes	2083
AMI	**18**	24		(b)
Customer connect project	**54**	41		(b)
CEP deferral	**190**	161	Yes	(b)
Deferred pipeline integrity costs	**28**	24	Yes	(b)
Propane caverns	**26**	—		(b)
Manufactured gas plant (MGP)	**—**	104		(b)
Other	**154**	126		(b)
Total regulatory assets	**684**	707		
Less: current portion	**103**	72		
Total noncurrent regulatory assets	**$ 581**	$ 635		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes	**$ 496**	$ 602		(b)
Costs of removal	**9**	39		(d)
Accrued pension and OPEB	**21**	21		(e)
Provision for rate refunds	**—**	61		
Other	**107**	78		(b)
Total regulatory liabilities	**633**	801		
Less: current portion	**99**	62		
Total noncurrent regulatory liabilities	**$ 534**	$ 739		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Recovery over the life of the associated assets.
(e) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.

Duke Energy Ohio Electric Base Rate Case

Duke Energy Ohio filed with the PUCO an electric distribution base rate case application on October 1, 2021, with supporting testimony filed on October 15, 2021, requesting an increase in electric distribution base rates of approximately $55 million and an ROE of 10.3%. This is an approximate 3.3% average increase in the customer's total bill across all customer classes. The drivers for this case are capital invested since Duke Energy Ohio's last electric distribution base rate case in 2017. Duke Energy Ohio is also seeking to adjust the caps on its Distribution Capital Investment Rider (DCI Rider). The Staff of the PUCO (Staff) report was issued on May 19, 2022, recommending an increase in electric distribution base rates of $2 million to $15 million with an ROE range of 8.84% to 9.85%. On September 19, 2022, Duke Energy Ohio filed a Stipulation and Recommendation with the PUCO, which includes an increase in overall electric distribution base rates of approximately $23 million and an ROE of 9.5%. The stipulation is among all but one party to the proceeding. The PUCO issued an order on December 14, 2022, approving the Stipulation without material modification. Rates went into effect on January 3, 2023. The Ohio Consumers' Counsel (OCC) filed an application for rehearing on January 13, 2023. On February 8, 2023, the Commission granted the OCC's application for rehearing for further consideration. Duke Energy Ohio cannot predict the outcome of this matter.

Energy Efficiency Cost Recovery

In response to changes in Ohio law that eliminated Ohio's energy efficiency mandates, the PUCO issued an order on February 26, 2020, directing utilities to wind down their demand-side management programs by September 30, 2020, and to terminate the programs by December 31, 2020. Duke Energy Ohio took the following actions:

- On March 27, 2020, Duke Energy Ohio filed an application for rehearing seeking clarification on the final true up and reconciliation process after 2020. On November 18, 2020, the PUCO issued an order replacing the cost cap previously imposed upon Duke Energy Ohio with a cap on shared savings recovery. On December 18, 2020, Duke Energy Ohio filed an additional application for rehearing challenging, among other things, the imposition of the cap on shared savings. On January 13, 2021, the application for rehearing was granted for further consideration.
- On October 9, 2020, Duke Energy Ohio filed an application to implement a voluntary energy efficiency program portfolio to commence on January 1, 2021. The application proposed a mechanism for recovery of program costs and a benefit associated with avoided transmission and distribution costs. This application remains under review.
- On November 18, 2020, the PUCO issued an order directing all utilities to set their energy efficiency riders to zero effective January 1, 2021, and to file a separate application for final reconciliation of all energy efficiency costs prior to December 31, 2020. Effective January 1, 2021, Duke Energy Ohio suspended its energy efficiency programs.
- On June 14, 2021, the PUCO requested each utility to file by July 15, 2021, a proposal to reestablish low-income programs through December 31, 2021. Duke Energy Ohio filed its application on July 14, 2021.
- On February 23, 2022, the PUCO issued its Fifth Entry on Rehearing that 1) affirmed its reduction in Duke Energy Ohio's shared savings cap; 2) denied rehearing/clarification regarding lost distribution revenues and shared savings recovery for periods after December 31, 2020; and 3) directed Duke Energy Ohio to submit an updated application with exhibits.
- On March 25, 2022, Duke Energy Ohio filed its Amended Application consistent with the PUCO's order.

Duke Energy Ohio cannot predict the outcome of this matter.

Duke Energy Ohio Natural Gas Base Rate Case

Duke Energy Ohio filed with the PUCO a natural gas base rate case application on June 30, 2022, with supporting testimony filed on July 14, 2022, requesting an increase in natural gas base rates of approximately $49 million and an ROE of 10.3%. This is an approximate 5.6% average increase in the customer's total bill across all customer classes. The drivers for this case are capital invested since Duke Energy Ohio's last natural gas base rate case in 2012. Duke Energy Ohio is also seeking to adjust the caps on its Capital Expenditure Program Rider (CEP Rider). The Staff of the PUCO (Staff) report was issued on December 21, 2022, recommending an increase in natural gas base rates of $24 million to $36 million, with an equity ratio of 52% and an ROE range of 9.03% to 10.04%. A procedural schedule was issued on December 22, 2022, scheduling the evidentiary hearing to commence on March 28, 2023. Duke Energy Ohio cannot predict the outcome of this matter.

Natural Gas Pipeline Extension

Duke Energy Ohio installed a new natural gas pipeline (the Central Corridor Project) in its Ohio service territory to increase system reliability and enable the retirement of older infrastructure. Construction of the pipeline extension was completed and placed in service on March 14, 2022, with a total cost of approximately $170 million (excluding overheads and AFUDC).

MGP Cost Recovery

In an order issued in 2013, the PUCO approved Duke Energy Ohio's deferral and recovery of costs related to environmental remediation at two sites (East End and West End) that housed former MGP operations. Duke Energy Ohio made annual applications with the PUCO to recover its incremental remediation costs consistent with the PUCO's directive in Duke Energy Ohio's 2012 natural gas base rate case.

A Stipulation and Recommendation was filed jointly by Duke Energy Ohio, the Staff, the Office of the Ohio Consumers' Counsel and the Ohio Energy Group on August 31, 2021, which was approved without modification by the PUCO on April 20, 2022. The Stipulation and Recommendation resolved all open issues regarding MGP remediation costs incurred between 2013 and 2019, Duke Energy Ohio's request for additional deferral authority beyond 2019 and the pending issues related to the Tax Act described below as it related to Duke Energy Ohio's natural gas operations. As a result of the approval of the Stipulation and Recommendation, Duke Energy Ohio recognized pretax charges of approximately $15 million to Operating revenues, regulated natural gas and $58 million to Operation, maintenance and other and a tax benefit of $72 million to Income Tax (Benefit) Expense in the Consolidated Statements of Operations for the year ended December 31, 2022. The Stipulation and Recommendation further acknowledged Duke Energy Ohio's ability to file a request for additional deferral authority in the future related to environmental remediation of any MGP impacts in the Ohio River, if necessary, subject to specific conditions. On June 15, 2022, the PUCO granted the rehearing requests of Interstate Gas Supply, Inc. (IGS) and The Retail Energy Supply Association (RESA), which were filed on May 20, 2022, for further consideration. Duke Energy Ohio cannot predict the outcome of this matter.

Tax Act – Ohio

On December 21, 2018, Duke Energy Ohio filed an application to change its base rate tariffs and establish a new rider to implement the benefits of the Tax Act for natural gas customers. The new rider would flow through to customers the benefit of the reduction in the statutory federal tax rate from 35% to 21% since January 1, 2018, all future benefits of the lower tax rates and a full refund of deferred income taxes collected at the higher tax rates in prior years. Deferred income taxes subject to normalization rules would be refunded consistent with federal law and deferred income taxes not subject to normalization rules will be refunded over a 10-year period. An evidentiary hearing occurred on August 7, 2019. The Stipulation and Recommendation filed on August 31, 2021, and approved on April 20, 2022, disclosed in the MGP Cost Recovery matter above, resolves the outstanding issues in this proceeding by providing customers a one-time bill credit for the reduction in the statutory federal tax rate from 35% to 21% since January 1, 2018, through June 1, 2022, and reducing base rates going forward. Deferred income taxes subject to normalization rules will be refunded consistent with federal law through a new rider. Deferred income taxes not subject to normalization rules were written off. The commission granted the rehearing requests of IGS and RESA for further consideration.Duke Energy Ohio cannot predict the outcome of this matter.

Midwest Propane Caverns

Duke Energy Ohio used propane stored in caverns to meet peak demand during winter for several decades. Once the Central Corridor Project was complete and placed in service, the propane peaking facilities were no longer necessary and were retired. On October 7, 2021, Duke Energy Ohio requested deferral treatment of the property, plant and equipment as well as costs related to propane inventory and decommissioning costs. On January 6, 2022, the Staff issued a report recommending deferral authority for costs related to propane inventory and decommissioning costs, but not for the net book value of the remaining plant assets. As a result of the Staff's report, Duke Energy Ohio recorded a $19 million charge to Impairment of assets and other charges on the Consolidated Statements of Operations and Comprehensive Income for the year ended December 31, 2021. A Stipulation and Recommendation was filed jointly by Duke Energy Ohio and the Staff on April 27, 2022, recommending, among other things, approval of deferral treatment of a portion of the net book value of the property, plant and equipment prior to the 2021 impairment at the time of the next natural gas base rate case, excluding operations and maintenance savings, decommissioning costs not to exceed $7 million and costs related to propane inventory. The Stipulation and Recommendation states that Duke Energy Ohio will seek recovery of the deferral through its next natural gas base rate case proceeding with a proposed amortization period of at least 10 years and include an independent engineering study analyzing the necessity and prudency of the incremental investments made at the facilities since March 31, 2012. Duke Energy Ohio will not seek a return on the deferred amounts. An evidentiary hearing was held on September 8, 2022. On October 5, 2022, the PUCO issued an order approving the Stipulation and Recommendation as filed. As a result of the order, Duke Energy Ohio recorded a reversal of $12 million to Impairment of assets and other charges on the Consolidated Statements of Operations and Comprehensive Income for the year ended December 31, 2022.

Duke Energy Kentucky Electric Base Rate Case

On December 1, 2022, Duke Energy Kentucky filed a rate case with the KPSC requesting an annualized increase in electric base rates of approximately $75 million and an ROE of 10.35%. This is an overall increase in rates of approximately 17.8%. The request for rate increase is driven by capital investments to strengthen the electricity generation and delivery systems along with adjusted depreciation rates for the East Bend and Woodsdale generation stations to support the energy transition. Duke Energy Kentucky is also requesting new programs and tariff updates, including a voluntary community-based renewable subscription program and two EV charging programs. A procedural schedule was issued on December 19, 2022, scheduling the evidentiary hearing for May 9, 2023. New rates are anticipated to go into effect around July 15, 2023. Duke Energy Kentucky cannot predict the outcome of this matter.

Duke Energy Indiana

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Indiana's Consolidated Balance Sheets.

(in millions)	December 31, 2022	2021	Earns/Pays a Return	Recovery/Refund Period Ends
Regulatory Assets[a]				
AROs – coal ash	**$ 385**	$ 749	Yes	(b)
Deferred fuel and purchased power	**138**	158		2023
Accrued pension and OPEB	**214**	222		(e)
Hedge costs deferrals	**20**	35		(b)
PISCC and deferred operating expenses[c]	**255**	262	Yes	(b)
Retired generation facilities[c]	**34**	38	Yes	2030
AMI	**15**	17		2031
Customer connect project	**19**	11		(b)
Other	**44**	63		(b)
Total regulatory assets	**1,124**	1,555		
Less: current portion	**249**	277		
Total noncurrent regulatory assets	**$ 875**	$ 1,278		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes	**$ 840**	$ 908		(b)
Costs of removal	**531**	575		(d)
Hedge cost deferrals	**81**	—		(b)
Accrued pension and OPEB	**104**	113		(e)
Other	**85**	96		(b)
Total regulatory liabilities	**1,641**	1,692		
Less: current portion	**187**	127		
Total noncurrent regulatory liabilities	**$ 1,454**	$ 1,565		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Refunded over the life of the associated assets.
(e) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.

2019 Indiana Rate Case

On July 2, 2019, Duke Energy Indiana filed a general rate case with the IURC for a rate increase for retail customers of approximately $395 million. The rebuttal case, filed on December 4, 2019, updated the requested revenue requirement to result in a 15.6% or $396 million average retail rate increase, including the impacts of the utility receipts tax. On June 29, 2020, the IURC issued an order in the rate case approving a revenue increase of $146 million before certain adjustments and ratemaking refinements. The order approved Duke Energy Indiana's requested forecasted rate base of $10.2 billion as of December 31, 2020, including the Edwardsport Integrated Gasification Combined Cycle (IGCC) Plant. The IURC reduced Duke Energy Indiana's request by slightly more than $200 million, when accounting for the utility receipts tax and other adjustments. Approximately 50% of the reduction was due to a prospective change in depreciation and use of regulatory asset for the end-of-life inventory at retired generating plants, approximately 20% was due to the approved ROE of 9.7% versus the requested ROE of 10.4% and approximately 20% was related to miscellaneous earnings neutral adjustments. Step one rates were estimated to be approximately 75% of the total and became effective on July 30, 2020. Step two rates estimated to be the remaining 25% of the total rate increase were approved on July 28, 2021, and implemented in August 2021.

Several groups appealed the IURC order to the Indiana Court of Appeals. The Indiana Court of Appeals affirmed the IURC decision on May 13, 2021. However, upon appeal by the Indiana Office of Utility Consumer Counselor (OUCC) and the Duke Industrial Group on March 10, 2022, the Indiana Supreme Court found that the IURC erred in allowing Duke Energy Indiana to recover coal ash costs incurred before the IURC's rate case order in June 2020. The Indiana Supreme Court found that allowing Duke Energy Indiana to recover coal ash costs incurred between rate cases that exceeded the amount built into base rates violated the prohibition against retroactive ratemaking. The IURC's order has been remanded to the IURC for additional proceedings consistent with the Indiana Supreme Court's opinion. As a result of the court's opinion, Duke Energy Indiana recognized pretax charges of approximately $211 million to Impairment of assets and other charges and $46 million to Operating revenues in the Consolidated Statements of Operations for the year ended December 31, 2022. Duke Energy Indiana filed a request for rehearing with the Supreme Court on April 11, 2022, which the court denied on May 26, 2022. Duke Energy Indiana filed its testimony in the remand proceeding on August 18, 2022. An evidentiary hearing is scheduled to begin March 3, 2023. Duke Energy Indiana cannot predict the outcome of this matter.

2020 Indiana Coal Ash Recovery Case

In Duke Energy Indiana's 2019 rate case, the IURC also opened a subdocket for post-2018 coal ash related expenditures. Duke Energy Indiana filed testimony on April 15, 2020, in the coal ash subdocket requesting recovery for the post-2018 coal ash basin closure costs for plans that have been approved by the Indiana Department of Environmental Management (IDEM) as well as continuing deferral, with carrying costs, on the balance. An evidentiary hearing was held on September 14, 2020. Briefing was completed by mid-September 2021. On November 3, 2021, the IURC issued an order allowing recovery for post-2018 coal ash basin closure costs for the plans that have been approved by IDEM, as well as continuing deferral, with carrying costs, on the balance. The OUCC and the Duke Industrial Group appealed. The Indiana Court of Appeals issued its opinion on February 21, 2023, reversing the IURC's order to the extent that it allowed Duke Energy Indiana to recover federally mandated costs incurred prior to the IURC's November 3, 2021 order. In addition, the court found that any costs incurred pre-petition to determine federally mandated compliance options were not specifically authorized by the statute and should also be disallowed. Duke Energy Indiana is assessing its appellate options and must file a petition to transfer to the Indiana Supreme Court by April 7, 2023. As a result of the court's opinion, Duke Energy Indiana recognized a pretax charge of approximately $175 million to Impairment of assets and other charges for the year ended December 31, 2022. Duke Energy Indiana cannot predict the outcome of this matter.

TDSIC 2.0

On November 23, 2021, Duke Energy Indiana filed for approval of the Transmission, Distribution, Storage Improvement Charge 2.0 investment plan for 2023-2028 (TDSIC 2.0). On June 15, 2022, the IURC approved, without modification, TDSIC 2.0, which includes approximately $2 billion in transmission and distribution investments selected to improve customer reliability, harden and improve resiliency of the grid, enable expansion of renewable and distributed energy projects and encourage economic development. In addition, the IURC set up a subdocket to consider the targeted economic development project, which the IURC approved on March 2, 2022. On July 15, 2022, the OUCC filed a notice of appeal to the Indiana Court of Appeals in Duke Energy Indiana's TDSIC 2.0 proceeding. An appellant brief was filed on October 28, 2022, and Duke Energy Indiana filed its responsive brief on December 28, 2022. Duke Energy Indiana cannot predict the outcome of this matter.

Piedmont

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Piedmont's Consolidated Balance Sheets.

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	**2022**	**2021**	**a Return**	**Period Ends**
Regulatory Assets[a]				
AROs – nuclear and other	**$ 27**	$ 22		(d)
Accrued pension and OPEB[c]	**119**	82		(g)
Vacation accrual	**12**	12		2023
Derivatives – natural gas supply contracts[f]	**168**	139		
Deferred pipeline integrity costs[c]	**93**	84		2025
Amounts due from customers	**57**	85	(e)	(b)
Other	**35**	33		(b)
Total regulatory assets	**511**	457		
Less: current portion	**119**	141		
Total noncurrent regulatory assets	**$ 392**	$ 316		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes	**$ 459**	$ 510		(b)
Costs of removal[c]	**573**	572		(d)
Other	**66**	32	(e)	(b)
Total regulatory liabilities	**1,098**	1,114		
Less: current portion	**74**	56		
Total noncurrent regulatory liabilities	**$ 1,024**	$ 1,058		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Recovery over the life of the associated assets.
(e) Certain costs earn/pay a return.
(f) Balance will fluctuate with changes in the market. Current contracts extend into 2031.
(g) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.

2022 South Carolina Rate Case

On April 1, 2022, Piedmont filed an application with the PSCSC for a rate increase for retail customers of approximately $7 million, which represents an approximate 3.4% increase in retail revenues. An evidentiary hearing was held on August 15, 2022. On September 15, 2022, the PSCSC delivered its decision, which included an ROE of 9.3% and a capital structure of 52.2% equity and 47.8% debt and issued its final order on October 6, 2022. Revised customer rates became effective in October 2022 and resulted in a rate decrease for retail customers of approximately $1 million.

Tennessee Annual Review Mechanism

On October 10, 2022, the TPUC approved Piedmont's petition to adopt an Annual Review Mechanism (ARM) as allowed by Tennessee law. Under the ARM, Piedmont will adjust rates annually to achieve its allowed 9.80% ROE over the upcoming year and to true up any variance between its allowed ROE and actual ROE from the prior calendar year. The initial year subject to the true up is 2022, and the initial rate adjustments request will be filed in May 2023 for rates effective October 1, 2023.

OTHER REGULATORY MATTERS

Atlantic Coast Pipeline, LLC

Atlantic Coast Pipeline (ACP pipeline) was planned to be an approximately 600-mile interstate natural gas pipeline running from West Virginia to North Carolina. Duke Energy indirectly owns a 47% interest, which is accounted for as an equity method investment through its Gas Utilities and Infrastructure segment.

As a result of the uncertainty created by various legal rulings, the potential impact on the cost and schedule for the project, the ongoing legal challenges and the risk of additional legal challenges and delays through the construction period and Dominion's decision to sell substantially all of its gas transmission and storage segment assets, Duke Energy's Board of Directors and management decided that it was not prudent to continue to invest in the project. On July 5, 2020, Duke Energy and Dominion announced the cancellation of the ACP pipeline project.

As part of the pretax charges to earnings of approximately $2.1 billion recorded for the year ended December 31, 2020, within Equity in earnings (losses) of unconsolidated affiliates on the Duke Energy Consolidated Statements of Operations, Duke Energy established liabilities related to the cancellation of the ACP pipeline project. In February 2021, Duke Energy paid approximately $855 million to fund ACP's outstanding debt, relieving Duke Energy of its guarantee. At December 31, 2022, there is $59 million and $47 million within Other Current Liabilities and Other Noncurrent Liabilities, respectively, in the Gas Utilities and Infrastructure segment. The liabilities represent Duke Energy's obligation of approximately $106 million to satisfy remaining ARO requirements to restore construction sites.

See Notes 8 and 13 for additional information regarding this transaction.

Potential Coal Plant Retirements

The Subsidiary Registrants periodically file IRPs with their state regulatory commissions. The IRPs provide a view of forecasted energy needs over a long term (10 to 20 years) and options being considered to meet those needs. IRPs filed by the Subsidiary Registrants included planning assumptions to potentially retire certain coal-fired generating facilities in North Carolina and Indiana earlier than their current estimated useful lives. The NCUC concluded in its Carbon Plan order that the projected retirements dates presented by Duke Energy Carolinas and Duke Energy Progress in their Carbon Plan for coal-fired generating facilities were reasonable for planning purposes and further directed that appropriate steps be taken to optimally retire the coal fleet according to such schedule. Duke Energy continues to evaluate the potential need to retire these coal-fired generating facilities earlier than the current estimated useful lives and plans to seek regulatory recovery for amounts that would not be otherwise recovered when any of these assets are retired.

The table below contains the net carrying value of generating facilities planned for retirement or included in recent IRPs or Carbon Plan as evaluated for potential retirement. Dollar amounts in the table below are included in Net property, plant and equipment on the Consolidated Balance Sheets as of December 31, 2022, and exclude capitalized asset retirement costs.

	Capacity (in MW)	Remaining Net Book Value (in millions)
Duke Energy Carolinas		
Allen Steam Station Unit 1[(a)]	**167**	**$ 10**
Allen Steam Station Unit 5[(b)]	**259**	**233**
Cliffside Unit 5[(b)]	**546**	**344**
Marshall Units 1-2[(b)]	**760**	**428**
Duke Energy Progress		
Mayo Unit 1[(b)]	**713**	**639**
Roxboro Units 3-4[(b)]	**1,409**	**425**
Duke Energy Florida		
Crystal River Units 4-5[(c)]	**1,442**	**1,549**
Duke Energy Indiana		
Gibson Units 1-5[(d)]	**2,845**	**2,043**
Cayuga Units 1-2[(d)]	**1,005**	**622**
Total Duke Energy	**9,146**	**$ 6,293**

(a) As part of the 2015 resolution of a lawsuit involving alleged New Source Review violations, Duke Energy Carolinas must retire Allen Steam Station Unit 1 by December 31, 2024.

(b) These units were included in the IRP filed by Duke Energy Carolinas and Duke Energy Progress in South Carolina on September 1, 2020, and in the Carbon Plan adopted by the NCUC in December 2022. The long-term energy options considered could result in retirement of these units earlier than their current estimated useful lives.

(c) On January 14, 2021, Duke Energy Florida filed the 2021 Settlement agreement with the FPSC, which proposed depreciation rates reflecting retirement dates for Duke Energy Florida's last two coal-fired generating facilities, Crystal River Units 4-5, eight years ahead of schedule in 2034 rather than in 2042. The FPSC approved the 2021 Settlement on May 4, 2021. The remaining net book value reflected in the table above excludes $200 million of accelerated deprecation collected from retail customers pursuant to Duke Energy Florida's 2017 Settlement.

(d) The rate case filed July 2, 2019, included proposed depreciation rates reflecting retirement dates from 2026 to 2038. The depreciation rates reflecting these updated retirement dates were approved by the IURC as part of the rate case order issued on June 29, 2020.

5. COMMITMENTS AND CONTINGENCIES

INSURANCE

General Insurance

The Duke Energy Registrants have insurance and reinsurance coverage either directly or through indemnification from Duke Energy's captive insurance company, Bison, and its affiliates, consistent with companies engaged in similar commercial operations with similar type properties. The Duke Energy Registrants' coverage includes (i) commercial general liability coverage for liabilities arising to third parties for bodily injury and property damage; (ii) workers' compensation; (iii) automobile liability coverage; and (iv) property coverage for all real and personal property damage. Real and personal property damage coverage excludes electric transmission and distribution lines, but includes damages arising from boiler and machinery breakdowns, earthquakes, flood damage and extra expense, but not outage or replacement power coverage. All coverage is subject to certain deductibles or retentions, sublimits, exclusions, terms and conditions common for companies with similar types of operations. The Duke Energy Registrants self-insure their electric transmission and distribution lines against loss due to storm damage and other natural disasters. As discussed further in Note 4, Duke Energy Florida maintains a storm damage reserve and has a regulatory mechanism to recover the cost of named storms on an expedited basis.

The cost of the Duke Energy Registrants' coverage can fluctuate from year to year reflecting claims history and conditions of the insurance and reinsurance markets.

In the event of a loss, terms and amounts of insurance and reinsurance available might not be adequate to cover claims and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material effect on the Duke Energy Registrants' results of operations, cash flows or financial position. Each company is responsible to the extent losses may be excluded or exceed limits of the coverage available.

Nuclear Insurance

Duke Energy Carolinas owns and operates McGuire and Oconee and operates and has a partial ownership interest in Catawba. McGuire and Catawba each have two reactors. Oconee has three reactors. The other joint owners of Catawba reimburse Duke Energy Carolinas for certain expenses associated with nuclear insurance per the Catawba joint owner agreements.

Duke Energy Progress owns and operates Robinson, Brunswick and Harris. Robinson and Harris each have one reactor. Brunswick has two reactors.

Duke Energy Florida owns Crystal River Unit 3, which permanently ceased operation in 2013 and achieved a SAFSTOR condition in July 2019. On October 1, 2020, Crystal River Unit 3 changed decommissioning strategies from SAFSTOR to DECON.

In the event of a loss, terms and amounts of insurance available might not be adequate to cover property damage and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material effect on Duke Energy Carolinas', Duke Energy Progress' and Duke Energy Florida's results of operations, cash flows or financial position. Each company is responsible to the extent losses may be excluded or exceed limits of the coverage available.

Nuclear Liability Coverage

The Price-Anderson Act requires owners of nuclear reactors to provide for public nuclear liability protection per nuclear incident up to a maximum total financial protection liability. The maximum total financial protection liability, which is approximately $13.7 billion, is subject to change every five years for inflation and for the number of licensed reactors. Total nuclear liability coverage consists of a combination of private primary nuclear liability insurance coverage and a mandatory industry risk-sharing program to provide for excess nuclear liability coverage above the maximum reasonably available private primary coverage. The U.S. Congress could impose revenue-raising measures on the nuclear industry to pay claims.

Primary Liability Insurance

Duke Energy Carolinas and Duke Energy Progress have purchased the maximum reasonably available private primary nuclear liability insurance as required by law, which is $450 million per station. Duke Energy Florida has purchased $100 million primary nuclear liability insurance for Crystal River in compliance with the law.

Excess Liability Program

This program provides $13.2 billion of coverage per incident through the Price-Anderson Act's mandatory industrywide excess secondary financial protection program of risk pooling. This amount is the product of potential cumulative retrospective premium assessments of $138 million times the current 96 licensed commercial nuclear reactors in the U.S. Under this program, operating unit licensees could be assessed retrospective premiums to compensate for public nuclear liability damages in the event of a nuclear incident at any licensed facility in the U.S. Retrospective premiums may be assessed at a rate not to exceed $20.5 million per year per licensed reactor for each incident. The assessment may be subject to state premium taxes.

Nuclear Property and Accidental Outage Coverage

Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are members of Nuclear Electric Insurance Limited (NEIL), an industry mutual insurance company, which provides property damage, nuclear accident decontamination and premature decommissioning insurance for each station for losses resulting from damage to its nuclear plants, either due to accidents or acts of terrorism. Additionally, NEIL provides accidental outage coverage for losses in the event of a major accidental outage at an insured nuclear station.

Pursuant to regulations of the NRC, each company's property damage insurance policies provide that all proceeds from such insurance be applied, first, to place the plant in a safe and stable condition after a qualifying accident and second, to decontaminate the plant before any proceeds can be used for decommissioning, plant repair or restoration.

Losses resulting from acts of terrorism are covered as common occurrences, such that if terrorist acts occur against one or more commercial nuclear power plants insured by NEIL within a 12-month period, they would be treated as one event and the owners of the plants where the act occurred would share one full limit of liability. The full limit of liability is currently $3.2 billion. NEIL sublimits the total aggregate for all of their policies for non-nuclear terrorist events to approximately $1.8 billion.

Each nuclear facility has accident property damage, nuclear accident decontamination and premature decommissioning liability insurance from NEIL with limits of $1.5 billion, except for Crystal River Unit 3. Crystal River Unit 3's limit is $50 million and is on an actual cash value basis. All nuclear facilities except for Catawba and Crystal River Unit 3 also share an additional $1.25 billion nuclear accident insurance limit above their dedicated underlying limit. This shared additional excess limit is not subject to reinstatement in the event of a loss. Catawba has a dedicated $1.25 billion of additional nuclear accident insurance limit above its dedicated underlying limit. Catawba and Oconee also have an additional $750 million of non-nuclear accident property damage limit. All coverages are subject to sublimits and significant deductibles.

NEIL's Accidental Outage policy provides some coverage, similar to business interruption, for losses in the event of a major accident property damage outage of a nuclear unit. Coverage is provided on a weekly limit basis after a significant waiting period deductible and at 100% of the applicable weekly limits for 52 weeks and 80% of the applicable weekly limits for up to the next 110 weeks. Coverage is provided until these applicable weekly periods are met, where the accidental outage policy limit will not exceed $490 million for Catawba, McGuire, Harris, Brunswick, Oconee and Robinson. NEIL sublimits the accidental outage recovery up to the first 104 weeks of coverage not to exceed $328 million from non-nuclear accidental property damage. Coverage amounts decrease in the event more than one unit at a station is out of service due to a common accident. All coverages are subject to sublimits and significant deductibles.

Potential Retroactive Premium Assessments

In the event of NEIL losses, NEIL's board of directors may assess member companies' retroactive premiums of amounts up to10 times their annual premiums for up to six years after a loss. NEIL has never exercised this assessment. The maximum aggregate annual retrospective premium obligations for Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are $151 million, $93 million and $1 million, respectively. Duke Energy Carolinas' maximum assessment amount includes 100% of potential obligations to NEIL for jointly owned reactors. Duke Energy Carolinas would seek reimbursement from the joint owners for their portion of these assessment amounts.

ENVIRONMENTAL

The Duke Energy Registrants are subject to federal, state and local regulations regarding air and water quality, hazardous and solid waste disposal, coal ash and other environmental matters. These regulations can be changed from time to time, imposing new obligations on the Duke Energy Registrants. The following environmental matters impact all of the Duke Energy Registrants.

Remediation Activities

In addition to AROs recorded as a result of various environmental regulations, discussed in Note 10, the Duke Energy Registrants are responsible for environmental remediation at various sites. These include certain properties that are part of ongoing operations and sites formerly owned or used by Duke Energy entities. These sites are in various stages of investigation, remediation and monitoring. Managed in conjunction with relevant federal, state and local agencies, remediation activities vary based upon site conditions and location, remediation requirements, complexity and sharing of responsibility. If remediation activities involve joint and several liability provisions, strict liability, or cost recovery or contribution actions, the Duke Energy Registrants could potentially be held responsible for environmental impacts caused by other potentially responsible parties and may also benefit from insurance policies or contractual indemnities that cover some or all cleanup costs. Liabilities are recorded when losses become probable and are reasonably estimable. The total costs that may be incurred cannot be estimated because the extent of environmental impact, allocation among potentially responsible parties, remediation alternatives and/or regulatory decisions have not yet been determined at all sites. Additional costs associated with remediation activities are likely to be incurred in the future and could be significant. Costs are typically expensed as Operation, maintenance and other in the Consolidated Statements of Operations unless regulatory recovery of the costs is deemed probable.

The following table contains information regarding reserves for probable and estimable costs related to the various environmental sites. These reserves are recorded in Other within Other Noncurrent Liabilities on the Consolidated Balance Sheets.

(in millions)	December 31, 2022	December 31, 2021
Reserves for Environmental Remediation		
Duke Energy	**$ 84**	$ 88
Duke Energy Carolinas	**22**	19
Progress Energy	**19**	23
Duke Energy Progress	**8**	11
Duke Energy Florida	**11**	11
Duke Energy Ohio	**33**	34
Duke Energy Indiana	**3**	4
Piedmont	**7**	9

Additional losses in excess of recorded reserves that could be incurred for the stages of investigation, remediation and monitoring for environmental sites that have been evaluated at this time are not material.

LITIGATION

Duke Energy

Michael Johnson et al. v. Duke Energy Corporation et al.

On September 23, 2020, plaintiff Michael Johnson, a former Duke Energy employee and participant in the Duke Energy Retirement Savings Plan (Plan) brought suit on his own behalf and on behalf of other participants and beneficiaries similarly situated against Duke Energy Corporation, the Duke Energy Benefits Committee, and other unnamed individual defendants. The complaint, which was subsequently amended to add a current participant as a plaintiff on November 23, 2020, alleges that the defendants breached their fiduciary duties with respect to certain fees associated with the Plan in violation of the Employee Retirement Income Security Act of 1974 and seeks certification of a class of all individuals who were participants or beneficiaries of the Plan at any time on or after September 23, 2014. The defendants filed a motion to dismiss the plaintiffs' amended complaint on December 18, 2020. On January 31, 2022, the court denied the defendants' motion to dismiss. On February 28, 2022, Duke Energy responded to the amended complaint. Discovery commenced and the parties exchanged preliminary disclosures. After review of these disclosures, the plaintiffs agreed to voluntarily dismiss the suit and the parties subsequently filed a joint stipulation of voluntary dismissal with prejudice on April 29, 2022, ending this litigation.

Texas Storm Uri Tort Litigation

Duke Energy Corporation and several Duke Energy renewables project companies in the ERCOT market were named in more than thirty lawsuits arising out of Texas Storm Uri, which occurred in February 2021. Duke Energy Corporation was dismissed from the suits, leaving two suits in which individual wind and solar projects are named. These lawsuits seek recovery for property damages, personal injury and wrongful death allegedly caused by the power outages that plaintiffs claim were the collective failure of generators, transmission and distribution utilities ("TDUs"), retail energy providers, natural gas providers, co-ops and municipalities that generate power and ERCOT, all of which were originally sued by all plaintiffs. The cases were consolidated into a Texas state court multidistrict litigation (MDL) proceeding for discovery and pre-trial motions. Five cases were designated for motions to dismiss and all other cases were stayed. On January 28, 2023, the Court denied the generators' and TDUs' motions to dismiss the negligence claims but dismissed the tortious interference and conspiracy claims. The motions to dismiss ERCOT and the natural gas defendants were also granted. The generator and TDU defendants filed a petition for mandamus in each of the five cases seeking to overturn the denials on February 10, 2023. If the Texas Court of Appeals accepts the appeals, it will set a briefing schedule. The remaining cases that are part of the MDL are currently stayed, except that plaintiffs have been given leave to amend their pleadings. Plaintiffs began amending existing lawsuits and filing new lawsuits on behalf of hundreds of plaintiffs against hundreds of defendants, including in some cases, by again naming Duke Energy Corporation and naming, for the first time, Duke Energy Renewables, LLC. Plaintiffs have also re-named ERCOT as a defendant. As new cases are served, they are being brought into the MDL and are subject to the stay in the MDL proceeding. Duke Energy cannot predict the outcomes of these matters. See Note 2 for more information related to the sale of the Commercial Renewables Disposal Groups.

Duke Energy Carolinas

Ruben Villano, et al. v. Duke Energy Carolinas, LLC

On June 16, 2021, a group of nine individuals went over a low head dam adjacent to the Dan River Steam Station in Eden, North Carolina, while water tubing. Emergency personnel rescued four people and five others were confirmed deceased. On August 11, 2021, Duke Energy Carolinas was served with the complaint filed in Durham County Superior Court on behalf of four survivors, which was later amended to include all the decedents along with the survivors. The lawsuit alleges that Duke Energy Carolinas knew that the river was used for recreational purposes and that Duke Energy did not adequately warn about the dam and that Duke Energy Carolinas created a dangerous and hidden hazard on the Dan River in building and maintaining the low head dam. Discovery has commenced and is scheduled to be completed on or before August 23, 2023. The parties are preparing for mediation, which is scheduled for March 22, 2023. Dispositive motions are due to be filed by September 6, 2023, and the case is scheduled to be trial-ready by October 2, 2023. Duke Energy Carolinas cannot predict the outcome of this matter.

NTE Carolinas II, LLC Litigation

In November 2017, Duke Energy Carolinas entered into a standard FERC large generator interconnection agreement (LGIA) with NTE Carolinas II, LLC (NTE), a company that proposed to build a combined-cycle natural gas plant in Rockingham County, North Carolina. On September 6, 2019, Duke Energy Carolinas filed a lawsuit in Mecklenburg County Superior Court against NTE for breach of contract, alleging that NTE's failure to pay benchmark payments for Duke Energy Carolinas' transmission system upgrades required under the interconnection agreement constituted a termination of the interconnection agreement. Duke Energy Carolinas sought a monetary judgment against NTE because NTE failed to make multiple milestone payments. The lawsuit was moved to federal court in North Carolina. NTE filed a motion to dismiss Duke Energy Carolinas' complaint and brought counterclaims alleging anti-competitive conduct and violations of state and federal statutes. Duke Energy Carolinas filed a motion to dismiss NTE's counterclaims. Both NTE's and Duke Energy Carolinas' motions to dismiss were subsequently denied by the court.

On May 21, 2020, in response to an NTE petition challenging Duke Energy Carolinas' termination of the LGIA, FERC issued a ruling that 1) it has exclusive jurisdiction to determine whether a transmission provider may terminate a LGIA; 2) FERC approval is required to terminate a conforming LGIA if objected to by the interconnection customer; and 3) Duke Energy may not announce the termination of a conforming LGIA unless FERC has approved the termination. FERC's Office of Enforcement also initiated an investigation of Duke Energy Carolinas into matters pertaining to the LGIA. Duke Energy Carolinas is cooperating with the Office of Enforcement but cannot predict the outcome of this investigation.

Following completion of discovery, Duke Energy Carolinas filed a motion for summary judgment seeking a ruling in its favor as to some of its affirmative claims against NTE and to all of NTE's counterclaims. On June 24, 2022, the court issued an order partially granting Duke Energy Carolinas' motion by dismissing NTE's counterclaims that Duke Energy Carolinas engaged in anti-competitive behavior in violation of state and federal statutes. On October 12, 2022, the parties executed a settlement agreement with respect to the remaining breach of contract claims in the litigation and a Stipulation of Dismissal was filed with the court on October 13, 2022. On November 11, 2022, NTE filed its Notice of Appeal to the U.S. Court of Appeals for the Fourth Circuit as to the District Court's summary judgment ruling in Duke Energy Carolinas' favor on NTE's antitrust and unfair competition claims. Briefing on NTE's appeal will be completed on May 3, 2023. Duke Energy Carolinas cannot predict the outcome of this matter.

Asbestos-related Injuries and Damages Claims

Duke Energy Carolinas has experienced numerous claims for indemnification and medical cost reimbursement related to asbestos exposure. These claims relate to damages for bodily injuries alleged to have arisen from exposure to or use of asbestos in connection with construction and maintenance activities conducted on its electric generation plants prior to 1985.

Duke Energy Carolinas has recognized asbestos-related reserves of $457 million and $501 million at December 31, 2022, and 2021, respectively. These reserves are classified in Other within Other Noncurrent Liabilities and Other within Current Liabilities on the Consolidated Balance Sheets. The change in the reserves is a result of a third-party study completed in 2021 as well as settlements made throughout the year. These reserves are based upon Duke Energy Carolinas' best estimate for current and future asbestos claims through 2042 and are recorded on an undiscounted basis. In light of the uncertainties inherent in a longer-term forecast, management does not believe they can reasonably estimate the indemnity and medical costs that might be incurred after 2042 related to such potential claims. It is possible Duke Energy Carolinas may incur asbestos liabilities in excess of the recorded reserves.

Duke Energy Carolinas has third-party insurance to cover certain losses related to asbestos-related injuries and damages above an aggregate self-insured retention. Receivables for insurance recoveries were $595 million and $644 million at December 31, 2022, and 2021, respectively. These amounts are classified in Other within Other Noncurrent Assets and Receivables within Current Assets on the Consolidated Balance Sheets. Any future payments up to the policy limit will be reimbursed by the third-party insurance carrier. Duke Energy Carolinas is not aware of any uncertainties regarding the legal sufficiency of insurance claims. Duke Energy Carolinas believes the insurance recovery asset is probable of recovery as the insurance carrier continues to have a strong financial strength rating.

The reserve for credit losses for insurance receivables for the asbestos-related injuries and damages is $12 million for Duke Energy and Duke Energy Carolinas as of December 31, 2022, and December 31, 2021. The insurance receivable is evaluated based on the risk of default and the historical losses, current conditions and expected conditions around collectability. Management evaluates the risk of default annually based on payment history, credit rating and changes in the risk of default from credit agencies.

Duke Energy Progress and Duke Energy Florida

Spent Nuclear Fuel Matters

On June 18, 2018, Duke Energy Progress and Duke Energy Florida sued the U.S. in the U.S. Court of Federal Claims for damages incurred for the period 2014 through 2018. The lawsuit claimed the DOE breached a contract in failing to accept spent nuclear fuel under the Nuclear Waste Policy Act of 1982 and asserted damages for the cost of on-site storage in the amount of $100 million and $200 million for Duke Energy Progress and Duke Energy Florida, respectively.

On March 30, 2022, the DOE and Duke Energy Progress executed a settlement agreement, pursuant to which Duke Energy Progress would receive damages for costs incurred between 2014 and 2018 and would be able to submit future costs on a defined schedule. In April 2022, Duke Energy Progress received $87 million in proceeds that related to damages incurred in 2014 through 2018.

On May 2, 2022, the DOE and Duke Energy Florida executed a settlement agreement, pursuant to which Duke Energy Florida would receive damages for costs incurred between 2014 and 2018 and would be able to submit costs incurred in 2019 and 2020 pursuant to an audit process. In June 2022, Duke Energy Florida received $180 million in proceeds that related to damages incurred in 2014 through 2018.

Duke Energy Indiana

Coal Ash Basin Closure Plan Appeal

On January 27, 2020, Hoosier Environmental Council (HEC) filed a Petition for Administrative Review with the Indiana Office of Environmental Adjudication challenging the Indiana Department of Environmental Management's (IDEM's) December 10, 2019 partial approval of Duke Energy Indiana's ash pond closure plan at Duke Energy's Gallagher power station. After hearing oral arguments in early April 2021 on Duke Energy Indiana's and HEC's competing Motions for Summary Judgment, on May 4, 2021, the administrative court rejected all of HEC's claims and issued a ruling in favor of Duke Energy Indiana. On June 3, 2021, HEC filed an appeal in Superior Court to seek judicial review of the order. Briefing on the appeal was completed on December 13, 2021.

On January 11, 2022, Duke Energy Indiana received a compliance obligation letter from the EPA notifying the company that the two basins at issue in the litigation are subject to requirements of the CCR Rule. The letter does not provide a deadline for compliance. Duke Energy Indiana is proceeding with surface impoundment closure at its Indiana sites consistent with EPA's guidance, the federal CCR rule, and Indiana law, as applicable.

On April 21, 2022, HEC filed a motion requesting that the court hold a hearing within 45 days and also take judicial notice of the EPA's January 11, 2022 letter. On April 22, 2022, Duke Energy Indiana sent IDEM a letter withdrawing the closure plans for the Gallagher North Ash Pond and Primary Pond Ash Fill. After acknowledgment by IDEM of withdrawal of these closure plans, Duke Energy Indiana filed a Motion to Dismiss the litigation as moot on April 28, 2022, which IDEM supported, and the court granted the Motion to Dismiss on July 8, 2022.

Coal Ash Insurance Coverage Litigation

In June 2022, Duke Energy Indiana filed a civil action in Indiana Superior Court against various insurance companies seeking declaratory relief with respect to insurance coverage for coal combustion residuals-related expenses and liabilities covered by third-party liability insurance policies. The insurance policies cover the 1969-1972 and 1984-1985 periods and provide third-party liability insurance for claims and suits alleging property damage, bodily injury and personal injury (or a combination thereof). A trial date has not yet been set. Duke Energy Indiana cannot predict the outcome of this matter.

Other Litigation and Legal Proceedings

The Duke Energy Registrants are involved in other legal, tax and regulatory proceedings arising in the ordinary course of business, some of which involve significant amounts. The Duke Energy Registrants believe the final disposition of these proceedings will not have a material effect on their results of operations, cash flows or financial position for the years presented. Reserves are classified on the Consolidated Balance Sheets in Other within Other Noncurrent Liabilities and Other within Current Liabilities.

OTHER COMMITMENTS AND CONTINGENCIES

General

As part of their normal business, the Duke Energy Registrants are party to various financial guarantees, performance guarantees and other contractual commitments to extend guarantees of credit and other assistance to various subsidiaries, investees and other third parties. These guarantees involve elements of performance and credit risk, which are not fully recognized on the Consolidated Balance Sheets and have uncapped maximum potential payments. However, the Duke Energy Registrants do not believe these guarantees will have a material effect on their results of operations, cash flows or financial position. See Note 8 for more information.

Purchase Obligations

Purchased Power

Duke Energy Progress, Duke Energy Florida and Duke Energy Ohio have ongoing purchased power contracts, including renewable energy contracts, with other utilities, wholesale marketers, co-generators and qualified facilities. These purchased power contracts generally provide for capacity and energy payments. In addition, Duke Energy Progress and Duke Energy Florida have various contracts to secure transmission rights.

The following table presents executory purchased power contracts with terms exceeding one year, excluding contracts classified as leases.

		Minimum Purchase Amount at December 31, 2022						
(in millions)	Contract Expiration	2023	2024	2025	2026	2027	Thereafter	Total
Duke Energy Progress[a]	2028-2032	$ 22	$ 21	$ 22	$ 18	$ 19	$ 27	$ 129
Duke Energy Florida[b]	2024-2025	300	267	91	—	—	—	658
Duke Energy Ohio[c]	2024	55	36	—	—	—	—	91

(a) Contracts represent between 18% and 100% of net plant output.
(b) Contracts represent 100% of net plant output.
(c) Share of net plant output varies. Excludes PPA with OVEC.

Gas Supply and Capacity Contracts

Duke Energy Ohio and Piedmont routinely enter into long-term natural gas supply commodity and capacity commitments and other agreements that commit future cash flows to acquire services needed in their businesses. These commitments include pipeline and storage capacity contracts and natural gas supply contracts to provide service to customers. Costs arising from the natural gas supply commodity and capacity commitments, while significant, are pass-through costs to customers and are generally fully recoverable through the fuel adjustment or PGA procedures and prudence reviews in North Carolina and South Carolina and under the Tennessee Incentive Plan in Tennessee. In the Midwest, these costs are recovered via the Gas Cost Recovery Rate in Ohio or the Gas Cost Adjustment Clause in Kentucky. The time periods for fixed payments under pipeline and storage capacity contracts are up to 20 years. The time periods for fixed payments under natural gas supply contracts are up to four years. The time period for the natural gas supply purchase commitments is up to nine years.

Certain storage and pipeline capacity contracts require the payment of demand charges that are based on rates approved by the FERC in order to maintain rights to access the natural gas storage or pipeline capacity on a firm basis during the contract term. The demand charges that are incurred in each period are recognized in the Consolidated Statements of Operations and Comprehensive Income as part of natural gas purchases and are included in Cost of natural gas.

The following table presents future unconditional purchase obligations under natural gas supply and capacity contracts as of December 31, 2022.

(in millions)	2023	2024	2025	2026	2027	Thereafter	Total
Duke Energy Ohio	$ 85	$ 101	$ 85	$ 56	$ 52	$ 616	$ 995
Piedmont	319	313	267	213	203	587	1,902

6. LEASES

As part of its operations, Duke Energy leases certain aircraft, space on communication towers, industrial equipment, fleet vehicles, fuel transportation (barges and railcars), land and office space under various terms and expiration dates. Additionally, Duke Energy Carolinas, Duke Energy Progress and Duke Energy Indiana have finance leases related to firm natural gas pipeline transportation capacity. Duke Energy Progress and Duke Energy Florida have entered into certain PPAs, which are classified as finance and operating leases.

Duke Energy has certain lease agreements, which include variable lease payments that are based on the usage of an asset. These variable lease payments are not included in the measurement of the ROU assets or operating lease liabilities on the Consolidated Financial Statements.

Certain Duke Energy lease agreements include options for renewal and early termination. The intent to renew a lease varies depending on the lease type and asset. Renewal options that are reasonably certain to be exercised are included in the lease measurements. The decision to terminate a lease early is dependent on various economic factors. No termination options have been included in any of the lease measurements.

Duke Energy Carolinas entered into a sale-leaseback arrangement in December 2019, to construct and occupy an office tower. The lease agreement was evaluated as a sale-leaseback of real estate and it was determined that the transaction did not qualify for sale-leaseback accounting. As a result, the transaction is being accounted for as a financing. For this transaction, Duke Energy Carolinas will continue to record the real estate on the Consolidated Balance Sheets within Property, Plant and Equipment as if it were the legal owner and will continue to recognize depreciation expense over the estimated useful life. In addition, the failed sale-leaseback obligation is reported within Long-Term Debt on the Consolidated Balance Sheets, with the monthly lease payments commencing after the construction phase being split between interest expense and principal pay down of the debt.

Piedmont has certain agreements with Duke Energy Carolinas for the construction and transportation of natural gas pipelines to supply its natural gas plant needs. Piedmont accounts for these pipeline lateral contracts as sales-type leases since the present value of the sum of the lease payments equals the fair value of the assets. These pipeline lateral assets owned by Piedmont had a current net investment basis of $2 million as of December 31, 2022, and 2021, and a long-term net investment basis of $201 million and $203 million as of December 31, 2022, and 2021, respectively. These assets are classified in Other, within Current Assets and Other Noncurrent Assets, respectively, on Piedmont's Consolidated Balance Sheets. Duke Energy Carolinas accounts for the contracts as finance leases. The activity for these contracts is eliminated in consolidation at Duke Energy.

The following tables present the components of lease expense.

	Year Ended December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Operating lease expense[a]	$ 229	$ 39	$ 153	$ 83	$ 70	$ 10	$ 19	$ 6
Short-term lease expense[a]	4	—	1	—	1	—	2	—
Variable lease expense[a]	61	(1)	60	37	23	—	—	1
Finance lease expense								
Amortization of leased assets[b]	151	6	61	41	20	—	—	—
Interest on lease liabilities[c]	50	32	49	45	4	—	1	—
Total finance lease expense	201	38	110	86	24	—	1	—
Total lease expense	$ 495	$ 76	$ 324	$ 206	$ 118	$ 10	$ 22	$ 7

	Year Ended December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Operating lease expense[a]	$ 245	$ 43	$ 155	$ 83	$ 72	$ 11	$ 18	$ 7
Short-term lease expense[a]	5	—	2	1	1	—	2	—
Variable lease expense[a]	41	17	22	10	12	—	—	1
Finance lease expense								
Amortization of leased assets[b]	219	5	37	18	19	—	1	—
Interest on lease liabilities[c]	55	33	48	42	6	—	—	—
Total finance lease expense	274	38	85	60	25	—	1	—
Total lease expense	$ 565	$ 98	$ 264	$ 154	$ 110	$ 11	$ 21	$ 8

(a) Included in Operations, maintenance and other or, for barges and railcars, Fuel used in electric generation and purchased power on the Consolidated Statements of Operations.
(b) Included in Depreciation and amortization on the Consolidated Statements of Operations.
(c) Included in Interest Expense on the Consolidated Statements of Operations.

The following table presents operating lease maturities and a reconciliation of the undiscounted cash flows to operating lease liabilities.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2023	$ 225	$ 23	$ 118	$ 64	$ 54	$ 2	$ 6	$ 4
2024	207	21	110	56	54	2	5	4
2025	175	14	96	42	54	2	5	4
2026	161	13	99	45	54	2	4	—
2027	134	9	73	46	27	2	4	—
Thereafter	322	37	253	209	44	15	45	1
Total operating lease payments	1,224	117	749	462	287	25	69	13
Less: present value discount	(169)	(20)	(107)	(76)	(31)	(7)	(18)	—
Total operating lease liabilities[a]	$ 1,055	$ 97	$ 642	$ 386	$ 256	$ 18	$ 51	$ 13

(a) Certain operating lease payments include renewal options that are reasonably certain to be exercised.

The following table presents finance lease maturities and a reconciliation of the undiscounted cash flows to finance lease liabilities.

	December 31, 2022					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Indiana
2023	$ 198	$ 38	$ 103	$ 78	$ 25	$ 1
2024	143	38	88	79	9	1
2025	76	38	85	80	5	1
2026	77	38	86	81	5	1
2027	74	38	82	81	1	1
Thereafter	584	427	555	555	—	23
Total finance lease payments	1,152	617	999	954	45	28
Less: amounts representing interest	(388)	(333)	(371)	(367)	(4)	(19)
Total finance lease liabilities	$ 764	$ 284	$ 628	$ 587	$ 41	$ 9

The following tables contain additional information related to leases.

		December 31, 2022							
(in millions)	Classification	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Assets									
Operating	Operating lease ROU assets, net	$ 1,042	$ 78	$ 628	$ 370	$ 258	$ 18	$ 49	$ 4
Finance	Net property, plant and equipment	810	284	674	590	84	—	6	—
Total lease assets		$ 1,852	$ 362	$ 1,302	$ 960	$ 342	$ 18	$ 55	$ 4
Liabilities									
Current									
Operating	Other current liabilities	$ 179	$ 14	$ 96	$ 51	$ 45	$ 1	$ 4	$ —
Finance	Current maturities of long-term debt	153	7	57	35	22	—	—	—
Noncurrent									
Operating	Operating lease liabilities	876	83	546	335	211	17	47	13
Finance	Long-Term Debt	611	277	571	552	19	—	9	—
Total lease liabilities		$ 1,819	$ 381	$ 1,270	$ 973	$ 297	$ 18	$ 60	$ 13

		December 31, 2021							
(in millions)	Classification	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Assets									
Operating	Operating lease ROU assets, net	$ 1,136	$ 92	$ 691	$ 389	$ 302	$ 19	$ 53	$ 16
Finance	Net property, plant and equipment	950	302	729	627	102	—	7	—
Total lease assets		$ 2,086	$ 394	$ 1,420	$ 1,016	$ 404	$ 19	$ 60	$ 16
Liabilities									
Current									
Operating	Other current liabilities	$ 184	$ 22	$ 94	$ 50	$ 44	$ 1	$ 4	$ 5
Finance	Current maturities of long-term debt	151	6	61	41	20	—	—	—
Noncurrent									
Operating	Operating lease liabilities	940	78	606	350	256	18	50	14
Finance	Long-Term Debt	764	283	629	588	41	—	10	—
Total lease liabilities		$ 2,039	$ 389	$ 1,390	$ 1,029	$ 361	$ 19	$ 64	$ 19

(in millions)	Year Ended December 31, 2022							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Cash paid for amounts included in the measurement of lease liabilities[a]								
Operating cash flows from operating leases	$ 230	$ 24	$ 118	$ 63	$ 55	$ 2	$ 6	$ 4
Operating cash flows from finance leases	50	32	49	45	4	—	1	—
Financing cash flows from finance leases	151	6	61	41	20	—	—	—
Lease assets obtained in exchange for new lease liabilities (non-cash)								
Operating[b]	$ 111	$ 10	$ —	$ —	$ —	$ —	$ —	$ —

ons)	Year Ended December 31, 2021							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
id for amounts included in the measurement of lease liabilities[a]								
ting cash flows from operating leases	$ 245	$ 25	$ 117	$ 62	$ 55	$ 2	$ 6	5
ting cash flows from finance leases	55	33	48	42	6	—	—	—
cing cash flows from finance leases	219	5	37	18	19	—	1	—
ssets obtained in exchange for new lease liabilities (non-cash)								
ting[b]	$ 182	$ 4	$ 99	$ 99	$ —	$ —	$ —	—
ce	322	—	322	322	—	—	—	—

(a) No amounts were classified as investing cash flows from operating leases.
(b) Does not include ROU assets recorded as a result of the adoption of the new lease standard.

	December 31, 2022							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Weighted average remaining lease term (years)								
Operating leases	8	10	8	9	6	15	15	1
Finance leases	10	17	12	12	12	—	23	—
Weighted average discount rate[a]								
Operating leases	3.4 %	3.8 %	3.6 %	3.5 %	3.8 %	4.2 %	4.0 %	3.3 %
Finance leases	7.7 %	11.5 %	9.1 %	9.1 %	8.0 %	— %	11.9 %	— %

	December 31, 2021							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Weighted average remaining lease term (years)								
Operating leases	8	9	8	10	7	16	16	4
Finance leases	10	18	13	13	11	—	24	—
Weighted average discount rate[a]								
Operating leases	3.5 %	3.5 %	3.6 %	3.4 %	3.8 %	4.2 %	4.1 %	3.6 %
Finance leases	7.3 %	11.6 %	9.0 %	9.0 %	8.2 %	— %	11.9 %	— %

(a) The discount rate is calculated using the rate implicit in a lease if it is readily determinable. Generally, the rate used by the lessor is not provided to Duke Energy and in these cases the incremental borrowing rate is used. Duke Energy will typically use its fully collateralized incremental borrowing rate as of the commencement date to calculate and record the lease. The incremental borrowing rate is influenced by the lessee's credit rating and lease term and as such may differ for individual leases, embedded leases or portfolios of leased assets.

7. DEBT AND CREDIT FACILITIES

Summary of Debt and Related Terms

The following tables summarize outstanding debt and includes debt attributable to the Commercial Renewables Disposal Groups. See Note 2 for further details.

	December 31, 2022									
(in millions)	Weighted Average Interest Rate	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unsecured debt, maturing 2023-2082	4.20 %	$ 29,585	$ 1,150	$ 2,600	$ —	$ 950	$ 1,330	$ 697	$ 3,390
Secured debt, maturing 2023-2052	4.11 %	5,632	1,317	2,383	1,155	1,228	—	—	—
First mortgage bonds, maturing 2023-2052[a]	3.89 %	32,645	11,306	16,350	8,776	7,576	1,850	3,138	—
Finance leases, maturing 2023-2051[b]	7.90 %	764	284	628	587	41	—	9	—
Tax-exempt bonds, maturing 2027-2046[c]	3.84 %	1,331	—	500	500	—	77	352	—
Notes payable and commercial paper[d]	4.50 %	4,582	—	—	—	—	—	—	—
Money pool/intercompany borrowings		—	1,533	993	389	605	522	585	514
Fair value hedge carrying value adjustment		(5)	—	—	—	—	—	—	—
Unamortized debt discount and premium, net[e]		1,016	(21)	(40)	(23)	(16)	(25)	(17)	(9)
Unamortized debt issuance costs[f]		(383)	(70)	(132)	(59)	(70)	(12)	(22)	(18)
Total debt	4.09 %	$ 75,167	$ 15,499	$ 23,282	$ 11,325	$ 10,314	$ 3,742	$ 4,742	$ 3,877
Short-term notes payable and commercial paper		(3,952)	—	—	—	—	—	—	—
Short-term money pool/intercompany borrowings		—	(1,233)	(843)	(238)	(605)	(497)	(435)	(514)
Current maturities of long-term debt[g]		(4,154)	(1,018)	(697)	(369)	(328)	(475)	(303)	(45)
Total long-term debt[g]		$ 67,061	$ 13,248	$ 21,742	$ 10,718	$ 9,381	$ 2,770	$ 4,004	$ 3,318

(a) Substantially all electric utility property is mortgaged under mortgage bond indentures.
(b) Duke Energy includes $164 million of finance lease purchase accounting adjustments related to Duke Energy Florida related to PPAs that are not accounted for as finance leases in their respective financial statements because of grandfathering provisions in GAAP.
(c) Substantially all tax-exempt bonds are secured by first mortgage bonds, letters of credit or the Master Credit Facility.
(d) Includes $625 million classified as Long-Term Debt on the Consolidated Balance Sheets due to the existence of long-term credit facilities that backstop these commercial paper balances, along with Duke Energy's ability and intent to refinance these balances on a long-term basis. The weighted average days to maturity for Duke Energy's commercial paper program was 15 days.
(e) Duke Energy includes $1,057 million and $85 million in purchase accounting adjustments related to Progress Energy and Piedmont, respectively.
(f) Duke Energy includes $27 million in purchase accounting adjustments primarily related to the merger with Progress Energy.
(g) Refer to Note 18 for additional information on amounts from consolidated VIEs.

		December 31, 2021							
(in millions)	Weighted Average Interest Rate	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unsecured debt, maturing 2022-2082	3.71 %	$ 24,564	$ 1,150	$ 2,250	$ —	$ 150	$ 1,330	$ 700	$ 2,990
Secured debt, maturing 2022-2052	2.50 %	5,584	1,094	2,397	1,120	1,278	—	—	—
First mortgage bonds, maturing 2022-2051[a]	3.87 %	31,026	10,507	15,450	8,375	7,075	1,850	3,219	—
Finance leases, maturing 2022-2051[b]	5.81 %	915	289	690	629	61	—	10	—
Tax-exempt bonds, maturing 2027-2041[c]	0.65 %	360	—	48	48	—	27	285	—
Notes payable and commercial paper[d]	0.35 %	3,929	—	—	—	—	—	—	—
Money pool/intercompany borrowings		—	526	2,959	322	199	128	150	518
Fair value hedge carrying value adjustment		4	4	—	—	—	—	—	—
Unamortized debt discount and premium, net[e]		1,119	(21)	(34)	(19)	(14)	(27)	(18)	(6)
Unamortized debt issuance costs[f]		(362)	(67)	(128)	(54)	(68)	(13)	(23)	(16)
Total debt	3.50 %	$ 67,139	$ 13,482	$ 23,632	$ 10,421	$ 8,681	$ 3,295	$ 4,323	$ 3,486
Short-term notes payable and commercial paper		(3,304)	—	—	—	—	—	—	—
Short-term money pool/intercompany borrowings		—	(226)	(2,809)	(172)	(199)	(103)	—	(518)
Current maturities of long-term debt[g]		(3,387)	(362)	(1,082)	(556)	(76)	—	(84)	—
Total long-term debt[g]		$ 60,448	$ 12,894	$ 19,741	$ 9,693	$ 8,406	$ 3,192	$ 4,239	$ 2,968

(a) Substantially all electric utility property is mortgaged under mortgage bond indentures.
(b) Duke Energy includes $256 million of finance lease purchase accounting adjustments related to Duke Energy Florida related to PPAs that are not accounted for as finance leases in their respective financial statements because of grandfathering provisions in GAAP.
(c) Substantially all tax-exempt bonds are secured by first mortgage bonds, letters of credit or the Master Credit Facility.
(d) Includes $625 million that was classified as Long-Term Debt on the Consolidated Balance Sheets due to the existence of long-term credit facilities that backstop these commercial paper balances, along with Duke Energy's ability and intent to refinance these balances on a long-term basis. The weighted average days to maturity for Duke Energy's commercial paper programs was 15 days.
(e) Duke Energy includes $1,121 million and $100 million in purchase accounting adjustments related to Progress Energy and Piedmont, respectively.
(f) Duke Energy includes $29 million in purchase accounting adjustments primarily related to the merger with Progress Energy.
(g) Refer to Note 18 for additional information on amounts from consolidated VIEs.

Current Maturities of Long-Term Debt

The following table shows the significant components of Current maturities of Long-Term Debt on the Consolidated Balance Sheets. The Duke Energy Registrants currently anticipate satisfying these obligations with cash on hand and proceeds from additional borrowings.

(in millions)	Maturity Date	Interest Rate	December 31, 2022
Unsecured Debt			
Duke Energy (Parent)	April 2023	2.875 %	$ **350**
Duke Energy (Parent)[a]	June 2023	3.469 %	**500**
Duke Energy (Parent)	October 2023	3.950 %	**400**
Duke Energy Ohio[a]	October 2023	4.272 %	**150**
Duke Energy Indiana[a]	October 2023	4.118 %	**300**
First Mortgage Bonds			
Duke Energy Carolinas	March 2023	2.500 %	**500**
Duke Energy Carolinas	March 2023	3.050 %	**500**
Duke Energy Progress	September 2023	3.375 %	**300**
Duke Energy Ohio	September 2023	3.800 %	**300**
Other[b]			**854**
Current maturities of long-term debt			$ **4,154**

(a) Debt has a floating interest rate.
(b) Includes finance lease obligations, amortizing debt, tax-exempt bonds with mandatory put options and small bullet maturities.

Maturities and Call Options

The following table shows the annual maturities of long-term debt for the next five years and thereafter. Amounts presented exclude short-term notes payable, commercial paper and money pool borrowings and debt issuance costs for the Subsidiary Registrants.

	December 31, 2022							
(in millions)	Duke Energy[a]	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2023	$ 4,154	$ 1,018	$ 697	$ 369	$ 328	$ 475	$ 303	$ 45
2024	3,216	19	939	72	867	—	4	40
2025	4,322	491	1,040	975	65	245	4	205
2026	2,682	621	345	279	66	45	4	40
2027	3,203	323	947	233	714	102	177	300
Thereafter	52,999	11,884	18,642	9,238	7,753	2,415	3,853	2,760
Total long-term debt, including current maturities	$ 70,576	$ 14,356	$ 22,610	$ 11,166	$ 9,793	$ 3,282	$ 4,345	$ 3,390

(a) Excludes $1,169 million in purchase accounting adjustments related to the Progress Energy merger and the Piedmont acquisition.

The Duke Energy Registrants have the ability under certain debt facilities to call and repay the obligation prior to its scheduled maturity. Therefore, the actual timing of future cash repayments could be materially different than as presented above.

Short-Term Obligations Classified as Long-Term Debt

Tax-exempt bonds that may be put to the Duke Energy Registrants at the option of the holder and certain commercial paper issuances and money pool borrowings are classified as Long-Term Debt on the Consolidated Balance Sheets. These tax-exempt bonds, commercial paper issuances and money pool borrowings, which are short-term obligations by nature, are classified as long-term due to Duke Energy's intent and ability to utilize such borrowings as long-term financing. As Duke Energy's Master Credit Facility and other bilateral letter of credit agreements have non-cancelable terms in excess of one year as of the balance sheet date, Duke Energy has the ability to refinance these short-term obligations on a long-term basis. The following tables show short-term obligations classified as long-term debt.

	December 31, 2022 and 2021				
(in millions)	Duke Energy	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Ohio	Duke Energy Indiana
Tax-exempt bonds	$ 312	$ —	$ —	$ 27	$ 285
Commercial paper[a]	625	300	150	25	150
Total	$ 937	$ 300	$ 150	$ 52	$ 435

(a) Progress Energy amounts are equal to Duke Energy Progress amounts.

Summary of Significant Debt Issuances

In January 2023, Duke Energy Carolinas issued $1.8 billion of first mortgage bonds. The issuance was split between a $900 million,10-year tranche at 4.95% and a $900 million, 30-year tranche at 5.35%. The net proceeds will be used to refinance $1 billion of Duke Energy Carolinas bonds maturing in March 2023, to pay down short-term debt and for general company purposes.

The following tables summarize significant debt issuances (in millions).

			Year Ended December 31, 2022					
Issuance Date	Maturity Date	Interest Rate	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Piedmont
Unsecured Debt								
May 2022[a]	May 2052	5.050 %	$ 400	$ —	$ —	$ —	$ —	$ 400
June 2022[b]	June 2028	4.750 %	645	645	—	—	—	—
June 2022[b]	June 2034	5.306 %	537	537	—	—	—	—
August 2022[c]	March 2028	4.300 %	900	900	—	—	—	—
August 2022[c]	August 2032	4.500 %	1,150	1,150	—	—	—	—
August 2022[c]	August 2052	5.000 %	1,150	1,150	—	—		—
December 2022[d]	December 2025	5.000 %	500	500	—	—	—	—
December 2022[d]	December 2027	5.000 %	500	500	—	—	—	—
First Mortgage Bonds								
March 2022[e]	March 2032	2.850 %	500	—	500	—	—	—
March 2022[e]	March 2052	3.550 %	650	—	650	—	—	—
March 2022[e]	April 2032	3.400 %	500	—	—	500	—	—
March 2022[e]	April 2052	4.000 %	400	—	—	400	—	—
November 2022[f]	November 2052	5.950 %	500	—	—	—	500	—
Tax-exempt Bonds								
June 2022[g]	September 2030	4.000 %	168	168	—	—	—	—
June 2022[g]	November 2039	4.250 %	234	234	—	—	—	—
September 2022[h]	October 2046	3.300 %	200	—	—	200		—
September 2022[i]	October 2046	3.700 %	210	—	—	210		—
September 2022[i]	October 2046	4.000 %	42	—	—	42		—
Total issuances			$ 9,186	$ 5,784	$ 1,150	$ 1,352	$ 500	$ 400

(a) Debt issued to repay a portion of outstanding intercompany short-term debt and for general corporate purposes.
(b) Duke Energy (Parent) issued 600 million euros aggregate principal amount of 3.10% senior notes due June 2028 and 500 million euros aggregate principal amount of 3.85% senior notes due June 2034. Debt issued to repay a $500 million debt maturity, pay down short-term debt and for general corporate purposes. Duke Energy's obligations under its euro-denominated fixed-rate notes were effectively converted to fixed-rate U.S. dollars at issuance through cross-currency swaps, mitigating foreign currency exchange risk associated with the interest and principal payments. See Note 15 for additional information.
(c) Debt issued to repay a portion of short-term debt and for general corporate purposes.
(d) Proceeds will be used to repay a portion of commercial paper and for general corporate purposes.
(e) Debt issued to finance or refinance, in whole or in part, existing or new eligible projects under the sustainable financing framework.
(f) Debt issued to repay a portion of outstanding intercompany short-term debt and for general company purposes.
(g) Debt issued to refund the Ohio Air Quality Development Revenue Refunding bonds, previously held in treasury, which were used to finance or refinance portions of certain solid waste disposal facilities. The mandatory purchase date of these bonds is June 1, 2027.
(h) Debt issued to provide funds to refund the prior bonds, which were used to finance or refinance portions of certain air and water pollution control equipment and solid waste disposal equipment. The mandatory purchase date of these bonds is October 1, 2026.
(i) Debt issued to provide funds to refund the prior bonds, which were used to finance or refinance portions of certain air and water pollution control equipment and solid waste disposal equipment. The mandatory purchase date of these bonds is October 1, 2030.

			Year Ended December 31, 2021					
Issuance Date	Maturity Date	Interest Rate	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Piedmont
Unsecured Debt								
March 2021[a]	March 2031	2.500 %	$ 350	$ —	$ —	$ —	$ —	$ 350
June 2021[b][c]	June 2023	0.299 %	500	500	—	—	—	—
June 2021[c]	June 2031	2.550 %	1,000	1,000	—	—	—	—
June 2021[c]	June 2041	3.300 %	750	750	—	—	—	—
June 2021[c]	June 2051	3.500 %	750	750	—	—	—	—
September 2021[d]	January 2082	3.250 %	500	500	—	—	—	—
Secured Debt								
November 2021[e]	July 2031	1.679 %	100	—	100	—	—	—
November 2021[e]	July 2041	2.617 %	137	—	137	—	—	—
November 2021[e]	July 2028	1.295 %	221	—	—	221	—	—
November 2021[e]	July 2037	2.387 %	352	—	—	352	—	—
November 2021[e]	July 2041	2.799 %	197	—	—	197	—	—
First Mortgage Bonds								
April 2021[f]	April 2031	2.550 %	550	—	550	—	—	—
April 2021[f]	April 2051	3.450 %	450	—	450	—	—	—
August 2021[g]	August 2031	2.000 %	650	—	—	650	—	—
August 2021[g]	August 2051	2.900 %	450	—	—	450	—	—
December 2021[h]	December 2031	2.400 %	650	—	—	—	650	—
December 2021[h]	December 2051	3.000 %	500	—	—	—	500	—
Total issuances			$ 8,107	$ 3,500	$ 1,237	$ 1,870	$ 1,150	$ 350

(a) Debt issued to repay at maturity $160 million senior unsecured notes due June 2021, pay down short-term debt and for general corporate purposes.
(b) Debt has a floating interest rate.
(c) Debt issued to repay $1.75 billion of Duke Energy (Parent) debt maturities, to repay a portion of short-term debt and for general corporate purposes.
(d) Debt issued to repay in October 2021 $500 million of Duke Energy (Parent) unsecured notes. The interest rate resets every five years.
(e) Debt issued to finance the North Carolina portion of storm restoration expenditures related to Hurricane Florence, Hurricane Michael, Hurricane Dorian and Winter Storm Diego.
(f) Debt issued to repay at maturity $500 million first mortgage bonds due June 2021, pay down short-term debt and for general company purposes.
(g) Debt issued to repay at maturity a total of $600 million first mortgage bonds due September 2021, pay down short-term debt and for general company purposes.
(h) Proceeds were used to finance or refinance, in whole or in part, existing or new eligible projects under the sustainable financing framework.

AVAILABLE CREDIT FACILITIES

Master Credit Facility

In March 2022, Duke Energy amended its existing Master Credit Facility to increase the amount of the facility from $8 billion to $9 billion and to extend the termination date to March 2027. The Duke Energy Registrants, excluding Progress Energy, have borrowing capacity under the Master Credit Facility up to a specified sublimit for each borrower. Duke Energy has the unilateral ability at any time to increase or decrease the borrowing sublimits of each borrower, subject to a maximum sublimit for each borrower. The amount available under the Master Credit Facility has been reduced to backstop issuances of commercial paper, certain letters of credit and variable-rate demand tax-exempt bonds that may be put to the Duke Energy Registrants at the option of the holder.

The table below includes the current borrowing sublimits and available capacity under these credit facilities.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Facility size[a]	$ 9,000	$ 2,375	$ 1,925	$ 800	$ 1,150	$ 900	$ 1,050	$ 800
Reduction to backstop issuances								
Commercial paper[b]	(3,685)	463	(1,533)	(389)	(605)	(522)	(585)	(514)
Outstanding letters of credit	(40)	(27)	(4)	(2)	(7)	—	—	—
Tax-exempt bonds	(81)	—	—	—	—	—	(81)	—
Available capacity	$ 5,194	$ 2,811	$ 388	$ 409	$ 538	$ 378	$ 384	$ 286

(a) Represents the sublimit of each borrower.
(b) Duke Energy issued $625 million of commercial paper and loaned the proceeds through the money pool to Duke Energy Carolinas, Duke Energy Progress, Duke Energy Ohio and Duke Energy Indiana. The balances are classified as Long-Term Debt Payable to Affiliated Companies in the Consolidated Balance Sheets.

Duke Energy (Parent) Term Loan Facility

On March 9, 2022, Duke Energy (Parent) entered into a Term Loan Credit Agreement (Credit Agreement) with commitments totaling $1.4 billion maturing on March 9, 2024. The maturity date of the Credit Agreement may be extended for up to two years by request of Duke Energy (Parent), upon satisfaction of certain conditions contained in the Credit Agreement. Borrowings under the facility were used to repay amounts drawn under the Three-Year Revolving Credit Facility and for general corporate purposes, including repayment of a portion of Duke Energy's outstanding commercial paper. In December 2022, Duke Energy (Parent) repaid $400 million of the term loan. The balance is classified as Long-Term Debt on Duke Energy's Consolidated Balance Sheets. The Three-Year Revolving Credit Facility was terminated in March 2022.

Duke Energy Florida Term Loan Facility

In October 2022, Duke Energy Florida entered into a term loan facility with commitments totaling $800 million expiring in April 2024. The term loan was fully drawn at the time of closing In October and borrowings were used for storm costs, under-collected fuel and general company purposes. The balance is classified as Long-Term Debt on Duke Energy Florida's Consolidated Balance Sheet.

Other Debt Matters

In September 2022, Duke Energy filed a Form S-3 with the SEC. Under this Form S-3, which is uncapped, the Duke Energy Registrants, excluding Progress Energy, may issue debt and other securities, including preferred stock, in the future at amounts, prices and with terms to be determined at the time of future offerings. The registration statement was filed to replace a similar prior filing upon expiration of its three-year term and also allows for the issuance of common and preferred stock by Duke Energy.

Also in September 2022, to replace another similar prior filing, Duke Energy filed an effective Form S-3 with the SEC to sell up to $4 billion of variable denomination floating-rate demand notes, called PremierNotes. The Form S-3 states that no more than $2 billion of the notes will be outstanding at any particular time. The notes are offered on a continuous basis and bear interest at a floating rate per annum determined by the Duke Energy PremierNotes Committee, or its designee, on a weekly basis. The interest rate payable on notes held by an investor may vary based on the principal amount of the investment. The notes have no stated maturity date, are non-transferable and may be redeemed in whole or in part by Duke Energy or at the investor's option at any time. The balance as of December 31, 2022, and 2021, was $897 million and $1,066 million, respectively. The notes are short-term debt obligations of Duke Energy and are reflected as Notes payable and commercial paper on Duke Energy's Consolidated Balance Sheets.

Money Pool and Intercompany Credit Agreements

The Subsidiary Registrants, excluding Progress Energy, are eligible to receive support for their short-term borrowing needs through participation with Duke Energy and certain of its subsidiaries in a money pool arrangement. Under this arrangement, those companies with short-term funds may provide short-term loans to affiliates participating in this arrangement. The money pool is structured such that the Subsidiary Registrants, excluding Progress Energy, separately manage their cash needs and working capital requirements. Accordingly, there is no net settlement of receivables and payables between money pool participants. Duke Energy (Parent), may loan funds to its participating subsidiaries, but may not borrow funds through the money pool. Accordingly, as the money pool activity is between Duke Energy and its subsidiaries, all money pool balances are eliminated within Duke Energy's Consolidated Balance Sheets.

Money pool receivable balances are reflected within Notes receivable from affiliated companies on the Subsidiary Registrants' Consolidated Balance Sheets. Money pool payable balances are reflected within either Notes payable to affiliated companies or Long-Term Debt Payable to Affiliated Companies on the Subsidiary Registrants' Consolidated Balance Sheets.

In March 2022, Progress Energy closed a revolving credit agreement with Duke Energy (Parent), which allowed up to $2.5 billion in intercompany borrowings.

Restrictive Debt Covenants

The Duke Energy Registrants' debt and credit agreements contain various financial and other covenants. Duke Energy's Master Credit Facility contains a covenant requiring the debt-to-total capitalization ratio not to exceed 65% for each borrower, excluding Piedmont, and 70% for Piedmont. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements. As of December 31, 2022, Duke Energy presented approximately $131 million of long-term debt as current on the Consolidated Balance Sheet as a result of a technical default due to the bankruptcy filing of a Duke Energy customer. The Duke Energy Registrants were in compliance with all other covenants related to their debt agreements as of December 31, 2022. In addition, some credit agreements may allow for acceleration of payments or termination of the agreements due to nonpayment, or acceleration of other significant indebtedness of the borrower or some of its subsidiaries. None of the debt or credit agreements contain material adverse change clauses.

Other Loans

As of December 31, 2022, and 2021, Duke Energy had loans outstanding of $852 million, including $33 million at Duke Energy Progress and $819 million, including $34 million at Duke Energy Progress, respectively, against the cash surrender value of life insurance policies it owns on the lives of its executives. The amounts outstanding were carried as a reduction of the related cash surrender value that is included in Other within Other Noncurrent Assets on the Consolidated Balance Sheets.

8. GUARANTEES AND INDEMNIFICATIONS

Duke Energy has various financial and performance guarantees and indemnifications with non-consolidated entities, which are issued in the normal course of business. As discussed below, these contracts include performance guarantees, standby letters of credit, debt guarantees and indemnifications and include guarantees and indemnifications related to Commercial Renewables Disposal Groups. Duke Energy enters into these arrangements to facilitate commercial transactions with third parties by enhancing the value of the transaction to the third party. At December 31, 2022, Duke Energy does not believe conditions are likely for significant performance under these guarantees. To the extent liabilities are incurred as a result of the activities covered by the guarantees, such liabilities are included on the accompanying Consolidated Balance Sheets.

On January 2, 2007, Duke Energy completed the spin-off of its previously wholly owned natural gas businesses to shareholders. Guarantees issued by Duke Energy or its affiliates, or assigned to Duke Energy prior to the spin-off, remained with Duke Energy subsequent to the spin-off. Guarantees issued by Spectra Energy Capital, LLC (Spectra Capital) or its affiliates prior to the spin-off remained with Spectra Capital subsequent to the spin-off, except for guarantees that were later assigned to Duke Energy. Duke Energy has indemnified Spectra Capital against any losses incurred under certain of the guarantee obligations that remain with Spectra Capital. At December 31, 2022, the maximum potential amount of future payments associated with these guarantees were $40 million, the majority of which expire by 2028.

In October 2017, ACP executed a $3.4 billion revolving credit facility with a stated maturity date of October 2021. Duke Energy entered into a guarantee agreement to support its share of the ACP revolving credit facility. In July 2020, ACP reduced the size of the credit facility to $1.9 billion. Duke Energy's maximum exposure to loss under the terms of the guarantee was $860 million as of December 31, 2020. This amount represented 47% of the outstanding borrowings under the credit facility and was recognized within Other Current Liabilities on the Consolidated Balance Sheets at December 31, 2020, of which $95 million was previously recognized due the adoption of new guidance for credit losses effective January 1, 2020. In February 2021, Duke Energy paid approximately $855 million to fund ACP's outstanding debt, relieving Duke Energy of its guarantee. See Notes 4 and 13 for more information.

In addition to the Spectra Capital and ACP revolving credit facility guarantees above, Duke Energy has issued performance guarantees to customers and other third parties that guarantee the payment and performance of other parties, including certain non-wholly owned entities, as well as guarantees of debt of certain non-consolidated entities. If such entities were to default on payments or performance, Duke Energy would be required under the guarantees to make payments on the obligations of these entities. The maximum potential amount of future payments required under these guarantees as of December 31, 2022, was $33 million of which all expire between 2024 and 2030, with the remaining performance guarantees having no contractual expiration. Additionally, certain guarantees have uncapped maximum potential payments; however, Duke Energy does not believe these guarantees will have a material effect on its results of operations, cash flows or financial position.

Duke Energy uses bank-issued standby letters of credit to secure the performance of wholly owned and non-wholly owned entities to a third party or customer. Under these arrangements, Duke Energy has payment obligations to the issuing bank that are triggered by a draw by the third party or customer due to the failure of the wholly owned or non-wholly owned entity to perform according to the terms of its underlying contract. At December 31, 2022, Duke Energy had issued a total of $667 million in letters of credit, which expire between 2023 and 2028. The unused amount under these letters of credit was $35 million.

Duke Energy recognized $2 million and $3 million as of December 31, 2022, and 2021, respectively, primarily in Other within Other Noncurrent Liabilities on the Consolidated Balance Sheets, for the guarantees discussed above. As current estimates change, additional losses related to guarantees and indemnifications to third parties, which could be material, may be recorded by the Duke Energy Registrants in the future.

9. JOINT OWNERSHIP OF GENERATING AND TRANSMISSION FACILITIES

The Duke Energy Registrants maintain ownership interests in certain jointly owned generating and transmission facilities. The Duke Energy Registrants are entitled to a share of the generating capacity and output of each unit equal to their respective ownership interests. The Duke Energy Registrants pay their ownership share of additional construction costs, fuel inventory purchases and operating expenses. The Duke Energy Registrants share of revenues and operating costs of the jointly owned facilities is included within the corresponding line in the Consolidated Statements of Operations. Each participant in the jointly owned facilities must provide its own financing.

The following table presents the Duke Energy Registrants' interest of jointly owned plant or facilities and amounts included on the Consolidated Balance Sheets. All facilities are operated by the Duke Energy Registrants and are included in the Electric Utilities and Infrastructure segment.

	December 31, 2022			
(in millions except for ownership interest)	Ownership Interest	Property, Plant and Equipment	Accumulated Depreciation	Construction Work in Progress
Duke Energy Carolinas				
Catawba (units 1 and 2)[a]	19.25 %	$ 1,047	$ 546	$ 32
W.S. Lee CC[b]	87.27 %	613	86	48
Duke Energy Indiana				
Gibson (unit 5)[c]	50.05 %	450	241	2
Vermillion[d]	62.50 %	182	113	1
Transmission and local facilities[c]	Various	6,718	1,510	157

(a) Jointly owned with North Carolina Municipal Power Agency Number 1, NCEMC and PMPA.
(b) Jointly owned with NCEMC.
(c) Jointly owned with WVPA and IMPA.
(d) Jointly owned with WVPA.

10. ASSET RETIREMENT OBLIGATIONS

Duke Energy records an ARO when it has a legal obligation to incur retirement costs associated with the retirement of a long-lived asset and the obligation can be reasonably estimated. Certain assets of the Duke Energy Registrants have an indeterminate life, such as transmission and distribution facilities, and thus the fair value of the retirement obligation is not reasonably estimable. A liability for these AROs will be recorded when a fair value is determinable.

The Duke Energy Registrants' regulated operations accrue costs of removal for property that does not have an associated legal retirement obligation based on regulatory orders from state commissions. These costs of removal are recorded as a regulatory liability in accordance with regulatory accounting treatment. The Duke Energy Registrants do not accrue the estimated cost of removal for any nonregulated assets. See Note 4 for the estimated cost of removal for assets without an associated legal retirement obligation, which are included in Regulatory liabilities on the Consolidated Balance Sheets.

The following table presents the AROs recorded on the Consolidated Balance Sheets.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Decommissioning of nuclear power facilities[a]	$ 7,261	$ 3,009	$ 4,217	$ 3,948	$ 270	$ —	$ —	$ —
Closure of ash impoundments	5,176	2,309	1,862	1,833	29	95	911	—
Other	291	64	102	42	59	59	40	26
Total asset retirement obligation	$ 12,728	$ 5,382	$ 6,181	$ 5,823	$ 358	$ 154	$ 951	$ 26
Less: Current portion	773	261	289	288	1	17	207	—
Total noncurrent asset retirement obligation	$ 11,955	$ 5,121	$ 5,892	$ 5,535	$ 357	$ 137	$ 744	$ 26

(a) Duke Energy amount includes purchase accounting adjustments related to the merger with Progress Energy.

Nuclear Decommissioning Liability

AROs related to nuclear decommissioning are based on site-specific cost studies. The NCUC, PSCSC and FPSC require updated cost estimates for decommissioning nuclear plants every five years.

The following table summarizes information about the most recent site-specific nuclear decommissioning cost studies. Decommissioning costs are stated in 2018 or 2019 dollars, depending on the year of the cost study, and include costs to decommission plant components not subject to radioactive contamination.

(in millions)	Annual Funding Requirement[a]	Decommissioning Costs[a]	Year of Cost Study
Duke Energy	$ 10	$ 9,105	2018 or 2019
Duke Energy Carolinas[b][c]	—	4,365	2018
Duke Energy Progress[d]	10	4,181	2019
Duke Energy Florida[e]	—	559	N/A

(a) Amount represents annual funding requirement for the current fiscal year. Amounts for Progress Energy equal the sum of Duke Energy Progress and Duke Energy Florida.
(b) Decommissioning costs for Duke Energy Carolinas reflects its ownership interest in jointly owned reactors. Other joint owners are responsible for decommissioning costs related to their interest in the reactors.
(c) Duke Energy Carolinas' site-specific nuclear decommissioning cost study completed in 2018 was filed with the NCUC and PSCSC in 2019. A new funding study was also completed and filed with the NCUC and PSCSC in 2019.
(d) Duke Energy Progress' site-specific nuclear decommissioning cost study completed in 2019 was filed with the NCUC and PSCSC in March 2020. Duke Energy Progress also completed a funding study, which was filed with the NCUC and PSCSC in July 2020. In October 2021, Duke Energy Progress filed the 2019 nuclear decommissioning cost study with the FERC, as well as a revised rate schedule for decommissioning expense to be collected from wholesale customers. The FERC accepted the filing, as filed on December 9, 2021.
(e) During 2019, Duke Energy Florida reached an agreement to transfer decommissioning work for Crystal River Unit 3 to a third party and decommissioning costs are based on the agreement with this third party rather than a cost study. Regulatory approval was received from the NRC and the FPSC in April 2020 and August 2020, respectively.

Nuclear Decommissioning Trust Funds

Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida each maintain NDTFs that are intended to pay for the decommissioning costs of their respective nuclear power plants. The NDTF investments are managed and invested in accordance with applicable requirements of various regulatory bodies including the NRC, FERC, NCUC, PSCSC, FPSC and the IRS.

Use of the NDTF investments is restricted to nuclear decommissioning activities including license termination, spent fuel and site restoration. The license termination and spent fuel obligations relate to contaminated decommissioning and are recorded as AROs. The site restoration obligation relates to non-contaminated decommissioning and is recorded to cost of removal within Regulatory liabilities on the Consolidated Balance Sheets.

The following table presents the fair value of NDTF assets legally restricted for purposes of settling AROs associated with nuclear decommissioning. Duke Energy Florida entered into an agreement with a third party to decommission Crystal River Unit 3 and was granted an exemption from the NRC, which allows for use of the NDTF for all aspects of nuclear decommissioning. The entire balance of Duke Energy Florida's NDTF may be applied toward license termination, spent fuel and site restoration costs incurred to decommission Crystal River Unit 3 and is excluded from the table below. See Note 17 for additional information related to the fair value of the Duke Energy Registrants' NDTFs.

	December 31,	
(in millions)	**2022**	**2021**
Duke Energy	**$ 7,466**	$ 8,933
Duke Energy Carolinas	**4,208**	5,068
Duke Energy Progress	**3,258**	3,865

Nuclear Operating Licenses

As described in Note 4, Duke Energy Carolinas and Duke Energy Progress intend to seek renewal of operating licenses and 20-year license extensions for all of their nuclear stations. The following table includes the current expiration of nuclear operating licenses.

Unit	**Year of Expiration**
Duke Energy Carolinas	
Catawba Units 1 and 2	2043
McGuire Unit 1	2041
McGuire Unit 2	2043
Oconee Units 1 and 2	2033
Oconee Unit 3	2034
Duke Energy Progress	
Brunswick Unit 1	2036
Brunswick Unit 2	2034
Harris	2046
Robinson	2030

The NRC has acknowledged permanent cessation of operation and permanent removal of fuel from the reactor vessel at Crystal River Unit 3. Therefore, the license no longer authorizes operation of the reactor. During 2019, Duke Energy Florida entered into an agreement for the accelerated decommissioning of Crystal River Unit 3. Regulatory approval was received from the NRC and the FPSC in April 2020 and August 2020, respectively. See Note 4 for more information.

Closure of Ash Impoundments

The Duke Energy Registrants are subject to state and federal regulations covering the closure of coal ash impoundments, including the EPA CCR rule and the Coal Ash Act, and other agreements. AROs recorded on the Duke Energy Registrants' Consolidated Balance Sheets include the legal obligation for closure of coal ash basins and the disposal of related ash as a result of these regulations and agreements.

The ARO amount recorded on the Consolidated Balance Sheets is based upon estimated closure costs for impacted ash impoundments. The amount recorded represents the discounted cash flows for estimated closure costs based upon specific closure plans. Actual costs to be incurred will be dependent upon factors that vary from site to site. The most significant factors are the method and time frame of closure at the individual sites. Closure methods considered include removing the water from ash basins, consolidating material as necessary and capping the ash with a synthetic barrier, excavating and relocating the ash to a lined structural fill or lined landfill or recycling the ash for concrete or some other beneficial use. The ultimate method and timetable for closure will be in compliance with standards set by federal and state regulations and other agreements. The ARO amount will be adjusted as additional information is gained through the closure and post-closure process, including acceptance and approval of compliance approaches, which may change management assumptions, and may result in a material change to the balance. See ARO Liability Rollforward section below for information on revisions made to the coal ash liability during 2022 and 2021.

Asset retirement costs associated with the AROs for operating plants and retired plants are included in Net property, plant and equipment and Regulatory assets, respectively, on the Consolidated Balance Sheets. See Note 4 for additional information on Regulatory assets related to AROs and Note 5 for additional information on commitments and contingencies.

Cost recovery for future expenditures will be pursued through the normal ratemaking process with federal and state utility commissions, which permit recovery of necessary and prudently incurred costs associated with Duke Energy's regulated operations. See Note 4 for additional information on recovery of coal ash costs.

ARO Liability Rollforward

The following tables present changes in the liability associated with AROs.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Balance at December 31, 2020	$ 12,854	$ 5,350	$ 6,149	$ 5,635	$ 514	$ 111	$ 1,176	$ 20
Accretion expense[a]	504	242	229	212	17	4	35	1
Liabilities settled[b]	(613)	(210)	(324)	(214)	(110)	(3)	(77)	—
Liabilities incurred in the current year	14	8	6	—	6	—	—	—
Revisions in estimates of cash flows[c]	(159)	(89)	52	42	10	24	(147)	1
Balance at December 31, 2021	12,600	5,301	6,112	5,675	437	136	987	22
Accretion expense[a]	**501**	**242**	**229**	**215**	**14**	**6**	**30**	**1**
Liabilities settled[b]	**(680)**	**(234)**	**(334)**	**(228)**	**(106)**	**(13)**	**(98)**	**—**
Liabilities incurred in the current year	**22**	**—**	**18**	**—**	**18**	**—**	**5**	**—**
Revisions in estimates of cash flows[c]	**285**	**73**	**156**	**161**	**(5)**	**25**	**27**	**3**
Balance at December 31, 2022	**$ 12,728**	**$ 5,382**	**$ 6,181**	**$ 5,823**	**$ 358**	**$ 154**	**$ 951**	**$ 26**

(a) Substantially all accretion expense for the years ended December 31, 2022, and 2021, relates to Duke Energy's regulated operations and has been deferred in accordance with regulatory accounting treatment.
(b) Amounts primarily relate to ash impoundment closures and nuclear decommissioning.
(c) The amounts recorded represent the discounted cash flows for estimated closure costs as evaluated on a site-by-site basis. The increases in 2022 primarily relate to higher unit costs associated with basin closure and routine maintenance. The decreases in 2021 primarily relate to revised basin closure cost estimates, partially offset by increases related to new closure plan approvals, post closure maintenance and beneficiation costs.

11. PROPERTY, PLANT AND EQUIPMENT

The following tables summarize the property, plant and equipment for Duke Energy and its subsidiary registrants.

		December 31, 2022							
(in millions)	Average Remaining Useful Life (Years)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Land		$ 2,232	$ 565	$ 993	$ 496	$ 497	$ 230	$ 124	$ 295
Plant – Regulated									
Electric generation, distribution and transmission	39	126,016	46,640	55,872	33,336	22,536	6,900	16,604	—
Natural gas transmission and distribution	56	13,174	—	—	—	—	3,773	—	9,401
Other buildings and improvements	40	2,537	973	647	341	306	398	336	183
Plant – Nonregulated									
Other buildings and improvements	10	369	—	—	—	—	—	—	—
Nuclear fuel		3,081	1,723	1,358	1,358	—	—	—	—
Equipment	13	2,959	710	936	567	369	441	356	125
Construction in process		7,381	2,671	3,073	1,317	1,756	375	381	478
Other	15	6,090	1,368	1,943	1,460	476	380	320	387
Total property, plant and equipment[a]		163,839	54,650	64,822	38,875	25,940	12,497	18,121	10,869
Total accumulated depreciation – regulated[b][c]		(50,544)	(18,669)	(20,584)	(14,201)	(6,377)	(3,250)	(6,021)	(2,081)
Total accumulated depreciation – nonregulated[d]		(1,556)	—	—	—	—	—	—	—
Facilities to be retired, net		9	—	—	—	—	—	—	9
Total net property, plant and equipment		$ 111,748	$ 35,981	$ 44,238	$ 24,674	$ 19,563	$ 9,247	$ 12,100	$ 8,797

(a) Includes finance leases of $816 million, $335 million, $674 million, $590 million, $84 million and $10 million at Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana, respectively, primarily within Plant – Regulated. The Progress Energy, Duke Energy Progress and Duke Energy Florida amounts are net of $233 million, $81 million and $152 million, respectively, of accumulated amortization of finance leases.

(b) Includes $1,683 million, $934 million, $749 million and $749 million of accumulated amortization of nuclear fuel at Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.

(c) Includes accumulated amortization of finance leases of $7 million, $51 million and $4 million at Duke Energy, Duke Energy Carolinas and Duke Energy Indiana, respectively.

(d) Includes accumulated amortization of finance leases of ($1 million) at Duke Energy.

		December 31, 2021							
(in millions)	Average Remaining Useful Life (Years)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Land		$ 2,145	$ 543	$ 957	$ 482	$ 475	$ 219	$ 122	$ 279
Plant – Regulated									
Electric generation, distribution and transmission	40	120,855	44,910	53,447	32,417	21,030	6,573	15,925	—
Natural gas transmission and distribution	54	12,079	—	—	—	—	3,347	—	8,732
Other buildings and improvements	37	1,921	550	514	228	286	381	321	155
Plant – Nonregulated									
Other buildings and improvements	11	401	—	—	—	—	—	—	—
Nuclear fuel		3,181	1,856	1,325	1,325	—	—	—	—
Equipment	13	2,659	614	791	497	294	403	262	122
Construction in process		5,979	2,078	2,297	954	1,343	515	460	262
Other	14	5,276	1,323	1,563	1,115	437	287	253	368
Total property, plant and equipment[a]		154,496	51,874	60,894	37,018	23,865	11,725	17,343	9,918
Total accumulated depreciation – regulated[b][c]		(47,611)	(17,854)	(19,214)	(13,387)	(5,819)	(3,106)	(5,583)	(1,899)
Total accumulated depreciation – nonregulated[d]		(1,493)	—	—	—	—	—	—	—
Facilities to be retired, net		144	102	26	26	—	6	—	11
Total net property, plant and equipment		$ 105,536	$ 34,122	$ 41,706	$ 23,657	$ 18,046	$ 8,625	$ 11,760	$ 8,030

(a) Includes finance leases of $958 million, $335 million, $729 million, $627 million, $102 million, and $10 million at Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana, respectively, primarily within Plant – Regulated. The Progress Energy, Duke Energy Progress and Duke Energy Florida amounts are net of $178 million, $45 million and $133 million, respectively, of accumulated amortization of finance leases.
(b) Includes $1,799 million, $1,064 million, $735 million and $735 million of accumulated amortization of nuclear fuel at Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.
(c) Includes accumulated amortization of finance leases of $9 million, $33 million, and $3 million at Duke Energy, Duke Energy Carolinas and Duke Energy Indiana, respectively.
(d) Includes accumulated amortization of finance leases of ($1 million) at Duke Energy.

Duke Energy continues to execute on its business transformation strategy, including the evaluation of in-office work policies considering the experience with the COVID-19 pandemic and also workforce realignment of roles and responsibilities. In May 2021, Duke Energy management approved the sale of certain properties and entered into an agreement to exit certain leased space on December 31, 2021. The sale of the properties is subject to abandonment accounting and resulted in an impairment charge. Additionally, the exit of the leased space resulted in the impairment of related furniture, fixtures and equipment. During the year ended December 31, 2021, Duke Energy recorded a pretax charge to earnings of $192 million on the Consolidated Statements of Operations, which includes $133 million within Impairment of assets and other charges, $42 million within Operations, maintenance and other and $17 million within Depreciation and amortization.

The following table presents capitalized interest, which includes the debt component of AFUDC.

	Years Ended December 31,		
(in millions)	2022	2021	2020
Duke Energy	**$ 118**	$ 66	$ 96
Duke Energy Carolinas	**50**	29	28
Progress Energy	**26**	20	17
Duke Energy Progress	**19**	14	12
Duke Energy Florida	**7**	6	5
Duke Energy Ohio	**14**	20	26
Duke Energy Indiana[a]	**3**	(17)	10
Piedmont	**4**	9	8

(a) In 2021, Duke Energy Indiana is primarily compromised of ($24 million) of PISCC amortization, which is partially offset by $7 million of the debt component of AFUDC.

12. GOODWILL AND INTANGIBLE ASSETS

GOODWILL

Duke Energy

Duke Energy's Goodwill balance of $19.3 billion is allocated $17.4 billion to EU&I and $1.9 billion to GU&I on Duke Energy's Consolidated Balance Sheets at December 31, 2022, and 2021. There are no accumulated impairment charges.

Duke Energy Ohio

Duke Energy Ohio's Goodwill balance of $920 million, allocated $596 million to EU&I and $324 million to GU&I, is presented net of accumulated impairment charges of $216 million on the Consolidated Balance Sheets at December 31, 2022, and 2021.

Progress Energy

Progress Energy's Goodwill is included in the EU&I segment and there are no accumulated impairment charges.

Piedmont

Piedmont's Goodwill is included in the GU&I segment and there are no accumulated impairment charges.

Goodwill Impairment Testing

Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont are required to perform an annual goodwill impairment test as of the same date each year and, accordingly, perform their annual impairment testing of goodwill as of August 31. Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont update their test between annual tests if events or circumstances occur that would more likely than not reduce the fair value of a reporting unit below its carrying value. As the fair value for Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont exceeded their respective carrying values at the date of the annual impairment analysis, no goodwill impairment charges were recorded in 2022.

INTANGIBLE ASSETS

The following tables show the carrying amount and accumulated amortization of intangible assets included in Other within Other Noncurrent Assets on the Consolidated Balance Sheets of the Duke Energy Registrants at December 31, 2022, and 2021.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Emission allowances	$ 8	$ —	$ 5	$ 2	$ 3	$ —	$ 2	$ —
Renewable energy certificates	210	84	124	124	—	2	—	—
Other	55	—	4	1	3	—	—	22
Total gross carrying amounts	273	84	133	127	6	2	2	22
Accumulated amortization – other	(8)	—	(1)	—	(1)	—	—	(2)
Total accumulated amortization	(8)	—	(1)	—	(1)	—	—	(2)
Total intangible assets, net	$ 265	$ 84	$ 132	$ 127	$ 5	$ 2	$ 2	$ 20

	December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Emission allowances	$ 8	$ —	$ 5	$ 2	$ 3	$ —	$ 2	$ —
Renewable energy certificates	204	73	131	131	—	—	—	—
Natural gas, coal and power contracts	24	—	—	—	—	—	24	—
Other	28	—	—	—	—	—	—	—
Total gross carrying amounts	264	73	136	133	3	—	26	—
Accumulated amortization – natural gas, coal and power contracts	(24)	—	—	—	—	—	(24)	—
Accumulated amortization – other	(4)	—	—	—	—	—	—	—
Total accumulated amortization	(28)	—	—	—	—	—	(24)	—
Total intangible assets, net	$ 236	$ 73	$ 136	$ 133	$ 3	$ —	$ 2	$ —

Amortization Expense

Amortization expense amounts for other intangible assets are immaterial for the years ended December 31, 2022, 2021 and 2020, and are expected to be immaterial for the next five years as of December 31, 2022.

13. INVESTMENTS IN UNCONSOLIDATED AFFILIATES

EQUITY METHOD INVESTMENTS

Investments in affiliates that are not controlled by Duke Energy, but over which it has significant influence, are accounted for using the equity method.

The following table presents Duke Energy's investments in unconsolidated affiliates accounted for under the equity method, as well as the respective equity in earnings, by segment, for periods presented in this filing.

	Years Ended December 31,					
	2022		2021		2020	
(in millions)	Investments	Equity in earnings (losses)	Investments	Equity in earnings (losses)		Equity in earnings (losses)
Electric Utilities and Infrastructure	**$ 99**	**$ 7**	$ 104	$ 7	$	(1)
Gas Utilities and Infrastructure	**240**	**21**	231	8		(2,017)
Other	**116**	**85**	122	47		13
Total	**$ 455**	**$ 113**	$ 457	$ 62	$	(2,005)

During the years ended December 31, 2022, 2021 and 2020, Duke Energy received distributions from equity investments of $111 million, $56 million and $34 million, respectively, which are included in Other assets within Cash Flows from Operating Activities on the Consolidated Statements of Cash Flows. During the years ended December 31, 2022, 2021 and 2020, Duke Energy received distributions from equity investments of $6 million, $14 million and $23 million, respectively, which are included in Return of investment capital within Cash Flows from Investing Activities on the Consolidated Statements of Cash Flows.

During the years ended December 31, 2022, 2021 and 2020, Piedmont received distributions from equity investments of $31 million, $8 million and $2 million, respectively, which are included in Other assets within Cash Flows from Operating Activities. During the years ended December 31, 2021, and 2020, Piedmont received distributions from equity investments of $2 million and $2 million, respectively, which are included within Cash Flows from Investing Activities on the Consolidated Statements of Cash Flows. Amounts received during the year ended December 31, 2022, included in Cash Flows from Investing Activities on the Consolidated Statements of Cash Flows were immaterial.

Significant investments in affiliates accounted for under the equity method are discussed below.

Electric Utilities and Infrastructure

Duke Energy owns 50% interests in both DATC and Pioneer, which build, own and operate electric transmission facilities in North America.

Gas Utilities and Infrastructure

Pipeline Investments

Piedmont owns a 21.49% investment in Cardinal, an intrastate pipeline located in North Carolina.

Duke Energy owns a 7.5% interest in Sabal Trail, a 517-mile interstate natural gas pipeline, which provides natural gas to Duke Energy Florida and Florida Power and Light.

Duke Energy owns a 47% interest in the ACP pipeline. In 2020, Duke Energy determined it would no longer continue its investment in the construction of the ACP pipeline. See Notes 4 and 8 for further information.

Storage Facilities

Piedmont owns a 45% interest in Pine Needle, an interstate LNG storage facility located in North Carolina, and a 50% interest in Hardy Storage, an underground interstate natural gas storage facility located in West Virginia.

Renewable Natural Gas Investments

Duke Energy owns a 29.68% investment in SustainRNG, a developer of renewable natural gas projects, a 70% interest in Sustain T&W, SustainRNG's renewable natural gas project located in Georgia, and a 70% interest in Sustain Liberty, SustainRNG's renewable natural gas project located in North Carolina.

Other

Duke Energy has a 17.5% indirect economic ownership interest and a 25% board representation and voting rights interest in NMC, which owns and operates a methanol and MTBE business in Jubail, Saudi Arabia.

Significant Subsidiaries

For the year ended December 31, 2020, Duke Energy's investment in ACP met the requirements of S-X Rule 4-08(g) to provide summarized financial information. The following table provides summary information for ACP as required under S-X Rule 1-02(bb) for the period of significance in Duke Energy's consolidated statements of operations. For the years ended December 31, 2022, and 2021, there were no investments that met the significance requirements.

	Year Ended December 31, 2020
Net revenues	$ —
Operating loss	(4,612)
Net loss	(4,512)
Net loss attributable to Duke Energy	$ (2,121)

14. RELATED PARTY TRANSACTIONS

The Subsidiary Registrants engage in related party transactions in accordance with the applicable state and federal commission regulations. Refer to the Consolidated Balance Sheets of the Subsidiary Registrants for balances due to or due from related parties. Material amounts related to transactions with related parties included in the Consolidated Statements of Operations and Comprehensive Income are presented in the following table.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
Duke Energy Carolinas			
Corporate governance and shared service expenses[a]	**$ 838**	$ 894	$ 753
Indemnification coverages[b]	**28**	24	20
Joint Dispatch Agreement (JDA) revenue[c]	**109**	41	25
JDA expense[c]	**600**	207	114
Intercompany natural gas purchases[d]	**12**	11	15
Progress Energy			
Corporate governance and shared service expenses[a]	**$ 818**	$ 856	$ 715
Indemnification coverages[b]	**43**	41	36
JDA revenue[c]	**600**	207	114
JDA expense[c]	**109**	41	25
Intercompany natural gas purchases[d]	**76**	75	75
Duke Energy Progress			
Corporate governance and shared service expenses[a]	**$ 469**	$ 504	$ 420
Indemnification coverages[b]	**20**	19	17
JDA revenue[c]	**600**	207	114
JDA expense[c]	**109**	41	25
Intercompany natural gas purchases[d]	**76**	75	75
Duke Energy Florida			
Corporate governance and shared service expenses[a]	**$ 349**	$ 352	$ 295
Indemnification coverages[b]	**23**	22	19
Duke Energy Ohio			
Corporate governance and shared service expenses[a]	**$ 334**	$ 329	$ 326
Indemnification coverages[b]	**5**	4	4
Duke Energy Indiana			
Corporate governance and shared service expenses[a]	**$ 447**	$ 409	$ 401
Indemnification coverages[b]	**8**	8	8
Piedmont			
Corporate governance and shared service expenses[a]	**$ 155**	$ 139	$ 140
Indemnification coverages[b]	**3**	3	3
Intercompany natural gas sales[d]	**88**	86	90
Natural gas storage and transportation costs[e]	**23**	22	23

(a) The Subsidiary Registrants are charged their proportionate share of corporate governance and other shared services costs, primarily related to human resources, employee benefits, information technology, legal and accounting fees, as well as other third-party costs. These amounts are primarily recorded in Operation, maintenance and other on the Consolidated Statements of Operations and Comprehensive Income.

(b) The Subsidiary Registrants incur expenses related to certain indemnification coverages through Bison, Duke Energy's wholly owned captive insurance subsidiary. These expenses are recorded in Operation, maintenance and other on the Consolidated Statements of Operations and Comprehensive Income.

(c) Duke Energy Carolinas and Duke Energy Progress participate in a JDA, which allows the collective dispatch of power plants between the service territories to reduce customer rates. Revenues from the sale of power and expenses from the purchase of power pursuant to the JDA are recorded in Operating Revenues and Fuel used in electric generation and purchased power, respectively, on the Consolidated Statements of Operations and Comprehensive Income.

(d) Piedmont provides long-term natural gas delivery service to certain Duke Energy Carolinas and Duke Energy Progress natural gas-fired generation facilities. Piedmont records the sales in Operating Revenues, and Duke Energy Carolinas and Duke Energy Progress record the related purchases as a component of Fuel used in electric generation and purchased power on their respective Consolidated Statements of Operations and Comprehensive Income. These intercompany revenues and expenses are eliminated in consolidation.

(e) Piedmont has related party transactions as a customer of its equity method investments in Pine Needle, Hardy Storage, and Cardinal natural gas storage and transportation facilities. These expenses are included in Cost of natural gas on Piedmont's Consolidated Statements of Operations and Comprehensive Income.

In addition to the amounts presented above, the Subsidiary Registrants have other affiliate transactions, including rental of office space, participation in a money pool arrangement, other operational transactions and their proportionate share of certain charged expenses. See Note 7 for more information regarding money pool. These transactions of the Subsidiary Registrants are incurred in the ordinary course of business and are eliminated in consolidation.

As discussed in Note 18, certain trade receivables have been sold by Duke Energy Ohio and Duke Energy Indiana to CRC, an affiliate formed by a subsidiary of Duke Energy. The proceeds obtained from the sales of receivables are largely cash but do include a subordinated note from CRC for a portion of the purchase price.

Intercompany Income Taxes

Duke Energy and the Subsidiary Registrants file a consolidated federal income tax return and other state and jurisdictional returns. The Subsidiary Registrants have a tax sharing agreement with Duke Energy for the allocation of consolidated tax liabilities and benefits. Income taxes recorded represent amounts the Subsidiary Registrants would incur as separate C-Corporations. The following table includes the balance of intercompany income tax receivables and payables for the Subsidiary Registrants.

(in millions)	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
December 31, 2022							
Intercompany income tax receivable	**$ —**	**$ 95**	**$ 36**	**$ 17**	**$ —**	**$ —**	**—**
Intercompany income tax payable	**37**	**—**	**—**	**—**	**17**	**18**	**38**
December 31, 2021							
Intercompany income tax receivable	$ —	$ —	$ —	$ 40	$ 19	$ —	—
Intercompany income tax payable	62	—	84	—	—	10	27

15. DERIVATIVES AND HEDGING

The Duke Energy Registrants use commodity, interest rate and foreign currency contracts to manage commodity price risk, interest rate risk and foreign currency exchange rate risk. The primary use of commodity derivatives is to hedge the generation portfolio against changes in the prices of electricity and natural gas. Piedmont enters into natural gas supply contracts to provide diversification, reliability and natural gas cost benefits to its customers. Interest rate derivatives are used to manage interest rate risk associated with borrowings. Foreign currency derivatives are used to manage risk related to foreign currency exchange rates on certain issuances of debt. Derivatives related to interest rate risk for the Commercial Renewables Disposal Groups are included in the following disclosures. See Note 2 for further information.

All derivative instruments not identified as NPNS are recorded at fair value as assets or liabilities on the Consolidated Balance Sheets. Cash collateral related to derivative instruments executed under master netting arrangements is offset against the collateralized derivatives on the Consolidated Balance Sheets. The cash impacts of settled derivatives are recorded as operating activities on the Consolidated Statements of Cash Flows.

INTEREST RATE RISK

The Duke Energy Registrants are exposed to changes in interest rates as a result of their issuance or anticipated issuance of variable-rate and fixed-rate debt and commercial paper. Interest rate risk is managed by limiting variable-rate exposures to a percentage of total debt and by monitoring changes in interest rates. To manage risk associated with changes in interest rates, the Duke Energy Registrants may enter into interest rate swaps, U.S. Treasury lock agreements and other financial contracts. In anticipation of certain fixed-rate debt issuances, a series of forward-starting interest rate swaps or Treasury locks may be executed to lock in components of current market interest rates. These instruments are later terminated prior to or upon the issuance of the corresponding debt.

Cash Flow Hedges

For a derivative designated as hedging the exposure to variable cash flows of a future transaction, referred to as a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported as a component of other comprehensive income and subsequently reclassified into earnings once the future transaction impacts earnings. Amounts for interest rate contracts are reclassified to earnings as interest expense over the term of the related debt. See Note 2 for information on the de-designation of interest rate swaps and related gain reclassified out of AOCI for the year ended December 31, 2022, related to the Commercial Renewables Disposal Groups. Gains and losses reclassified out of AOCI for the years ended December 31, 2021, and 2020, were not material. Duke Energy's interest rate derivatives designated as hedges include forward-starting interest rate swaps not accounted for under regulatory accounting.

Undesignated Contracts

Undesignated contracts primarily include contracts not designated as a hedge because they are accounted for under regulatory accounting or contracts that do not qualify for hedge accounting.

Duke Energy's interest rate swaps for its regulated operations employ regulatory accounting. With regulatory accounting, the mark-to-market gains or losses on the swaps are deferred as regulatory liabilities or regulatory assets, respectively. Regulatory assets and liabilities are amortized consistent with the treatment of the related costs in the ratemaking process. The accrual of interest on the swaps is recorded as Interest Expense on the Duke Energy Registrant's Consolidated Statements of Operations and Comprehensive Income.

The following tables show notional amounts of outstanding derivatives related to interest rate risk.

	December 31, 2022						
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Indiana**	**Duke Energy Ohio**
Cash flow hedges	**$ 500**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**
Undesignated contracts	**2,979**	**1,250**	**800**	**500**	**300**	**300**	**27**
Total notional amount	**$ 3,479**	**$ 1,250**	**$ 800**	**$ 500**	**$ 300**	**$ 300**	**$ 27**

	December 31, 2021					
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Indiana**	**Duke Energy Ohio**
Cash flow hedges	$ 2,415	$ —	$ —	$ —	$ —	$ —
Undesignated contracts	1,177	350	500	500	300	27
Total notional amount	**$ 3,592**	**$ 350**	**$ 500**	**$ 500**	**$ 300**	**$ 27**

COMMODITY PRICE RISK

The Duke Energy Registrants are exposed to the impact of changes in the prices of electricity purchased and sold in bulk power markets and natural gas purchases, including Piedmont's natural gas supply contracts. Exposure to commodity price risk is influenced by a number of factors including the term of contracts, the liquidity of markets and delivery locations. To manage risk associated with commodity prices, the Duke Energy Registrants may enter into long-term power purchase or sales contracts and long-term natural gas supply agreements.

Undesignated Contracts

For the Subsidiary Registrants, bulk power electricity and natural gas purchases flow through fuel adjustment clauses, formula-based contracts or other cost sharing mechanisms. Differences between the costs included in rates and the incurred costs, including undesignated derivative contracts, are largely deferred as regulatory assets or regulatory liabilities. Piedmont policies allow for the use of financial instruments to hedge commodity price risks. The strategy and objective of these hedging programs are to use the financial instruments to reduce natural gas cost volatility for customers.

Volumes

The tables below include volumes of outstanding commodity derivatives. Amounts disclosed represent the absolute value of notional volumes of commodity contracts excluding NPNS. The Duke Energy Registrants have netted contractual amounts where offsetting purchase and sale contracts exist with identical delivery locations and times of delivery. Where all commodity positions are perfectly offset, no quantities are shown.

	December 31, 2022						
	Duke Energy	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Electricity (GWh)	**14,086**	**—**	**—**	**—**	**1,820**	**12,266**	**—**
Natural gas (millions of Dth)	**909**	**307**	**292**	**292**	**—**	**11**	**299**

	December 31, 2021						
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Electricity (GWh)	12,369	—	—	—	1,681	10,688	—
Natural gas (millions of Dth)	823	264	215	215	—	8	336

FOREIGN CURRENCY RISK

Duke Energy may enter into foreign currency derivatives to hedge exposure to changes in foreign currency exchange rates, such as that arising from the issuance of debt denominated in a currency other than U.S. dollars.

Fair Value Hedges

Derivatives related to existing fixed rate securities are accounted for as fair value hedges, where the derivatives' fair value gains or losses and hedged items' fair value gains or losses are both recorded directly to earnings on the same income statement line item, including foreign currency gains or losses arising from changes in the U.S. currency exchange rates. Duke Energy has elected to exclude the cross-currency basis spread from the assessment of effectiveness in the fair value hedges of its foreign currency risk and record any difference between the change in the fair value of the excluded components and the amounts recognized in earnings as a component of other comprehensive income or loss.

The following table shows Duke Energy's outstanding derivatives related to foreign currency risk. There were no fair value hedges in 2021.

	December 31, 2022					
	Pay Notional (in millions)	Pay Rate	Receive Notional (in millions)	Receive Rate	Hedge Maturity Date	Fair Value Gain (Loss)[a] (in millions)
Fair value hedges						
	$ 645	4.75 %	600 euros	3.10 %	June 2028	$ (3)
	537	5.31 %	500 euros	3.85 %	June 2034	(2)
Total notional amount	$ 1,182		1,100 euros			$ (5)

(a) Amounts are recorded in Other Income and expenses, net on the Consolidated Statement of Operations, which offsets an equal translation adjustment of the foreign denominated debt. See the Consolidated Statements of Comprehensive Income for amounts excluded from the assessment of effectiveness for which the difference between changes in fair value and periodic amortization is recorded.

LOCATION AND FAIR VALUE OF DERIVATIVE ASSETS AND LIABILITIES RECOGNIZED IN THE CONSOLIDATED BALANCE SHEETS

The following tables show the fair value and balance sheet location of derivative instruments. Although derivatives subject to master netting arrangements are netted on the Consolidated Balance Sheets, the fair values presented below are shown gross and cash collateral on the derivatives has not been netted against the fair values shown.

Derivative Assets	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Commodity Contracts								
Not Designated as Hedging Instruments								
Current	$ 265	$ 132	$ 99	$ 99	$ —	$ 5	$ 29	$ —
Noncurrent	213	104	108	108	—	—	—	—
Total Derivative Assets – Commodity Contracts	$ 478	$ 236	$ 207	$ 207	$ —	$ 5	$ 29	$ —
Interest Rate Contracts								
Designated as Hedging Instruments								
Current	$ 101	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Not Designated as Hedging Instruments								
Current	$ 228	$ 94	$ 41	$ 23	$ 17	$ —	$ 81	$ —
Noncurrent	29	—	—	—	—	—	—	—
Total Derivative Assets – Interest Rate Contracts	$ 358	$ 94	$ 41	$ 23	$ 17	$ —	$ 81	$ —
Total Derivative Assets	$ 836	$ 330	$ 248	$ 230	$ 17	$ 5	$ 110	$ —

Derivative Liabilities	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Commodity Contracts								
Not Designated as Hedging Instruments								
Current	$ 175	$ 96	$ 36	$ 18	$ 19	$ —	$ 16	$ 27
Noncurrent	202	31	30	30	—	—	—	141
Total Derivative Liabilities – Commodity Contracts	$ 377	$ 127	$ 66	$ 48	$ 19	$ —	$ 16	$ 168
Interest Rate Contracts								
Not Designated as Hedging Instruments								
Noncurrent	2	—	—	—	—	2	—	—
Total Derivative Liabilities – Interest Rate Contracts	$ 2	$ —	$ —	$ —	$ —	$ 2	$ —	$ —
Foreign Currency Contracts								
Designated as Hedging Instruments								
Current	$ 18	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Noncurrent	40	—	—	—	—	—	—	—
Total Derivative Liabilities – Foreign Currency Contracts	$ 58	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Total Derivative Liabilities	$ 437	$ 127	$ 66	$ 48	$ 19	$ 2	$ 16	$ 168

Derivative Assets	December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Commodity Contracts								
Not Designated as Hedging Instruments								
Current	$ 199	$ 99	$ 72	$ 72	$ —	$ 2	$ 23	$ 3
Noncurrent	113	63	50	50	—	—	—	—
Total Derivative Assets – Commodity Contracts	$ 312	$ 162	$ 122	$ 122	$ —	$ 2	$ 23	$ 3
Interest Rate Contracts								
Designated as Hedging Instruments								
Current	$ 3	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Noncurrent	3	—	—	—	—	—	—	—
Not Designated as Hedging Instruments								
Current	$ 2	$ —	$ 2	$ 2	$ —	$ —	$ —	$ —
Total Derivative Assets – Interest Rate Contracts	$ 8	$ —	$ 2	$ 2	$ —	$ —	$ —	$ —
Total Derivative Assets	$ 320	$ 162	$ 124	$ 124	$ —	$ 2	$ 23	$ 3

Derivative Liabilities	December 31, 2021								
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Not Designated as Hedging Instruments								
Current	$ 72	$ 18	$ 19	$ 5	$ 14	$ —	$ 13	$ 21
Noncurrent	132	9	5	5	—	—	—	118
Total Derivative Liabilities – Commodity Contracts	$ 204	$ 27	$ 24	$ 10	$ 14	$ —	$ 13	$ 139
Interest Rate Contracts								
Designated as Hedging Instruments								
Current	$ 75	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Noncurrent	21	—	—	—	—	—	—	—
Not Designated as Hedging Instruments								
Current	10	8	—	—	—	1	—	—
Noncurrent	18	—	—	—	—	4	14	—
Total Derivative Liabilities – Interest Rate Contracts	$ 124	$ 8	$ —	$ —	$ —	$ 5	$ 14	$ —
Total Derivative Liabilities	$ 328	$ 35	$ 24	$ 10	$ 14	$ 5	$ 27	$ 139

OFFSETTING ASSETS AND LIABILITIES

The following tables present the line items on the Consolidated Balance Sheets where derivatives are reported. Substantially all of Duke Energy's outstanding derivative contracts are subject to enforceable master netting arrangements. The gross amounts offset in the tables below show the effect of these netting arrangements on financial position and include collateral posted to offset the net position. The amounts shown are calculated by counterparty. Accounts receivable or accounts payable may also be available to offset exposures in the event of bankruptcy. These amounts are not included in the tables below.

Derivative Assets	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	**$ 594**	**$ 226**	**$ 140**	**$ 122**	**$ 17**	**$ 5**	**$ 110**	**$ —**
Gross amounts offset	**(64)**	**(33)**	**(30)**	**(30)**	**—**	**—**	**—**	**—**
Net amounts presented in Current Assets: Other	**$ 530**	**$ 193**	**$ 110**	**$ 92**	**$ 17**	**$ 5**	**$ 110**	**$ —**
Noncurrent								
Gross amounts recognized	**$ 242**	**$ 104**	**$ 108**	**$ 108**	**$ —**	**$ —**	**$ —**	**$ —**
Gross amounts offset	**(97)**	**(40)**	**(57)**	**(57)**	**—**	**—**	**—**	**—**
Net amounts presented in Other Noncurrent Assets: Other	**$ 145**	**$ 64**	**$ 51**	**$ 51**	**$ —**	**$ —**	**$ —**	**$ —**

Derivative Liabilities	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	**$ 193**	**$ 96**	**$ 36**	**$ 18**	**$ 19**	**$ —**	**$ 16**	**$ 27**
Gross amounts offset	**(49)**	**(15)**	**(18)**	**(18)**	**—**	**—**	**(16)**	**—**
Net amounts presented in Current Liabilities: Other	**$ 144**	**$ 81**	**$ 18**	**$ —**	**$ 19**	**$ —**	**$ —**	**$ 27**
Noncurrent								
Gross amounts recognized	**$ 244**	**$ 31**	**$ 30**	**$ 30**	**$ —**	**$ 2**	**$ —**	**$ 141**
Gross amounts offset	**(59)**	**(29)**	**(30)**	**(30)**	**—**	**—**	**—**	**—**
Net amounts presented in Other Noncurrent Liabilities: Other	**$ 185**	**$ 2**	**$ —**	**$ —**	**$ —**	**$ 2**	**$ —**	**$ 141**

Derivative Assets	December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	$ 204	$ 99	$ 74	$ 74	$ —	$ 2	$ 23	$ 3
Gross amounts offset	(25)	(16)	(9)	(9)	—	—	—	—
Net amounts presented in Current Assets: Other	$ 179	$ 83	$ 65	$ 65	$ —	$ 2	$ 23	$ 3
Noncurrent								
Gross amounts recognized	$ 116	$ 63	$ 50	$ 50	$ —	$ —	$ —	$ —
Gross amounts offset	(23)	(15)	(8)	(8)	—	—	—	—
Net amounts presented in Other Noncurrent Assets: Other	$ 93	$ 48	$ 42	$ 42	$ —	$ —	$ —	$ —

Derivative Liabilities	December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	$ 157	$ 26	$ 19	$ 5	$ 14	$ 1	$ 13	$ 21
Gross amounts offset	(11)	(6)	(5)	(5)	—	—	—	—
Net amounts presented in Current Liabilities: Other	$ 146	$ 20	$ 14	$ —	$ 14	$ 1	$ 13	$ 21
Noncurrent								
Gross amounts recognized	$ 171	$ 9	$ 5	$ 5	$ —	$ 4	$ 14	$ 118
Gross amounts offset	(12)	(8)	(5)	(5)	—	—	—	—
Net amounts presented in Other Noncurrent Liabilities: Other	$ 159	$ 1	$ —	$ —	$ —	$ 4	$ 14	$ 118

OBJECTIVE CREDIT CONTINGENT FEATURES

Certain derivative contracts contain objective credit contingent features. These features include the requirement to post cash collateral or letters of credit if specific events occur, such as a credit rating downgrade below investment grade. The following tables show information with respect to derivative contracts that are in a net liability position and contain objective credit risk-related payment provisions.

	December 31, 2022				
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida
Aggregate fair value of derivatives in a net liability position	**$ 141**	**$ 86**	**$ 55**	**$ 48**	**$ 7**
Fair value of collateral already posted	**—**	**—**	**—**	**—**	**—**
Additional cash collateral or letters of credit in the event credit risk-related contingent features were triggered	**141**	**86**	**55**	**48**	**7**

	December 31, 2021				
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida
Aggregate fair value of derivatives in a net liability position	$ 32	$ 18	$ 14	$ 10	$ 4
Fair value of collateral already posted	—	—	—	—	—
Additional cash collateral or letters of credit in the event credit risk-related contingent features were triggered	32	18	14	10	4

The Duke Energy Registrants have elected to offset cash collateral and fair values of derivatives. For amounts to be netted, the derivative and cash collateral must be executed with the same counterparty under the same master netting arrangement.

16. INVESTMENTS IN DEBT AND EQUITY SECURITIES

Duke Energy's investments in debt and equity securities are primarily comprised of investments held in (i) the NDTF at Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, (ii) the grantor trusts at Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana related to OPEB plans and (iii) Bison. The Duke Energy Registrants classify investments in debt securities as AFS and investments in equity securities as FV-NI.

For investments in debt securities classified as AFS, the unrealized gains and losses are included in other comprehensive income until realized, at which time they are reported through net income. For investments in equity securities classified as FV-NI, both realized and unrealized gains and losses are reported through net income. Substantially all of Duke Energy's investments in debt and equity securities qualify for regulatory accounting, and accordingly, all associated realized and unrealized gains and losses on these investments are deferred as a regulatory asset or liability.

Duke Energy classifies the majority of investments in debt and equity securities as long term, unless otherwise noted.

Investment Trusts

The investments within the Investment Trusts are managed by independent investment managers with discretion to buy, sell and invest pursuant to the objectives set forth by the investment manager agreements and trust agreements. The Duke Energy Registrants have limited oversight of the day-to-day management of these investments. As a result, the ability to hold investments in unrealized loss positions is outside the control of the Duke Energy Registrants. Accordingly, all unrealized losses associated with debt securities within the Investment Trusts are recognized immediately and deferred to regulatory accounts where appropriate.

Other AFS Securities

Unrealized gains and losses on all other AFS securities are included in other comprehensive income until realized, unless it is determined the carrying value of an investment has a credit loss. The Duke Energy Registrants analyze all investment holdings each reporting period to determine whether a decline in fair value is related to a credit loss. If a credit loss exists, the unrealized credit loss is included in earnings. There were no material credit losses as of December 31, 2022, and 2021.

Other Investments amounts are recorded in Other within Other Noncurrent Assets on the Consolidated Balance Sheets.

DUKE ENERGY

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2022			December 31, 2021		
(in millions)	**Gross Unrealized Holding Gains**	**Gross Unrealized Holding Losses**	**Estimated Fair Value**	**Gross Unrealized Holding Gains**	**Gross Unrealized Holding Losses**	**Estimated Fair Value**
NDTF						
Cash and cash equivalents	**$ —**	**$ —**	**$ 215**	$ —	$ —	$ 160
Equity securities	**3,658**	**105**	**5,871**	4,905	43	7,350
Corporate debt securities	**1**	**85**	**641**	39	6	829
Municipal bonds	**—**	**39**	**330**	14	1	314
U.S. government bonds	**2**	**112**	**1,423**	31	12	1,568
Other debt securities	**—**	**18**	**156**	3	1	180
Total NDTF Investments	**$ 3,661**	**$ 359**	**$ 8,636**	$ 4,992	$ 63	$ 10,401
Other Investments						
Cash and cash equivalents	**$ —**	**$ —**	**$ 22**	$ —	$ —	$ 36
Equity securities	**21**	**16**	**128**	36	—	156
Corporate debt securities	**—**	**12**	**84**	2	1	119
Municipal bonds	**—**	**3**	**78**	3	1	80
U.S. government bonds	**—**	**2**	**62**	—	—	56
Other debt securities	**—**	**3**	**41**	—	1	45
Total Other Investments	**$ 21**	**$ 36**	**$ 415**	$ 41	$ 3	$ 492
Total Investments	**$ 3,682**	**$ 395**	**$ 9,051**	$ 5,033	$ 66	$ 10,893

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2022, 2021 and 2020, were as follows.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
FV-NI:			
Realized gains	**$ 201**	$ 724	$ 366
Realized losses	**316**	141	174
AFS:			
Realized gains	**28**	56	96
Realized losses	**151**	54	51

DUKE ENERGY CAROLINAS

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2022			December 31, 2021		
(in millions)	**Gross Unrealized Holding Gains**	**Gross Unrealized Holding Losses**	**Estimated Fair Value**	**Gross Unrealized Holding Gains**	**Gross Unrealized Holding Losses**	**Estimated Fair Value**
NDTF						
Cash and cash equivalents	**$ —**	**$ —**	**$ 117**	$ —	$ —	$ 53
Equity securities	**2,147**	**51**	**3,367**	2,887	19	4,265
Corporate debt securities	**1**	**62**	**401**	24	4	506
Municipal bonds	**—**	**10**	**64**	2	—	48
U.S. government bonds	**1**	**51**	**685**	16	3	712
Other debt securities	**—**	**18**	**148**	3	1	175
Total NDTF Investments	**$ 2,149**	**$ 192**	**$ 4,782**	$ 2,932	$ 27	$ 5,759

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2022, 2021 and 2020, were as follows.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
FV-NI:			
Realized gains	**$ 124**	$ 440	$ 64
Realized losses	**177**	96	99
AFS:			
Realized gains	**22**	38	60
Realized losses	**86**	37	37

PROGRESS ENERGY

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2022			December 31, 2021		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	**$ —**	**$ —**	**$ 98**	$ —	$ —	$ 107
Equity securities	**1,511**	**54**	**2,504**	2,018	24	3,085
Corporate debt securities	**—**	**23**	**240**	15	2	323
Municipal bonds	**—**	**29**	**266**	12	1	266
U.S. government bonds	**1**	**61**	**738**	15	9	856
Other debt securities	**—**	**—**	**8**	—	—	5
Total NDTF Investments	**$ 1,512**	**$ 167**	**$ 3,854**	$ 2,060	$ 36	$ 4,642
Other Investments						
Cash and cash equivalents	**$ —**	**$ —**	**$ 11**	$ —	$ —	$ 20
Municipal bonds	**—**	**—**	**25**	2	—	26
Total Other Investments	**$ —**	**$ —**	**$ 36**	$ 2	$ —	$ 46
Total Investments	**$ 1,512**	**$ 167**	**$ 3,890**	$ 2,062	$ 36	$ 4,688

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2022, 2021 and 2020, were as follows.

	Years Ended December 31,		
(in millions)	2022	2021	2020
FV-NI:			
Realized gains	**$ 77**	$ 284	$ 302
Realized losses	**139**	45	75
AFS:			
Realized gains	**6**	16	24
Realized losses	**48**	14	13

DUKE ENERGY PROGRESS

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2022			December 31, 2021		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	**$ —**	**$ —**	**$ 56**	$ —	$ —	$ 94
Equity securities	**1,431**	**54**	**2,411**	1,915	23	2,970
Corporate debt securities	**—**	**22**	**230**	15	2	282
Municipal bonds	**—**	**29**	**266**	12	1	266
U.S. government bonds	**1**	**37**	**460**	15	3	472
Other debt securities	**—**	**—**	**7**	—	—	5
Total NDTF Investments	**$ 1,432**	**$ 142**	**$ 3,430**	$ 1,957	$ 29	$ 4,089
Other Investments						
Cash and cash equivalents	**$ —**	**$ —**	**$ 9**	$ —	$ —	$ 16
Total Other Investments	**$ —**	**$ —**	**$ 9**	$ —	$ —	$ 16
Total Investments	**$ 1,432**	**$ 142**	**$ 3,439**	$ 1,957	$ 29	$ 4,105

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2022, 2021 and 2020, were as follows.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
FV-NI:			
Realized gains	**$ 76**	$ 283	$ 52
Realized losses	**136**	44	59
AFS:			
Realized gains	**6**	15	24
Realized losses	**44**	13	13

DUKE ENERGY FLORIDA

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2022			December 31, 2021		
(in millions)	**Gross Unrealized Holding Gains**	**Gross Unrealized Holding Losses**	**Estimated Fair Value**	**Gross Unrealized Holding Gains**	**Gross Unrealized Holding Losses**	**Estimated Fair Value**
NDTF						
Cash and cash equivalents	**$ —**	**$ —**	**$ 42**	$ —	$ —	$ 13
Equity securities	**80**	**—**	**93**	103	1	115
Corporate debt securities	**—**	**1**	**10**	—	—	41
U.S. government bonds	**—**	**24**	**278**	—	6	384
Other debt securities	**—**	**—**	**1**	—	—	—
Total NDTF Investments[a]	**$ 80**	**$ 25**	**$ 424**	$ 103	$ 7	$ 553
Other Investments						
Cash and cash equivalents	**$ —**	**$ —**	**$ 1**	$ —	$ —	$ 3
Municipal bonds	**—**	**—**	**25**	2	—	26
Total Other Investments	**$ —**	**$ —**	**$ 26**	$ 2	$ —	$ 29
Total Investments	**$ 80**	**$ 25**	**$ 450**	$ 105	$ 7	$ 582

(a) During the years ended December 31, 2022, and 2021, Duke Energy Florida continued to receive reimbursements from the NDTF for costs related to ongoing decommissioning activity of the Crystal River Unit 3.

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2022, 2021 and 2020, were as follows.

	Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**
FV-NI:			
Realized gains	**$ 1**	$ 1	$ 250
Realized losses	**3**	1	16
AFS:			
Realized gains	**—**	1	—
Realized losses	**4**	1	—

DUKE ENERGY INDIANA

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are measured at FV-NI and debt investments are classified as AFS.

	December 31, 2022			December 31, 2021		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
Investments						
Cash and cash equivalents	**$ —**	**$ —**	**$ 1**	$ —	$ —	$ —
Equity securities	**2**	**16**	**79**	6	—	97
Corporate debt securities	**—**	**1**	**8**	—	—	6
Municipal bonds	**—**	**3**	**45**	1	1	46
U.S. government bonds	**—**	**—**	**7**	—	—	12
Total Investments	**$ 2**	**$ 20**	**$ 140**	$ 7	$ 1	$ 161

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2022, 2021 and 2020, were immaterial.

DEBT SECURITY MATURITIES

The table below summarizes the maturity date for debt securities.

	December 31, 2022					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Indiana
Due in one year or less	**$ 137**	**$ 7**	**$ 89**	**$ 24**	**$ 65**	**$ 8**
Due after one through five years	**807**	**287**	**443**	**244**	**199**	**22**
Due after five through 10 years	**469**	**230**	**193**	**178**	**15**	**6**
Due after 10 years	**1,402**	**774**	**552**	**517**	**35**	**24**
Total	**$ 2,815**	**$ 1,298**	**$ 1,277**	**$ 963**	**$ 314**	**$ 60**

17. FAIR VALUE MEASUREMENTS

Fair value is the exchange price to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. The fair value definition focuses on an exit price versus the acquisition cost. Fair value measurements use market data or assumptions market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs may be readily observable, corroborated by market data, or generally unobservable. Valuation techniques maximize the use of observable inputs and minimize the use of unobservable inputs. A midmarket pricing convention (the midpoint price between bid and ask prices) is permitted for use as a practical expedient.

Fair value measurements are classified in three levels based on the fair value hierarchy as defined by GAAP. Certain investments are not categorized within the fair value hierarchy. These investments are measured at fair value using the net asset value per share practical expedient. The net asset value is derived based on the investment cost, less any impairment, plus or minus changes resulting from observable price changes for an identical or similar investment of the same issuer.

Fair value accounting guidance permits entities to elect to measure certain financial instruments that are not required to be accounted for at fair value, such as equity method investments or the company's own debt, at fair value. The Duke Energy Registrants have not elected to record any of these items at fair value.

Valuation methods of the primary fair value measurements disclosed below are as follows.

Investments in equity securities

The majority of investments in equity securities are valued using Level 1 measurements. Investments in equity securities are typically valued at the closing price in the principal active market as of the last business day of the quarter. Principal active markets for equity prices include published exchanges such as the NYSE and Nasdaq Stock Market. Foreign equity prices are translated from their trading currency using the currency exchange rate in effect at the close of the principal active market. There was no after-hours market activity that was required to be reflected in the reported fair value measurements.

Investments in debt securities

Most investments in debt securities are valued using Level 2 measurements because the valuations use interest rate curves and credit spreads applied to the terms of the debt instrument (maturity and coupon interest rate) and consider the counterparty credit rating. If the market for a particular fixed-income security is relatively inactive or illiquid, the measurement is Level 3.

Commodity derivatives

Commodity derivatives with clearinghouses are classified as Level 1. Commodity derivatives with observable forward curves are classified as Level 2. If forward price curves are not observable for the full term of the contract and the unobservable period had more than an insignificant impact on the valuation, the commodity derivative is classified as Level 3. In isolation, increases (decreases) in natural gas forward prices result in favorable (unfavorable) fair value adjustments for natural gas purchase contracts; and increases (decreases) in electricity forward prices result in unfavorable (favorable) fair value adjustments for electricity sales contracts. Duke Energy regularly evaluates and validates pricing inputs used to estimate the fair value of natural gas commodity contracts by a market participant price verification procedure. This procedure provides a comparison of internal forward commodity curves to market participant generated curves.

Interest rate derivatives

Most over-the-counter interest rate contract derivatives are valued using financial models that utilize observable inputs for similar instruments and are classified as Level 2. Inputs include forward interest rate curves, notional amounts, interest rates and credit quality of the counterparties. Derivatives related to interest rate risk for the Commercial Renewables Disposal Groups are included in the following disclosures. See Note 2 for further information.

Other fair value considerations

See Note 2 for further information on the valuation of the Commercial Renewables Disposal Groups. See Note 12 for a discussion of the valuation of goodwill and intangible assets.

DUKE ENERGY

The following tables provide recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets. Derivative amounts in the tables below for all Duke Energy Registrants exclude cash collateral, which is disclosed in Note 15. See Note 16 for additional information related to investments by major security type for the Duke Energy Registrants.

	December 31, 2022				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized**
NDTF cash and cash equivalents	**$ 215**	**$ 215**	**$ —**	**$ —**	**$ —**
NDTF equity securities	**5,871**	**5,829**	**—**	**—**	**42**
NDTF debt securities	**2,550**	**780**	**1,770**	**—**	**—**
Other equity securities	**128**	**128**	**—**	**—**	**—**
Other debt securities	**265**	**55**	**210**	**—**	**—**
Other cash and cash equivalents	**22**	**22**	**—**	**—**	**—**
Derivative assets	**836**	**1**	**801**	**34**	**—**
Total assets	**9,887**	**7,030**	**2,781**	**34**	**42**
Derivative liabilities	**(437)**	**(16)**	**(421)**	**—**	**—**
Net assets (liabilities)	**$ 9,450**	**$ 7,014**	**$ 2,360**	**$ 34**	**$ 42**

	December 31, 2021				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized**
NDTF cash and cash equivalents	$ 160	$ 160	$ —	$ —	$ —
NDTF equity securities	7,350	7,300	—	—	50
NDTF debt securities	2,891	967	1,924	—	—
Other equity securities	156	156	—	—	—
Other debt securities	300	45	255	—	—
Other cash and cash equivalents	36	36	—	—	—
Derivative assets	320	3	293	24	—
Total assets	11,213	8,667	2,472	24	50
Derivative liabilities	(327)	(13)	(314)	—	—
Net assets (liabilities)	$ 10,886	$ 8,654	$ 2,158	$ 24	$ 50

The following table provides reconciliations of beginning and ending balances of assets and liabilities measured at fair value using Level 3 measurements.

	Derivatives (net)	
	Years Ended December 31,	
(in millions)	2022	2021
Balance at beginning of period	$ 24	$ 8
Purchases, sales, issuances and settlements:		
Purchases	78	21
Settlements	(36)	(20)
Total gains (losses) included on the Consolidated Balance Sheet	(32)	15
Balance at end of period	$ 34	$ 24

DUKE ENERGY CAROLINAS

The following tables provide recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2022			
(in millions)	Total Fair Value	Level 1	Level 2	Not Categorized
NDTF cash and cash equivalents	$ 117	$ 117	$ —	$ —
NDTF equity securities	3,367	3,325	—	42
NDTF debt securities	1,298	323	975	—
Derivative assets	330	—	330	—
Total assets	5,112	3,765	1,305	42
Derivative liabilities	(127)	—	(127)	—
Net assets	$ 4,985	$ 3,765	$ 1,178	$ 42

	December 31, 2021			
(in millions)	Total Fair Value	Level 1	Level 2	Not Categorized
NDTF cash and cash equivalents	$ 53	$ 53	$ —	$ —
NDTF equity securities	4,265	4,215	—	50
NDTF debt securities	1,441	339	1,102	—
Derivative assets	162	—	162	—
Total assets	5,921	4,607	1,264	50
Derivative liabilities	(35)	—	(35)	—
Net assets	$ 5,886	$ 4,607	$ 1,229	$ 50

PROGRESS ENERGY

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2022			December 31, 2021		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF cash and cash equivalents	$ 98	$ 98	$ —	$ 107	$ 107	$ —
NDTF equity securities	2,504	2,504	—	3,085	3,085	—
NDTF debt securities	1,252	457	795	1,450	628	822
Other debt securities	25	—	25	26	—	26
Other cash and cash equivalents	11	11	—	20	20	—
Derivative assets	248	—	248	124	—	124
Total assets	4,138	3,070	1,068	4,812	3,840	972
Derivative liabilities	(66)	—	(66)	(24)	—	(24)
Net assets	$ 4,072	$ 3,070	$ 1,002	$ 4,788	$ 3,840	$ 948

DUKE ENERGY PROGRESS

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2022			December 31, 2021		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF cash and cash equivalents	$ 56	$ 56	$ —	$ 94	$ 94	$ —
NDTF equity securities	2,411	2,411	—	2,970	2,970	—
NDTF debt securities	963	225	738	1,025	289	736
Other cash and cash equivalents	9	9	—	16	16	—
Derivative assets	230	—	230	124	—	124
Total assets	3,669	2,701	968	4,229	3,369	860
Derivative liabilities	(48)	—	(48)	(10)	—	(10)
Net assets	$ 3,621	$ 2,701	$ 920	$ 4,219	$ 3,369	$ 850

DUKE ENERGY FLORIDA

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2022			December 31, 2021		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF cash and cash equivalents	$ 42	$ 42	$ —	$ 13	$ 13	$ —
NDTF equity securities	93	93	—	115	115	—
NDTF debt securities	289	232	57	425	339	86
Other debt securities	25	—	25	26	—	26
Other cash and cash equivalents	1	1	—	3	3	—
Derivative assets	17	—	17	—	—	—
Total assets	467	368	99	582	470	112
Derivative liabilities	(19)	—	(19)	(14)	—	(14)
Net assets	$ 448	$ 368	$ 80	$ 568	$ 470	$ 98

DUKE ENERGY OHIO

The recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets were not material at December 31, 2022, and 2021.

DUKE ENERGY INDIANA

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2022				December 31, 2021			
(in millions)	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3
Other equity securities	$ 79	$ 79	$ —	$ —	$ 97	$ 97	$ —	$ —
Other debt securities	60	—	60	—	64	—	64	—
Other cash equivalents	1	1	—	—	—	—	—	—
Derivative assets	110	—	81	29	23	1	—	22
Total assets	250	80	141	29	184	98	64	22
Derivative liabilities	(16)	(16)	—	—	(27)	(13)	(14)	—
Net assets	$ 234	$ 64	$ 141	$ 29	$ 157	$ 85	$ 50	$ 22

The following table provides a reconciliation of beginning and ending balances of assets and liabilities measured at fair value using Level 3 measurements.

	Derivatives (net)	
	Years Ended December 31,	
(in millions)	**2022**	**2021**
Balance at beginning of period	**$ 22**	$ 6
Purchases, sales, issuances and settlements:		
Purchases	**74**	18
Settlements	**(32)**	(16)
Total (losses) gains included on the Consolidated Balance Sheet	**(35)**	14
Balance at end of period	**$ 29**	$ 22

PIEDMONT

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2022			December 31, 2021		
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Total Fair Value**	**Level 1**	**Level 2**
Derivative assets	**$ — $**	**— $**	**—**	$ 3	$ 3	$ —
Derivative liabilities	**(168)**	**—**	**(168)**	(139)	—	(139)
Net (liabilities) assets	**$ (168) $**	**— $**	**(168)**	$ (136)	$ 3	$ (139)

QUANTITATIVE INFORMATION ABOUT UNOBSERVABLE INPUTS

The following tables include quantitative information about the Duke Energy Registrants' derivatives classified as Level 3.

	December 31, 2022				
Investment Type	**Fair Value (in millions)**	**Valuation Technique**	**Unobservable Input**	**Range**	**Weighted Average Range**
Duke Energy Ohio					
FTRs	**$ 5**	RTO auction pricing	FTR price – per MWh	**$ 0.89 – $ 6.25**	**$ 3.35**
Duke Energy Indiana					
FTRs	**29**	RTO auction pricing	FTR price – per MWh	**0.09 – 21.79**	**2.74**
Duke Energy					
Total Level 3 derivatives	**$ 34**				

	December 31, 2021				
Investment Type	**Fair Value (in millions)**	**Valuation Technique**	**Unobservable Input**	**Range**	**Weighted Average Range**
Duke Energy Ohio					
FTRs	$ 2	RTO auction pricing	FTR price – per MWh	$ 0.06 – $ 1.79	$ 0.96
Duke Energy Indiana					
FTRs	22	RTO auction pricing	FTR price – per MWh	(1.18) – 13.11	2.68
Duke Energy					
Total Level 3 derivatives	$ 24				

OTHER FAIR VALUE DISCLOSURES

The fair value and book value of long-term debt, including current maturities, is summarized in the following table. The following disclosures include debt attributable to the Commercial Renewables Disposal Groups. See Note 2 for further details. Estimates determined are not necessarily indicative of amounts that could have been settled in current markets. Fair value of long-term debt uses Level 2 measurements.

	December 31, 2022		December 31, 2021	
(in millions)	**Book Value**	**Fair Value**	**Book Value**	**Fair Value**
Duke Energy[(a)]	**$ 71,215**	**$ 63,454**	$ 63,835	$ 69,683
Duke Energy Carolinas	**14,266**	**12,943**	13,275	15,101
Progress Energy	**22,439**	**20,467**	20,823	23,751
Duke Energy Progress	**11,087**	**9,689**	10,249	11,252
Duke Energy Florida	**9,709**	**8,991**	8,482	9,772
Duke Energy Ohio	**3,245**	**2,927**	3,193	3,570
Duke Energy Indiana	**4,307**	**3,913**	4,323	5,067
Piedmont	**3,363**	**2,940**	2,968	3,278

(a) Book value of long-term debt includes $1.17 billion as of December 31, 2022, and $1.25 billion as of December 31, 2021, of unamortized debt discount and premium, net in purchase accounting adjustments related to the mergers with Progress Energy and Piedmont that are excluded from fair value of long-term debt.

At both December 31, 2022, and December 31, 2021, fair value of cash and cash equivalents, accounts and notes receivable, accounts payable, notes payable and commercial paper, and nonrecourse notes payable of VIEs are not materially different from their carrying amounts because of the short-term nature of these instruments and/or because the stated rates approximate market rates.

18. VARIABLE INTEREST ENTITIES

A VIE is an entity that is evaluated for consolidation using more than a simple analysis of voting control. The analysis to determine whether an entity is a VIE considers contracts with an entity, credit support for an entity, the adequacy of the equity investment of an entity and the relationship of voting power to the amount of equity invested in an entity. This analysis is performed either upon the creation of a legal entity or upon the occurrence of an event requiring reevaluation, such as a significant change in an entity's assets or activities. A qualitative analysis of control determines the party that consolidates a VIE. This assessment is based on (i) what party has the power to direct the activities of the VIE that most significantly impact its economic performance and (ii) what party has rights to receive benefits or is obligated to absorb losses that could potentially be significant to the VIE. The analysis of the party that consolidates a VIE is a continual reassessment.

CONSOLIDATED VIEs

The obligations of the consolidated VIEs discussed in the following paragraphs are nonrecourse to the Duke Energy Registrants. The registrants have no requirement to provide liquidity to, purchase assets of or guarantee performance of these VIEs unless noted in the following paragraphs.

No financial support was provided to any of the consolidated VIEs during the years ended December 31, 2022, 2021 and 2020, or is expected to be provided in the future, that was not previously contractually required.

Receivables Financing – DERF/DEPR/DEFR

DERF, DEPR and DEFR are bankruptcy remote, special purpose subsidiaries of Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, respectively. DERF, DEPR and DEFR are wholly owned LLCs with separate legal existence from their parent companies, and their assets are not generally available to creditors of their parent companies. On a revolving basis, DERF, DEPR and DEFR buy certain accounts receivable arising from the sale of electricity and related services from their parent companies.

DERF, DEPR and DEFR borrow amounts under credit facilities to buy these receivables. Borrowing availability from the credit facilities is limited to the amount of qualified receivables purchased, which generally exclude receivables past due more than a predetermined number of days and reserves for expected past-due balances. The sole source of funds to satisfy the related debt obligations is cash collections from the receivables. Amounts borrowed under the credit facilities are reflected on the Consolidated Balance Sheets as Long-Term Debt.

The most significant activity that impacts the economic performance of DERF, DEPR and DEFR are the decisions made to manage delinquent receivables. Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are considered the primary beneficiaries and consolidate DERF, DEPR and DEFR, respectively, as they make those decisions.

Receivables Financing – CRC

CRC is a bankruptcy remote, special purpose entity indirectly owned by Duke Energy. On a revolving basis, CRC buys certain accounts receivable arising from the sale of electricity, natural gas and related services from Duke Energy Ohio and Duke Energy Indiana. CRC borrows amounts under a credit facility to buy the receivables from Duke Energy Ohio and Duke Energy Indiana. Borrowing availability from the credit facility is limited to the amount of qualified receivables sold to CRC, which generally exclude receivables past due more than a predetermined number of days and reserves for expected past-due balances. The sole source of funds to satisfy the related debt obligation is cash collections from the receivables. Amounts borrowed under the credit facility are reflected on Duke Energy's Consolidated Balance Sheets as Long-Term Debt.

The proceeds Duke Energy Ohio and Duke Energy Indiana receive from the sale of receivables to CRC are approximately 75% cash and 25% in the form of a subordinated note from CRC. The subordinated note is a retained interest in the receivables sold. Depending on collection experience, additional equity infusions to CRC may be required by Duke Energy to maintain a minimum equity balance of $3 million.

CRC is considered a VIE because (i) equity capitalization is insufficient to support its operations, (ii) power to direct the activities that most significantly impact the economic performance of the entity is not held by the equity holder and (iii) deficiencies in net worth of CRC are funded by Duke Energy. The most significant activities that impact the economic performance of CRC are decisions made to manage delinquent receivables. Duke Energy is considered the primary beneficiary and consolidates CRC as it makes these decisions. Neither Duke Energy Ohio nor Duke Energy Indiana consolidate CRC.

Receivables Financing – Credit Facilities

The following table summarizes the amounts and expiration dates of the credit facilities and associated restricted receivables described above.

		Duke Energy		
		Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida
(in millions)	**CRC**	**DERF**	**DEPR**	**DEFR**
Expiration date	February 2025	January 2025	April 2025	April 2023
Credit facility amount	$ 350	$ 500	$ 400	$ 250
Amounts borrowed at December 31, 2022	**350**	**471**	**400**	**250**
Amounts borrowed at December 31, 2021	350	475	350	250
Restricted Receivables at December 31, 2022	**917**	**928**	**793**	**490**
Restricted Receivables at December 31, 2021	587	844	574	427

Nuclear Asset-Recovery Bonds – Duke Energy Florida Project Finance, LLC (DEFPF)

DEFPF is a bankruptcy remote, wholly owned special purpose subsidiary of Duke Energy Florida. DEFPF was formed in 2016 for the sole purpose of issuing nuclear asset-recovery bonds to finance Duke Energy Florida's unrecovered regulatory asset related to Crystal River Unit 3.

In 2016, DEFPF issued senior secured bonds and used the proceeds to acquire nuclear asset-recovery property from Duke Energy Florida. The nuclear asset-recovery property acquired includes the right to impose, bill, collect and adjust a non-bypassable nuclear asset-recovery charge from all Duke Energy Florida retail customers until the bonds are paid in full and all financing costs have been recovered. The nuclear asset-recovery bonds are secured by the nuclear asset-recovery property and cash collections from the nuclear asset-recovery charges are the sole source of funds to satisfy the debt obligation. The bondholders have no recourse to Duke Energy Florida.

DEFPF is considered a VIE primarily because the equity capitalization is insufficient to support its operations. Duke Energy Florida has the power to direct the significant activities of the VIE as described above and therefore Duke Energy Florida is considered the primary beneficiary and consolidates DEFPF.

The following table summarizes the impact of DEFPF on Duke Energy Florida's Consolidated Balance Sheets.

	December 31,	
(in millions)	**2022**	**2021**
Receivables of VIEs	**$ 6**	$ 5
Regulatory Assets: Current	**55**	54
Current Assets: Other	**41**	39
Other Noncurrent Assets: Regulatory assets	**826**	883
Current Liabilities: Other	**9**	9
Current maturities of long-term debt	**56**	56
Long-Term Debt	**890**	946

Storm Recovery Bonds – Duke Energy Carolinas NC Storm Funding and Duke Energy Progress NC Storm Funding

Duke Energy Carolinas NC Storm Funding, LLC. (DECNCSF) and Duke Energy Progress NC Storm Funding, LLC. (DEPNCSF) are bankruptcy remote, wholly owned special purpose subsidiaries of Duke Energy Carolinas and Duke Energy Progress, respectively. These entities were formed in 2021 for the sole purpose of issuing storm recovery bonds to finance certain of Duke Energy Carolinas' and Duke Energy Progress' unrecovered regulatory assets related to storm costs.

In November 2021, DECNCSF and DEPNCSF issued $237 million and $770 million of senior secured bonds, respectively and used the proceeds to acquire storm recovery property from Duke Energy Carolinas and Duke Energy Progress. The storm recovery property was created by state legislation and NCUC financing orders for the purpose of financing storm costs incurred in 2018 and 2019. The storm recovery property acquired includes the right to impose, bill, collect and adjust a non-bypassable charge from all Duke Energy Carolinas' and Duke Energy Progress' retail customers until the bonds are paid in full and all financing costs have been recovered. The storm recovery bonds are secured by the storm recovery property and cash collections from the storm recovery charges are the sole source of funds to satisfy the debt obligation. The bondholders have no recourse to Duke Energy Carolinas or Duke Energy Progress. For additional information, see Notes 4 and 7.

DECNCSF and DEPNCSF are considered VIEs primarily because the equity capitalization is insufficient to support their operations. Duke Energy Carolinas and Duke Energy Progress have the power to direct the significant activities of the VIEs as described above and therefore Duke Energy Carolinas and Duke Energy Progress are considered the primary beneficiaries and consolidate DECNCSF and DEPNCSF, respectively.

The following table summarizes the impact of these VIEs on Duke Energy Carolinas' and Duke Energy Progress' Consolidated Balance Sheets.

	Duke Energy Carolinas		Duke Energy Progress	
	December 31,		December 31,	
(in millions)	**2022**	**2021**	**2022**	**2021**
Regulatory Assets: Current	**$ 12**	**$ 12**	**$ 39**	**$ 39**
Current Assets: Other	**8**	**—**	**29**	**—**
Other Noncurrent Assets: Regulatory assets	**208**	**220**	**681**	**720**
Other Noncurrent Assets: Other	**1**	**1**	**2**	**4**
Current maturities of long-term debt	**10**	**5**	**34**	**15**
Current Liabilities: Other	**3**	**1**	**8**	**2**
Long-Term Debt	**219**	**228**	**714**	**747**

NON-CONSOLIDATED VIEs

The following tables summarize the impact of non-consolidated VIEs on the Consolidated Balance Sheets.

	December 31, 2022		
(in millions)	**Duke Energy Natural Gas Investments**	**Duke Energy Ohio**	**Duke Energy Indiana**
Receivables from affiliated companies	**$ —**	**$ 198**	**$ 317**
Investments in equity method unconsolidated affiliates	**43**	**—**	**—**
Other noncurrent assets	**45**	**—**	**—**
Total assets	**$ 88**	**$ 198**	**$ 317**
Other current liabilities	**59**	**—**	**—**
Other noncurrent liabilities	**47**	**—**	**—**
Total liabilities	**$ 106**	**$ —**	**$ —**
Net (liabilities) assets	**$ (18)**	**$ 198**	**$ 317**

	December 31, 2021		
(in millions)	**Duke Energy Natural Gas Investments**	**Duke Energy Ohio**	**Duke Energy Indiana**
Receivables from affiliated companies	$ —	$ 79	$ 97
Investments in equity method unconsolidated affiliates	15	—	—
Other noncurrent assets	61	—	—
Total assets	$ 76	$ 79	$ 97
Other current liabilities	47	—	—
Other noncurrent liabilities	54	—	—
Total liabilities	$ 101	$ —	$ —
Net (liabilities) assets	$ (25)	$ 79	$ 97

The Duke Energy Registrants are not aware of any situations where the maximum exposure to loss significantly exceeds the carrying values shown above.

Natural Gas Investments

Duke Energy has investments in various joint ventures including pipeline and renewable natural gas projects. These entities are considered VIEs due to having insufficient equity to finance their own activities without subordinated financial support. Duke Energy does not have the power to direct the activities that most significantly impact the economic performance, the obligation to absorb losses or the right to receive benefits of these VIEs and therefore does not consolidate these entities.

Duke Energy has a 47% ownership interest in ACP. In 2020, Duke Energy determined that it would no longer invest in the construction of the ACP pipeline. In February 2021, Duke Energy paid approximately $855 million to fund ACP's outstanding debt, relieving Duke Energy of its guarantee. See Notes 4, 8 and 13 for further information regarding this transaction.

CRC

See discussion under Consolidated VIEs for additional information related to CRC.

Amounts included in Receivables from affiliated companies in the above table for Duke Energy Ohio and Duke Energy Indiana reflect their retained interest in receivables sold to CRC. These subordinated notes held by Duke Energy Ohio and Duke Energy Indiana are stated at fair value. Carrying values of retained interests are determined by allocating carrying value of the receivables between assets sold and interests retained based on relative fair value. The allocated bases of the subordinated notes are not materially different than their face value because (i) the receivables generally turnover in less than two months, (ii) credit losses are reasonably predictable due to the broad customer base and lack of significant concentration and (iii) the equity in CRC is subordinate to all retained interests and thus would absorb losses first. The hypothetical effect on fair value of the retained interests assuming both a 10% and a 20% unfavorable variation in credit losses or discount rates is not material due to the short turnover of receivables and historically low credit loss history. Interest accrues to Duke Energy Ohio and Duke Energy Indiana on the retained interests using the acceptable yield method. This method generally approximates the stated rate on the notes since the allocated basis and the face value are nearly equivalent. An impairment charge is recorded against the carrying value of both retained interests and purchased beneficial interest whenever it is determined that an other-than-temporary impairment has occurred.

Key assumptions used in estimating fair value are detailed in the following table.

	Duke Energy Ohio		Duke Energy Indiana	
	2022	**2021**	**2022**	**2021**
Anticipated credit loss ratio	**0.5 %**	0.5 %	**0.3 %**	0.3 %
Discount rate	**2.7 %**	1.1 %	**2.7 %**	1.1 %
Receivable turnover rate	**13.5 %**	13.5 %	**11.3 %**	11.3 %

The following table shows the gross and net receivables sold.

	Duke Energy Ohio		Duke Energy Indiana	
	December 31,		December 31,	
(in millions)	**2022**	**2021**	**2022**	**2021**
Receivables sold	**$ 423**	$ 269	**$ 508**	$ 328
Less: Retained interests	**198**	79	**317**	97
Net receivables sold	**$ 225**	$ 190	**$ 191**	$ 231

The following table shows sales and cash flows related to receivables sold.

	Duke Energy Ohio			Duke Energy Indiana		
	Years Ended December 31,			Years Ended December 31,		
(in millions)	**2022**	**2021**	**2020**	**2022**	**2021**	**2020**
Sales						
Receivables sold	**$ 2,562**	$ 2,023	$ 1,905	**$ 3,744**	$ 2,909	$ 2,631
Loss recognized on sale	**18**	10	10	**26**	13	12
Cash flows						
Cash proceeds from receivables sold	**2,424**	2,018	1,875	**3,498**	2,909	2,586
Collection fees received	**1**	1	1	**2**	1	1
Return received on retained interests	**10**	4	4	**15**	6	5

Cash flows from sales of receivables are reflected within Cash Flows From Operating Activities and Cash Flows from Investing Activities on Duke Energy Ohio's and Duke Energy Indiana's Consolidated Statements of Cash Flows.

Collection fees received in connection with servicing transferred accounts receivable are included in Operation, maintenance and other on Duke Energy Ohio's and Duke Energy Indiana's Consolidated Statements of Operations and Comprehensive Income. The loss recognized on sales of receivables is calculated monthly by multiplying receivables sold during the month by the required discount. The required discount is derived monthly utilizing a three-year weighted average formula that considers charge-off history, late charge history and turnover history on the sold receivables, as well as a component for the time value of money. The discount rate, or component for the time value of money, is the prior month-end Daily Simple SOFR plus a fixed rate of 1%.

19. REVENUE

Duke Energy recognizes revenue consistent with amounts billed under tariff offerings or at contractually agreed upon rates based on actual physical delivery of electric or natural gas service, including estimated volumes delivered when billings have not yet occurred. As such, the majority of Duke Energy's revenues have fixed pricing based on the contractual terms of the published tariffs, with variability in expected cash flows attributable to the customer's volumetric demand and ultimate quantities of energy or natural gas supplied and used during the billing period. The stand-alone selling price of related sales are designed to support recovery of prudently incurred costs and an appropriate return on invested assets and are primarily governed by published tariff rates or contractual agreements approved by relevant regulatory bodies. As described in Note 1, certain excise taxes and franchise fees levied by state or local governments are required to be paid even if not collected from the customer. These taxes are recognized on a gross basis as part of revenues. Duke Energy elects to account for all other taxes net of revenues.

Performance obligations are satisfied over time as energy or natural gas is delivered and consumed with billings generally occurring monthly and related payments due within 30 days, depending on regulatory requirements. In no event does the timing between payment and delivery of the goods and services exceed one year. Using this output method for revenue recognition provides a faithful depiction of the transfer of electric and natural gas service as customers obtain control of the commodity and benefit from its use at delivery. Additionally, Duke Energy has an enforceable right to consideration for energy or natural gas delivered at any discrete point in time and will recognize revenue at an amount that reflects the consideration to which Duke Energy is entitled for the energy or natural gas delivered.

As described above, the majority of Duke Energy's tariff revenues are at-will and, as such, related contracts with customers have an expected duration of one year or less and will not have future performance obligations for disclosure. Additionally, other long-term revenue streams, including wholesale contracts, generally provide services that are part of a single performance obligation, the delivery of electricity or natural gas. As such, other than material fixed consideration under long-term contracts, related disclosures for future performance obligations are also not applicable.

Duke Energy earns substantially all of its revenues through its reportable segments, EU&I and GU&I.

Electric Utilities and Infrastructure

EU&I earns the majority of its revenues through retail and wholesale electric service through the generation, transmission, distribution and sale of electricity. Duke Energy generally provides retail and wholesale electric service customers with their full electric load requirements or with supplemental load requirements when the customer has other sources of electricity.

Retail electric service is generally marketed throughout Duke Energy's electric service territory through standard service offers. The standard service offers are through tariffs determined by regulators in Duke Energy's regulated service territory. Each tariff, which is assigned to customers based on customer class, has multiple components such as an energy charge, a demand charge, a basic facilities charge and applicable riders. Duke Energy considers each of these components to be aggregated into a single performance obligation for providing electric service, or in the case of distribution only customers in Duke Energy Ohio, for delivering electricity. Electricity is considered a single performance obligation satisfied over time consistent with the series guidance and is provided and consumed over the billing period, generally one month. Retail electric service is typically provided to at-will customers who can cancel service at any time, without a substantive penalty. Additionally, Duke Energy adheres to applicable regulatory requirements in each jurisdiction to ensure the collectability of amounts billed and appropriate mitigating procedures are followed when necessary. As such, revenue from contracts with customers for such contracts is equivalent to the electricity supplied and billed in that period (including unbilled estimates).

Wholesale electric service is generally provided under long-term contracts using cost-based pricing. FERC regulates costs that may be recovered from customers and the amount of return companies are permitted to earn. Wholesale contracts include both energy and demand charges. For full requirements contracts, Duke Energy considers both charges as a single performance obligation for providing integrated electric service. For contracts where energy and demand charges are considered separate performance obligations, energy and demand are each a distinct performance obligation under the series guidance and are satisfied as energy is delivered and stand-ready service is provided on a monthly basis. This service represents consumption over the billing period and revenue is recognized consistent with billings and unbilled estimates, which generally occur monthly. Contractual amounts owed are typically trued up annually based upon incurred costs in accordance with FERC published filings and the specific customer's actual peak demand. Estimates of variable consideration related to potential additional billings or refunds owed are updated quarterly.

The majority of wholesale revenues are full requirements contracts where the customers purchase the substantial majority of their energy needs and do not have a fixed quantity of contractually required energy or capacity. As such, related forecasted revenues are considered optional purchases. Supplemental requirements contracts that include contracted blocks of energy and capacity at contractually fixed prices have the following estimated remaining performance obligations:

	Remaining Performance Obligations						
(in millions)	**2023**	**2024**	**2025**	**2026**	**2027**	**Thereafter**	**Total**
Progress Energy	$ 61	$ 66	$ 7	$ 7	$ 7	$ 36	$ 184
Duke Energy Progress	8	8	—	—	—	—	16
Duke Energy Florida	53	58	7	7	7	36	168
Duke Energy Indiana	11	16	17	15	7	5	71

Revenues for block sales are recognized monthly as energy is delivered and stand-ready service is provided, consistent with invoiced amounts and unbilled estimates.

Gas Utilities and Infrastructure

GU&I earns its revenue through retail and wholesale natural gas service through the transportation, distribution and sale of natural gas. Duke Energy generally provides retail and wholesale natural gas service customers with all natural gas load requirements. Additionally, while natural gas can be stored, substantially all natural gas provided by Duke Energy is consumed by customers simultaneously with receipt of delivery.

Retail natural gas service is marketed throughout Duke Energy's natural gas service territory using published tariff rates. The tariff rates are established by regulators in Duke Energy's service territories. Each tariff, which is assigned to customers based on customer class, have multiple components, such as a commodity charge, demand charge, customer or monthly charge and transportation costs. Duke Energy considers each of these components to be aggregated into a single performance obligation for providing natural gas service. For contracts where Duke Energy provides all of the customer's natural gas needs, the delivery of natural gas is considered a single performance obligation satisfied over time, and revenue is recognized monthly based on billings and unbilled estimates as service is provided and the commodity is consumed over the billing period. Additionally, natural gas service is typically at-will and customers can cancel service at any time, without a substantive penalty. Duke Energy also adheres to applicable regulatory requirements to ensure the collectability of amounts billed and receivable and appropriate mitigating procedures are followed when necessary.

Certain long-term individually negotiated contracts exist to provide natural gas service. These contracts are regulated and approved by state commissions. The negotiated contracts have multiple components, including a natural gas and a demand charge, similar to retail natural gas contracts. Duke Energy considers each of these components to be a single performance obligation for providing natural gas service. This service represents consumption over the billing period, generally one month.

Fixed capacity payments under long-term contracts for the GU&I segment include minimum margin contracts and supply arrangements with municipalities and power generation facilities. Revenues for related sales are recognized monthly as natural gas is delivered and stand-ready service is provided, consistent with invoiced amounts and unbilled estimates. Estimated remaining performance obligations are as follows:

	Remaining Performance Obligations						
(in millions)	**2023**	**2024**	**2025**	**2026**	**2027**	**Thereafter**	**Total**
Piedmont	$ 68	$ 62	$ 61	$ 51	$ 49	$ 241	$ 532

Other

The remainder of Duke Energy's operations is presented as Other, which does not include material revenues from contracts with customers.

Disaggregated Revenues

For the EU&I and GU&I segments, revenue by customer class is most meaningful to Duke Energy as each respective customer class collectively represents unique customer expectations of service, generally has different energy and demand requirements, and operates under tailored, regulatory approved pricing structures. Additionally, each customer class is impacted differently by weather and a variety of economic factors including the level of population growth, economic investment, employment levels, and regulatory activities in each of Duke Energy's jurisdictions. As such, analyzing revenues disaggregated by customer class allows Duke Energy to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Disaggregated revenues are presented as follows:

	Year Ended December 31, 2022							
(in millions) **By market or type of customer**	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Electric Utilities and Infrastructure								
Residential	$ 11,377	$ 3,275	$ 5,812	$ 2,378	$ 3,434	$ 862	$ 1,430	$ —
General	7,356	2,396	3,396	1,480	1,916	517	1,049	—
Industrial	3,504	1,251	1,095	770	325	202	956	—
Wholesale	2,856	561	1,785	1,346	439	127	383	—
Other revenues	795	372	994	768	226	61	19	—
Total Electric Utilities and Infrastructure revenue from contracts with customers	$ 25,888	$ 7,855	$ 13,082	$ 6,742	$ 6,340	$ 1,769	$ 3,837	$ —
Gas Utilities and Infrastructure								
Residential	$ 1,462	$ —	$ —	$ —	$ —	$ 488	$ —	$ 974
Commercial	765	—	—	—	—	180	—	585
Industrial	170	—	—	—	—	24	—	144
Power Generation	—	—	—	—	—	—	—	94
Other revenues	360	—	—	—	—	25	—	271
Total Gas Utilities and Infrastructure revenue from contracts with customers	$ 2,757	$ —	$ —	$ —	$ —	$ 717	$ —	$ 2,068
Other								
Revenue from contracts with customers	$ 30	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Total revenue from contracts with customers	$ 28,675	$ 7,855	$ 13,082	$ 6,742	$ 6,340	$ 2,486	$ 3,837	$ 2,068
Other revenue sources[a]	$ 93	$ 2	$ 43	$ 11	$ 13	$ 28	$ 85	$ 56
Total revenues	$ 28,768	$ 7,857	$ 13,125	$ 6,753	$ 6,353	$ 2,514	$ 3,922	$ 2,124

(a) Other revenue sources include revenues from leases, derivatives and alternative revenue programs that are not considered revenues from contracts with customers. Alternative revenue programs in certain jurisdictions include regulatory mechanisms that periodically adjust for over or under collection of related revenues.

ons) ket or type of customer		Year Ended December 31, 2021							
		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Utilities and Infrastructure									
ential	$	$ 10,097	$ 3,054	$ 5,084	$ 2,156	$ 2,928	$ 767	$ 1,188	—
al		6,375	2,210	2,883	1,378	1,505	440	825	—
rial		2,924	1,145	894	634	260	135	750	—
sale		2,199	472	1,385	1,164	221	56	285	—
revenues		879	264	716	387	329	83	86	—
ectric Utilities and Infrastructure revenue from contracts with customers	$	$ 22,474	$ 7,145	$ 10,962	$ 5,719	$ 5,243	$ 1,481	$ 3,134	—
ities and Infrastructure									
ential	$	$ 1,131	$ —	$ —	$ —	$ —	$ 354	$ —	777
ercial		561	—	—	—	—	143	—	418
rial		158	—	—	—	—	20	—	137
Generation		—	—	—	—	—	—	—	92
revenues		133	—	—	—	—	28	—	45
as Utilities and Infrastructure revenue from contracts with customers	$	$ 1,983	$ —	$ —	$ —	$ —	$ 545	$ —	1,469
e from contracts with customers	$	$ 29	$ —	$ —	$ —	$ —	$ —	$ —	—
venue from contracts with customers	$	$ 24,486	$ 7,145	$ 10,962	$ 5,719	$ 5,243	$ 2,026	$ 3,134	1,469
venue sources[(a)]	$	$ 135	$ (43)	$ 95	$ 61	$ 16	$ 11	$ 40	100
venues	$	$ 24,621	$ 7,102	$ 11,057	$ 5,780	$ 5,259	$ 2,037	$ 3,174	1,569

(a) Other revenue sources include revenues from leases, derivatives and alternative revenue programs that are not considered revenues from contracts with customers. Alternative revenue programs in certain jurisdictions include regulatory mechanisms that periodically adjust for over or under collection of related revenues.

ons) ket or type of customer		Year Ended December 31, 2020 Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Utilities and Infrastructure									
ential	$	$ 9,806	$ 2,997	$ 5,017	$ 2,059	$ 2,958	$ 726	$ 1,064	—
al		6,194	2,233	2,779	1,312	1,467	442	740	—
rial		2,859	1,137	901	649	252	137	683	—
sale		1,864	380	1,228	1,034	194	32	224	—
revenues		914	281	596	294	302	82	72	—
ectric Utilities and Infrastructure revenue from contracts with customers	$	$ 21,637	$ 7,028	$ 10,521	$ 5,348	$ 5,173	$ 1,419	$ 2,783	—
ities and Infrastructure									
ential	$	$ 930	$ —	$ —	$ —	$ —	$ 300	$ —	630
ercial		446	—	—	—	—	117	—	329
rial		127	—	—	—	—	17	—	110
Generation		—	—	—	—	—	—	—	34
revenues		87	—	—	—	—	17	—	70
as Utilities and Infrastructure revenue from contracts with customers	$	$ 1,590	$ —	$ —	$ —	$ —	$ 451	$ —	1,173
e from contracts with customers	$	$ 26	$ —	$ —	$ —	$ —	$ —	$ —	—
venue from contracts with customers	$	$ 23,253	$ 7,028	$ 10,521	$ 5,348	$ 5,173	$ 1,870	$ 2,783	1,173
venue sources[(a)]	$	$ 113	$ (13)	$ 106	$ 74	$ 15	$ (12)	$ 12	124
venues	$	$ 23,366	$ 7,015	$ 10,627	$ 5,422	$ 5,188	$ 1,858	$ 2,795	1,297

(a) Other revenue sources include revenues from leases, derivatives and alternative revenue programs that are not considered revenues from contracts with customers. Alternative revenue programs in certain jurisdictions include regulatory mechanisms that periodically adjust for over or under collection of related revenues.

As described in Note 1, Duke Energy adopted the new guidance for credit losses effective January 1, 2020, using the modified retrospective method of adoption, which does not require restatement of prior year reported results. The following table presents the reserve for credit losses for trade and other receivables based on adoption of the new standard.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Balance at December 31, 2019	**$ 76**	**$ 10**	**$ 16**	**$ 8**	**$ 7**	**$ 4**	**$ 3**	**$ 6**
Cumulative Change in Accounting Principle	5	1	2	1	1	—	—	1
Write-Offs	(58)	(13)	(23)	(8)	(14)	—	—	(6)
Credit Loss Expense	75	13	29	9	20	—	—	11
Other Adjustments	48	12	13	13	—	—	—	—
Balance at December 31, 2020	**$ 146**	**$ 23**	**$ 37**	**$ 23**	**$ 14**	**$ 4**	**$ 3**	**$ 12**
Write-Offs	(58)	(21)	(25)	(12)	(13)	—	—	(9)
Credit Loss Expense	53	27	25	11	14	—	—	7
Other Adjustments	(20)	13	(1)	(1)	1	—	—	5
Balance at December 31, 2021	**$ 121**	**$ 42**	**$ 36**	**$ 21**	**$ 16**	**$ 4**	**$ 3**	**$ 15**
Write-Offs	(158)	(73)	(70)	(36)	(34)	—	—	(12)
Credit Loss Expense	160	40	72	17	55	2	1	11
Other Adjustments	93	59	43	42	(1)	—	—	—
Balance at December 31, 2022	**$ 216**	**$ 68**	**$ 81**	**$ 44**	**$ 36**	**$ 6**	**$ 4**	**$ 14**

Trade and other receivables are evaluated based on an estimate of the risk of loss over the life of the receivable and current and historical conditions using supportable assumptions. Management evaluates the risk of loss for trade and other receivables by comparing the historical write-off amounts to total revenue over a specified period. Historical loss rates are adjusted due to the impact of current conditions, as well as forecasted conditions over a reasonable time period. The calculated write-off rate can be applied to the receivable balance for which an established reserve does not already exist. Management reviews the assumptions and risk of loss periodically for trade and other receivables.

The aging of trade receivables is presented in the table below.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unbilled Receivables[a][b]	$ 1,457	$ 486	$ 355	$ 232	$ 123	$ 20	$ 28	$ 160
Current	2,347	577	1,059	637	417	15	52	265
1-30 days past due	261	96	60	15	45	5	17	15
31-60 days past due	123	23	61	49	12	6	2	3
61-90 days past due	74	25	18	9	9	3	11	2
91+ days past due	209	70	74	27	47	26	6	4
Deferred Payment Arrangements[c]	160	57	62	35	27	4	—	1
Trade and Other Receivables	**$ 4,631**	**$ 1,334**	**$ 1,689**	**$ 1,004**	**$ 680**	**$ 79**	**$ 116**	**$ 450**

	December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unbilled Receivables[a][b]	$ 922	$ 316	$ 266	$ 193	$ 73	$ 4	$ 27	$ 106
Current	1,941	592	716	405	311	42	50	202
1-30 days past due	288	77	128	44	82	4	5	12
31-60 days past due	98	30	49	21	28	1	10	2
61-90 days past due	118	32	48	28	20	23	5	4
91+ days past due	161	84	37	9	28	24	6	3
Deferred Payment Arrangements[c]	115	55	45	22	23	2	—	4
Trade and Other Receivables	**$ 3,643**	**$ 1,186**	**$ 1,289**	**$ 722**	**$ 565**	**$ 100**	**$ 103**	**$ 333**

(a) Unbilled revenues are recognized by applying customer billing rates to the estimated volumes of energy or natural gas delivered but not yet billed and are included within Receivables and Receivables of VIEs on the Consolidated Balance Sheets.

(b) Duke Energy Ohio and Duke Energy Indiana sell, on a revolving basis, nearly all of their retail accounts receivable, including receivables for unbilled revenues, to an affiliate, CRC, and account for the transfers of receivables as sales. Accordingly, the receivables sold are not reflected on the Consolidated Balance Sheets of Duke Energy Ohio and Duke Energy Indiana. See Note 18 for further information. These receivables for unbilled revenues are $148 million and $260 million for Duke Energy Ohio and Duke Energy Indiana, respectively, as of December 31, 2022, and $82 million and $121 million for Duke Energy Ohio and Duke Energy Indiana, respectively, as of December 31, 2021.

(c) Due to ongoing financial hardships impacting customers, Duke Energy has permitted customers to defer payment of past-due amounts through installment payment plans.

20. STOCKHOLDERS' EQUITY

Basic EPS is computed by dividing net income available to Duke Energy common stockholders, as adjusted for distributed and undistributed earnings allocated to participating securities and accumulated preferred dividends, by the weighted average number of common shares outstanding during the period. Diluted EPS is computed by dividing net income available to Duke Energy common stockholders, as adjusted for distributed and undistributed earnings allocated to participating securities and accumulated preferred dividends, by the diluted weighted average number of common shares outstanding during the period. Diluted EPS reflects the potential dilution that could occur if securities or other agreements to issue common stock, such as equity forward sale agreements, were exercised or settled. Duke Energy's participating securities are RSUs that are entitled to dividends declared on Duke Energy common stock during the RSUs vesting periods. Dividends declared on preferred stock are recorded on the Consolidated Statements of Operations as a reduction of net income to arrive at net income available to Duke Energy common stockholders. Dividends accumulated on preferred stock are an adjustment to net income used in the calculation of basic and diluted EPS.

The following table presents Duke Energy's basic and diluted EPS calculations, the weighted average number of common shares outstanding and common and preferred share dividends declared.

	Years Ended December 31,		
(in millions, except per share amounts)	**2022**	**2021**	**2020**
Net Income available to Duke Energy common stockholders	**$ 2,444**	$ 3,802	$ 1,270
Less: (Loss) Income from discontinued operations attributable to Duke Energy common stockholders	**(1,215)**	200	289
Accumulated preferred stock dividends adjustment	**—**	—	1
Less: Impact of participating securities	**2**	3	2
Income from continuing operations available to Duke Energy common stockholders	**$ 3,657**	$ 3,599	$ 980
Loss from discontinued operations, net of tax	**$ (1,323)**	$ (144)	$ (7)
Add: Loss attributable to NCI	**108**	344	296
(Loss) Income from discontinued operations attributable to Duke Energy common stockholders	**$ (1,215)**	$ 200	$ 289
Weighted average common shares outstanding – basic	**770**	769	737
Equity forwards	**—**	—	1
Weighted average common shares outstanding – diluted	**770**	769	738
EPS from continuing operations available to Duke Energy common stockholders			
Basic and Diluted	**$ 4.74**	$ 4.68	$ 1.33
(Loss) Earnings Per Share from discontinued operations attributable to Duke Energy common stockholders			
Basic and Diluted	**$ (1.57)**	$ 0.26	$ 0.39
Potentially dilutive items excluded from the calculation[(a)]	**2**	2	2
Dividends declared per common share	**$ 3.98**	$ 3.90	$ 3.82
Dividends declared on Series A preferred stock per depositary share[(b)]	**$ 1.437**	$ 1.437	$ 1.437
Dividends declared on Series B preferred stock per share[(c)]	**$ 48.750**	$ 48.750	$ 49.292

(a) Performance stock awards were not included in the dilutive securities calculation because the performance measures related to the awards had not been met.
(b) 5.75% Series A Cumulative Redeemable Perpetual Preferred Stock dividends are payable quarterly in arrears on the 16th day of March, June, September and December. The preferred stock has a $25 liquidation preference per depositary share.
(c) 4.875% Series B Fixed-Rate Reset Cumulative Redeemable Perpetual Preferred Stock dividends are payable semiannually in arrears on the 16th day of March and September. The preferred stock has a $1,000 liquidation preference per share. On September 16, 2024, the First Call Date, and any fifth anniversary of the First Call Date, the dividend rate will reset based on the then current five-year U.S. Treasury rate plus a spread of 3.388%.

Common Stock

In November 2022, Duke Energy filed a prospectus supplement and executed an EDA under which it may sell up to $1.5 billion of its common stock through a new ATM offering program, including an equity forward sales component. Under the terms of the EDA, Duke Energy may issue and sell shares of common stock through September 2025.

Preferred Stock

The Series A Preferred Stock has no maturity or mandatory redemption date, is not redeemable at the option of the holders and includes separate call options. The first call option allows Duke Energy to call the Series A Preferred Stock at a redemption price of $25.50 per depositary share prior to June 15, 2024, in whole but not in part, at any time within 120 days after a ratings event where a rating agency amends, clarifies or changes the criteria it uses to assign equity credit for securities such as the preferred stock. The second call option allows Duke Energy to call the preferred stock, in whole or in part, at any time, on or after June 15, 2024, at a redemption price of $25 per depositary share. Duke Energy is also required to redeem all accumulated and unpaid dividends if either call option is exercised.

The Series B Preferred Stock has no maturity or mandatory redemption date, is not redeemable at the option of the holders and includes separate call options. The first call option allows Duke Energy to call the Series B Preferred Stock at a redemption price of $1,020 per share, in whole but not in part, at any time within 120 days after a ratings event. The second call option allows Duke Energy to call the preferred stock, in whole or in part, on the First Call Date or any subsequent Reset Date at a redemption price in cash equal to $1,000 per share. Duke Energy is also required to redeem all accumulated and unpaid dividends if either call option is exercised.

Dividends issued on its Series A and Series B Preferred Stock are subject to approval by the Board of Directors. However, the deferral of dividend payments on the preferred stock prohibits the declaration of common stock dividends.

The Series A and Series B Preferred Stock rank, with respect to dividends and distributions upon liquidation or dissolution:

- senior to Common Stock and to each other class or series of capital stock established after the original issue date of the Series A and Series B Preferred Stock that is expressly made subordinated to the Series A and Series B Preferred Stock;
- on a parity with any class or series of capital stock established after the original issue date of the Series A and Series B Preferred Stock that is not expressly made senior or subordinated to the Series A or Series B Preferred Stock;

- junior to any class or series of capital stock established after the original issue date of the Series A and Series B Preferred Stock that is expressly made senior to the Series A or Series B Preferred Stock;
- junior to all existing and future indebtedness (including indebtedness outstanding under Duke Energy's credit facilities, unsecured senior notes, junior subordinated debentures and commercial paper) and other liabilities with respect to assets available to satisfy claims against Duke Energy; and
- structurally subordinated to existing and future indebtedness and other liabilities of Duke Energy's subsidiaries and future preferred stock of subsidiaries.

Holders of Series A and Series B Preferred Stock have no voting rights with respect to matters that generally require the approval of voting stockholders. The limited voting rights of holders of Series A and Series B Preferred Stock include the right to vote as a single class, respectively, on certain matters that may affect the preference or special rights of the preferred stock, except in the instance that Duke Energy elects to defer the payment of dividends for a total of six quarterly full dividend periods for Series A Preferred Stock or three semiannual full dividend periods for Series B Preferred Stock. If dividends are deferred for a cumulative total of six quarterly full dividend periods for Series A Preferred Stock or three semiannual full dividend periods for Series B Preferred Stock, whether or not for consecutive dividend periods, holders of the respective preferred stock have the right to elect two additional Board members to the Board of Directors.

21. SEVERANCE

During 2022, Duke Energy identified opportunities to eliminate work and create sustainable savings through a workload reduction initiative with a focus on process improvement through digital technology, governance simplification and elimination of low-value work. As a result, Duke Energy extended involuntary severance benefits to certain employees in specific areas as a part of this initiative.

During 2021, Duke Energy reviewed its operations and identified opportunities for improvement to better serve its customers. This operational review included workforce realignment to ensure the company is staffed with the right skill sets and number of teammates to execute the long-term vision for Duke Energy. As such, Duke Energy extended involuntary severance benefits to certain employees in specific areas as a part of these workforce realignment efforts.

During 2020, as a result of partial settlements between Duke Energy Carolinas, Duke Energy Progress and the Public Staff, Duke Energy Carolinas and Duke Energy Progress deferred as Regulatory assets on the Consolidated Balance Sheets, approximately $65 million and $33 million, respectively, of previously recorded severance charges within Operation, maintenance and other on the Consolidated Statements of Operations. These severance charges were previously recorded during 2018, as Duke Energy reviewed its operations and identified opportunities for improvement to better serve its customers. This operational review included the company's workforce strategy and staffing levels to ensure the company was staffed with the right skill sets and number of teammates to execute the long-term vision for Duke Energy. As such, Duke Energy extended voluntary and involuntary severance benefits to certain employees in specific areas as a part of workforce planning and digital transformation efforts.

The following table presents the direct and allocated severance and related charges accrued for approximately 233 employees in 2022, 290 employees in 2021 and 30 employees in 2020, by the Duke Energy Registrants within Operation, maintenance and other on the Consolidated Statements of Operations.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Year Ended December 31, 2022[a][b]	**$ 65**	**$ 40**	**$ 20**	**$ 17**	**$ 3**	**$ 1**	**$ 2**	**$ 2**
Year Ended December 31, 2021[c][d]	69	33	26	20	6	2	3	2
Year Ended December 31, 2020[e][f]	(85)	(58)	(28)	(31)	3	—	—	—

(a) Includes amortization of deferred severance charges of approximately $33 million, $22 million, $11 million and $11 million for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.
(b) Includes adjustments associated with 2021 severance charges of approximately $(19) million, $(6) million, $(8) million, $(4) million, $(4) million, $(1) million, $(2) million and $(1) million for Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont, respectively.
(c) Includes amortization of deferred severance charges of approximately $33 million, $22 million, $11 million and $11 million for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.
(d) Includes adjustments associated with 2018 severance charges of approximately $(3) million, $(2) million and $(1) million for Duke Energy, Duke Energy Carolinas and Duke Energy Indiana, respectively.
(e) Includes unamortized deferred severance charges of approximately $(86) million, $(57) million, $(29) million and $(29) million for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.
(f) Includes adjustments associated with 2018 severance charges of approximately $(6) million, $(2) million, $(3) million and $(2) million for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.

The table below presents the severance liability for past and ongoing severance plans including the plans described above.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Balance at December 31, 2020	$ 11	$ 2	$ 3	$ 1	$ 2	$ —	$ 1	$ —
Provision/Adjustments	36	1	1	1	—	—	—	—
Cash Reductions	(8)	(1)	(2)	(1)	(1)	—	(1)	—
Balance at December 31, 2021	$ 39	$ 2	$ 2	$ 1	$ 1	$ —	$ —	$ —
Provision/Adjustments	**33**	**14**	**4**	**3**	**1**	**—**	**—**	**1**
Cash Reductions	**(8)**	**(1)**	**—**	**—**	**—**	**—**	**—**	**—**
Balance at December 31, 2022	**$ 64**	**$ 15**	**$ 6**	**$ 4**	**$ 2**	**$ —**	**$ —**	**1**

22. STOCK-BASED COMPENSATION

The Duke Energy Corporation 2015 Long-Term Incentive Plan (the 2015 Plan) provides for the grant of stock-based compensation awards to employees and outside directors. The 2015 Plan reserved 10 million shares of common stock for issuance. Duke Energy has historically issued new shares upon exercising or vesting of share-based awards. However, Duke Energy may use a combination of new share issuances and open market repurchases for share-based awards that are exercised or vest in the future. Duke Energy has not determined with certainty the amount of such new share issuances or open market repurchases.

The following table summarizes the total expense recognized by the Duke Energy Registrants, net of tax, for stock-based compensation.

	Years Ended December 31,		
(in millions)	2022	2021	2020
Duke Energy	**$ 74**	$ 64	$ 61
Duke Energy Carolinas	**27**	23	22
Progress Energy	**27**	24	23
Duke Energy Progress	**17**	15	15
Duke Energy Florida	**10**	9	9
Duke Energy Ohio	**5**	5	4
Duke Energy Indiana	**7**	6	6
Piedmont	**4**	3	3

Duke Energy's pretax stock-based compensation costs, the tax benefit associated with stock-based compensation expense and stock-based compensation costs capitalized are included in the following table.

	Years Ended December 31,		
(in millions)	2022	2021	2020
RSU awards	**$ 58**	$ 49	$ 46
Performance awards	**42**	39	38
Pretax stock-based compensation cost	**$ 100**	$ 88	$ 84
Stock-based compensation costs capitalized	**5**	5	5
Stock-based compensation expense	**$ 95**	$ 83	$ 79
Tax benefit associated with stock-based compensation expense	**$ 21**	$ 19	$ 18

RESTRICTED STOCK UNIT AWARDS

RSU awards generally vest over periods from immediate to three years. Fair value amounts are based on the market price of Duke Energy's common stock on the grant date. The following table includes information related to RSU awards.

	Years Ended December 31,		
	2022	2021	2020
Shares granted (in thousands)	**654**	673	498
Fair value (in millions)	**$ 64**	$ 59	$ 50

The following table summarizes information about RSU awards outstanding.

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)
Outstanding at December 31, 2021	1,043	$ 92
Granted	**654**	**98**
Vested	**(527)**	**93**
Forfeited	**(73)**	**94**
Outstanding at December 31, 2022	**1,097**	**95**
RSU awards expected to vest	**1,056**	**95**

The total grant date fair value of shares vested during the years ended December 31, 2022, 2021 and 2020, was $49 million, $45 million and $43 million, respectively. At December 31, 2022, Duke Energy had $34 million of unrecognized compensation cost, which is expected to be recognized over a weighted average period of 23 months.

PERFORMANCE AWARDS

Stock-based performance awards generally vest after three years to the extent performance targets are met. The actual number of shares issued will range from zero to 200% of target shares, depending on the level of performance achieved.

Performance awards contain performance conditions and a market condition. The performance conditions are based on Duke Energy's cumulative adjusted EPS and total incident case rate (total incident case rate is one of our key employee safety metrics). The market condition is based on TSR of Duke Energy relative to a predefined peer group.

Relative TSR is valued using a path-dependent model that incorporates expected relative TSR into the fair value determination of Duke Energy's performance-based share awards. The model uses three-year historical volatilities and correlations for all companies in the predefined peer group, including Duke Energy, to simulate Duke Energy's relative TSR as of the end of the performance period. For each simulation, Duke Energy's relative TSR associated with the simulated stock price at the end of the performance period plus expected dividends within the period results in a value per share for the award portfolio. The average of these simulations is the expected portfolio value per share. Actual life to date results of Duke Energy's relative TSR for each grant are incorporated within the model. For performance awards granted in 2022, the model used a risk-free interest rate of 1.78%, which reflects the yield on three-year Treasury bonds as of the grant date, and an expected volatility of 26.8% based on Duke Energy's historical volatility over three years using daily stock prices.

The following table includes information related to stock-based performance awards.

	Years Ended December 31,		
	2022	**2021**	**2020**
Shares granted assuming target performance (in thousands)	**408**	380	319
Fair value (in millions)	**$ 40**	$ 33	$ 34

The following table summarizes information about stock-based performance awards outstanding and assumes payout at the target level.

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)
Outstanding at December 31, 2021	952	$ 93
Granted	**408**	**99**
Vested	**(297)**	**86**
Forfeited	**(30)**	**96**
Outstanding at December 31, 2022	**1,033**	**97**
Stock-based performance awards expected to vest	**1,006**	**97**

The total grant date fair value of shares vested during the years ended December 31, 2022, and 2021, was $25 million and $25 million, respectively. At December 31, 2022, Duke Energy had $22 million of unrecognized compensation cost, which is expected to be recognized over a weighted average period of 22 months.

23. EMPLOYEE BENEFIT PLANS

DEFINED BENEFIT RETIREMENT PLANS

Duke Energy and certain subsidiaries maintain, and the Subsidiary Registrants participate in, qualified, non-contributory defined benefit retirement plans, which consist of the Duke Energy Retirement Cash Balance Plan (RCBP), which is an active plan, and the Duke Energy Legacy Pension Plan (DELPP), which is an inactive plan. These plans cover most employees using a cash balance formula. Under a cash balance formula, a plan participant accumulates a retirement benefit consisting of pay credits based upon a percentage of current eligible earnings, age or age and years of service and interest credits. Certain employees are eligible for benefits that use a final average earnings formula. Under these final average earnings formulas, a plan participant accumulates a retirement benefit equal to the sum of percentages of their (i) highest three-, four-, or five-year average earnings, (ii) highest three-, four-, or five-year average earnings in excess of covered compensation per year of participation (maximum of 35 years) or (iii) highest three-year average earnings times years of participation in excess of 35 years. Duke Energy also maintains, and the Subsidiary Registrants participate in, non-qualified, non-contributory defined benefit retirement plans that cover certain executives. The qualified and non-qualified, non-contributory defined benefit plans are closed to new participants.

Duke Energy uses a December 31 measurement date for its defined benefit retirement plan assets and obligations. Actuarial losses experienced by the defined benefit retirement plans in remeasuring plan assets on December 31, 2022, were primarily attributable to actual investment performance that was less than expected investment performance. Actuarial gains experienced by the defined benefit retirement plans in remeasuring plan obligations as of December 31, 2022, were primarily attributable to the increase in the discount rate used to measure plan obligations. Actuarial losses experienced by the defined benefit retirement plans in remeasuring plan assets as of December 31, 2021, were primarily attributable to actual investment performance that was less than expected investment performance. Actuarial gains experienced by the defined benefit retirement plans in remeasuring plan obligations as of December 31, 2021, were primarily attributable to the increase in the discount rate used to measure plan obligations.

As a result of the application of settlement accounting due to total lump-sum benefit payments exceeding the settlement threshold (defined as the sum of service cost and interest cost on projected benefit obligation components of net periodic benefit costs) for one of its qualified pension plans, Duke Energy recognized settlement charges of $117 million, of which $95 million was recorded to Regulatory Assets within Other Noncurrent Assets on the Condensed Consolidated Balance Sheets and $22 million was recorded to Other Income and Expenses, net, within the Condensed Consolidated Statement of Operations as of December 31, 2022.

Settlement charges recognized by the Subsidiary Registrants as of December 31, 2022, which represent amounts allocated by Duke Energy for employees of the Subsidiary Registrants and allocated charges for their proportionate share of settlement charges for employees of Duke Energy's shared services affiliate, and recorded to Regulatory Assets within Other Noncurrent Assets on the Condensed Consolidated Balance Sheets were $35 million for Duke Energy Carolinas, $23 million for Progress Energy, $16 million for Duke Energy Progress, $7 million for Duke Energy Florida, $8 million for Duke Energy Indiana and $29 million for Piedmont. Settlement charges recognized by the Subsidiary Registrants as of December 31, 2022, recorded to Other Income and Expenses, net, within the Condensed Consolidated Statement of Operations were $3 million for Duke Energy Carolinas, $5 million for Progress Energy, $5 million for Duke Energy Progress, $1 million for Duke Energy Florida, $5 million for Duke Energy Ohio and $6 million for Piedmont.

The settlement charges reflect the recognition of a pro-rata portion of previously unrecognized actuarial losses, equal to the percentage of reduction in the projected benefit obligation resulting from total lump-sum benefit payments as of December 31, 2022. Settlement charges recognized as a regulatory asset within Other Noncurrent Assets on the Consolidated Balance Sheets are amortized over the average remaining service period for participants in the plan. Amortization of settlement charges is disclosed in the tables below as a component of net periodic pension costs.

Effective December 31, 2022, Duke Energy Florida changed its method for calculating the market related value of plan assets (MRVA) from the fair value method to a method that recognizes changes in fair value of its plan assets over a five-year period. This represents a change in regulatory treatment that will serve to mitigate the impact of market volatility on retail customer rates, resulting in the timing of net periodic pension cost recognition that is more consistent with treatment of the related cost in the ratemaking process. The three-year retrospective impact of this method change of $24 million was recognized by Duke Energy, Progress Energy and Duke Energy Florida, respectively, and was recorded to Other Income and Expenses, net, within the Condensed Consolidated Statement of Operations and has been disclosed in the tables below as a component of net periodic pension costs.

Net periodic benefit costs disclosed in the tables below represent the cost of the respective benefit plan for the periods presented prior to capitalization of amounts reflected as Net property, plant and equipment, on the Consolidated Balance Sheets. Only the service cost component of net periodic benefit costs is eligible to be capitalized. The remaining non-capitalized portions of net periodic benefit costs are classified as either: (1) service cost, which is recorded in Operations, maintenance and other on the Consolidated Statements of Operations; or as (2) components of non-service cost, which is recorded in Other income and expenses, net on the Consolidated Statements of Operations. Amounts presented in the tables below for the Subsidiary Registrants represent the amounts of pension and other post-retirement benefit cost allocated by Duke Energy for employees of the Subsidiary Registrants. Additionally, the Consolidated Statements of Operations of the Subsidiary Registrants also include allocated net periodic benefit costs for their proportionate share of pension and post-retirement benefit cost for employees of Duke Energy’s shared services affiliate that provide support to the Subsidiary Registrants. However, in the tables below, these amounts are only presented within the Duke Energy column (except for amortization of settlement charges). These allocated amounts are included in the governance and shared service costs discussed in Note 14.

Duke Energy's policy is to fund amounts on an actuarial basis to provide assets sufficient to meet benefit payments to be paid to plan participants. The following table includes information related to the Duke Energy Registrants' contributions to its qualified defined benefit pension plans. There were no contributions made in the years ended December 31, 2021 and 2020.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Contributions Made:								
2022	$ 58	$ 15	$ 13	$ 8	$ 5	$ 3	$ 5	$ 2

QUALIFIED PENSION PLANS

Components of Net Periodic Pension Costs

	Year Ended December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 152	$ 48	$ 43	$ 25	$ 17	$ 4	$ 9	$ 5
Interest cost on projected benefit obligation	249	59	77	35	41	13	20	8
Expected return on plan assets	(558)	(152)	(183)	(88)	(94)	(23)	(37)	(24)
Amortization of actuarial loss	81	16	23	12	12	4	9	5
Amortization of prior service credit	(18)	(3)	—	—	—	—	(2)	(7)
Amortization of settlement charges[c]	32	9	8	7	1	5	1	7
MRVA method change	24	—	24	—	24	—	—	—
Net periodic pension costs[a][b]	$ (38)	$ (23)	$ (8)	$ (9)	$ 1	$ 3	$ —	$ (6)

	Year Ended December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 176	$ 56	$ 50	$ 29	$ 21	$ 5	$ 10	$ 6
Interest cost on projected benefit obligation	220	51	70	30	39	13	18	7
Expected return on plan assets	(558)	(141)	(187)	(84)	(102)	(28)	(40)	(20)
Amortization of actuarial loss	133	29	38	18	20	7	13	10
Amortization of prior service credit	(29)	(8)	(2)	(1)	(1)	(1)	(2)	(9)
Amortization of settlement charges	9	5	2	2	1	—	—	1
Net periodic pension costs[a][b]	$ (49)	$ (8)	$ (29)	$ (6)	$ (22)	$ (4)	$ (1)	$ (5)

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 165	$ 51	$ 48	$ 27	$ 21	$ 5	$ 9	$ 6
Interest cost on projected benefit obligation	269	62	85	38	46	15	22	9
Expected return on plan assets	(572)	(145)	(190)	(87)	(101)	(28)	(42)	(21)
Amortization of actuarial loss	128	28	41	18	23	6	12	9
Amortization of prior service credit	(32)	(8)	(3)	(2)	(1)	—	(2)	(9)
Amortization of settlement charges[c]	18	9	7	6	1	—	1	1
Net periodic pension costs[a][b]	$ (24)	$ (3)	$ (12)	$ —	$ (11)	$ (2)	$ —	$ (5)

(a) Duke Energy amounts exclude $3 million, $3 million and $4 million for the years ended December 2022, 2021 and 2020, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

(b) Duke Energy Ohio amounts exclude $1 million, $1 million and $2 million for the years ended December 2022, 2021 and 2020, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

(c) Includes settlement charges not deferred as a regulatory asset.

Amounts Recognized in Accumulated Other Comprehensive Income and Regulatory Assets

	Year Ended December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net increase (decrease)	$ 367	$ 221	$ 107	$ 101	$ 5	$ (1)	$ (12)	$ 9
Accumulated other comprehensive loss (income)								
Deferred income tax expense	$ (7)	$ —	$ (1)	$ —	$ —	$ —	$ —	$ —
Amortization of prior year service credit	—	—	—	—	—	—	—	—
Amortization of prior year actuarial losses	37	—	2	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	$ 30	$ —	$ 1	$ —	$ —	$ —	$ —	$ —

	Year Ended December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net decrease	$ (261)	$ (57)	$ (128)	$ (31)	$ (97)	$ (17)	$ (19)	$ (5)
Accumulated other comprehensive loss (income)								
Deferred income tax expense	$ 1	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Amortization of prior year service credit	1	—	—	—	—	—	—	—
Amortization of prior year actuarial losses	(8)	—	(1)	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	$ (6)	$ —	$ (1)	$ —	$ —	$ —	$ —	$ —

Reconciliation of Funded Status to Net Amount Recognized

	Year Ended December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Obligation at prior measurement date	$ 8,207	$ 1,903	$ 2,560	$ 1,153	$ 1,392	$ 450	$ 680	$ 273
Service cost	145	47	40	24	16	4	8	5
Interest cost	249	59	77	35	41	13	20	8
Actuarial gain	(1,490)	(301)	(513)	(197)	(312)	(84)	(143)	(47)
Benefits paid	(753)	(159)	(184)	(101)	(82)	(50)	(66)	(69)
Transfers	—	5	(5)	(5)	—	—	—	—
Obligation at measurement date	$ 6,358	$ 1,554	$ 1,975	$ 909	$ 1,055	$ 333	$ 499	$ 170
Accumulated Benefit Obligation at measurement date	$ 6,324	$ 1,556	$ 1,959	$ 910	$ 1,038	$ 327	$ 495	$ 170
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 9,235	$ 2,365	$ 3,053	$ 1,421	$ 1,610	$ 438	$ 669	$ 334
Employer contributions	58	15	13	8	5	3	5	2
Actual return on plan assets	(1,547)	(411)	(506)	(240)	(262)	(68)	(107)	(64)
Benefits paid	(753)	(159)	(184)	(101)	(82)	(50)	(66)	(69)
Transfers	—	5	(5)	(5)	—	—	—	—
Plan assets at measurement date	$ 6,993	$ 1,815	$ 2,371	$ 1,083	$ 1,271	$ 323	$ 501	$ 203
Funded status of plan	$ 635	$ 261	$ 396	$ 174	$ 216	$ (10)	$ 2	$ 33

(in millions)	Year Ended December 31, 2021							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Obligation at prior measurement date	$ 8,634	$ 1,988	$ 2,715	$ 1,193	$ 1,507	$ 502	$ 715	$ 293
Service cost	168	54	48	28	20	5	9	6
Interest cost	220	51	70	30	39	13	18	7
Actuarial gain	(200)	(42)	(108)	(18)	(89)	(10)	(10)	(5)
Benefits paid	(615)	(148)	(161)	(80)	(81)	(50)	(52)	(28)
Transfers	—	—	(4)	—	(4)	(10)	—	—
Obligation at measurement date	$ 8,207	$ 1,903	$ 2,560	$ 1,153	$ 1,392	$ 450	$ 680	$ 273
Accumulated Benefit Obligation at measurement date	$ 8,144	$ 1,904	$ 2,529	$ 1,154	$ 1,361	$ 439	$ 672	$ 274
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 9,337	$ 2,381	$ 3,049	$ 1,422	$ 1,605	$ 472	$ 684	$ 343
Actual return on plan assets	513	132	169	79	90	26	37	19
Benefits paid	(615)	(148)	(161)	(80)	(81)	(50)	(52)	(28)
Transfers	—	—	(4)	—	(4)	(10)	—	—
Plan assets at measurement date	$ 9,235	$ 2,365	$ 3,053	$ 1,421	$ 1,610	$ 438	$ 669	$ 334
Funded status of plan	$ 1,028	$ 462	$ 493	$ 268	$ 218	$ (12)	$ (11)	$ 61

Amounts Recognized in the Consolidated Balance Sheets

(in millions)	December 31, 2022							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Prefunded pension[(a)]	**$ 885**	**$ 261**	**$ 396**	**$ 174**	**$ 216**	**$ 62**	**$ 90**	**$ 33**
Noncurrent pension liability[(b)]	**$ 250**	**$ —**	**$ —**	**$ —**	**$ —**	**$ 72**	**$ 88**	**$ —**
Net asset (liability) recognized	**$ 635**	**$ 261**	**$ 396**	**$ 174**	**$ 216**	**$ (10)**	**$ 2**	**$ 33**
Regulatory assets	**$ 2,016**	**$ 545**	**$ 670**	**$ 353**	**$ 316**	**$ 92**	**$ 178**	**$ 84**
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	**$ (27)**	**$ —**	**$ (1)**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**
Prior service credit	**(1)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Net actuarial loss	**129**	**—**	**3**	**—**	**—**	**—**	**—**	**—**
Net amounts recognized in accumulated other comprehensive loss	**$ 101**	**$ —**	**$ 2**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**

(in millions)	December 31, 2021								
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Prefunded pension[a]	$ 1,071	$ 462	$ 494	$ 268	$ 219	$ 74	$ 100	$ 61
Noncurrent pension liability[b]	$ 43	$ —	$ 1	$ —	$ 1	$ 86	$ 111	$ —
Net asset (liability) recognized	$ 1,028	$ 462	$ 493	$ 268	$ 218	$ (12)	$ (11)	$ 61
Regulatory assets	$ 1,649	$ 324	$ 563	$ 252	$ 311	$ 93	$ 190	$ 75
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	$ (20)	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Prior service credit	(1)	—	—	—	—	—	—	—
Net actuarial loss	92	—	1	—	—	—	—	—
Net amounts recognized in accumulated other comprehensive loss	$ 71	$ —	$ 1	$ —	$ —	$ —	$ —	$ —

(a) Included in Other within Other Noncurrent Assets on the Consolidated Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Consolidated Balance Sheets.

Information for Plans with Accumulated Benefit Obligation in Excess of Plan Assets

(in millions)	December 31, 2022		
	Duke Energy	Duke Energy Ohio	Duke Energy Indiana
Projected benefit obligation	**$ 3,323**	**$ 103**	**$ 198**
Accumulated benefit obligation	**3,288**	**99**	**193**
Fair value of plan assets	**3,073**	**31**	**110**

(in millions)	December 31, 2021	
	Duke Energy Ohio	Duke Energy Indiana
Projected benefit obligation	$ 153	$ 284
Accumulated benefit obligation	143	275
Fair value of plan assets	67	173

Assumptions Used for Pension Benefits Accounting

The discount rate used to determine the current year pension obligation and following year's pension expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high-quality corporate bonds that generate sufficient cash flow to provide for projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

The average remaining service period for participants in active plans and life expectancy of participants in inactive plans is 13 years for Duke Energy and Duke Energy Progress, 15 years for Duke Energy Florida and Duke Energy Ohio, 14 years for Progress Energy and Duke Energy Indiana, 12 years for Duke Energy Carolinas and nine years for Piedmont.

The following tables present the assumptions or range of assumptions used for pension benefit accounting.

	December 31,		
	2022	**2021**	**2020**
Benefit Obligations			
Discount rate	**5.60%**	2.90%	2.60%
Interest crediting rate	**4.35%**	4.00%	4.00%
Salary increase	**3.50 % – 4.00%**	3.50 % – 4.00%	3.50 % – 4.00%
Net Periodic Benefit Cost			
Discount rate	**2.90 % – 5.70%**	2.60%	3.30%
Interest crediting rate	**4.00%**	4.00%	4.00%
Salary increase	**3.50 % – 4.00%**	3.50 % – 4.00%	3.50 % – 4.00%
Expected long-term rate of return on plan assets	**6.50%**	6.50%	6.85%

Expected Benefit Payments

(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Years ending December 31,								
2023	$ 661	$ 186	$ 183	$ 99	$ 83	$ 32	$ 45	$ 19
2024	635	176	180	95	84	31	45	18
2025	629	174	183	97	85	31	44	16
2026	607	164	180	91	87	30	44	16
2027	592	156	177	89	87	29	43	15
2028-2032	2,581	628	804	372	427	135	205	71

NON-QUALIFIED PENSION PLANS

The accumulated benefit obligation, which equals the projected benefit obligation for non-qualified pension plans, was $232 million for Duke Energy, $10 million for Duke Energy Carolinas, $78 million for Progress Energy, $24 million for Duke Energy Progress, $32 million for Duke Energy Florida, $3 million for Duke Energy Ohio, $2 million for Duke Energy Indiana and $3 million for Piedmont as of December 31, 2022.

Employer contributions, which equal benefits paid for non-qualified pension plans, were $24 million for Duke Energy, $1 million for Duke Energy Carolinas, $10 million for Progress Energy, $3 million for Duke Energy Progress and $4 million for Duke Energy Florida for the year ended December 31, 2022. Employer contributions were not material for Duke Energy Ohio, Duke Energy Indiana or Piedmont for the year ended December 31, 2022.

Net periodic pension costs for non-qualified pension plans were not material for the years ended December 31, 2022, 2021 or 2020.

OTHER POST-RETIREMENT BENEFIT PLANS

Duke Energy provides, and the Subsidiary Registrants participate in, some health care and life insurance benefits for retired employees on a contributory and non-contributory basis. Employees are eligible for these benefits if they have met age and service requirements at retirement, as defined in the plans. The health care benefits include medical, dental, vision and prescription drug coverage and are subject to certain limitations, such as deductibles and copayments.

Duke Energy did not make any pre-funding contributions to its other post-retirement benefit plans during the years ended December 31, 2022, 2021 or 2020.

Components of Net Periodic Other Post-Retirement Benefit Costs

	Year Ended December 31, 2022							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Service cost	**$ 3**	**$ 1**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**
Interest cost on accumulated post-retirement benefit obligation	**17**	**4**	**7**	**4**	**3**	**1**	**1**	**1**
Expected return on plan assets	**(10)**	**(6)**	**—**	**—**	**—**	**—**	**—**	**(2)**
Amortization of actuarial loss	**2**	**—**	**1**	**1**	**1**	**—**	**—**	**—**
Amortization of prior service credit	**(8)**	**(3)**	**(2)**	**(1)**	**(1)**	**—**	**—**	**(2)**
Net periodic post-retirement benefit costs [a][b]	**$ 4**	**$ (4)**	**$ 6**	**$ 4**	**$ 3**	**$ 1**	**$ 1**	**$ (3)**

	Year Ended December 31, 2021							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Service cost	$ 4	$ 1	$ 1	$ —	$ —	$ —	$ 1	$ —
Interest cost on accumulated post-retirement benefit obligation	18	4	7	4	3	1	1	1
Expected return on plan assets	(11)	(7)	—	—	—	—	—	(2)
Amortization of actuarial loss	2	—	1	—	1	—	4	—
Amortization of prior service credit	(13)	(4)	(2)	(1)	(1)	(1)	(1)	(2)
Net periodic post-retirement benefit costs[a][b]	$ —	$ (6)	$ 7	$ 3	$ 3	$ —	$ 5	$ (3)

	Year Ended December 31, 2020							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Service cost	$ 4	$ 1	$ 1	$ —	$ —	$ —	$ 1	$ —
Interest cost on accumulated post-retirement benefit obligation	23	5	10	5	4	1	2	1
Expected return on plan assets	(13)	(8)	—	—	—	—	—	(2)
Amortization of actuarial loss	2	—	1	—	1	—	4	—
Amortization of prior service credit	(14)	(4)	(3)	(1)	(2)	(1)	(1)	(2)
Net periodic post-retirement benefit costs[a][b]	$ 2	$ (6)	$ 9	$ 4	$ 3	$ —	$ 6	$ (3)

(a) Duke Energy amounts exclude $4 million, $5 million and $6 million for the years ended December 2022, 2021 and 2020, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

(b) Duke Energy Ohio amounts exclude $1 million, $1 million and $1 million for the years ended December 2022, 2021 and 2020, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

Amounts Recognized in Accumulated Other Comprehensive Income and Regulatory Assets and Liabilities

	Year Ended December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net (decrease) increase	$ (79)	$ —	$ (80)	$ (45)	$ (36)	$ —	$ (3)	$ —
Regulatory liabilities, net increase (decrease)	$ 27	$ —	$ —	$ —	$ —	$ —	$ 19	$ (5)
Accumulated other comprehensive (income) loss								
Amortization of prior year actuarial gain	$ 1	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Net amount recognized in accumulated other comprehensive income	$ 1	$ —	$ —	$ —	$ —	$ —	$ —	$ —

	Year Ended December 31, 2021							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net (decrease) increase	$ (15)	$ —	$ (18)	$ (9)	$ (9)	$ 4	$ (4)	$ —
Regulatory liabilities, net increase	$ 23	$ 12	$ —	$ —	$ —	$ 4	$ 1	$ 2
Accumulated other comprehensive (income) loss								
Amortization of prior year actuarial gain	$ (1)	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Net amount recognized in accumulated other comprehensive income	$ (1)	$ —	$ —	$ —	$ —	$ —	$ —	$ —

Reconciliation of Funded Status to Accrued Other Post-Retirement Benefit Costs

	Year Ended December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Accumulated post-retirement benefit obligation at prior measurement date	$ 625	$ 149	$ 263	$ 147	$ 112	$ 25	$ 54	$ 27
Service cost	3	1	—	—	—	—	—	—
Interest cost	17	4	7	4	3	1	1	1
Plan participants' contributions	11	2	4	2	2	1	1	—
Actuarial gains	(80)	(17)	(43)	(27)	(16)	(3)	(1)	(5)
Plan amendments	(71)	(11)	(37)	(18)	(19)	—	(17)	—
Benefits paid	(68)	(16)	(26)	(13)	(13)	(4)	(8)	(2)
Accumulated post-retirement benefit obligation at measurement date	$ 437	$ 112	$ 168	$ 95	$ 69	$ 20	$ 30	$ 21
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 211	$ 135	$ (1)	$ (2)	$ (2)	$ 9	$ 6	$ 39
Actual return on plan assets	(31)	(19)	—	—	—	(2)	—	(7)
Benefits paid	(68)	(16)	(26)	(13)	(13)	(4)	(8)	(2)
Employer contributions	39	3	23	11	11	3	4	1
Plan participants' contributions	11	2	4	2	2	1	1	—
Plan assets at measurement date	$ 162	$ 105	$ —	$ (2)	$ (2)	$ 7	$ 3	$ 31
Funded status of plan	$ (275)	$ (7)	$ (168)	$ (97)	$ (71)	$ (13)	$ (27)	$ 10

(in millions)	Year Ended December 31, 2021							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Accumulated post-retirement benefit obligation at prior measurement date	$ 709	$ 174	$ 299	$ 166	$ 130	$ 27	$ 61	$ 30
Service cost	4	1	1	—	—	—	1	—
Interest cost	18	4	7	4	3	1	1	1
Plan participants' contributions	14	3	5	3	2	1	2	—
Actuarial gains	(47)	(14)	(20)	(10)	(10)	(1)	(2)	(2)
Benefits paid	(73)	(19)	(29)	(16)	(13)	(3)	(9)	(2)
Accumulated post-retirement benefit obligation at measurement date	$ 625	$ 149	$ 263	$ 147	$ 112	$ 25	$ 54	$ 27
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 237	$ 139	$ (1)	$ (2)	$ (1)	$ 9	$ 7	$ 37
Actual return on plan assets	15	9	—	—	—	1	—	3
Benefits paid	(73)	(19)	(29)	(16)	(13)	(3)	(9)	(2)
Employer contributions	18	3	24	13	10	1	6	1
Plan participants' contributions	14	3	5	3	2	1	2	—
Plan assets at measurement date	$ 211	$ 135	$ (1)	$ (2)	$ (2)	$ 9	$ 6	$ 39
Funded status of plan	$ (414)	$ (14)	$ (264)	$ (149)	$ (114)	$ (16)	$ (48)	$ 12

Amounts Recognized in the Consolidated Balance Sheets

(in millions)	December 31, 2022							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Prefunded post-retirement benefit	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ 1**	**$ —**	**$ 10**
Current post-retirement liability[a]	**9**	**—**	**5**	**3**	**2**	**2**	**—**	**—**
Noncurrent post-retirement liability[b]	**266**	**7**	**163**	**94**	**69**	**12**	**27**	**—**
Net liability (asset) recognized	**$ 275**	**$ 7**	**$ 168**	**$ 97**	**$ 71**	**$ 13**	**$ 27**	**$ (10)**
Regulatory assets	**$ 50**	**$ —**	**$ 46**	**$ 34**	**$ 11**	**$ 4**	**$ 25**	**$ —**
Regulatory liabilities	**$ 189**	**$ 44**	**$ —**	**$ —**	**$ —**	**$ 21**	**$ 82**	**$ —**
Accumulated other comprehensive (income) loss								
Deferred income tax expense	**$ 3**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**
Prior service credit	**(1)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Net actuarial gain	**(13)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Net amounts recognized in accumulated other comprehensive income	**$ (11)**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
	December 31, 2021							
Prefunded post-retirement benefit	$ 12	$ —	$ —	$ —	$ —	$ 1	$ —	$ 12
Current post-retirement liability[a]	9	—	5	3	2	1	—	—
Noncurrent post-retirement liability[b]	417	14	259	146	112	16	48	—
Net liability (asset) recognized	$ 414	$ 14	$ 264	$ 149	$ 114	$ 16	$ 48	$ (12)
Regulatory assets	$ 129	$ —	$ 126	$ 79	$ 47	$ 4	$ 28	$ —
Regulatory liabilities	$ 162	$ 44	$ —	$ —	$ —	$ 21	$ 63	$ 5
Accumulated other comprehensive (income) loss								
Deferred income tax expense	$ 3	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Prior service credit	(1)	—	—	—	—	—	—	—
Net actuarial gain	(14)	—	—	—	—	—	—	—
Net amounts recognized in accumulated other comprehensive income	$ (12)	$ —	$ —	$ —	$ —	$ —	$ —	$ —

(a) Included in Other within Current Liabilities on the Consolidated Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Consolidated Balance Sheets.

Assumptions Used for Other Post-Retirement Benefits Accounting

The discount rate used to determine the current year other post-retirement benefits obligation and following year's other post-retirement benefits expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high-quality corporate bonds that generate sufficient cash flow to provide for projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

The average remaining service period of active covered employees is seven years for Duke Energy and Duke Energy Florida, six years for Duke Energy Carolinas, Duke Energy Ohio, Duke Energy Indiana and Piedmont and five years for Progress Energy and Duke Energy Progress.

The following tables present the assumptions used for other post-retirement benefits accounting.

	December 31, 2022	December 31, 2021	December 31, 2020
Benefit Obligations			
Discount rate	**5.60 %**	2.90 %	2.60 %
Net Periodic Benefit Cost			
Discount rate	**2.90 %**	2.60 %	3.30 %
Expected long-term rate of return on plan assets	**6.50 %**	6.50 %	6.85 %

Assumed Health Care Cost Trend Rate

	December 31, 2022	December 31, 2021
Health care cost trend rate assumed for next year	**6.50 %**	6.25 %
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	**4.75 %**	4.75 %
Year that rate reaches ultimate trend	**2030-2032**	2028

Expected Benefit Payments

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Years ending December 31,								
2023	$ 68	$ 16	$ 25	$ 14	$ 11	$ 3	$ 7	$ 2
2024	49	13	18	10	7	3	4	2
2025	45	12	16	9	7	2	3	2
2026	41	11	15	9	6	2	3	2
2027	38	10	14	8	6	2	3	2
2028-2032	158	41	61	36	25	8	9	9

PLAN ASSETS

Description and Allocations

Duke Energy Corporation Master Retirement Trust

Assets for both the qualified pension and other post-retirement benefits are maintained in the Duke Energy Corporation Master Retirement Trust. Approximately 98% of the Duke Energy Corporation Master Retirement Trust assets were allocated to qualified pension plans and approximately 2% were allocated to other post-retirement plans (comprised of 401(h) accounts), as of December 31, 2022, and 2021. The investment objective of the Duke Energy Corporation Master Retirement Trust is to invest in a diverse portfolio of assets that is expected to generate positive surplus return over time (i.e., asset growth greater than liability growth) subject to a prudent level of portfolio risk, for the purpose of enhancing the security of benefits for plan participants.

As of December 31, 2022, Duke Energy assumes qualified pension and other post-retirement plan assets will generate a long-term rate of return of 8.25% for the RCBP pension and RCBP 401(h) account assets and 6.5% for the DELPP pension and DELPP 401(h) account assets. The expected long-term rate of return was developed using a weighted average calculation of expected returns based primarily on future expected returns across asset classes considering the use of active asset managers, where applicable. The asset allocation targets were set after considering the investment objective and the risk profile. Equity securities are held for their higher expected returns. Debt securities are primarily held to hedge the qualified pension plan. Return seeking debt securities, hedge funds and other global securities are held for diversification. Investments within asset classes are diversified to achieve broad market participation and reduce the impact of individual managers or investments.

Effective January 1, 2023, the target asset allocation for the RCBP assets is 35% liability hedging and 65% return-seeking assets and the target asset allocation for the DELPP assets is 80% liability hedging assets and 20% return-seeking assets. Duke Energy periodically reviews its asset allocation targets, and over time, as the funded status of the benefit plans increase, the level of asset risk relative to plan liabilities may be reduced to better manage Duke Energy's benefit plan liabilities and reduce funded status volatility.

The Duke Energy Corporation Master Retirement Trust is authorized to engage in the lending of certain plan assets. Securities lending is an investment management enhancement that utilizes certain existing securities of the Duke Energy Corporation Master Retirement Trust to earn additional income. Securities lending involves the loaning of securities to approved parties. In return for the loaned securities, the Duke Energy Corporation Master Retirement Trust receives collateral in the form of cash and securities as a safeguard against possible default of any borrower on the return of the loan under terms that permit the Duke Energy Corporation Master Retirement Trust to sell the securities. The Duke Energy Corporation Master Retirement Trust mitigates credit risk associated with securities lending arrangements by monitoring the fair value of the securities loaned, with additional collateral obtained or refunded as necessary. The fair value of securities on loan was approximately $390 million and $542 million at December 31, 2022, and 2021, respectively. Cash and securities obtained as collateral exceeded the fair value of the securities loaned at December 31, 2022, and 2021, respectively. Securities lending income earned by the Duke Energy Corporation Master Retirement Trust was immaterial for the years ended December 31, 2022, 2021 and 2020, respectively.

Qualified pension and other post-retirement benefits for the Subsidiary Registrants are derived from the Duke Energy Corporation Master Retirement Trust, as such, each are allocated their proportionate share of the assets discussed below.

The following table includes the target asset allocations by asset class at December 31, 2022, and the actual asset allocations for the RCBP assets.

	Target Allocation	Actual Allocation at December 31, 2022	Actual Allocation at December 31, 2021
Global equity securities	45 %	**49 %**	24 %
Global private equity securities	2 %	**2 %**	1 %
Debt securities	35 %	**30 %**	62 %
Return seeking debt securities	7 %	**7 %**	4 %
Hedge funds	4 %	**6 %**	3 %
Real estate and cash	7 %	**6 %**	6 %
Total	100 %	**100 %**	100 %

The following table includes the target asset allocations by asset class at December 31, 2022, and the actual asset allocations for the DELPP assets.

	Target Allocation	Actual Allocation at December 31, 2022	2021
Global equity securities	14 %	**14 %**	24 %
Global private equity securities	1 %	**— %**	1 %
Debt securities	80 %	**80 %**	62 %
Return seeking debt securities	2 %	**2 %**	4 %
Hedge funds	1 %	**2 %**	3 %
Real estate and cash	2 %	**2 %**	6 %
Total	100 %	**100 %**	**100 %**

Other post-retirement assets

Duke Energy's other post-retirement assets are comprised of Voluntary Employees' Beneficiary Association (VEBA) trusts and 401(h) accounts held within the Duke Energy Corporation Master Retirement Trust. Duke Energy's investment objective is to achieve sufficient returns, subject to a prudent level of portfolio risk, for the purpose of promoting the security of plan benefits for participants.

The following table presents target and actual asset allocations for the VEBA trusts at December 31, 2022.

	Target Allocation	Actual Allocation at December 31, 2022	2021
U.S. equity securities	30 %	**12 %**	19 %
Non-U.S. equity securities	5 %	**5 %**	5 %
Real estate	1 %	**3 %**	3 %
Debt securities	45 %	**11 %**	18 %
Cash	19 %	**69 %**	55 %
Total	100 %	**100 %**	100 %

Fair Value Measurements

Duke Energy classifies recurring and non-recurring fair value measurements based on the fair value hierarchy as discussed in Note 17.

Valuation methods of the primary fair value measurements disclosed below are as follows:

Investments in equity securities

Investments in equity securities are typically valued at the closing price in the principal active market as of the last business day of the reporting period. Principal active markets for equity prices include published exchanges such as NASDAQ and NYSE. Foreign equity prices are translated from their trading currency using the currency exchange rate in effect at the close of the principal active market. Prices have not been adjusted to reflect after-hours market activity. The majority of investments in equity securities are valued using Level 1 measurements. When the price of an institutional commingled fund is unpublished, it is not categorized in the fair value hierarchy, even though the funds are readily available at the fair value.

Investments in corporate debt securities and U.S. government securities

Most debt investments are valued based on a calculation using interest rate curves and credit spreads applied to the terms of the debt instrument (maturity and coupon interest rate) and consider the counterparty credit rating. Most debt valuations are Level 2 measurements. If the market for a particular fixed-income security is relatively inactive or illiquid, the measurement is Level 3. U.S. Treasury debt is typically Level 2.

Investments in short-term investment funds

Investments in short-term investment funds are valued at the net asset value of units held at year end and are readily redeemable at the measurement date. Investments in short-term investment funds with published prices are valued as Level 1. Investments in short-term investment funds with unpublished prices are valued as Level 2.

Duke Energy Corporation Master Retirement Trust

The following tables provide the fair value measurement amounts for the Duke Energy Corporation Master Retirement Trust qualified pension and other post-retirement assets.

	December 31, 2022				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized[b]**
Equity securities	**$ 2,234**	**$ 2,014**	**$ 194**	**$ —**	**$ 26**
Corporate debt securities	**2,944**	**—**	**2,944**	**—**	**—**
Short-term investment funds	**193**	**1**	**192**	**—**	**—**
Partnership interests	**62**	**—**	**—**	**62**	**—**
Hedge funds	**209**	**—**	**—**	**—**	**209**
U.S. government securities	**1,254**	**—**	**1,254**	**—**	**—**
Governments bonds – foreign	**112**	**—**	**112**	**—**	**—**
Cash	**45**	**45**	**—**	**—**	**—**
Government and commercial mortgage backed securities	**6**	**—**	**6**	**—**	**—**
Net pending transactions and other investments	**14**	**5**	**9**	**—**	**—**
Total assets[a]	**$ 7,073**	**$ 2,065**	**$ 4,711**	**$ 62**	**$ 235**

(a) Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont were allocated approximately 27%, 33%, 15%, 18%, 5%, 7% and 3%, respectively, of the Duke Energy Corporation Master Retirement Trust at December 31, 2022. Accordingly, all amounts included in the table above are allocable to the Subsidiary Registrants using these percentages.

(b) Certain investments that are measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy.

	December 31, 2021				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized[b]**
Equity securities	$ 2,575	$ 2,547	$ —	$ —	$ 28
Corporate debt securities	4,189	—	4,189	—	—
Short-term investment funds	382	272	110	—	—
Partnership interests	95	—	—	95	—
Hedge funds	216	—	—	—	216
U.S. government securities	1,618	—	1,618	—	—
Governments bonds – foreign	78	—	78	—	—
Cash	144	144	—	—	—
Government and commercial mortgage backed securities	2	—	2	—	—
Net pending transactions and other investments	53	12	41	—	—
Total assets[a]	$ 9,352	$ 2,975	$ 6,038	$ 95	$ 244

(a) Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont were allocated approximately 26%, 32%, 15%, 17%, 5%, 7% and 4%, respectively, of the Duke Energy Corporation Master Retirement Trust at December 31, 2021. Accordingly, all amounts included in the table above are allocable to the Subsidiary Registrants using these percentages.

(b) Certain investments that are measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy.

The following table provides a reconciliation of beginning and ending balances of Duke Energy Corporation Master Retirement Trust qualified pension and other post-retirement assets at fair value on a recurring basis where the determination of fair value includes significant unobservable inputs (Level 3).

(in millions)	**2022**	**2021**
Balance at January 1	**$ 95**	$ —
Sales	**(18)**	—
Total gains and other, net	**(8)**	—
Transfer of Level 3 assets from other classifications	**(7)**	95
Balance at December 31	**$ 62**	$ 95

Other post-retirement assets

The following tables provide the fair value measurement amounts for VEBA trust assets.

	December 31, 2022	
(in millions)	**Total Fair Value**	**Level 2**
Cash and cash equivalents	**$ 11**	**$ 11**
Real estate	**2**	**2**
Equity securities	**12**	**12**
Debt securities	**8**	**8**
Total assets	**$ 33**	**$ 33**

	December 31, 2021	
(in millions)	**Total Fair Value**	**Level 2**
Cash and cash equivalents	$ 14	$ 14
Real estate	2	2
Equity securities	18	18
Debt securities	11	11
Total assets	$ 45	$ 45

EMPLOYEE SAVINGS PLANS

Retirement Savings Plan

Duke Energy Corporation sponsors, and the Subsidiary Registrants participate in, employee savings plans that cover substantially all U.S. employees. Most employees participate in a matching contribution formula where Duke Energy provides a matching contribution generally equal to 100% of employee before-tax and Roth 401(k) contributions of up to 6% of eligible pay per pay period. Dividends on Duke Energy shares held by the savings plans are charged to retained earnings when declared and shares held in the plans are considered outstanding in the calculation of basic and diluted EPS.

For new and rehired employees who are not eligible to participate in Duke Energy's defined benefit plans, an additional employer contribution of 4% of eligible pay per pay period, which is subject to a three-year vesting schedule, is provided to the employee's savings plan account. Certain Piedmont employees whose participation in a prior Piedmont defined benefit plan (that was frozen as of December 31, 2017) are eligible for employer transition credit contributions of 3% to 5% of eligible pay per period, for each pay period during the three-year period ending December 31, 2020.

The following table includes pretax employer matching contributions made by Duke Energy and expensed by the Subsidiary Registrants.

(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Years ended December 31,								
2022	**$ 246**	**$ 76**	**$ 65**	**$ 43**	**$ 22**	**$ 6**	**$ 12**	**$ 13**
2021	229	70	60	39	21	5	12	11
2020	213	67	57	38	19	5	11	13

24. INCOME TAXES

Inflation Reduction Act

On August 16, 2022, the IRA was signed into law. Among other provisions, the IRA implemented a new 15% corporate alternative minimum tax based on GAAP net income, with certain adjustments as defined by the IRA, and clean energy-related provisions. The IRA's clean energy provisions include, among other provisions, the extension and modification of existing investment and PTCs for projects placed in service through 2024 and introduces new technology-neutral clean energy related credits beginning in 2025. In addition, the IRA created a new, zero-emission nuclear power PTC and a clean hydrogen PTC.

Duke Energy has preliminarily reviewed the provisions of the IRA and has determined there were no material impacts on the results of operations, financial position, or cash flows in the periods presented for the Duke Energy Registrants as a result of the IRA being signed into law. Based on the preliminary review of the IRA provisions, future annual cash flow impacts related to the energy credits could be material to the Duke Energy Registrants. However, the majority of Duke Energy's operations are regulated and the FERC and state utility commissions will determine the regulatory treatment. We anticipate the Subsidiary Registrants will defer and expect to pass along the net financial impact associated with the IRA to customers over time. See Note 4 for further details on the IRA as it relates to Duke Energy Florida. Duke Energy will continue to assess the IRA as new information and anticipated guidance from the U.S. Department of the Treasury becomes available.

North Carolina's 2021 Appropriations Act

On November 18, 2021, North Carolina Senate Bill 105 (SB 105) was signed into law. Starting with tax year 2025, SB 105 begins phasing out the North Carolina corporate income tax rate over five years, from a statutory rate of 2.5% to zero. Duke Energy recorded a net reduction of approximately $490 million to its North Carolina deferred tax liability in the fourth quarter of 2021. The majority of this deferred tax liability reduction was offset by recording a regulatory liability pending NCUC determination of the disposition of the amounts related to Duke Energy Carolinas, Duke Energy Progress and Piedmont. In addition, Duke Energy recorded a net reduction of North Carolina consolidating deferred tax assets of approximately $25 million to deferred state income tax expense in the fourth quarter of 2021. North Carolina SB 105 did not have a significant impact on the financial position, results of operation, or cash flows of Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress or Piedmont.

Consolidated Appropriations Act

On December 27, 2020, the Consolidated Appropriations Act (CAA) was signed into law. In addition to the CAA providing funding for government operations, it also provided tax provisions to assist with COVID-19 relief, including extending certain expiring tax provisions. The company has reviewed the provisions of the CAA and has determined that there are no material impacts on the financial statements as a result of the CAA being signed into law.

CARES Act

On March 27, 2020, the CARES Act was enacted. The CARES Act was an emergency economic stimulus package in response to the COVID-19 pandemic. Among other provisions, the CARES Act accelerated the remaining AMT credit refund allowances resulting in taxpayers being able to immediately claim a refund in full for any AMT credit carryforwards and provided for the deferral of certain 2020 payroll taxes. In the third quarter of 2020, Duke Energy received $572 million related to these AMT credit carryforwards and $19 million of interest income. In addition, the company deferred approximately $117 million of payroll taxes, of which, 50% were paid by December 31, 2021, with the remaining 50% payable by December 31, 2022. The other provisions within the CARES Act did not materially impact Duke Energy's income tax accounting.

Income Tax Expense

Components of Income Tax Expense

Tax benefit from discontinued operations, in the following tables, includes income tax benefits related to the Commercial Renewables Disposal Groups. See Note 2 for further details.

	Year Ended December 31, 2022							
ons)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
income taxes								
$	$ 1	$ (71)	$ (13)	$ 37	$ (37)	$ (2)	$ 38	32
	(8)	(13)	(3)	—	(23)	1	2	2
	4	—	—	—	—	—	—	—
rrent income taxes	(3)	(84)	(16)	37	(60)	(1)	40	34
d income taxes								
	328	230	310	118	201	(22)	(63)	12
	(14)	(16)	59	7	84	3	—	(7)
ferred income taxes[a]	314	214	369	125	285	(19)	(63)	5
ortization	(11)	(4)	(5)	(4)	—	(1)	(1)	—
tax expense from continuing operations	300	126	348	158	225	(21)	(24)	39
efit from discontinued operations	(503)	—	—	—	—	—	—	—
come tax (benefit) expense included in Consolidated Statements of Operations $	$ (203)	$ 126	$ 348	$ 158	$ 225	$ (21)	$ (24)	39

(a) Total deferred income taxes includes the generation of NOL carryforwards and tax credit carryforwards of $550 million at Duke Energy, $97 million at Duke Energy Carolinas, $128 million at Progress Energy, $9 million at Duke Energy Progress, $111 million at Duke Energy Florida, $7 million at Duke Energy Ohio, $13 million at Duke Energy Indiana, and $12 million at Piedmont.

(in millions)	Year Ended December 31, 2021							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current income taxes								
Federal	$ (2)	$ 241	$ (15)	$ 113	$ (75)	$ (8)	$ 65	$ 23
State	1	23	(4)	8	(17)	(2)	7	3
Foreign	2	—	—	—	—	—	—	—
Total current income taxes	1	264	(19)	121	(92)	(10)	72	26
Deferred income taxes								
Federal	275	(130)	203	(16)	202	35	19	17
State	—	(79)	47	(26)	77	5	16	(13)
Total deferred income taxes[a]	275	(209)	250	(42)	279	40	35	4
ITC amortization	(8)	(4)	(4)	(4)	—	—	—	—
Income tax expense from continuing operations	268	51	227	75	187	30	107	30
Tax benefit from discontinued operations	(76)	—	—	—	—	—	—	—
Total income tax expense included in Consolidated Statements of Operations	$ 192	$ 51	$ 227	$ 75	$ 187	$ 30	$ 107	$ 30

(a) Total deferred income taxes includes the generation of NOL carryforwards and tax credit carryforwards of $32 million at Duke Energy Carolinas, $8 million at Duke Energy Indiana, and $3 million at Piedmont. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $250 million at Duke Energy, $95 million at Progress Energy, $14 million at Duke Energy Progress, $64 million at Duke Energy Florida, and $2 million at Duke Energy Ohio.

(in millions)	Year Ended December 31, 2020							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current income taxes								
Federal	$ (281)	$ 314	$ 280	$ 181	$ 148	$ 10	$ 48	$ (27)
State	(3)	35	29	17	24	1	7	(8)
Foreign	1	—	—	—	—	—	—	—
Total current income taxes	(283)	349	309	198	172	11	55	(35)
Deferred income taxes								
Federal	222	(171)	(167)	(180)	1	30	12	60
State	(98)	(86)	(24)	(49)	25	2	17	(7)
Total deferred income taxes[a]	124	(257)	(191)	(229)	26	32	29	53
ITC amortization	(10)	(4)	(5)	(5)	—	—	—	—
Income tax (benefit) expense from continuing operations	(169)	88	113	(36)	198	43	84	18
Tax benefit from discontinued operations	(65)	—	—	—	—	—	—	—
Total income tax (benefit) expense included in Consolidated Statements of Operations	$ (234)	$ 88	$ 113	$ (36)	$ 198	$ 43	$ 84	$ 18

(a) Total deferred income taxes includes the generation of NOL carryforwards and tax credit carryforwards of $20 million at Duke Energy Carolinas, $3 million at Duke Energy Progress, $8 million at Duke Energy Indiana, and $11 million at Piedmont. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $39 million at Progress Energy, $30 million at Duke Energy Florida and $189 million at Duke Energy.

Duke Energy Income from Continuing Operations before Income Taxes

(in millions)	Years Ended December 31,		
	2022	2021	2020
Domestic	**$ 3,991**	$ 3,947	$ 907
Foreign	**87**	44	13
Income from continuing operations before income taxes	**$ 4,078**	$ 3,991	$ 920

Statutory Rate Reconciliation

The following tables present a reconciliation of income tax expense at the U.S. federal statutory tax rate to the actual tax expense from continuing operations.

	Year Ended December 31, 2022							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Income tax expense, computed at the statutory rate of 21%	**$ 856**	**$ 362**	**$ 457**	**$ 245**	**$ 238**	**$ 59**	**$ 24**	**$ 76**
State income tax, net of federal income tax effect	**(17)**	**(23)**	**44**	**6**	**48**	**3**	**2**	**(4)**
Amortization of excess deferred income tax	**(481)**	**(195)**	**(133)**	**(74)**	**(59)**	**(79)**	**(48)**	**(23)**
AFUDC equity income	**(41)**	**(20)**	**(14)**	**(11)**	**(3)**	**(1)**	**(2)**	**(2)**
AFUDC equity depreciation	**36**	**18**	**12**	**6**	**6**	**1**	**4**	**—**
Other tax credits	**(43)**	**(12)**	**(16)**	**(9)**	**(7)**	**(2)**	**(3)**	**(8)**
Other items, net	**(10)**	**(4)**	**(2)**	**(5)**	**2**	**(2)**	**(1)**	**—**
Income tax expense from continuing operations	**$ 300**	**$ 126**	**$ 348**	**$ 158**	**$ 225**	**$ (21)**	**$ (24)**	**$ 39**
Effective tax rate	**7.4 %**	**7.3 %**	**16.0 %**	**13.6 %**	**19.8 %**	**(7.5)%**	**(21.2)%**	**10.8 %**

	Year Ended December 31, 2021							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Income tax expense, computed at the statutory rate of 21%	$ 838	$ 291	$ 384	$ 224	$ 194	$ 49	$ 123	$ 71
State income tax, net of federal income tax effect	1	(44)	34	(14)	47	2	18	(8)
Amortization of excess deferred income tax	(438)	(184)	(174)	(120)	(54)	(22)	(34)	(25)
AFUDC equity income	(34)	(14)	(11)	(7)	(3)	(2)	(4)	(4)
AFUDC equity depreciation	35	18	10	5	5	2	5	—
Other tax credits	(30)	(12)	(11)	(8)	(3)	(1)	(2)	(4)
Valuation allowance[(a)]	(85)	—	—	—	—	—	—	—
Other items, net	(19)	(4)	(5)	(5)	1	2	1	—
Income tax expense from continuing operations	$ 268	$ 51	$ 227	$ 75	$ 187	$ 30	$ 107	$ 30
Effective tax rate	6.7 %	3.7 %	12.4 %	7.0 %	20.2 %	12.8 %	18.2 %	8.8 %

(a) In the fourth quarter of 2021, the company recognized a federal capital gain in the amount of $426 million. As a result, a valuation allowance of $85 million related to a federal capital loss carryforward was released. This valuation allowance was originally recorded as a result of the 2019 sale of minority interest of certain renewable assets within the Commercial Renewables Disposal Groups.

	Year Ended December 31, 2020							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Income tax expense, computed at the statutory rate of 21%	$ 193	$ 219	$ 243	$ 80	$ 204	$ 62	$ 103	$ 61
State income tax, net of federal income tax effect	(80)	(40)	4	(25)	39	2	19	(12)
Amortization of excess deferred income tax	(276)	(82)	(118)	(68)	(49)	(20)	(36)	(21)
AFUDC equity income	(48)	(13)	(9)	(6)	(3)	(2)	(4)	(10)
AFUDC equity depreciation	103	19	10	5	5	1	4	—
Other tax credits	(37)	(13)	(16)	(14)	(2)	(1)	(3)	(2)
Tax true up	(12)	(3)	1	(5)	5	—	(1)	1
Other items, net	(12)	1	(2)	(3)	(1)	1	2	1
Income tax (benefit) expense from continuing operations	$ (169)	$ 88	$ 113	$ (36)	$ 198	$ 43	$ 84	$ 18
Effective tax rate	(18.4)%	8.4 %	9.7 %	(9.5) %	20.4 %	14.6 %	17.1 %	6.2 %

Valuation allowances have been established for certain state NOL carryforwards and state income tax credits that reduce deferred tax assets to an amount that will be realized on a more-likely-than-not basis. The net change in the total valuation allowance is included in state income tax, net of federal income tax effect, in the above tables.

DEFERRED TAXES

Net Deferred Income Tax Liability Components

The following tables include deferred income tax assets and liabilities related to the Commercial Renewables Disposal Groups. See Note 2 for further details.

	December 31, 2022							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Deferred credits and other liabilities	$ 348	$ 170	$ 117	$ 33	$ 83	$ 12	$ 23	$ 24
Lease obligations	405	89	263	197	65	4	15	3
Pension, post-retirement and other employee benefits	192	(1)	12	18	(10)	9	10	(2)
Progress Energy merger purchase accounting adjustments[a]	301	—	—	—	—	—	—	—
Tax credits and NOL carryforwards	4,426	444	618	167	412	20	208	37
Regulatory liabilities and deferred credits	—	—	—	—	—	3	61	—
Investments and other assets	—	—	—	—	—	3	—	—
Other	106	18	22	12	10	5	2	9
Valuation allowance	(519)	—	—	—	—	—	—	—
Total deferred income tax assets	5,259	720	1,032	427	560	56	319	71
Investments and other assets	(1,671)	(983)	(521)	(432)	(102)	—	(12)	(28)
Accelerated depreciation rates	(11,478)	(3,410)	(4,358)	(1,844)	(2,576)	(1,192)	(1,606)	(892)
Regulatory assets and deferred debits, net	(2,074)	(480)	(1,300)	(628)	(671)	—	—	(21)
Total deferred income tax liabilities	(15,223)	(4,873)	(6,179)	(2,904)	(3,349)	(1,192)	(1,618)	(941)
Net deferred income tax liabilities	$ (9,964)	$ (4,153)	$ (5,147)	$ (2,477)	$ (2,789)	$ (1,136)	$ (1,299)	$ (870)

(a) Primarily related to lease obligations and debt fair value adjustments.

The following table presents the expiration of tax credits and NOL carryforwards.

	December 31, 2022		
(in millions)	Amount	Expiration Year	
General Business Credits	$ 2,473	2027 —	2042
Federal NOL carryforwards[a] [e]	306	2024 —	Indefinite
Charitable contribution carryforwards	18	2024 —	2027
State carryforwards and credits[b] [e]	394	2023 —	Indefinite
Foreign NOL carryforwards[c]	12	2027 —	2037
Foreign Tax Credits[d]	1,223	2024 —	2028
Total tax credits and NOL carryforwards	$ 4,426		

(a) A valuation allowance of $4 million has been recorded on the Federal NOL carryforwards, as presented in the Net Deferred Income Tax Liability Components table.
(b) A valuation allowance of $109 million has been recorded on the state NOL and attribute carryforwards, as presented in the Net Deferred Income Tax Liability Components table.
(c) A valuation allowance of $12 million has been recorded on the foreign NOL carryforwards, as presented in the Net Deferred Income Tax Liability Components table.
(d) A valuation allowance of $391 million has been recorded on the foreign tax credits, as presented in the Net Deferred Income Tax Liability Components table.
(e) Indefinite carryforward for Federal NOLs, and NOLs for states that have adopted the Tax Act's NOL provisions, generated in tax years beginning after December 31, 2017.

(in millions)	December 31, 2021 Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Deferred credits and other liabilities	$ 347	$ 121	$ 101	$ 60	$ 40	$ 19	$ 7	$ 18
Lease obligations	346	91	197	121	76	4	16	4
Pension, post-retirement and other employee benefits	207	(36)	30	17	7	11	20	(8)
Progress Energy merger purchase accounting adjustments[a]	340	—	—	—	—	—	—	—
Tax credits and NOL carryforwards	3,784	349	497	160	306	13	195	29
Regulatory liabilities and deferred credits	—	11	—	—	—	16	—	6
Investments and other assets	—	—	—	—	—	5	6	—
Other	85	12	12	7	4	7	2	8
Valuation allowance	(518)	—	—	—	—	—	—	—
Total deferred income tax assets	4,591	548	837	365	433	75	246	57
Investments and other assets	(2,428)	(1,205)	(742)	(610)	(135)	—	—	(39)
Accelerated depreciation rates	(10,391)	(2,977)	(3,891)	(1,546)	(2,382)	(1,125)	(1,496)	(833)
Regulatory assets and deferred debits, net	(1,151)	—	(768)	(417)	(350)	—	(53)	—
Total deferred income tax liabilities	(13,970)	(4,182)	(5,401)	(2,573)	(2,867)	(1,125)	(1,549)	(872)
Net deferred income tax liabilities	$ (9,379)	$ (3,634)	$ (4,564)	$ (2,208)	$ (2,434)	$ (1,050)	$ (1,303)	$ (815)

(a) Primarily related to lease obligations and debt fair value adjustments.

UNRECOGNIZED TAX BENEFITS

The following tables present changes to unrecognized tax benefits.

(in millions)	Year Ended December 31, 2022 Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unrecognized tax benefits – January 1	**$ 51**	**$ 13**	**$ 15**	**$ 10**	**$ 4**	**$ 1**	**$ 2**	**$ 4**
Gross decreases – tax positions in prior periods	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Gross increases – current period tax positions	**14**	**4**	**4**	**3**	**1**	**—**	**—**	**5**
Total changes	**14**	**4**	**4**	**3**	**1**	**—**	**—**	**5**
Unrecognized tax benefits – December 31	**$ 65**	**$ 17**	**$ 19**	**$ 13**	**$ 5**	**$ 1**	**$ 2**	**$ 9**

(in millions)	Year Ended December 31, 2021 Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unrecognized tax benefits – January 1	$ 125	$ 10	$ 10	$ 6	$ 3	$ 1	$ 1	$ 1
Gross decreases – tax positions in prior periods[a]	(86)	—	—	—	—	—	—	—
Gross increases – current period tax positions	12	3	5	4	1	—	1	3
Total changes	(74)	3	5	4	1	—	1	3
Unrecognized tax benefits – December 31	$ 51	$ 13	$ 15	$ 10	$ 4	$ 1	$ 2	$ 4

(a) In the fourth quarter of 2021, the company recognized a federal capital gain in the amount of $426 million. As a result of the capital gain, a previously recorded unrecognized tax benefit related to the character of a taxable loss has been reversed. See note (a) under the Statutory Rate Reconciliation table for more details.

(in millions)	Year Ended December 31, 2020							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unrecognized tax benefits – January 1	$ 126	$ 8	$ 9	$ 6	$ 3	$ 1	$ 1	$ 4
Gross decreases – tax positions in prior periods	(2)	—	—	—	—	—	—	—
Gross increases – current period tax positions	4	2	1	—	—	—	—	—
Reduction due to lapse of statute of limitations	(3)	—	—	—	—	—	—	(3)
Total changes	(1)	2	1	—	—	—	—	(3)
Unrecognized tax benefits – December 31	$ 125	$ 10	$ 10	$ 6	$ 3	$ 1	$ 1	$ 1

The following table includes additional information regarding the Duke Energy Registrants' unrecognized tax benefits at December 31, 2022. None of Duke Energy Registrants anticipates a material increase or decrease in unrecognized tax benefits within the next 12 months.

(in millions)	December 31, 2022							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Amount that if recognized, would affect the effective tax rate or regulatory liability[(a)]	$ 59	$ 17	$ 18	$ 13	$ 5	$ 1	$ 2	$ 8

(a) The Duke Energy Registrants are unable to estimate the specific amounts that would affect the ETR versus the regulatory liability.

Duke Energy and its subsidiaries are no longer subject to federal, state, local or non-U.S. income tax examinations by tax authorities for years before 2016, aside from certain state tax attributes carried forward for utilization in future years.

25. OTHER INCOME AND EXPENSES, NET

The components of Other income and expenses, net on the Consolidated Statements of Operations are as follows.

(in millions)	Year Ended December 31, 2022							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Interest income	$ 27	$ 2	$ 24	$ 4	$ 20	$ 11	$ 15	$ 19
AFUDC equity	197	98	68	52	16	7	13	11
Post in-service equity returns	34	14	18	18	—	1	1	—
Nonoperating income, other	134	107	71	40	38	—	7	16
Other income and expense, net	$ 392	$ 221	$ 181	$ 114	$ 74	$ 19	$ 36	$ 46

(in millions)	Year Ended December 31, 2021							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Interest income	$ 13	$ 4	$ 8	$ 6	$ 2	$ 4	$ 6	$ 19
AFUDC equity	171	65	51	34	16	7	27	20
Post in-service equity returns	39	21	16	16	—	1	1	—
Nonoperating income, other	413	180	140	87	53	6	8	16
Other income and expense, net	$ 636	$ 270	$ 215	$ 143	$ 71	$ 18	$ 42	$ 55

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Interest income	$ 30	$ 4	$ 8	$ 2	$ 6	$ 4	$ 6	$ 17
AFUDC equity	154	62	42	29	12	7	23	19
Post in-service equity returns	27	17	8	8	—	1	1	—
Nonoperating income, other	240	94	71	36	35	4	7	15
Other income and expense, net	$ 451	$ 177	$ 129	$ 75	$ 53	$ 16	$ 37	$ 51

26. SUBSEQUENT EVENTS

For information on subsequent events related to dispositions, regulatory matters, commitments and contingencies, and debt and credit facilities see Notes 2, 4, 5 and 7, respectively.

27. QUARTERLY FINANCIAL DATA (UNAUDITED)

DUKE ENERGY

Quarterly EPS amounts may not sum to the full-year total due to changes in the weighted average number of common shares outstanding and rounding.

(in millions, except per share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2022					
Operating revenues	**$ 7,011**	**$ 6,564**	**$ 7,842**	**$ 7,351**	**$ 28,768**
Operating income	**1,314**	**1,448**	**2,056**	**1,194**	**6,012**
Income from continuing operations	**835**	**898**	**1,410**	**635**	**3,778**
(Loss) Income from discontinued operations, net of tax	**(15)**	**(18)**	**3**	**(1,293)**	**(1,323)**
Net income (loss)	**820**	**880**	**1,413**	**(658)**	**2,455**
Net income (loss) available to Duke Energy Corporation common stockholders	**818**	**893**	**1,383**	**(650)**	**2,444**
Earnings per share:					
Income from continuing operations available to Duke Energy Corporation common stockholders					
Basic and diluted	**$ 1.06**	**$ 1.11**	**$ 1.78**	**$ 0.80**	**$ 4.74**
Income (Loss) from discontinued operations attributable to Duke Energy Corporation common stockholders					
Basic and diluted	**$ 0.02**	**$ 0.03**	**$ 0.03**	**$ (1.66)**	**$ (1.57)**
Net income (loss) available to Duke Energy Corporation common stockholders					
Basic and diluted	**$ 1.08**	**$ 1.14**	**$ 1.81**	**$ (0.86)**	**$ 3.17**
2021					
Operating revenues	$ 6,032	$ 5,638	$ 6,834	$ 6,117	$ 24,621
Operating income	1,466	1,198	1,726	1,110	5,500
Income from continuing operations	967	723	1,333	700	3,723
Loss from discontinued operations, net of tax	(26)	(25)	(57)	(36)	(144)
Net income	941	698	1,276	664	3,579
Net income available to Duke Energy Corporation common stockholders	953	751	1,366	732	3,802
Earnings per share:					
Income from continuing operations available to Duke Energy Corporation common stockholders					
Basic and diluted	$ 1.22	$ 0.90	$ 1.69	$ 0.86	$ 4.68
Income from discontinued operations attributable to Duke Energy Corporation common stockholders					
Basic and diluted	$ 0.03	$ 0.06	$ 0.10	$ 0.07	$ 0.26
Net income available to Duke Energy Corporation common stockholders					
Basic and diluted	$ 1.25	$ 0.96	$ 1.79	$ 0.93	$ 4.94

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed by the Duke Energy Registrants in the reports they file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified by the SEC rules and forms.

Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by the Duke Energy Registrants in the reports they file or submit under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, the Duke Energy Registrants have evaluated the effectiveness of their disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2022, and, based upon this evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these controls and procedures are effective in providing reasonable assurance of compliance.

Changes in Internal Control Over Financial Reporting

Under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, the Duke Energy Registrants have evaluated changes in internal control over financial reporting (as such term is defined in Rules 13a-15 and 15d-15 under the Exchange Act) that occurred during the fiscal quarter ended December 31, 2022, and have concluded no change has materially affected, or is reasonably likely to materially affect, internal controls over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

The Duke Energy Registrants' management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). The Duke Energy Registrants' internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes, in accordance with GAAP. Due to inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of the internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies and procedures may deteriorate.

The Duke Energy Registrants' management, including their Chief Executive Officer and Chief Financial Officer, has conducted an evaluation of the effectiveness of their internal control over financial reporting as of December 31, 2022, based on the framework in the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management concluded that its internal controls over financial reporting were effective as of December 31, 2022.

Deloitte & Touche LLP, Duke Energy's independent registered public accounting firm, has issued an attestation report on the effectiveness of Duke Energy's internal control over financial reporting, which is included herein. This report is not applicable to the Subsidiary Registrants as these companies are not accelerated or large accelerated filers.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Duke Energy Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Duke Energy Corporation and subsidiaries (the "Company") as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated February 27, 2023, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Annual Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte and Touche LLP

Charlotte, North Carolina
February 27, 2023

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding Duke Energy's Executive Officers is set forth in Part I, Item 1, "Business – Information about Our Executive Officers," in this Annual Report. Duke Energy will provide information that is responsive to the remainder of this Item 10 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 10 by reference.

ITEM 11. EXECUTIVE COMPENSATION

Duke Energy will provide information that is responsive to this Item 11 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 11 by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plan Information

The following table shows information as of December 31, 2022, about securities to be issued upon exercise of outstanding options, warrants and rights under Duke Energy's equity compensation plans, along with the weighted average exercise price of the outstanding options, warrants and rights and the number of securities remaining available for future issuance under the plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)[1]	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	3,385,638 (2)	n/a	2,410,473 (3)
Equity compensation plans not approved by security holders	109,690 (4)	n/a	n/a (5)
Total	3,495,328	n/a	2,410,473

(1) As of December 31, 2022, no options were outstanding under equity compensation plans.
(2) Includes RSUs and performance shares (assuming the maximum payout level) granted under the Duke Energy Corporation 2015 Long-Term Incentive Plan, as well as shares that could be payable with respect to certain compensation deferred under the Duke Energy Corporation Executive Savings Plan (Executive Savings Plan) or the Directors' Savings Plan.
(3) Includes shares remaining available for issuance pursuant to stock awards under the Duke Energy Corporation 2015 Long-Term Incentive Plan.
(4) Includes shares that could be payable with respect to certain compensation deferred under the Executive Savings Plan or the Duke Energy Corporation Directors' Savings Plan (Directors' Savings Plan), each of which is a non-qualified deferred compensation plan described in more detail below.
(5) The number of shares remaining available for future issuance under equity compensation plans not approved by security holders cannot be determined because it is based on the amount of future voluntary deferrals, if any, under the Executive Savings Plan and the Directors' Savings Plan.

Under the Executive Savings Plan, participants can elect to defer a portion of their base salary and short-term incentive compensation. Participants also receive a company matching contribution in excess of the contribution limits prescribed by the Internal Revenue Code under the Duke Energy Retirement Savings Plan, which is the 401(k) plan in which employees are generally eligible to participate. Eligible participants may also earn pay credits based on age and length of service on eligible earnings that exceed limits prescribed by the Internal Revenue Code.

In general, payments are made following termination of employment or death in the form of a lump sum or installments, as selected by the participant. Participants may direct the deemed investment of their accounts (with certain exceptions) among investment options available under the Duke Energy Retirement Savings Plan, including the Duke Energy Common Stock Fund. Participants may change their investment elections on a daily basis. Deferrals of equity awards are credited with earnings and losses based on the performance of the Duke Energy Common Stock Fund. The benefits payable under the plan are unfunded and subject to the claims of Duke Energy's creditors.

Under the Directors' Savings Plan, outside directors may elect to defer all or a portion of their annual compensation, generally consisting of retainers. Deferred amounts are credited to an unfunded account, the balance of which is adjusted for the performance of phantom investment options, including the Duke Energy Common Stock Fund, as elected by the director, and generally are paid when the director terminates his or her service from the Board of Directors.

Duke Energy will provide additional information that is responsive to this Item 12 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 12 by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Duke Energy will provide information that is responsive to this Item 13 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 13 by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Deloitte provided professional services to the Duke Energy Registrants. The following tables present the Deloitte fees for services rendered to the Duke Energy Registrants during 2022 and 2021.

	Year Ended December 31, 2022								
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Types of Fees								
Audit Fees[a]	**$ 13.7**	**$ 3.2**	**$ 4.9**	**$ 2.5**	**$ 2.4**	**$ 2.0**	**$ 1.8**	**$ 1.3**
Audit-Related Fees[b]	**1.7**	**0.1**	**0.2**	**0.1**	**0.1**	**0.2**	**—**	**—**
Total Fees	**$ 15.4**	**$ 3.3**	**$ 5.1**	**$ 2.6**	**$ 2.5**	**$ 2.2**	**$ 1.8**	**$ 1.3**

	Year Ended December 31, 2021							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Types of Fees								
Audit Fees[a]	$ 13.2	$ 3.1	$ 4.7	$ 2.4	$ 2.3	$ 1.9	$ 1.7	$ 1.3
Audit-Related Fees[b]	1.5	0.1	0.2	0.1	0.1	0.2	—	—
Total Fees	$ 14.7	$ 3.2	$ 4.9	$ 2.5	$ 2.4	$ 2.1	$ 1.7	$ 1.3

(a) Audit Fees are fees billed, or expected to be billed, by Deloitte for professional services for the financial statement audits, audit of the Duke Energy Registrants' financial statements included in Duke Energy's Annual Report on Form 10-K, reviews of financial statements included in Quarterly Reports on Form 10-Q, and services associated with securities filings such as comfort letters and consents.

(b) Audit-Related Fees are fees billed, or expected to be billed, by Deloitte for assurance and related services that are reasonably related to the performance of an audit or review of financial statements, including statutory reporting requirements.

To safeguard the continued independence of the independent auditor, the Audit Committee of Duke Energy adopted a policy that all services provided by the independent auditor require preapproval by the Audit Committee. Pursuant to the policy, certain audit services, audit-related services, tax services and other services have been specifically preapproved up to fee limits. In the event the cost of any of these services may exceed the fee limits, the Audit Committee must specifically approve the service. All services performed in 2022 and 2021 by the independent accountant were approved by the Audit Committee pursuant to the preapproval policy.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Consolidated Financial Statements and Supplemental Schedules included in Part II of this Annual Report are as follows:

Duke Energy Corporation
- Consolidated Financial Statements
- Consolidated Statements of Operations for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Balance Sheets as of December 31, 2022, and 2021
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm
- All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Duke Energy Carolinas, LLC
- Consolidated Financial Statements
- Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Balance Sheets as of December 31, 2022, and 2021
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm
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Progress Energy, Inc.
- Consolidated Financial Statements
- Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Balance Sheets as of December 31, 2022, and 2021
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm
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Duke Energy Progress, LLC
- Consolidated Financial Statements
- Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Balance Sheets as of December 31, 2022, and 2021
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm
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Duke Energy Florida, LLC
- Consolidated Financial Statements
- Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Balance Sheets as of December 31, 2022, and 2021
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm
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Duke Energy Ohio, Inc.
- Consolidated Financial Statements
- Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Balance Sheets as of December 31, 2022, and 2021
- Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
- Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm
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Duke Energy Indiana, LLC

Consolidated Financial Statements
Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
Consolidated Balance Sheets as of December 31, 2022, and 2021
Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Piedmont Natural Gas Company, Inc.

Consolidated Financial Statements
Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020
Consolidated Balance Sheets as of December 31, 2022, and 2021
Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2022, 2021 and 2020
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

EXHIBIT INDEX

Exhibits filed herewith are designated by an asterisk (*). All exhibits not so designated are incorporated by reference to a prior filing, as indicated. Items constituting management contracts or compensatory plans or arrangements are designated by a double asterisk (**). The Company agrees to furnish upon request to the commission a copy of any omitted schedules or exhibits upon request on all items designated by a triple asterisk (***).

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2.1	Agreement and Plan of Merger between Duke Energy Corporation, Diamond Acquisition Corporation and Progress Energy, Inc., dated as of January 8, 2011 (incorporated by reference to Exhibit 2.1 to Duke Energy Corporation's Current Report on Form 8-K filed on January 11, 2011, File No. 1-32853).	X		X					
2.2	Agreement and Plan of Merger between Piedmont Natural Gas Company, Duke Energy Corporation and Forest Subsidiary, Inc. (incorporated by reference to Exhibit 2.1 to Duke Energy Corporation's Current Report on Form 8-K filed on October 26, 2015, File No. 1-32853).	X							X
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Duke Energy Corporation's Current Report on Form 8-K filed on May 20, 2014, File No. 1-32853).	X							
3.2	Amended and Restated By-Laws of Duke Energy Corporation (incorporated by reference to Exhibit 3.1 to Duke Energy Corporation's Current Report on Form 8-K filed on January 4, 2016, File No. 1-32853).	X							
3.2.1	Amended and Restated By-Laws of Duke Energy Corporation, effective as of September 22, 2022, (incorporated by reference to Exhibit 3.1 to Duke Energy Corporation's Current Report on Form 8-K filed on September 28, 2022, File No. 1-32853).	X							
3.3	Articles of Organization including Articles of Conversion (incorporated by reference to Exhibit 3.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on April 7, 2006, File No. 1-4928).		X						
3.3.1	Amended Articles of Organization, effective October 1, 2006 (incorporated by reference to Exhibit 3.1 to Duke Energy Carolinas, LLC's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed on November 13, 2006, File No. 1-4928).		X						
3.4	Amended Articles of Incorporation of Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company), effective October 23, 1996, (incorporated by reference to Exhibit 3(a) to registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996, filed on November 13, 1996, File No. 1-1232).						X		
3.4.1	Amended Articles of Incorporation, effective September 19, 2006 (incorporated by reference to Exhibit 3.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed on November 17, 2006, File No. 1-1232).						X		
3.5	Certificate of Conversion of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.1	Articles of Entity Conversion of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.2	Plan of Entity Conversion of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.3 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.3	Articles of Organization of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.4 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.4	Amended and Restated Limited Liability Company Operating Agreement of Duke Energy Indiana, LLC, dated August 25, 2021 (incorporated by reference to Exhibit 3.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, filed on November 4, 2021, File No. 1-3543).							X	
3.6	Limited Liability Company Operating Agreement of Duke Energy Carolinas, LLC (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on April 7, 2006, File No. 1-4928).		X						
3.7	Regulations of Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company), effective July 23, 2003 (incorporated by reference to Exhibit 3.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, filed on August 13, 2003, File No. 1-1232).						X		
3.8	Articles of Organization including Articles of Conversion for Duke Energy Progress, LLC (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3382).				X				
3.8.1	Plan of Conversion of Duke Energy Progress, Inc. (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3382).				X				
3.8.2	Limited Liability Company Operating Agreement of Duke Energy Progress, LLC (incorporated by reference to Exhibit 3.3 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3382).				X				
3.9	Amended and Restated Articles of Incorporation of Progress Energy, Inc. (formerly CP&L Energy, Inc.), effective June 15, 2000 (incorporated by reference to Exhibit 3(a)(1) to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, filed on August 14, 2000, File No. 1-3382).			X					
3.9.1	Articles of Amendment to the Amended and Restated Articles of Incorporation of Progress Energy, Inc. (formerly			X					

	CP&L Energy, Inc.), effective December 4, 2000 (incorporated by reference to Exhibit 3(b)(1) to registrant's Annual Report on Form 10-K for the year ended December 31, 2001, filed on March 28, 2002, File No. 1-3382).										
3.9.2	Articles of Amendment to the Amended and Restated Articles of Incorporation of Progress Energy, Inc. (formerly CP&L Energy, Inc.), effective May 10, 2006 (incorporated by reference to Exhibit 3(a) to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-15929).				X						
3.9.3	By-Laws of Progress Energy, Inc. (formerly CP&L Energy, Inc.), effective May 10, 2006 (incorporated by reference to Exhibit 3(b) to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-15929).				X						
3.10	Articles of Conversion for Duke Energy Florida, LLC (incorporated by reference to Exhibit 3.4 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).						X				
3.10.1	Articles of Organization for Duke Energy Florida, LLC (incorporated by reference to Exhibit 3.5 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).						X				
3.10.2	Plan of Conversion of Duke Energy Florida, Inc. (incorporated by reference to Exhibit 3.6 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).						X				
3.10.3	Limited Liability Company Operating Agreement of Duke Energy Florida, LLC (incorporated by reference to Exhibit 3.7 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).						X				
3.11	Amended and Restated Articles of Incorporation of Piedmont Natural Gas Company, Inc., dated as of October 3, 2016 (incorporated by reference to Exhibit 3.1 to registrant's Annual Report on Form 10-K for the fiscal year ended October 31, 2016, filed on December 22, 2016, File No. 001-06196).										X
3.11.1	Bylaws of Piedmont Natural Gas Company, Inc., as amended and restated effective October 3, 2016 (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on October 3, 2016, File No. 1-06196).										X
3.12	Certificate of Designations with respect to Series A Preferred Stock, dated March 28, 2019 (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on March 29, 2019, File No. 1-32853).	X									
3.13	Certificate of Designation with respect to the Series B Preferred Stock, dated September 11, 2019 (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on September 12, 2019, File No. 1-32853).	X									
3.14	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896,under the headings "Description of Common Stock," "Description of Preferred Stock," "Description of Depositary Shares," "Description of Stock Purchase Contracts and Stock Purchase Units," and "Description of Debt Securities").	X									
3.15	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-01, under the heading "Description of Debt Securities").										X
3.16	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-02, under the headings "Description of First Mortgage Bonds" and "Description of Debt Securities").					X					
3.17	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-03, under the headings "Description of First Mortgage Bonds" and "Description of Unsecured Debt Securities").							X			
3.18	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-04, under the headings "Description of First Mortgage Bonds" and "Description of Unsecured Debt Securities").								X		
3.19	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-05, under the headings "Description of First Mortgage Bonds" and "Description of Debt Securities").						X				
3.20	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-06, under the headings "Description of First and Refunding Mortgage Bonds," "Description of Senior Notes," and "Description of Subordinate Notes").		X								
4.1	Indenture between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of June 3, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 16, 2008, File No. 1-32853).	X									
4.1.1	First Supplemental Indenture, dated as of June 16, 2008 (incorporated by reference to Exhibit 4.2 to Duke Energy Corporation's Current Report on Form 8-K filed on June 16, 2008, File No. 1-32853).	X									
4.1.2	Second Supplemental Indenture, dated as of January 26, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on January 26, 2009, File No. 1-32853).	X									
4.1.3	Third Supplemental Indenture, dated as of August 28, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on August 28, 2009, File No. 1-32853).	X									
4.1.4	Fourth Supplemental Indenture, dated as of March 25, 2010 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on March	X									

	25, 2010, File No. 1-32853).	
4.1.5	Fifth Supplemental Indenture, dated as of August 25, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on August 25, 2011, File No. 1-32853).	X
4.1.6	Sixth Supplemental Indenture, dated as of November 17, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on November 17, 2011, File No. 1-32853).	X
4.1.7	Seventh Supplemental Indenture, dated as of August 16, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on August 16, 2012, File No. 1-32853).	X
4.1.8	Eighth Supplemental Indenture, dated as of January 14, 2013 (incorporated by reference to Exhibit 2 to the Registration Statement on Form 8-A of Duke Energy Corporation filed on January 14, 2013, File No. 1-32853).	X
4.1.9	Ninth Supplemental Indenture, dated as of June 13, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 13, 2013, File No. 1-32853).	X
4.1.10	Tenth Supplemental Indenture, dated as of October 11, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on October 11, 2013, File No. 1-32853).	X
4.1.11	Eleventh Supplemental Indenture, dated as of April 4, 2014 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on April 4, 2014, File No. 1-32853).	X
4.1.12	Twelfth Supplemental Indenture, dated as of November 19, 2015 (incorporated by reference to Exhibit 4.2 to Duke Energy Corporation's Current Report on Form 8-K filed on November 19, 2015, File No. 1-32853).	X
4.1.13	Thirteenth Supplemental Indenture, dated as of April 18, 2016, to the indenture dated as of June 3, 2008, between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed on May 5, 2016, File No. 1-32853).	X
4.1.14	Fourteenth Supplemental Indenture, dated as of August 12, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 12, 2016, File No. 1-32853).	X
4.1.15	Fifteenth Supplemental Indenture, dated as of April 11, 2017 (incorporated by reference to Exhibit 4.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 9, 2017, File No. 1-32853).	X
4.1.16	Sixteenth Supplemental Indenture, dated as of June 13, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed on August 3, 2017, File No. 1-32853).	X
4.1.17	Seventeenth Supplemental Indenture, dated as of August 10, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 10, 2017, File No. 1-32853).	X
4.1.18	Eighteenth Supplemental Indenture, dated as of March 29, 2018 (incorporated by reference to Exhibit 4.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 10, 2018, File No. 1-32853).	X
4.1.19	Nineteenth Supplemental Indenture, dated as of May 16, 2018 (incorporated by reference to Exhibit 4.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed on August 2, 2018, File No. 1-32853).	X
4.1.20	Twentieth Supplemental Indenture (incorporated by reference to Exhibit 4.2 to registrant's Registration Statement on Form 8-A filed on September 17, 2018, File No. 1-32853).	X
4.1.21	Twenty-first Supplemental Indenture (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 11, 2019, File no. 1-32853).	X
4.1.22	Twenty-second Supplemental Indenture, dated as of June 7, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 7, 2019, File No. 1-32853).	X
4.1.23	Twenty-third Supplemental Indenture, dated as of May 15, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 15, 2020, File No. 1-32853).	X
4.1.24	Twenty-fourth Supplemental Indenture, dated as of September 11, 2020 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on September 11, 2020, File No. 1-32853).	X
4.1.25	Twenty-fifth Supplemental Indenture, dated as of June 10, 2021 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 10, 2021, File No. 1-32853).	X
4.1.26	Twenty-sixth Supplemental Indenture, dated as of September 28, 2021 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 28, 2021, File No. 1-32853).	X
4.1.27	Twenty-seventh Supplemental Indenture, dated as of June 15, 2022, to the indenture, dated as of June 3, 2008, between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 15, 2022, File No. 1-32853).	X
4.1.28	Twenty-eighth Supplemental Indenture, dated as of August 11, 2022, to the indenture, dated as of June 3, 2008, between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, and forms of global notes included therein (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 11, 2022, File No. 1-32853).	X
4.1.29	Twenty-ninth Supplemental Indenture, dated as of December 8, 2022, to the Indenture, dated as of June 3, 2008, between Duke Energy Corporation and The Bank of	X

	2008, between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, and forms of global notes included therein (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on December 8, 2022, File No. 1-32853).	
4.2	Senior Indenture between Duke Energy Carolinas, LLC and The Bank of New York Mellon Trust Company, N.A., as successor trustee to JPMorgan Chase Bank (formerly known as The Chase Manhattan Bank), dated as of September 1, 1998 (incorporated by reference to Exhibit 4-D-1 to registrant's Post-Effective Amendment No. 2 to Registration Statement on Form S-3 filed on April 7, 1999, File No. 333-14209).	X
4.2.1	Fifteenth Supplemental Indenture, dated as of April 3, 2006 (incorporated by reference to Exhibit 4.4.1 to registrant's Registration Statement on Form S-3 filed on October 3, 2007, File No. 333-146483-03).	X
4.2.2	Sixteenth Supplemental Indenture, dated as of June 5, 2007 (incorporated by reference to Exhibit 4.1 registrant's Current Report on Form 8-K filed on June 6, 2007, File No. 1-4928).	X
4.3	First and Refunding Mortgage from Duke Energy Carolinas, LLC to The Bank of New York Mellon Trust Company, N.A., successor trustee to Guaranty Trust Company of New York, dated as of December 1, 1927 (incorporated by reference to Exhibit 7(a) to registrant's Form S-1, effective October 15, 1947, File No. 2-7224).	X
4.3.1	Instrument of Resignation, Appointment and Acceptance among Duke Energy Carolinas, LLC, JPMorgan Chase Bank, N.A., as Trustee, and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of September 24, 2007, (incorporated by reference to Exhibit 4.6.1 to registrant's Registration Statement on Form S-3 filed on October 3, 2007, File No. 333-146483).	X
4.3.2	Ninth Supplemental Indenture, dated as of February 1, 1949 (incorporated by reference to Exhibit 7(j) to registrant's Form S-1 filed on February 3, 1949, File No. 2-7808).	X
4.3.3	Twentieth Supplemental Indenture, dated as of June 15, 1964 (incorporated by reference to Exhibit 4-B-20 to registrant's Form S-1 filed on August 23, 1966, File No. 2-25367).	X
4.3.4	Twenty-third Supplemental Indenture, dated as of February 1, 1968 (incorporated by reference to Exhibit 2-B-26 to registrant's Form S-9 filed on January 21, 1969, File No. 2-31304).	X
4.3.5	Sixtieth Supplemental Indenture, dated as of March 1, 1990 (incorporated by reference to Exhibit 4-B-61 to registrant's Annual Report on Form 10-K for the year ended December 31, 1990, File No.1-4928).	X
4.3.6	Sixty-third Supplemental Indenture, dated as of July 1, 1991 (incorporated by reference to Exhibit 4-B-64 to registrant's Registration Statement on Form S-3 filed on February 13, 1992, File No. 33-45501).	X
4.3.7	Eighty-fourth Supplemental Indenture, dated as of March 20, 2006 (incorporated by reference to Exhibit 4.6.9 to registrant's Registration Statement on Form S-3 filed on October 3, 2007, File No. 333-146483-03).	X
4.3.8	Eighty-fifth Supplemental Indenture, dated as of January 10, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on January 11, 2008, File No.1-4928).	X
4.3.9	Eighty-seventh Supplemental Indenture, dated as of April 14, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on April 15, 2008, File No.1-4928).	X
4.3.10	Eighty-eighth Supplemental Indenture, dated as of November 17, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on November 20, 2008, File No.1-4928).	X
4.3.11	Ninetieth Supplemental Indenture, dated as of November 19, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on November 19, 2009, File No.1-4928).	X
4.3.12	Ninety-first Supplemental Indenture, dated as of June 7, 2010 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on June 7, 2010, File No.1-4928).	X
4.3.13	Ninety-third Supplemental Indenture, dated as of May 19, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on May 19, 2011, File No.1-4928).	X
4.3.14	Ninety-fourth Supplemental Indenture, dated as of December 8, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on December 8, 2011, File No.1-4928).	X
4.3.15	Ninety-fifth Supplemental Indenture, dated as of September 21, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on September 21, 2012, File No.1-4928).	X
4.3.16	Ninety-sixth Supplemental Indenture, dated as of March 12, 2015, between Duke Energy Carolinas, LLC and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on March 12, 2015, File No. 1-4928).	X
4.3.17	Ninety-seventh Supplemental Indenture, dated as of March 11, 2016 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on March 11, 2016, File No. 1-4928).	X
4.3.18	Ninety-eighth Supplemental Indenture, dated as of November 17, 2016 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on November 17, 2016, File No. 1-4928).	X
4.3.19	Ninety-ninth Supplemental Indenture, dated as of November 14, 2017 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC Current Report on Form 8-K filed on November 14, 2017, File No. 1-4928).	X
4.3.20	One Hundredth Supplemental Indenture, dated as of March 1, 2018 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 1, 2018, File No. 1-4928).	X
4.3.21	One-Hundred and Second Supplemental Indenture, dated	X

4.3.21	One-Hundred and Second Supplemental Indenture, dated as of August 14, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 14, 2019, File No. 1-4928).	X	
4.3.22	One-Hundred and Third Supplemental Indenture, dated as of January 8, 2020 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on January 8, 2020, File No. 1-4928).	X	
4.3.23	One-Hundred and Fourth Supplemental Indenture, dated as of January 8, 2020 (incorporated by reference to Exhibit 4.3 to registrant's Current Report on Form 8-K filed on January 8, 2020, File No. 1-4928).	X	
4.3.24	One-Hundred and Fifth Supplemental Indenture, dated as of April 1, 2021 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on April 1, 2021, File No. 1-4928).	X	
4.3.25	One-Hundred and Sixth Supplemental Indenture, dated as of March 4, 2022 between the registrant and The Bank of New York Mellon Trust Company, N.A., as Trustee, and forms of global bonds representing the First and Refunding Mortgage Bonds, 2.85% Series due 2032 and First and Refunding Mortgage Bonds, 3.55% Series due 2052 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 4, 2022, File No. 1-32853).	X	
4.4	Mortgage and Deed of Trust between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and The Bank of New York Mellon (formerly Irving Trust Company) and Frederick G. Herbst (Tina D. Gonzalez, successor), as Trustees, dated as of May 1, 1940.		X
4.4.1	First through Fifth Supplemental Indentures thereto (incorporated by reference to Exhibit 2(b), File No. 2-64189).		X
4.4.2	Sixth Supplemental Indenture dated April 1, 1960 (incorporated by reference to Exhibit 2(b)-5, File No. 2-16210).		X
4.4.3	Seventh Supplemental Indenture dated November 1, 1961 (incorporated by reference to Exhibit 2(b)-6, File No. 2-16210).		X
4.4.4	Eighth Supplemental Indenture dated July 1, 1964 (incorporated by reference to Exhibit 4(b)-8, File No. 2-19118).		X
4.4.5	Ninth Supplemental Indenture dated April 1, 1966 (incorporated by reference to Exhibit 4(b)-2, File No. 2-22439).		X
4.4.6	Tenth Supplemental Indenture dated October 1, 1967 (incorporated by reference to Exhibit 4(b)-2, File No. 2-24624).		X
4.4.7	Eleventh Supplemental Indenture dated October 1, 1968 (incorporated by reference to Exhibit 2(c), File No. 2-27297).		X
4.4.8	Twelfth Supplemental Indenture dated January 1, 1970 (incorporated by reference to Exhibit 2(c), File No. 2-30172).		X
4.4.9	Thirteenth Supplemental Indenture dated August 1, 1970 (incorporated by reference to Exhibit 2(c), File No. 2-35694).		X
4.4.10	Fourteenth Supplemental Indenture dated January 1, 1971 (incorporated by reference to Exhibit 2(c), File No. 2-37505).		X
4.4.11	Fifteenth Supplemental Indenture dated October 1, 1971 (incorporated by reference to Exhibit 2(c), File No. 2-39002).		X
4.4.12	Sixteenth Supplemental Indenture dated May 1, 1972 (incorporated by reference to Exhibit 2(c), File No. 2-41738).		X
4.4.13	Seventeenth Supplemental Indenture dated November 1, 1973 (incorporated by reference to Exhibit 2(c), File No. 2-43439).		X
4.4.14	Eighteenth Supplemental Indenture dated (incorporated by reference to Exhibit 2(c), File No. 2-47751).		X
4.4.15	Nineteenth Supplemental Indenture dated May 1, 1974 (incorporated by reference to Exhibit 2(c), File No. 2-49347).		X
4.4.16	Twentieth Supplemental Indenture dated December 1, 1974 (incorporated by reference to Exhibit 2(c), File No. 2-53113).		X
4.4.17	Twenty-first Supplemental Indenture dated April 15, 1975 (incorporated by reference to Exhibit 2(d), File No. 2-53113).		X
4.4.18	Twenty-second Supplemental Indenture dated October 1, 1977 (incorporated by reference to Exhibit 2(c), File No. 2-59511).		X
4.4.19	Twenty-third Supplemental Indenture dated June 1, 1978 (incorporated by reference to Exhibit 2(c), File No. 2-61611).		X
4.4.20	Twenty-fourth Supplemental Indenture dated May 15, 1979 (incorporated by reference to Exhibit 2(d), File No. 2-64189).		X
4.4.21	Twenty-fifth Supplemental Indenture dated November 1, 1979 (incorporated by reference to Exhibit 2(c), File No. 2-65514).		X
4.4.22	Twenty-sixth Supplemental Indenture dated November 1, 1979 (incorporated by reference to Exhibit 2(c), File No. 2-66851).		X
4.4.23	Twenty-seventh Supplemental Indenture dated April 1, 1980 (incorporated by reference to Exhibit 2 (d), File No. 2-66851).		X
4.4.24	Twenty-eighth Supplemental Indenture dated October 1, 1980 (incorporated by reference to Exhibit 4(b)-1, File No. 2-81299).		X
4.4.25	Twenty-ninth Supplemental Indenture dated October 1, 1980 (incorporated by reference to Exhibit 4(b)-2, File No. 2-81299).		X
4.4.26	Thirtieth Supplemental Indenture dated December 1, 1982 (incorporated by reference to Exhibit 4(b)- 3, File No. 2-81299).		X
4.4.27	Thirty-first Supplemental Indenture dated March 15, 1983 (incorporated by reference to Exhibit 4(c)-1, File No. 2-95505).		X
4.4.28	Thirty-second Supplemental Indenture dated March 15, 1983 (incorporated by reference to Exhibit 4(c)-2, File No. 2-95505).		X
4.4.29	Thirty-third Supplemental Indenture dated December 1, 1983 (incorporated by reference to Exhibit 4(c)-3, File No. 2-95505).		X

4.4.30	Thirty-fourth Supplemental Indenture dated December 15, 1983 (incorporated by reference to Exhibit 4(c)-4, File No. 2-95505).	X
4.4.31	Thirty-fifth Supplemental Indenture dated April 1, 1984 (incorporated by reference to Exhibit 4(c)-5, File No. 2-95505).	X
4.4.32	Thirty-sixth Supplemental Indenture dated June 1, 1984 (incorporated by reference to Exhibit 4(c)-6, File No. 2-95505).	X
4.4.33	Thirty-seventh Supplemental Indenture dated June 1, 1984 (incorporated by reference to Exhibit 4(c)-7, File No. 2-95505).	X
4.4.34	Thirty-eighth Supplemental Indenture dated June 1, 1984 (incorporated by reference to Exhibit 4(c)- 8, File No. 2-95505).	X
4.4.35	Thirty-ninth Supplemental Indenture dated April 1, 1985 (incorporated by reference to Exhibit 4(b), File No. 33-25560).	X
4.4.36	Fortieth Supplemental Indenture dated October 1, 1985 (incorporated by reference to Exhibit 4(c), File No. 33-25560).	X
4.4.37	Forty-first Supplemental Indenture dated March 1, 1986 (incorporated by reference to Exhibit 4(d), File No. 33-25560).	X
4.4.38	Forty-second Supplemental Indenture dated July 1, 1986 (incorporated by reference to Exhibit 4(e), File No. 33-25560).	X
4.4.39	Forty-third Supplemental Indenture dated January 1, 1987 (incorporated by reference to Exhibit 4(f), File No. 33-25560).	X
4.4.40	Forty-fourth Supplemental Indenture dated December 1, 1987 (incorporated by reference to Exhibit 4(g), File No. 33-25560).	X
4.4.41	Forty-fifth Supplemental Indenture dated September 1, 1988 (incorporated by reference to Exhibit 4(h), File No. 33-25560).	X
4.4.42	Forty-sixth Supplemental Indenture dated April 1, 1989 (incorporated by reference to Exhibit 4(b), File No. 33-33431).	X
4.4.43	Forty-seventh Supplemental Indenture dated August 1, 1989 (incorporated by reference to Exhibit 4(c), File No. 33-33431).	X
4.4.44	Forty-eighth Supplemental Indenture dated November 15, 1990 (incorporated by reference to Exhibit 4(b), File No. 33-38298).	X
4.4.45	Forty-ninth Supplemental Indenture dated November 15, 1990 (incorporated by reference to Exhibit 4(c), File No. 33-38298).	X
4.4.46	Fiftieth Supplemental Indenture dated February 15, 1991 (incorporated by reference to Exhibit 4(h), File No. 33-42869).	X
4.4.47	Fifty-first Supplemental Indenture dated April 1, 1991 (incorporated by reference to Exhibit 4(i), File No. 33-42869).	X
4.4.48	Fifty-second Supplemental Indenture dated September 15, 1991(incorporated by reference to Exhibit 4(e), File No. 33-48607).	X
4.4.49	Fifty-third Supplemental Indenture dated January 1, 1992 (incorporated by reference to Exhibit 4(f), File No. 33-48607).	X
4.4.50	Fifty-fourth Supplemental Indenture dated April 15, 1992 (incorporated by reference to Exhibit 4 (g), File No. 33-48607).	X
4.4.51	Fifty-fifth Supplemental Indenture dated July 1, 1992 (incorporated by reference to Exhibit 4(e), File No. 33-55060).	X
4.4.52	Fifty-sixth Supplemental Indenture dated October 1, 1992 (incorporated by reference to Exhibit 4(f), File No. 33-55060).	X
4.4.53	Fifty-seventh Supplemental Indenture dated February 1, 1993 (incorporated by reference to Exhibit 4(e), File No. 33-60014).	X
4.4.54	Fifty-eighth Supplemental Indenture dated March 1, 1993 (incorporated by reference to Exhibit 4(f), File No. 33-60014).	X
4.4.55	Fifty-ninth Supplemental Indenture dated July 1, 1993 (incorporated by reference to Exhibit 4(a) to Post-Effective Amendment No. 1, File No. 33-38349).	X
4.4.56	Sixtieth Supplemental Indenture dated July 1, 1993 (incorporated by reference to Exhibit 4(b) to Post-Effective Amendment No. 1, File No. 33-38349).	X
4.4.57	Sixty-first Supplemental Indenture dated August 15, 1993 (incorporated by reference to Exhibit 4(e), File No. 33-50597).	X
4.4.58	Sixty-second Supplemental Indenture dated January 15, 1994 (incorporated by reference to Exhibit 4 to Duke Energy Progress' Current Report on Form 8-K dated January 19, 1994, File No. 1-3382).	X
4.4.59	Sixty-third Supplemental Indenture dated May 1, 1994 (incorporated by reference to Exhibit 4(f) for Duke Energy Progress' Form S-3, File No. 033-57835).	X
4.4.60	Sixty-fourth Supplemental Indenture dated August 15, 1997 (incorporated by reference to Exhibit to Duke Energy Progress' Current Report on Form 8-K dated August 26, 1997, File No. 1-3382).	X
4.4.61	Sixty-fifth Supplemental Indenture dated April 1, 1998 (incorporated by reference to Exhibit 4(b) for Duke Energy Progress' Registration Statement on Form S-3 filed December 18, 1998, File No. 333-69237).	X
4.4.62	Sixty-sixth Supplemental Indenture dated March 1, 1999 (incorporated by reference to Exhibit 4(c) to Duke Energy Progress' Current Report on Form 8-K filed on March 19, 1999, File No. 1-3382).	X
4.4.63	Form of Carolina Power & Light Company First Mortgage Bond, 6.80% Series Due August 15, 2007 (incorporated by reference to Exhibit 4 to Duke Energy Progress' Form 10-Q for the period ended September 30, 1998, File No. 1-3382)	X

	for the period ended September 30, 1998, File No. 1-3382).	
4.4.64	Sixty-eighth Supplemental Indenture dated April 1, 2000 (incorporated by reference to Exhibit No. 4(b) to Duke Energy Progress' Current Report on Form 8-K filed on April 20, 2000, File No. 1-3382).	X
4.4.65	Sixty-ninth Supplemental Indenture dated June 1, 2000 (incorporated by reference to Exhibit No. 4b(2) to Duke Energy Progress' Annual Report on Form 10-K for the year ended December 31, 2000, filed on March 29, 2001, File No. 1-3382).	X
4.4.66	Seventieth Supplemental Indenture dated July 1, 2000 (incorporated by reference to Exhibit 4b(3) to Duke Energy Progress' Annual Report on Form 10-K for the year ended December 31, 2000, filed on March 29, 2001, File No. 1-3382).	X
4.4.67	Seventy-first Supplemental Indenture dated February 1, 2002 (incorporated by reference to Exhibit 4b(2) to Duke Energy Progress' Annual Report on Form 10-K for the year ended December 31, 2001, filed on March 28, 2002, File No. 1-3382 and 1-15929).	X
4.4.68	Seventy-second Supplemental Indenture, dated as of September 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on September 12, 2003, File No. 1-3382).	X
4.4.69	Seventy-third Supplemental Indenture, dated as of March 1, 2005 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on March 22, 2005, File No. 1-3382).	X
4.4.70	Seventy-fourth Supplemental Indenture, dated as of November 1, 2005 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on November 30, 2005, File No. 1-3382).	X
4.4.71	Seventy-fifth Supplemental Indenture, dated as of March 1, 2008 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on March 13, 2008, File No. 1-3382).	X
4.4.72	Seventy-sixth Supplemental Indenture, dated as of January 1, 2009 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on January 15, 2009, File No. 1-3382).	X
4.4.73	Seventy-seventh Supplemental Indenture, dated as of June 18, 2009 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on June 23, 2009, File No. 1-3382).	X
4.4.74	Seventy-eighth Supplemental Indenture, dated as of September 1, 2011 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on September 15, 2011, File No. 1-3382).	X
4.4.75	Seventy-ninth Supplemental Indenture, dated as of May 1, 2012 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on May 18, 2012, File No. 1-3382).	X
4.4.76	Eightieth Supplemental Indenture, dated as of March 1, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on March 12, 2013, File No. 1-3382).	X
4.4.77	Eighty-second Supplemental Indenture, dated as of March 1, 2014, between Duke Energy Progress, Inc. and The Bank of New York Mellon (formerly Irving Trust Company) and Tina D. Gonzalez (successor to Frederick G. Herbst) and forms of global notes (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, Inc.'s Current Report on Form 8-K filed on March 6, 2014, File No. 1-3382).	X
4.4.78	Eighty-third Supplemental Indenture, dated as of November 1, 2014, between Duke Energy Progress, Inc. and The Bank of New York Mellon (formerly Irving Trust Company) and Tina D. Gonzalez (successor to Frederick G. Herbst) and forms of global notes (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, Inc.'s Current Report on Form 8-K filed on November 20, 2014, File No. 1-3382).	X
4.4.79	Eighty-fifth Supplemental Indenture, dated as of August 1, 2015 (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, LLC's Current Report on Form 8-K filed on August 13, 2015, File No. 1-3382).	X
4.4.80	Eighty-sixth Supplemental Indenture, dated as of September 1, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 16, 2016, File No. 1-15929).	X
4.4.81	Eighty-seventh Supplemental Indenture, dated as of September 1, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 8, 2017, File No. 1-3382).	X
4.4.82	Eighty-ninth Supplemental Indenture (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 7, 2019, File no. 1-3382).	X
4.4.83	Ninetieth Supplemental Indenture, dated as of August 1, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 20, 2020, File No. 1-3382).	X
4.4.84	Ninety-first Supplemental Indenture, dated as of August 1, 2021 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 12, 2021, File No. 1-3382).	X
4.4.85	Ninety-second Supplemental Indenture, dated as of March 1, 2022, among the registrant, The Bank of New York Mellon (formerly Irving Trust Company) and Christie Leppert (successor to Frederick G. Herbst) and forms of global	X

	(successor to Frederick G. Herbst) and forms of global bonds (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 17, 2022, File No. 1-3382).		
4.4.86	First Supplemental Indenture, dated as of August 1, 2020 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on August 20, 2020, File No. 1-3382).	X	
4.5	Indenture (for Debt Securities) between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and The Bank of New York Mellon (successor in interest to The Chase Manhattan Bank), as Trustee (incorporated by reference to Exhibit 4(a) to registrant's Current Report on Form 8-K filed on November 5, 1999, File No. 1-3382).	X	
4.6	Indenture (for [Subordinated] Debt Securities) (open ended) (incorporated by reference to Exhibit 4(a)(2) to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Registration Statement on Form S-3 filed on November 18, 2008, File No. 333-155418).	X	
4.7	Indenture (for First Mortgage Bonds) between Duke Energy Florida, Inc. (formerly Florida Power Corporation) and The Bank of New York Mellon (as successor to Guaranty Trust Company of New York and The Florida National Bank of Jacksonville), as Trustee, dated as of January 1, 1944, (incorporated by reference to Exhibit B-18 to registrant's Form A-2, File No. 2-5293).		X
4.7.1	Seventh Supplemental Indenture (incorporated by reference to Exhibit 4(b) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 27, 1991, File No. 33-16788).		X
4.7.2	Eighth Supplemental Indenture (incorporated by reference to Exhibit 4(c) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 27, 1991, File No. 33-16788).		X
4.7.3	Sixteenth Supplemental Indenture (incorporated by reference to Exhibit 4(d) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 27, 1991, File No. 33-16788).		X
4.7.4	Twenty-ninth Supplemental Indenture (incorporated by reference to Exhibit 4(c) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 17, 1982, File No. 2-79832).		X
4.7.5	Thirty-eighth Supplemental Indenture, dated as of July 25, 1994 (incorporated by reference to exhibit 4(f) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on August 29, 1994, File No. 33-55273).		X
4.7.6	Forty-first Supplemental Indenture, dated as of February 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Duke Energy Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on February 21, 2003, File No. 1-3274).		X
4.7.7	Forty-second Supplemental Indenture, dated as of April 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, filed on August 11, 2003, File No. 1-3274).		X
4.7.8	Forty-third Supplemental Indenture, dated as of November 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on November 21, 2003, File No. 1-3274).		X
4.7.9	Forty-fourth Supplemental Indenture, dated as of August 1, 2004 (incorporated by reference to Exhibit 4(m) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Annual Report on Form 10-K for the year ended December 31, 2004, filed on March 16, 2005, File No. 1-3274).		X
4.7.10	Forty-sixth Supplemental Indenture, dated as of September 1, 2007 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on September 19, 2007, File No. 1-3274).		X
4.7.11	Forty-seventh Supplemental Indenture, dated as of December 1, 2007 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on December 13, 2007, File No. 1-3274).		X
4.7.12	Forty-eighth Supplemental Indenture, dated as of June 1, 2008 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on June 18, 2008, File No. 1-3274).		X
4.7.13	Forty-ninth Supplemental Indenture, dated as of March 1, 2010 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on March 25, 2010, File No. 1-3274).		X
4.7.14	Fiftieth Supplemental Indenture, dated as of August 11, 2011 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on August 18, 2011, File No. 1-3274).		X
4.7.15	Fifty-first Supplemental Indenture, dated as of November 1, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on November 20, 2012, File No. 1-3274).		X
4.7.16	Fifty-third Supplemental Indenture, dated as of September 1, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 9, 2016, File No. 1-03274).		X
4.7.17	Fifty-fifth Supplemental Indenture, dated as of June 1, 2018 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 21, 2018, File No. 1-3274).		X

4.7.18	Fifty-sixth Supplemental Indenture, dated as of November 1, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on November 26, 2019, File No. 1-3274).	X			
4.7.19	Fifty-seventh Supplemental Indenture, dated as of June 1, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 11, 2020, File No. 1-3274).	X			
4.7.20	Fifty-eighth Supplemental Indenture, dated as of November 1, 2021 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on December 2, 2021, File No. 1-3274).	X			
4.8	Indenture (for Debt Securities) between Duke Energy Florida, Inc. (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) and The Bank of New York Mellon Trust Company, National Association (successor in interest to J.P. Morgan Trust Company, National Association), as Trustee, dated as of December 7, 2005 (incorporated by reference to Exhibit 4(a) to registrant's Current Report on Form 8-K filed on December 13, 2005, File No. 1-3274).	X			
4.8.1	First Supplemental Indenture, dated as of December 12, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on December 12, 2017, File No. 1-03274).	X			
4.8.2	Second Supplemental Indenture, dated as of November 26, 2019 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on November 26, 2019, File No. 1-3274).	X			
4.9	Indenture (for [Subordinated] Debt Securities) (open ended) (incorporated by reference to Exhibit 4(a)(2) Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Registration Statement on Form S-3 filed on November 18, 2008, File No. 333-155418).	X			
4.10	Original Indenture (Unsecured Debt Securities) between Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company) and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of May 15, 1995 (incorporated by reference to Exhibit 3 to registrant's Form 8-A filed on July 27, 1995, File No. 1-1232).		X		
4.10.1	First Supplemental Indenture, dated as of June 1, 1995 (incorporated by reference to Exhibit 4 B to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Quarterly Report on Form 10-Q for the quarter ended June 30, 1995, filed on August 11, 1995, File No. 1-1232).		X		
4.10.2	Seventh Supplemental Indenture, dated as of June 15, 2003 (incorporated by reference to Exhibit 4.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, filed on August 13, 2003, File No. 1-1232).		X		
4.11	Original Indenture (First Mortgage Bonds) between Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company) and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of August 1, 1936 (incorporated by reference to an exhibit to registrant's Registration Statement No. 2-2374).		X		
4.11.1	Fortieth Supplemental Indenture, dated as of March 23, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Current Report on Form 8-K filed on March 24, 2009, File No. 1-1232).		X		
4.11.2	Forty-second Supplemental Indenture, dated as of September 6, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Current Report on Form 8-K filed on September 6, 2013, File No. 1-1232).		X		
4.11.3	Forty-fourth Supplemental Indenture, dated as of June 23, 2016 (incorporated by reference to Exhibit 4.1 registrant's Current Report on Form 8-K filed on June 23, 2016, File No. 1-1232).		X		
4.11.4	Forty-fifth Supplemental Indenture, dated as of March 27, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 27,2017, File No. 1-01232).		X		
4.11.5	Forty-sixth Supplemental Indenture, dated as of January 8, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on January 8, 2019, File No. 1-1232).		X		
4.11.6	Forty-seventh Supplemental Indenture, dated as of May 21, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 21, 2020, File No. 1-1232).		X		
4.12	Indenture between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of November 15, 1996 (incorporated by reference to Exhibit 4(v) to the Cinergy Corp. Form 10-K for the year ended December 31, 1996, filed on March 27, 1997, File No. 1-11377).			X	
4.12.1	Third Supplemental Indenture, dated as of March 15, 1998 (incorporated by reference to Exhibit 4-w to Cinergy Corp.'s Annual Report on Form 10-K for the year ended December 31, 1997, filed on March 27, 1998, File No. 1-11377).			X	
4.12.2	Eighth Supplemental Indenture, dated as of September 23, 2003 (incorporated by reference to Exhibit 4.2 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Quarterly Report on Form 10-Q for the quarter ended September 30, 2003, filed on November 13, 2003, File No. 1-3543).			X	
4.12.3	Ninth Supplemental Indenture, dated as of October 21, 2005 (incorporated by reference to Exhibit 4.7.3 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633).			X	
4.12.4	Tenth Supplemental Indenture, dated as of June 9, 2006 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on June 15, 2006, File No. 1-3543).			X	
4.13	Original Indenture (First Mortgage Bonds) between Duke			X	

4.13	Original Indenture (First Mortgage Bonds) between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Deutsche Bank National Trust Company, as Successor Trustee, dated as of September 1, 1939, (filed as an exhibit in File No. 70-258).		X
4.13.1	Tenth Supplemental Indenture, dated as of July 1, 1952, (filed as an exhibit in File No. 2-9687).		X
4.13.2	Twenty-third Supplemental Indenture, dated as of January 1, 1977, (filed as an exhibit in File No. 2-57828).		X
4.13.3	Twenty-fifth Supplemental Indenture, dated as of September 1, 1978, (filed as an exhibit in File No. 2-62543).		X
4.13.4	Twenty-sixth Supplemental Indenture, dated as of September 1, 1978, (filed as an exhibit in File No. 2-62543).		X
4.13.5	Thirtieth Supplemental Indenture, dated as of August 1, 1980, (filed as an exhibit in File No. 2-68562).		X
4.13.6	Thirty-fifth Supplemental Indenture, dated as of March 30, 1984, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1984, File No. 1-3543).		X
4.13.7	Forty-sixth Supplemental Indenture, dated as of June 1, 1990, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1991, File No. 1-3543).		X
4.13.8	Forty-seventh Supplemental Indenture, dated as of July 15, 1991, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1991, File No. 1-3543).		X
4.13.9	Forty-eighth Supplemental Indenture, dated as of July 15, 1992, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1992, File No. 1-3543).		X
4.13.10	Fifty-second Supplemental Indenture, dated as of April 30, 1999 (incorporated by reference to Exhibit 4 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999, filed on May 13, 1999, File No. 1-3543).		X
4.13.11	Fifty-seventh Supplemental Indenture, dated as of August 21, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report Form 8-K filed on August 21, 2008, File No. 1-3543).		X
4.13.12	Fifty-eighth Supplemental Indenture, dated as of December 19, 2008 (incorporated by reference to Exhibit 4.8.12 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).		X
4.13.13	Fifty-ninth Supplemental Indenture, dated as of March 23, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on March 24, 2009, File No. 1-3543).		X
4.13.14	Sixtieth Supplemental Indenture, dated as of June 1, 2009 (incorporated by reference to Exhibit 4.8.14 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).		X
4.13.15	Sixty-first Supplemental Indenture, dated as of October 1, 2009 (incorporated by reference to Exhibit 4.8.15 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).		X
4.13.16	Sixty-second Supplemental Indenture, dated as of July 9, 2010 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on July 9, 2010, File No. 1-3543).		X
4.13.17	Sixty-third Supplemental Indenture, dated as of September 23, 2010 (incorporated by reference to Exhibit 4.8.17 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).		X
4.13.18	Sixty-fourth Supplemental Indenture, dated as of December 1, 2011 (incorporated by reference to Exhibit 4(d)(2)(xviii) to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 30, 2013, File No. 333-191462-03).		X
4.13.19	Sixty-fifth Supplemental Indenture, dated as of March 15, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on March 15, 2012, File No. 1-3543).		X
4.13.20	Sixty-sixth Supplemental Indenture, dated as of July 11, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on July 11, 2013, File No. 1-3543).		X
4.13.21	Sixty-seventh Supplemental Indenture, dated as of January 1, 2016, between Duke Energy Indiana, Inc. and Deutsche Bank National Trust Company, as Trustee, supplementing and amending the Indenture of Mortgage or Deed of Trust, dated September 1, 1939, between Duke Energy Indiana, Inc. and Deutsche Bank National Trust Company, as Trustee (incorporated by reference to Exhibit 4.2 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed on May 5, 2016, File No. 1-3543).		X
4.13.22	Sixty-eighth Supplemental Indenture, dated as of May 12, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 12, 2016, File No. 1-3543).		X
4.13.23	Sixty-ninth Supplemental Indenture, dated as of September 27, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 27, 2019, File No. 1-3543).		X
4.13.24	Seventieth Supplemental Indenture, dated as of March 12, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 12, 2020, File No. 1-3543).		X
4.14	Repayment Agreement between Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company) and The Dayton Power and Light Company, dated as of December 23, 1992, (filed with registrant's Annual Report on Form 10-	X	

	K for the year ended December 31, 1992, File No. 1-1232).				
4.15	Unsecured Promissory Note between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and the Rural Utilities Service, dated as of October 14, 1998 (incorporated by reference to Exhibit 4 to registrant's Annual Report on Form 10-K for the year ended December 31, 1998, filed on March 8, 1999, File No. 1-3543).			X	
4.16	6.302% Subordinated Note between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Cinergy Corp., dated as of February 5, 2003 (incorporated by reference to Exhibit 4(yyy) to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, filed on May 12,2003, File No. 1-3543).			X	
4.17	6.403% Subordinated Note between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Cinergy Corp., dated as of February 5, 2003 (incorporated by reference to Exhibit 4(zzz) to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, filed on May 12, 2003, File No. 1-3543).			X	
4.18	Contingent Value Obligation Agreement between Progress Energy, Inc. (formerly CP&L Energy, Inc.) and The Chase Manhattan Bank, as Trustee, dated as of November 30, 2000 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on December 1, 2000, File No. 1-3382).	X			
4.19	Form of 3.47% Series A Senior Notes due July 16, 2027 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 29, 2012, File No. 1-06196).				X
4.20	Form of 3.57% Series B Senior Notes due July 16, 2027 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on March 29, 2012, File No. 1-06196).				X
4.21	Form of 4.65% Senior Notes due 2043 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on August 1, 2013, File No. 1-06196).				X
4.22	Form of 4.10% Senior Notes due 2034 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on September 18, 2014, File No. 1-06196).				X
4.23	Form of 3.60% Senior Notes due 2025 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on September 14, 2015, File No. 1-06196).				X
4.24	Form of 3.64% Senior Notes due 2046 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on July 28, 2016, File No. 1-06196).				X
4.25	Form of 4.24% Series B Senior Notes due June 6, 2021 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on May 12, 2011, File No. 1-06196).				X
4.26	Indenture, dated as of April 1, 1993, between Piedmont and The Bank of New York Mellon Trust Company, N.A. (as successor to Citibank, N.A.), Trustee (incorporated by reference to Exhibit 4.1 to registrant's Registration Statement on Form S-3 filed on May 16, 1995, File No. 33-59369).				X
4.26.1	Second Supplemental Indenture, dated as of June 15, 2003, between Piedmont and Citibank, N.A., Trustee (incorporated by reference to Exhibit 4.3 to registrant's Registration Statement on Form S-3 filed on June 19, 2003, File No. 333-106268).				X
4.26.2	Fourth Supplemental Indenture, dated as of May 6, 2011, between Piedmont Natural Gas Company, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.2 to registrant's Registration Statement on Form S-3-ASR filed on July 7, 2011, File No. 333-175386).				X
4.26.3	Fifth Supplemental Indenture, dated August 1, 2013, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 1, 2013, File No. 1-06196).				X
4.26.4	Sixth Supplemental Indenture, dated September 18, 2014, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 18, 2014, File No. 1-06196).				X
4.26.5	Seventh Supplemental Indenture, dated September 14, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 14, 2015, File No. 1-06196).				X
4.26.6	Eighth Supplemental Indenture, dated July 28, 2016, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on July 28, 2016, File No. 1-06196).				X
4.26.7	Ninth Supplemental Indenture, dated as of May 24, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 24, 2019, File No. 1-6196).				X
4.26.8	Tenth Supplemental Indenture, dated as of May 21, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 21, 2020, File No. 1-6196).				X
4.26.9	Eleventh Supplemental Indenture, dated as of March 11, 2021 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 11, 2021, File No. 1-6196).				X
4.26.10	Twelfth Supplemental Indenture dated as of May 13, 2022 between Piedmont Natural Gas Company, Inc. and The Bank of New York Mellon Trust Company, N.A., as successor to Citibank, N.A. and form of global notes (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 13, 2022, File No. 1-6196).				X
4.27	Medium-Term Note, Series A, dated as of October 6, 1993 (incorporated by reference to Exhibit 4.8 to registrant's Annual Report on Form 10-K for the year ended October 31, 1993, File No. 1-06196).				X
4.28	Medium-Term Note, Series A, dated as of September 19,				X

	1994 (incorporated by reference to Exhibit 4.9 to registrant's Annual Report on Form 10-K for the year ended October 31, 1994, File No. 1-06196).					
4.29	Form of 6% Medium-Term Note, Series E, dated as of December 19, 2003 (incorporated by reference to Exhibit 99.2 to registrant's Current Report on Form 8-K filed on December 23, 2003, File No. 1-06196).					X
4.30	Form of Master Global Note (incorporated by reference to Exhibit 4.4 to registrant's Registration Statement on Form S-3 filed on April 30, 1997, File No. 333-26161).					X
4.31	Pricing Supplement of Medium-Term Notes, Series B, dated October 3, 1995 (incorporated by reference to Exhibit 4.10 to registrant's Annual Report on Form 10-K for the year ended October 31, 1995, File No. 1-06196).					X
4.32	Pricing Supplement of Medium-Term Notes, Series B, dated October 4, 1996 (incorporated by reference to Exhibit 4.11 to registrant's Annual Report on Form 10-K for the year ended October 31, 1996, File No. 1-06196).					X
4.33	Pricing Supplement of Medium-Term Notes, Series C, dated September 15, 1999 (incorporated by reference to Rule 424(b)(3) Pricing Supplement to Form S-3 Registration Statement Nos. 33-59369 and 333-26161).					X
4.34	Agreement of Resignation, Appointment and Acceptance dated as of March 29, 2007, by and among Piedmont Natural Gas Company, Inc., Citibank, N.A., and The Bank of New York Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended April 30, 2007, filed on June 8, 2007, File No. 1-06196).					X
10.1	Agreements with Piedmont Electric Membership Corporation, Rutherford Electric Membership Corporation and Blue Ridge Electric Membership Corporation (incorporated by reference to Exhibit 10.15 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-32853).		X			
10.2	Asset Purchase Agreement between Saluda River Electric Cooperative, Inc., as Seller, and Duke Energy Carolinas, LLC, as Purchaser, dated as of December 20, 2006 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on December 27, 2006, File No. 1-4928).		X			
10.3	Settlement between Duke Energy Corporation, Duke Energy Carolinas, LLC and the U.S. Department of Justice resolving Duke Energy's used nuclear fuel litigation against the U.S. Department of Energy, dated as of March 6, 2007 (incorporated by reference to Item 8.01 to registrant's Current Report on Form 8-K filed on March 12, 2007, File No. 1-4928).		X			
10.4	Letter Agreement between Georgia Natural Gas Company and Piedmont Energy Company dated February 12, 2016 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on February 18, 2016, File No. 1-06196).					X
10.5	Assignment of Membership Interests dated as of October 3, 2016 between Piedmont ACP Company, LLC and Dominion Atlantic Coast Pipeline, LLC, (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on October 7, 2016, File No. 1-06196).					X
10.6	Agreements between Piedmont Electric Membership Corporation, Rutherford Electric Membership Corporation and Blue Ridge Electric Membership Corporation (incorporated by reference to Exhibit 10.15 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-32853).		X			
10.7	Conveyance and Assignment Agreement, dated as of October 3, 2016, by and between Piedmont Energy Company and Georgia Natural Gas Company (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on October 3, 2016, File No. 1-06196).					X
10.8	Engineering, Procurement and Construction Management Agreement between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Bechtel Power Corporation, dated as of December 15, 2008 (incorporated by reference to Exhibit 10.16 to registrant's Annual Report on Form 10-K for the year ended December 31, 2008, filed on March 13, 2009, File No. 1-3543). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)				X	
10.9	Formation and Sale Agreement between Duke Ventures, LLC, Crescent Resources, LLC, Morgan Stanley Real Estate Fund V U.S. L.P., Morgan Stanley Real Estate Fund V Special U.S., L.P., Morgan Stanley Real Estate Investors V U.S., L.P., MSP Real Estate Fund V, L.P., and Morgan Stanley Strategic Investments, Inc., dated as of September 7, 2006 (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed on November 9, 2006, File No. 1-32853).	X				
10.10	Operating Agreement of Pioneer Transmission, LLC (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, filed on November 7, 2008, File No. 1-32853).	X				
10.11**	Amended and Restated Duke Energy Corporation Directors' Saving Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.32 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, filed on February 28, 2014, File No. 1-32853).	X				
10.12**	Amendment to Duke Energy Corporation Directors' Savings Plan, effective as of December 16, 2021 (incorporated by reference to Exhibit 10.12 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2021, filed on February 24, 2022, File No. 1-32853).	X				
10.13	Engineering, Procurement and Construction Management Agreement between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Bechtel Power Corporation, dated as of December 15, 2008 (incorporated by reference to Item 1.01 to registrant's Current Report on Form 8-K filed on	X			X	

	December 19, 2008, File Nos. 1-32853 and 1-3543). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)								
10.14**	Duke Energy Corporation Executive Severance Plan (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on January 13, 2011, File No. 1-32853).	X							
10.15	$6,000,000,000 Five-Year Credit Agreement between Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Carolina Power and Light Company d/b/a Duke Energy Progress, Inc. and Florida Power Corporation, d/b/a Duke Energy Florida, Inc., as Borrowers, the lenders listed therein, Wells Fargo Bank, National Association, as Administrative Agent, Bank of America, N.A. and The Royal Bank of Scotland plc, as Co-Syndication Agents and Bank of China, New York Branch, Barclays Bank PLC, Citibank, N.A., Credit Suisse AG, Cayman Islands Branch, Industrial and Commercial Bank of China Limited, New York Branch, JPMorgan Chase Bank, N.A. and UBS Securities LLC, as Co-Documentation Agents, dated as of November 18, 2011 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on November 25, 2011, File Nos. 1-32853, 1-4928, 1-1232 and 1-3543).	X	X				X	X	
10.15.1	Amendment No. 1 and Consent between Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, Inc., Duke Energy Florida, Inc., and Wells Fargo Bank, National Association, dated as of December 18, 2013 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on December 23, 2013, File Nos. 1-32853, 1-4928, 1-3382, 1-3274, 1-1232 and 1-3543).	X	X		X	X	X	X	
10.15.2	Amendment No. 2 and Consent between Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, Inc., and Duke Energy Florida, Inc., the Lenders party hereto, the issuing Lenders party hereto, Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender, dated as of January 30, 2015 (incorporated by reference to Exhibit 10.1 of registrant's Current Report on Form 8-K filed on February 5, 2015, File Nos. 1-32853, 1-4928, 1-1232, 1-3543, 1-3382 and 1-3274).	X	X		X	X	X	X	
10.15.3	Amendment No. 3 and Consent, dated as of March 16, 2017, among the registrants, the Lenders party thereto, the issuing Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 17, 2017, File Nos. 1-32853, 1-04928, 1-03382, 1-03274, 1-01232, 1-03543, 1-06196).	X	X		X	X	X	X	X
10.15.4	Amendment No.4 and Consent, dated as of March 18, 2019, among Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, LLC, Duke Energy Florida, LLC, and Piedmont Natural Gas Company, Inc., the Lenders party thereto, the Issuing Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 21, 2019, File Nos. 1-32853, 1-4928, 1-3382, 1-3274, 1-1232, 1-3543, 1-6196).	X	X		X	X	X	X	X
10.15.5	Amendment No. 5 and Consent, dated as of March 16, 2020, among registrants', the Lenders party thereto, the Issuing Lenders party thereto, and Wells Fargo Bank, N.A., as Administrative Agent, and Swingline Lender (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 17, 2020, File Nos. 1-32853, 1-4928, 1-3382, 1-3274, 1-1232, 1-3543, 1-6196).	X	X		X	X	X	X	X
10.16**	Duke Energy Corporation 2015 Long-Term Incentive Plan (incorporated by reference to Appendix C to registrant's DEF 14A filed on March 26, 2015, File No. 1-32853).	X							
10.16.1**	Amendment to Duke Energy Corporation 2015 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.16.1 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2018, filed on February 28, 2019, File No. 1-32853).	X							
10.17**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.4 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 filed on May 9, 2017, File No. 1-32853).	X							
10.18**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.24 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2017, filed on February 21, 2018, File No. 1-32853).	X							
10.19**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 9, 2019, File No. 1-32853).	X							
10.20**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.4 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed on May 9, 2022, File No. 1-32853).	X							
*10.21**	Restricted Stock Unit Award Agreement	X							
10.22**	Performance Share Award Agreement (incorporated by reference to Exhibit 10.2 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 9, 2019, File No. 1-32853).	X							
10.23**	Performance Share Award Agreement (incorporated by reference to Exhibit 10.4 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 12, 2020, File No. 1-32853).	X							
*10.24**	Performance Share Award Agreement	X							
10.25	Settlement Agreement between Duke Energy Corporation, the North Carolina Utilities Commission Staff and the North Carolina Public Staff, dated as of November 28, 2012 (incorporated by reference to Exhibit 10.1 to registrant's	X							

	Current Report on Form 8-K filed on November 29, 2012, File No. 1-32853).										
10.26	Settlement Agreement between Duke Energy Corporation and the North Carolina Attorney General, dated as of December 3, 2012 (incorporated by reference Item 7.01 to registrant's Current Report on Form 8-K filed on December 3, 2012, File No. 1-32853).	X									
10.27	Settlement Agreement between Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, and The North Carolina Department of Environmental Quality, dated as of December 31, 2019 (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on January 2, 2020, File Nos. 1-4928, 1-3382).		X		X						
10.28	Duke Energy Carolinas Summary of Partial Settlement in North Carolina Rate Case (incorporated by reference to Exhibit 99.1 to registrant's Current Report on Form 8-K filed on March 26, 2020, File Nos. 1-32853, 1-4928, 1-3382).	X	X		X						
10.29	Coal Combustion Residuals Settlement Agreement between registrants and the Public Staff-North Carolina Utilities Commission, the North Carolina Attorney General's Office, and the Sierra Club, dated as of January 22, 2021 (incorporated by reference to Exhibit 10.1 to registrants' Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed on May 10, 2021, File Nos. 1-32853, 1-4928, 1-3382).	X	X		X						
10.30	Investment Agreement by and among Cinergy Corp., Duke Energy Indiana HoldCo, LLC, Duke Energy Corporation, and Epson Investment PTE. LTD., dated as of January 28, 2021 (incorporated by reference to Exhibit 10.2 to registrants' Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed on May 10, 2021, File Nos. 1-32853, 1-3543).	X								X	
10.31	Cooperation Agreement, dated as of November 13, 2021, by and among Duke Energy Corporation, Elliott Investment Management L.P., and Elliott International, L.P. (incorporated by reference to registrant's Current Report on Form 8-K filed on November 15, 2021, File No. 1-32853).	X									
10.32**	Form of Change-in-Control Agreement (incorporated by reference to Exhibit 10.58 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2012, filed on March 1, 2013, File No. 1-32853).	X									
10.33**	Amended and Restated Duke Energy Corporation Executive Cash Balance Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.52 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, filed on February 28, 2014, File No. 1-32852).	X									
10.33.1**	Amended and Restated Duke Energy Corporation Executive Cash Balance Plan, dated as of September 30, 2020 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on September 25, 2020, File No. 1-32853).	X									
10.34	Purchase, Construction and Ownership Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Municipal Power Agency Number 3 and Exhibits, together with resolution, dated as of December 16, 1981, changing name to North Carolina Eastern Municipal Power Agency, amending letter, dated as of February 18, 1982, and amendment, dated as of February 24, 1982 (incorporated by reference to Exhibit 10(a) to registrant's File No. 33-25560).				X						
10.35	Operating and Fuel Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Municipal Power Agency Number 3 and Exhibits, together with resolution, dated as of December 16, 1981, changing name to North Carolina Eastern Municipal Power Agency, amending letters, dated as of August 21, 1981, and December 15, 1981, and amendment, dated as of February 24, 1982 (incorporated by reference to Exhibit 10(b) to registrant's File No. 33-25560).				X						
10.36	Power Coordination Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Municipal Power Agency Number 3 and Exhibits, together with resolution, dated as of December 16, 1981, changing name to North Carolina Eastern Municipal Power Agency and amending letter, dated as of January 29, 1982 (incorporated by reference to Exhibit 10(c) to registrant's File No. 33-25560).				X						
10.37	Amendment, dated as of December 16, 1982, to Purchase, Construction and Ownership Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Eastern Municipal Power Agency (incorporated by reference to Exhibit 10(d) to registrant's File No. 33-25560).				X						
10.38	Precedent and Related Agreements between Duke Energy Florida, Inc. (formerly Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("PEF")), Southern Natural Gas Company, Florida Gas Transmission Company ("FGT"), and BG LNG Services, LLC ("BG"), including: a) Precedent Agreement between Southern Natural Gas Company and PEF, dated as of December 2, 2004; b) Gas Sale and Purchase Contract between BG and PEF, dated as of December 1, 2004; c) Interim Firm Transportation Service Agreement by and between FGT and PEF, dated as of December 2, 2004; d) Letter Agreement between FGT and PEF, dated as of December 2, 2004, and Firm Transportation Service Agreement between FGT and PEF to be entered into upon satisfaction of certain conditions precedent; e) Discount Agreement between FGT and PEF, dated as of December 2, 2004; f) Amendment to Gas Sale and Purchase Contract between BG and PEF, dated as of January 28, 2005; and g) Letter Agreement between FGT and PEF, dated as of January 31, 2005 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K/A filed on March 15, 2005, File Nos. 1-15929 and 1-3274). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)			X		X					

10.39	Engineering, Procurement and Construction Agreement between Duke Energy Florida, Inc. (formerly Florida Power Corporation d/b/a/ Progress Energy Florida, Inc.), as owner, and a consortium consisting of Westinghouse Electric Company LLC and Stone & Webster, Inc., as contractor, for a two-unit AP1000 Nuclear Power Plant, dated as of December 31, 2008 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on March 2, 2009, File Nos. 1-15929 and 1-3274). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)			X		X		
10.40**	Employment Agreement between Duke Energy Corporation and Lynn J. Good, dated as of June 17, 2013 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 18, 2013, File No. 1-32853).	X						
10.40.1**	Amendment to Employment Agreement between Duke Energy Corporation and Lynn J. Good, dated as of June 25, 2015 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 29, 2015, File No. 1-32853).	X						
10.41**	Amended and Restated Duke Energy Corporation Executive Short-Term Incentive Plan, effective February 23, 2022 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on February 24, 2022, File No. 1-32853).	X						
10.42**	Duke Energy Corporation 2017 Director Compensation Program Summary (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed on August 3, 2017, File No. 1-32853).	X						
10.43**	Duke Energy Corporation 2022 Director Compensation Program Summary (incorporated by reference to Exhibit 10.5 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed on May 9, 2022, File No. 1-32853).	X						
10.44**	Amended and Restated Duke Energy Corporation Executive Savings Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.82 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, filed on February 28, 2014, File No. 1-32853).	X						
10.44.1**	Amendment to Duke Energy Corporation Executive Savings Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed on November 3, 2017, File No. 1-32853).	X						
10.44.2**	Amendment to Duke Energy Corporation Executive Savings Plan, dated as of October 1, 2020 (incorporated by reference to Exhibit 10.2 to Duke Energy Corporation's Current Report on Form 8-K filed on September 25, 2020, File No. 1-32853).	X						
10.45**	Consulting Agreement, dated as of September 22, 2021, between Duke Energy Business Services, LLC and Douglas F Esamann (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on September 27, 2021, File No. 1-32853).	X						
10.46**	Retention Award Agreement (incorporated by reference to Exhibit 10.42 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2021, filed on February 24, 2022, File No. 1-32853).	X						
10.47	Agreement between Duke Energy SAM, LLC, Duke Energy Ohio, Inc., Duke Energy Commercial Enterprise, Inc. and Dynegy Resource I, LLC, dated as of August 21, 2014 (incorporated by reference to Exhibit 10.61 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2014, filed on March 2, 2015, File No. 1-32853).	X					X	
10.48	Asset Purchase Agreement between Duke Energy Progress, Inc. and North Carolina Eastern Municipal Power Agency, dated as of September 5, 2014 (incorporated by reference to Exhibit 10.62 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2014, filed on March 2, 2015, File No. 1-32853).	X			X			
10.49	Accelerated Stock Repurchase Program executed by Goldman, Sachs & Co., and JPMorgan Chase Bank, N.A. on April 6, 2015, under an agreement with Duke Energy Corporation (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on April 6, 2015, File No. 1-32853).	X						
10.50	Plea Agreement between Duke Energy Corporation and the Court of the Eastern District of North Carolina in connection with the May 14, 2015, Dan River Grand Jury Settlement (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed on August 7, 2015, File No. 1-32853).	X						
10.51	Plea Agreement between Duke Energy Corporation and the Court of the Eastern District of North Carolina in connection with the May 14, 2015, Dan River Grand Jury Settlement (incorporated by reference to Exhibit 10.4 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed on August 7, 2015, File No. 1-32853).	X						
10.52	Purchase and Sale Agreement by and among Duke Energy International Group S.à.r.l., Duke Energy International Brazil Holdings S.à.r.l. and China Three Gorges (Luxembourg) Energy S.à.r.l., dated as of October 10, 2016 (incorporated by reference to Exhibit 2.1 to registrant's Current Report on Form 8-K filed on October 13, 2016, File No. 1-32853).	X						
10.53	Purchase and Sale Agreement by and among Duke Energy Brazil Holdings II, C.V., Duke Energy International Uruguay Investments SRL, Duke Energy International Group S.à.r.l., Duke Energy International España Holdings SL, Duke Energy International Investments No. 2 Ltd., ISQ Enerlam Aggregator, L.P., and Enerlam (UK) Holdings Ltd., dated as of October 10, 2016 (incorporated by reference to Exhibit 2.2. to registrant's Current Report on Form 8-K filed on October 13, 2016, File No. 1-32853).	X						
10.54	$1,000,000,000 Credit Agreement, dated as of June 14	X						

10.54	$1,000,000,000 Credit Agreement, dated as of June 14, 2017, among Duke Energy Corporation, the Lenders listed therein, The Bank of Nova Scotia, as Administrative Agent, PNC Bank, N.A., Sumitomo Mitsui Banking Corporation, and TD Bank, N.A., as Co-Syndication Agents, and Bank of China, New York Branch, BNP Paribas, Santander Bank, N.A. and U.S. Bank N.A., as Co-Documentation Agents (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on June 14, 2017, File No. 1-32853).	X								
10.55	$1,000,000,000 Credit Agreement, dated as of May 15, 2019, among Duke Energy Corporation, the Lenders party thereto, The Bank of Nova Scotia, as Administrative Agent, PNC Bank, N.A., Sumitomo Mitsui Banking Corporation, and TD Bank, N.A., as Co-Syndication Agents, and Bank of China, New York Branch, BNP Paribas, Santander Bank, N.A., and U.S. Bank, N.A., as Co-Documentation Agents (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on May 16, 2019, File No. 1-32853).	X								
10.55.1	First Amendment to $1,000,000,000 Credit Agreement, dated as of May 15, 2019, among Duke Energy Corporation, the Lenders party therein, The Bank of Nova Scotia, as Administrative Agent, PNC Bank, N.A., Sumitomo Mitsui Banking Corporation, and TD Bank, N.A., as Co-Syndication Agents, and Bank of China, New York Branch, BNP Paribas, Santander Bank, N.A., and U.S> Bank, N.A., as Co-Documentation Agents (incorporated by reference to Exhibit 10.3 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed on May 10, 2021, File No. 1-32853).	X								
10.56	Amended and Restated Credit Agreement, dated as of March 18, 2022, among Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, LLC, Duke Energy Florida, LLC, and Piedmont Natural Gas Company, Inc., the Lenders party thereto, Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender and Wells Fargo Securities, LLC, as Joint Lead Arranger, Joint Bookrunner and Sustainability Structuring Agent, that increases the amount of the credit facility from $8B to $9B (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 21, 2022, File Nos. 1-32853, 1-4928, 1-3382, 1-3274, 1-1232, 1-3543, 1-6196).	X	X		X	X	X	X	X	X
10.57	$800 million Credit Agreement, dated as of October 21, 2022, among Duke Energy Florida, LLC, as Borrower, the lenders listed therein, Truist Bank, as Administrative Agent, Truist Securities, Inc., Mizuho Bank Ltd., and TD Bank, N.A., as Joint Lead Arrangers, and Truist Securities, Inc., as Sole Bookrunner (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on October 21, 2022, File No. 1-3274				X					
10.58	$1.5 billion 364-Day Term Loan Credit Agreement, dated as of March 19, 2020, among the registrant, as Borrower, certain Lenders from time to time parties thereto, and PNC Bank, N.A., as Administrative Agent, and registrant's borrowing of the remaining $500 million under registrant's existing $1 billion revolving credit facility on March 17, 2020 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on March 19, 2020, File No. 1-32853).	X								
10.59	Joinder Agreement, dated as of March 27, 2020, by and among, the registrant, each of the Incremental Lenders listed therein, and PNC Bank, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 12, 2020, File No. 1-32853).	X								
10.60	$1,400,000,000 Term Loan Credit Facility, dated as of March 9, 2022, among the registrant, as Borrower, certain Lenders from time to time parties thereto, and The Bank of Nova Scotia as Administrative Agent and Coordinating Lead Arranger (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on March 22, 2022, File No. 1-32853).	X								
10.61	Note Purchase Agreement, dated as of May 6, 2011, among Piedmont Natural Gas Company, Inc. and the Purchasers party thereto (incorporated by reference to Exhibit 10 to registrant's Current Report on Form 8-K filed on May 12, 2011, File No. 1-06196).									X
10.62	Amended and Restated Limited Liability Company Agreement of Constitution Pipeline Company, LLC dated April 9, 2012, by and among Williams Partners Operating LLC and Cabot Pipeline Holdings LLC (incorporated by reference to Exhibit 10.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended January 31, 2013, filed on March 6, 2013, File No. 1-06196).									X
10.62.1	First Amendment to Amended and Restated Limited Liability Company Agreement of Constitution Pipeline Company, LLC, dated as of November 9, 2012, by and among Constitution Pipeline Company, LLC, Williams Partners Operating LLC, Cabot Pipeline Holdings LLC, and Piedmont Constitution Pipeline Company, LLC (incorporated by reference to Exhibit 10.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended January 31, 2013, filed on March 6, 2013, File No. 1-06196).									X
10.62.2	Second Amendment to Amended and Restated Limited Liability Company Agreement of Constitution Pipeline Company, LLC, dated as of May 29, 2013, by and among Constitution Pipeline Company, LLC, Williams Partners Operating LLC, Cabot Pipeline Holdings LLC, Piedmont Constitution Pipeline Company, LLC, and Capitol Energy Ventures Corp. (incorporated by reference to Exhibit 99.1 to registrant's Current Report on Form 8-K filed on September 4, 2013, File No. 1-06196).									X
10.63	Second Amended and Restated Limited Liability Company Agreement of SouthStar Energy Services LLC, dated as of September 1, 2013, by and between Georgia Natural Gas Company and Piedmont Energy Company (incorporated by reference to Exhibit 10.39 to registrant's Annual Report on Form 10-K for the year ended October 31, 2013, filed on December 23, 2013, File No. 1-06196).									X
10.64	Limited Liability Company Agreement of Atlantic Coast Pipeline, LLC, dated as of September 2, 2014, by and between Dominion Atlantic Coast Pipeline, LLC, Duke									X

	between Dominion Atlantic Coast Pipeline, LLC, Duke Energy ACP, LLC, Piedmont ACP Company, LLC, and Maple Enterprise Holdings, Inc. (incorporated by reference to Exhibit 10.35 to registrant's Annual Report on Form 10-K for the year ended October 31, 2014, filed on December 23, 2014, File No. 1-06196).												
10.65	Amended and Restated Limited Liability Company Operating Agreement of Duke Energy Indiana Holdco, LLC (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on September 8, 2021, File Nos. 1-32853, 1-03543).	X									X		
10.66	Engineering, Procurement and Construction Agreement between Duke Energy Business Services, LLC, as agent for and on behalf of Piedmont Natural Gas Company Inc. and Matrix Service, Inc., dated as of April 30, 2019 (incorporated by reference to Exhibit 10.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 6, 2019, File No. 1-06196). (Portions of the exhibit have been omitted for confidentiality.)												X
10.67	Decommissioning Services Agreement between Duke Energy Florida, LLC, and ADP CR3, LLC, and ADP SF1, LLC (incorporated by reference to Exhibit 10.3 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 6, 2019, File No. 2-5293). (Portions of the exhibit have been omitted for confidentiality.)							X					
10.68	Form of Forward Sale Agreement (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on November 8, 2019, File No. 1-32853).	X											
10.69	Lease Agreement dated as of December 23, 2019, between the registrant and CGA 525 South Tryon TIC 1, LLC, a Delaware limited liability company, CGA 525 South Tryon TIC 2, LLC, a Delaware limited liability company, and CK 525 South Tryon TIC, LLC, a Delaware limited liability company (incorporated by reference to Exhibit 10.64 to registrant's Annual Report on Form 10-K for the year ended December 31, 2019, filed on February 20, 2020, File No. 1-4928).		X										
10.70	Construction Agency Agreement dated as of December 23, 2019, between the registrant and CGA 525 South Tryon TIC 1, LLC, a Delaware limited liability company, CGA 525 South Tryon TIC 2, LLC, a Delaware limited liability company, and CK 525 South Tryon TIC, LLC, a Delaware limited liability company (incorporated by reference to Exhibit 10.65 to registrant's Annual Report on Form 10-K for the year ended December 31, 2019, filed on February 20, 2020, File No. 1-4928).		X										
10.71	Equity Distribution Agreement, dated November 10, 2022, among Duke Energy Corporation and Barclays Capital, Inc., BofA Securities, Inc., Credit Suisse Securities (USA) LLC, Mizuho Securities USA LLC, Scotia Capital (USA) Inc. and SMBC Nikko Securities America, Inc., acting as sales agents, and Barclays Capital Inc., BofA Securities Inc., Credit Suisse Securities (USA) LLC, Mizuho Markets Americas LLC and Scotia Capital (USA) Inc. or their respective affiliates, acting as forward purchasers (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K, filed on November 10, 2022, File No. 1-32853	X											
*21	List of Subsidiaries	X											
*23.1.1	Consent of Independent Registered Public Accounting Firm.	X											
*23.1.2	Consent of Independent Registered Public Accounting Firm.		X										
*23.1.3	Consent of Independent Registered Public Accounting Firm.					X							
*23.1.4	Consent of Independent Registered Public Accounting Firm.							X					
*23.1.5	Consent of Independent Registered Public Accounting Firm.								X				
*23.1.6	Consent of Independent Registered Public Accounting Firm.										X		
*23.1.7	Consent of Independent Registered Public Accounting Firm.												X
*24.1	Power of attorney authorizing Lynn J. Good and others to sign the Annual Report on behalf of the registrant and certain of its directors and officers.	X											
*24.2	Certified copy of resolution of the Board of Directors of the registrant authorizing power of attorney.	X											
*31.1.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X											
*31.1.2	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.		X										
*31.1.3	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X								
*31.1.4	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X							
*31.1.5	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.							X					
*31.1.6	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.								X				
*31.1.7	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.										X		
*31.1.8	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.												X
*31.2.1	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X											
*31.2.2	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.		X										
*31.2.3	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X								
*31.2.4	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X							
*31.2.5	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.							X					
*31.2.6	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.								X				
*31.2.7	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.										X		
*31.2.8	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.												X
*32.1.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X											

*32.1.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.		X						
*32.1.3	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			X					
*32.1.4	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X				
*32.1.5	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X			
*32.1.6	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.						X		
*32.1.7	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.							X	
*32.1.8	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.								X
*32.2.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X							
*32.2.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.		X						
*32.2.3	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			X					
*32.2.4	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X				
*32.2.5	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X			
*32.2.6	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.						X		
*32.2.7	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.							X	
*32.2.8	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.								X
*101.INS	XBRL Instance Document (this does not appear in the Interactive Data File because it's XBRL tags are embedded within the Inline XBRL document).	X	X	X	X	X	X	X	X
*101.SCH	XBRL Taxonomy Extension Schema Document	X	X	X	X	X	X	X	X
*101.CAL	XBRL Taxonomy Calculation Linkbase Document	X	X	X	X	X	X	X	X
*101.LAB	XBRL Taxonomy Label Linkbase Document	X	X	X	X	X	X	X	X
*101.PRE	XBRL Taxonomy Presentation Linkbase Document	X	X	X	X	X	X	X	X
*101.DEF	XBRL Taxonomy Definition Linkbase Document	X	X	X	X	X	X	X	X
*104	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).	X	X	X	X	X	X	X	X

The total amount of securities of each respective registrant or its subsidiaries authorized under any instrument with respect to long-term debt not filed as an exhibit does not exceed 10% of the total assets of such registrant and its subsidiaries on a consolidated basis. Each registrant agrees, upon request of the SEC, to furnish copies of any or all of such instruments to it.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

DUKE ENERGY CORPORATION
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chair, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chair, President and Chief Executive Officer (Principal Executive Officer and Director)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

Derrick Burks*	Lynn J. Good*
Annette K. Clayton*	John T. Herron*
Theodore F. Craver, Jr.*	Idalene F. Kesner*
Robert M. Davis*	E. Marie McKee*
Caroline D. Dorsa*	Michael J. Pacilio*
W. Roy Dunbar*	Thomas E. Skains*
Nicholas C. Fanandakis*	William E. Webster, Jr.*

Brian D. Savoy, by signing his name hereto, does hereby sign this document on behalf of the registrant and on behalf of each of the above-named persons previously indicated by asterisk (*) pursuant to a power of attorney duly executed by the registrant and such persons, filed with the Securities and Exchange Commission as an exhibit hereto.

By: /s/ BRIAN D. SAVOY
Attorney-In-Fact

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

DUKE ENERGY CAROLINAS, LLC
(Registrant)
By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ JULIA S. JANSON
Julia S. Janson

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

PROGRESS ENERGY, INC.
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ KODWO GHARTEY-TAGOE
Kodwo Ghartey-Tagoe

/s/ LYNN J. GOOD
Lynn J. Good

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

DUKE ENERGY PROGRESS, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ KODWO GHARTEY-TAGOE
Kodwo Ghartey-Tagoe

/s/ R. ALEXANDER GLENN
R. Alexander Glenn

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ JULIA S. JANSON
Julia S. Janson

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

DUKE ENERGY FLORIDA, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ KODWO GHARTEY-TAGOE
Kodwo Ghartey-Tagoe

/s/ R. ALEXANDER GLENN
R. Alexander Glenn

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ JULIA S. JANSON
Julia S. Janson

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

DUKE ENERGY OHIO, INC.
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ R. ALEXANDER GLENN
R. Alexander Glenn

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

DUKE ENERGY INDIANA, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ R. ALEXANDER GLENN
R. Alexander Glenn

/s/ KELLEY A. KARN
Kelley A. Karn

/s/ STAN PINEGAR
Stan Pinegar

Date: February 27, 2023

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2023

PIEDMONT NATURAL GAS COMPANY, INC.
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ BRIAN D. SAVOY
Brian D. Savoy
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ CYNTHIA S. LEE
Cynthia S. Lee
Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ BRIAN D. SAVOY
Brian D. Savoy

Date: February 27, 2023