

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 period ended December 31, 2019 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 and Telephone Number	IRS Employer Identification No.
1-32853	 DUKE ENERGY CORPORATION (a Delaware corporation) 550 South Tryon 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:

<u>Registrant</u>	<u>Title of each class</u>	<u>Trading symbols</u>	<u>Name of each exchange on which registered</u>
Duke Energy Corporation (Duke Energy)	Common Stock, \$0.001 par value	DUK	New York Stock Exchange LLC
Duke Energy	5.125% Junior Subordinated Debentures due January 15, 2073	DUKH	New York Stock Exchange LLC
Duke Energy	5.625% Junior Subordinated Debentures due September 15, 2078	DUKB	New York Stock Exchange LLC
Duke Energy	Depository 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

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Duke Energy Florida, LLC (Duke Energy Florida)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Duke Energy Carolinas, LLC (Duke Energy Carolinas)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Duke Energy Ohio, Inc. (Duke Energy Ohio)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Progress Energy, Inc. (Progress Energy)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Duke Energy Indiana, LLC (Duke Energy Indiana)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Duke Energy Progress, LLC (Duke Energy Progress)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Piedmont Natural Gas Company, Inc. (Piedmont)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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 and post 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 each of the registrants is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Estimated aggregate market value of the common equity held by nonaffiliates of Duke Energy at June 30, 2019. \$ 64,230,558,771
 Number of shares of Common Stock, \$0.001 par value, outstanding at January 31, 2020. 733,321,965

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Duke Energy definitive proxy statement for the 2020 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.

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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:

- 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 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;
- 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 and the economic health of our service territories or variations in customer usage patterns, including energy efficiency efforts 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 and distributed generation technologies, such as private solar and battery storage, in Duke Energy service territories could result in customers leaving the electric distribution system, 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;
- 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;
- The ability to obtain the necessary permits and approvals and to complete necessary or desirable pipeline expansion or infrastructure projects in our natural gas business;
- 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 attack, cybersecurity threats, data security breaches, operational accidents, 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 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, 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;

FORWARD LOOKING STATEMENTS

- 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;
- The effect of accounting pronouncements issued periodically by accounting standard-setting bodies;
- 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; and
- The ability to implement our business strategy, including enhancing existing technology systems.

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
2013 Settlement	Revised and Restated Stipulation and Settlement Agreement approved in November 2013 among Duke Energy Florida, the Florida Office of Public Counsel and other customer advocates
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
ACE	Affordable Clean Energy
ACP	Atlantic Coast Pipeline, LLC, a limited liability company owned by Dominion, Duke Energy and Southern Company Gas
ACP pipeline	The approximately 600-mile proposed interstate natural gas pipeline
AFUDC	Allowance for funds used during construction
AFS	Available for Sale
ALJ	Administrative Law Judge
AMI	Advanced Metering Infrastructure
AMT	Alternative Minimum Tax
AOCI	Accumulated Other Comprehensive Income (Loss)
ARO	Asset Retirement Obligation
ATM	At-the-market
Audit Committee	Audit Committee of the Board of Directors
Beckjord	Beckjord Generating Station
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
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
Constitution	Constitution Pipeline Company, LLC
CPCN	Certificate of Public Convenience and Necessity
CRC	Cinergy Receivables Company LLC
Crystal River Unit 3	Crystal River Unit 3 Nuclear Plant
CWA	Clean Water Act

GLOSSARY OF TERMS

DATC	Duke-American Transmission Co.
D.C. Circuit Court	U.S. Court of Appeals for the District of Columbia
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
DETM	Duke Energy Trading and Marketing, LLC
DOE	U.S. Department of Energy
Dominion	Dominion Energy, Inc.
DRIP	Dividend Reinvestment Program
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
EE	Energy efficiency
EPA	U.S. Environmental Protection Agency
EPC	Engineering, Procurement and Construction agreement
EPS	Earnings Per Share
ETR	Effective tax rate
Exchange Act	Securities Exchange Act of 1934
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FES	FirstEnergy Solutions Corp.
Form S-3	Registration statement
FPSC	Florida Public Service Commission
FTR	Financial transmission rights
Fluor	Fluor Enterprises, Inc.
FV-NI	Fair value through net income
GAAP	Generally Accepted Accounting Principles in the United States
GAAP Reported EPS	Diluted EPS Available to Duke Energy Corporation common stockholders
GHG	Greenhouse Gas
GWh	Gigawatt-hours

GLOSSARY OF TERMS

Hardy Storage	Hardy Storage Company, LLC
Harris	Shearon Harris Nuclear Plant
HLBV	Hypothetical Liquidation at Book Value
IGCC	Integrated Gasification Combined Cycle
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
LIBOR	London Interbank Offered Rate
LLC	Limited Liability Company
McGuire	McGuire Nuclear Station
MGP	Manufactured gas plant
MISO	Midcontinent Independent System Operator, Inc.
MMBtu	Million British Thermal Unit
MTBE	Methyl tertiary butyl ether
MTEP	MISO Transmission Expansion Planning
MW	Megawatt
MWh	Megawatt-hour
NCDEQ	North Carolina Department of Environmental Quality
NCEMC	North Carolina Electric Membership Corporation
NCEMPA	North Carolina Eastern Municipal Power Agency
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
NO _x	Nitrogen oxide
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

GLOSSARY OF TERMS

OPEB Assets	Other post-retirement plan assets are comprised of the Retirement Plan of Piedmont 401(h) Medical Plan, and the following VEBA Trusts: Duke Energy Corporation Employee Benefits Trust, Piedmont Natural Gas Company 501(c)(9) Trust for Retired Bargaining Unit Employees and the Piedmont Natural Gas Company 501(c)(9) Trust for Retired Non-Bargaining Unit Employees
ORS	Office of Regulatory Staff
OTTI	Other-than-temporary impairment
OVEC	Ohio Valley Electric Corporation
the Parent	Duke Energy Corporation holding company
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
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
RCA	Revolving Credit Agreement
RFP	Requests for Proposal
REC	Renewable Energy Certificate
REC Solar	REC Solar Corp.
Relative TSR	TSR of Duke Energy stock relative to a predefined peer group
Robinson	Robinson Nuclear Plant
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
SELC	Southern Environmental Law Center
Segment Income	Income from continuing operations net of income attributable to noncontrolling interests and preferred stock dividends
SO ₂	Sulfur dioxide
Spectra Capital	Spectra Energy Capital, LLC
S&P	Standard & Poor's Rating Services
State utility commissions	NCUC, PSCSC, FPSC, PUCO, IURC, KPSC and TPUC (Collectively)

GLOSSARY OF TERMS

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
VEBA	Voluntary Employees' Beneficiary Association
VIE	Variable Interest Entity
WACC	Weighted Average Cost of Capital
WNA	Weather normalization adjustment
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.

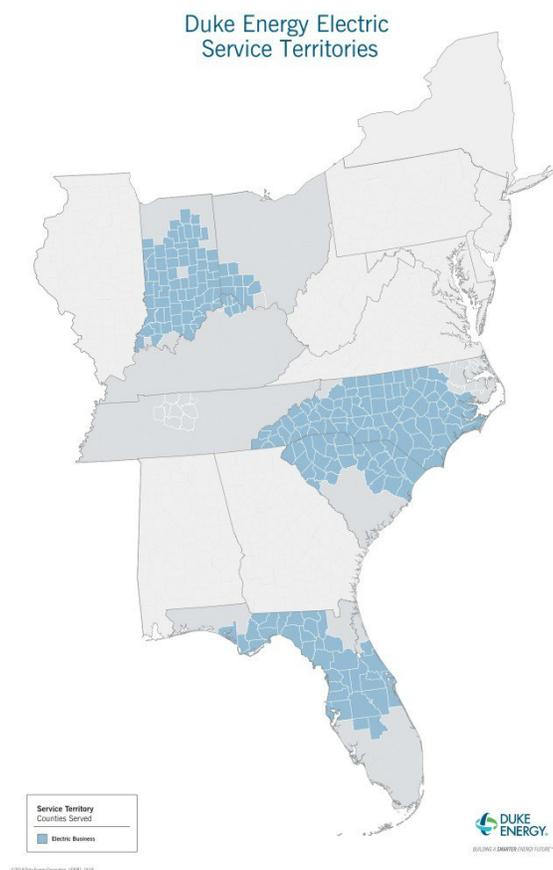
The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at sec.gov. Additionally, information about the Duke Energy Registrants, including reports filed with the SEC, is available through 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 three reportable business segments: Electric Utilities and Infrastructure, Gas Utilities and Infrastructure and Commercial Renewables. The remainder of Duke Energy's operations is presented as Other. 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

Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure provides retail electric service through the generation, transmission, distribution and sale of electricity to approximately 7.8 million customers within the Southeast and Midwest regions of the U.S. The service territory is approximately 91,000 square miles across six states with a total estimated population of 25 million people. The operations include electricity sold wholesale to municipalities, electric cooperative utilities and other load-serving entities. Electric Utilities and Infrastructure is also a joint owner in certain electric transmission projects. Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure 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 Electric Utilities and Infrastructure as of December 31, 2019.



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 billed sales by customer class for the year ended December 31, 2019.

	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana
Residential	32%	27%	49%	37%	29%
General service	33%	23%	37%	38%	26%
Industrial	24%	15%	7%	23%	32%
Total retail sales	89%	65%	93%	98%	87%
Wholesale and other sales	11%	35%	7%	2%	13%
Total sales	100%	100%	100%	100%	100%

The number of residential and general service customers within the Electric Utilities and Infrastructure service territory is expected to increase over time. While economic conditions within the service territory remain strong, sales growth continues to be influenced by adoption of energy efficiencies and self-generation. Residential sales for 2019 compared to 2018 declined. The continued adoption of more efficient structures and appliances is expected to continue to drive average usage per customer lower over time. However, the continued adoption of more efficient housing and appliances is expected to 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

Electric Utilities and Infrastructure'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. Electric Utilities and Infrastructure 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, Electric Utilities and Infrastructure conducts competitive auctions for electricity supply. The cost of energy purchased through these auctions is recovered from retail customers. Electric Utilities and Infrastructure 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 Electric Utilities and Infrastructure'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 Electric Utilities and Infrastructure to attract new customers and to retain existing customers.

Energy Capacity and Resources

Electric Utilities and Infrastructure owns approximately 51,144 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 Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure 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.

Electric Utilities and Infrastructure'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

Electric Utilities and Infrastructure 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, 2019.

	Generation by Source			Cost of Delivered Fuel per Net Kilowatt-hour Generated (Cents)		
	2019	2018	2017	2019	2018	2017
Natural gas and oil ^(a)	29.2%	26.2%	23.6%	2.96	3.57	2.85
Nuclear ^(a)	28.6%	26.0%	27.8%	0.60	0.50	0.69
Coal ^(a)	21.6%	24.4%	27.4%	3.08	2.82	2.72
All fuels (cost-based on weighted average) ^(a)	79.4%	76.6%	78.8%	2.14	2.29	2.04
Hydroelectric and solar ^(b)	1.2%	1.3%	0.7%			
Total generation	80.6%	77.9%	79.5%			
Purchased power and net interchange	19.4%	22.1%	20.5%			
Total sources of energy	100.0%	100.0%	100.0%			

(a) Statistics related to all fuels reflect Electric Utilities and Infrastructure's 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 Electric Utilities and Infrastructure'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.

Electric Utilities and Infrastructure has certain dual-fuel generating facilities that can operate utilizing both natural gas and fuel oil. The cost of Electric Utilities and Infrastructure'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. For Duke Energy Florida, there is currently an agreed to moratorium with the FPSC on future hedging of natural gas prices.

Electric Utilities and Infrastructure has firm interstate and intrastate natural gas transportation agreements and storage agreements in place to support generation needed for load requirements. Electric Utilities and Infrastructure may purchase additional shorter-term natural gas transportation and utilize natural gas interruptible transportation agreements to support generation needed for load requirements. The Electric Utilities and Infrastructure 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.

Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure 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, Electric Utilities and Infrastructure generally sources these services to a single domestic supplier on a plant-by-plant basis using multiyear contracts.

Electric Utilities and Infrastructure has entered into fuel contracts that cover 100% of its uranium concentrates, conversion services and enrichment services requirements through at least 2020 and cover fabrication services requirements for these plants through at least 2027. For future requirements not already covered under long-term contracts, Electric Utilities and Infrastructure 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

Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure uses spot market purchases to meet coal requirements not met by long-term contracts. Expiration dates for its long-term contracts, which have various price adjustment provisions and market reopeners, range from 2020 to 2022 for Duke Energy Carolinas and Duke Energy Progress, 2020 to 2021 for Duke Energy Florida and Duke Energy Ohio and 2020 to 2025 for Duke Energy Indiana. Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure has an adequate supply of coal under contract to meet its hedging 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. Electric Utilities and Infrastructure 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 Colorado and 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. The current average sulfur content of coal purchased by Electric Utilities and Infrastructure is between 1.5% and 2% for Duke Energy Carolinas and Duke Energy Progress, between 2% and 3% for Duke Energy Florida, between 2.5% and 3% for Duke Energy Ohio and between 1.5% and 3% for Duke Energy Indiana. Electric Utilities and Infrastructure's environmental controls, in combination with the use of SO₂ emission allowances, enable Electric Utilities and Infrastructure to satisfy current SO₂ emission limitations for its existing facilities.

Purchased Power

Electric Utilities and Infrastructure purchases a portion of its capacity and system requirements through purchase obligations, leases and purchase capacity contracts. Electric Utilities and Infrastructure 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:

	2019	2018	2017
Purchase obligations and leases (in millions of MWh) ^(a)	34.8	21.3	17.7
Purchase capacity under contract (in MW) ^(b)	4,238	4,025	4,028

(a) Represents approximately 14% for 2019 and 7% for 2018 and 2017 of total system requirements.

(b) For 2019, 2018 and 2017 these agreements include approximately 412 MW of firm capacity under contract by Duke Energy Florida with QFs.

Inventory

Electric Utilities and Infrastructure 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, 2019, the inventory balance for Electric Utilities and Infrastructure was approximately \$3 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 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 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, including the Coal Ash Act in North Carolina.

Electric Utilities and Infrastructure has and will periodically submit to applicable authorities required site-specific coal ash impoundment remediation or closure plans. These plans and all associated permits must be approved before any work can begin. 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 appropriate engineered off-site or on-site lined landfills or conversion of the ash for beneficial use. Duke Energy has completed excavation of coal ash regulated by the Coal Ash Act at three of the four high-priority 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.

The Coal Ash Act leaves 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 Carolinas and Duke Energy Progress have included compliance costs associated with the EPA CCR rule and the Coal Ash Act in their respective rate case filings. 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 \$13.9 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.

(in millions)	NDTF ^(a)		Decommissioning	
	December 31, 2019	December 31, 2018	Costs ^(a)	Year of Cost Study
Duke Energy	\$ 8,140	\$ 6,720	\$ 9,152	2018 and 2019
Duke Energy Carolinas ^{(b)(c)}	4,359	3,558	4,365	2018
Duke Energy Progress ^(d)	3,047	2,503	4,181	2019
Duke Energy Florida ^(e)	734	659	606	2019

- (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, which was completed in 2019, is expected to be filed with the NCUC and PSCSC during the first quarter of 2020. Duke Energy Progress is expected to file an updated funding study with NCUC and PSCSC in the third quarter of 2020.
- (e) During 2019, Duke Energy Florida reached an agreement to transfer decommissioning work for Crystal River Unit 3 to a third party. The agreement requires regulatory approval from the NRC and the FPSC.

The NCUC, PSCSC, FPSC and FERC have allowed Electric Utilities and Infrastructure to recover estimated decommissioning costs through retail and wholesale rates over the expected remaining service periods of their nuclear stations. Electric Utilities and Infrastructure 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 Electric Utilities and Infrastructure 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.

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.

Electric Utilities and Infrastructure 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. During 2019, Duke Energy 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.

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 Electric Utilities and Infrastructure's generating facilities. CPCNs issued by the state electric utility commissions, as applicable, authorize Electric Utilities and Infrastructure 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 Electric Utilities and Infrastructure 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 Electric Utilities and Infrastructure. Electric Utilities and Infrastructure 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 Electric Utilities and Infrastructure, 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 Electric Utilities and Infrastructure.

The table below reflects significant electric rate case applications approved and effective in the past three years or 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 Carolinas 2018 South Carolina Rate Case	PSCSC	\$ 45	9.5%	53%	6/1/2019
Duke Energy Progress 2018 South Carolina Rate Case	PSCSC	29	9.5%	53%	6/1/2019
Duke Energy Ohio 2017 Ohio Electric Rate Case	PUCO	(19)	9.84%	50.75%	1/2/2019
Duke Energy Carolinas 2017 North Carolina Rate Case	NCUC	(73)	9.9%	52%	8/1/2018
Duke Energy Kentucky 2017 Kentucky Electric Rate Case	KPSC	8	9.725%	49%	5/1/2018
Duke Energy Progress 2017 North Carolina Rate Case	NCUC	151	9.9%	52%	3/16/2018
Duke Energy Progress 2016 South Carolina Rate Case	PSCSC	(a)	10.1%	53%	1/1/2017
Pending Rate Cases:					
Duke Energy Carolinas 2019 North Carolina Rate Case	NCUC	\$ 291	10.3%	53%	8/1/2020
Duke Energy Progress 2019 North Carolina Rate Case	NCUC	464	10.3%	53%	9/1/2020
Duke Energy Kentucky 2019 Kentucky Electric Rate Case	KPSC	46	9.8%	48.2%	Q2 2020
Duke Energy Indiana 2019 Indiana Rate Case	IURC	(b)	10.4%	53%	mid 2020

- (a) An increase of approximately \$38 million in revenues was effective January 1, 2017, and an additional increase of approximately \$19 million in revenues was effective January 1, 2018.
- (b) Requests an increase of annualized retail revenues of \$352 million beginning in July 2020, and an additional \$44 million beginning in April 2021, which include the impacts of the Utility Receipt Tax.

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

Federal

The FERC approves Electric Utilities and Infrastructure'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 Electric Utilities and Infrastructure.

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.

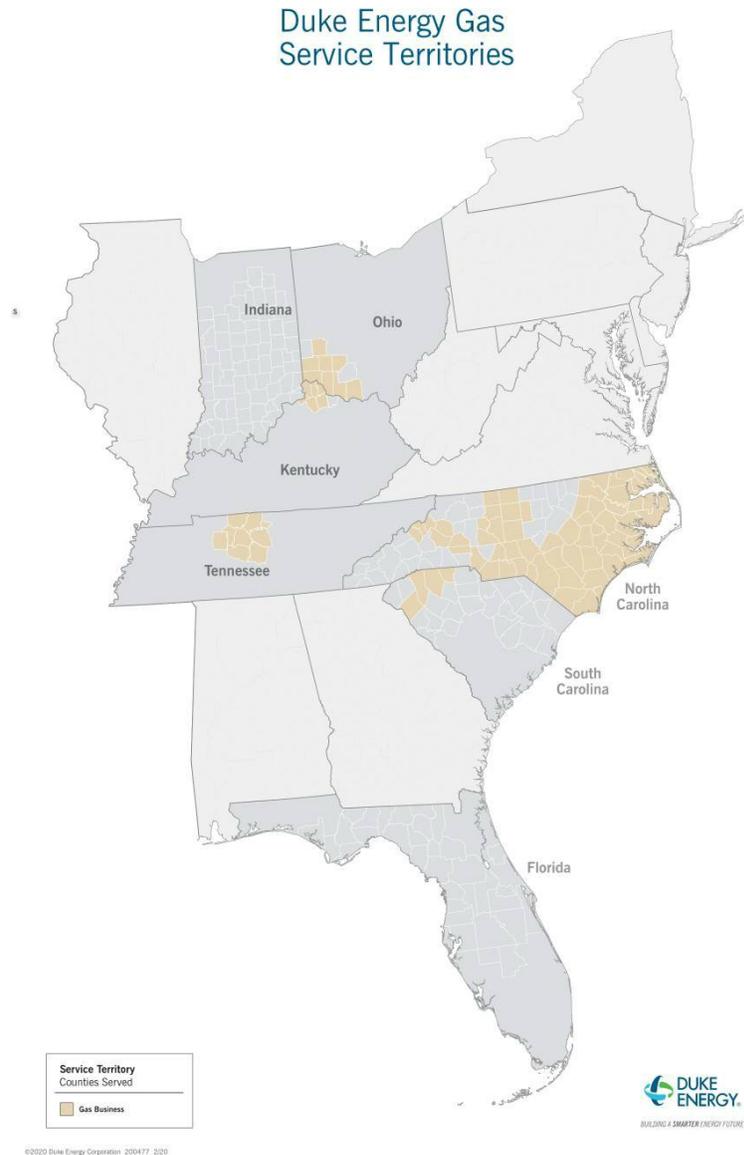
Duke Energy Ohio is a member of PJM and Duke Energy Indiana is a member of MISO. Transmission owners in these RTOs have turned over control of their transmission facilities and their transmission systems are currently under the dispatch control of the RTOs. Transmission service is provided on a nationwide,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

Environmental

Electric Utilities and Infrastructure 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 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

Gas Utilities and Infrastructure 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. Gas Utilities and Infrastructure serves residential, commercial, industrial and power generation natural gas customers, including customers served by municipalities who are wholesale customers. Gas Utilities and Infrastructure has over 1.6 million customers, including 1.1 million customers located in North Carolina, South Carolina and Tennessee, and an additional 535,000 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 and proposed midstream properties for Gas Utilities and Infrastructure as of December 31, 2019.



The number of residential, commercial and industrial customers within the Gas Utilities and Infrastructure 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.

Gas Utilities and Infrastructure also owns, operates and has investments in various pipeline transmission and natural gas storage facilities.

Natural Gas for Retail Distribution

Gas Utilities and Infrastructure is responsible for the distribution of natural gas to retail customers in its North Carolina, South Carolina, Tennessee, Ohio and Kentucky service territories. Gas Utilities and Infrastructure'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 Gas Utilities and Infrastructure 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, Gas Utilities and Infrastructure may release these services and supplies in the secondary market under FERC-approved capacity release provisions or make wholesale secondary market sales. In 2019, firm supply purchase commitment agreements provided 100% of the natural gas supply for both Piedmont and Duke Energy Ohio.

Impact of Weather

Gas Utilities and Infrastructure 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 commercial customer classes. Margin decoupling provides a set revenue 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

Gas Utilities and Infrastructure's businesses operate as the sole provider of natural gas service within their retail service territories. Gas Utilities and Infrastructure owns and operates facilities necessary to transport and distribute natural gas. Gas Utilities and Infrastructure 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. Gas Utilities and Infrastructure'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.

Pipeline and Storage Investments

Duke Energy, through its Gas Utilities and Infrastructure segment, is a 47% equity member of ACP, which plans to build and own the proposed ACP pipeline, an approximately 600-mile interstate natural gas pipeline, regulated by FERC. The ACP pipeline is intended to transport diverse natural gas supplies into southeastern markets. Duke Energy Carolinas, Duke Energy Progress and Piedmont, among others, will be customers of ACP. ACP expects mechanical completion of the full project in late 2021 with in-service likely in the first half of 2022. Abnormal weather, work delays (including delays due to judicial or regulatory action) and other conditions may result in cost or schedule modifications, a suspension of AFUDC for ACP and/or impairment charges potentially material to Duke Energy's cash flows, financial position and results of operations. ACP and Duke Energy will continue to consider their options with respect to the foregoing in light of their existing contractual and legal obligations.

Gas Utilities and Infrastructure also 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 one 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. In May 2019, construction activities began as planned on Phase II of Sabal Trail. Phase II will add approximately 200,000 Dth of capacity to the Sabal Trail pipeline and is expected to achieve in-service in May 2020.

Gas Utilities and Infrastructure had a 24% equity ownership interest in Constitution, an interstate pipeline development company formed to develop, construct, own and operate a 124-mile natural gas pipeline and related facilities, regulated by FERC. Constitution was slated to transport natural gas supplies from the Marcellus supply region in northern Pennsylvania to major northeastern markets. As of February 5, 2020, the Constitution partners formally resolved to initiate the dissolution of Constitution, and to terminate the Constitution Pipeline project.

Duke Energy, through its Gas Utilities and Infrastructure segment, 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, 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 Corporation.

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 pipeline investments.

Inventory

Gas Utilities and Infrastructure must maintain adequate natural gas inventory in order to provide reliable delivery to customers. As of December 31, 2019, the inventory balance for Gas Utilities and Infrastructure was \$111 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 Gas Utilities and Infrastructure's natural gas distribution facilities. CPCNs issued by the state gas utility commissions or other government agencies, as applicable, authorize Gas Utilities and Infrastructure 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 Gas Utilities and Infrastructure 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 Gas Utilities and Infrastructure. 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 Gas Utilities and Infrastructure, unless a commission finds a portion of such costs to have not been prudent. However, delays between the expenditure for natural gas and recovery from customers can adversely impact the timing of cash flows of Gas Utilities and Infrastructure.

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

	Annual Increase (Decrease) (in millions)	Return on Equity	Equity Component of Capital Structure	Effective Date
Approved Rate Cases:				
Piedmont 2017 South Carolina Rate Stabilization Adjustment Filing	6	10.2%	53.0%	November 2017
Piedmont 2018 South Carolina Rate Stabilization Adjustment Filing	(14)	10.2%	53.0%	November 2018
Piedmont 2019 South Carolina Rate Stabilization Adjustment Filing	6	9.9%	55.4%	November 2019
Duke Energy Kentucky 2018 Natural Gas Base Rate Case	7	9.7%	50.8%	April 2019
Piedmont 2019 North Carolina Natural Gas Base Rate Case	109	9.7%	52.0%	November 2019

Gas Utilities and Infrastructure has IMR mechanisms in North Carolina and Tennessee designed to separately track and recover certain costs associated with capital investments incurred to comply with federal pipeline safety and integrity programs, as well as additional state safety and integrity requirements in Tennessee. The following table summarizes information related to recently approved or pending IMR filings.

(in millions)	Cumulative Investment	Annual Revenues	Effective Date
Piedmont 2019 IMR Filing – North Carolina	\$ 109	\$ 11.4	December 2019
Pending Filing:			
Piedmont 2019 IMR Filing – Tennessee	296.6	28.1	Expected Effective Date mid 2020

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

Federal

Gas Utilities and Infrastructure 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

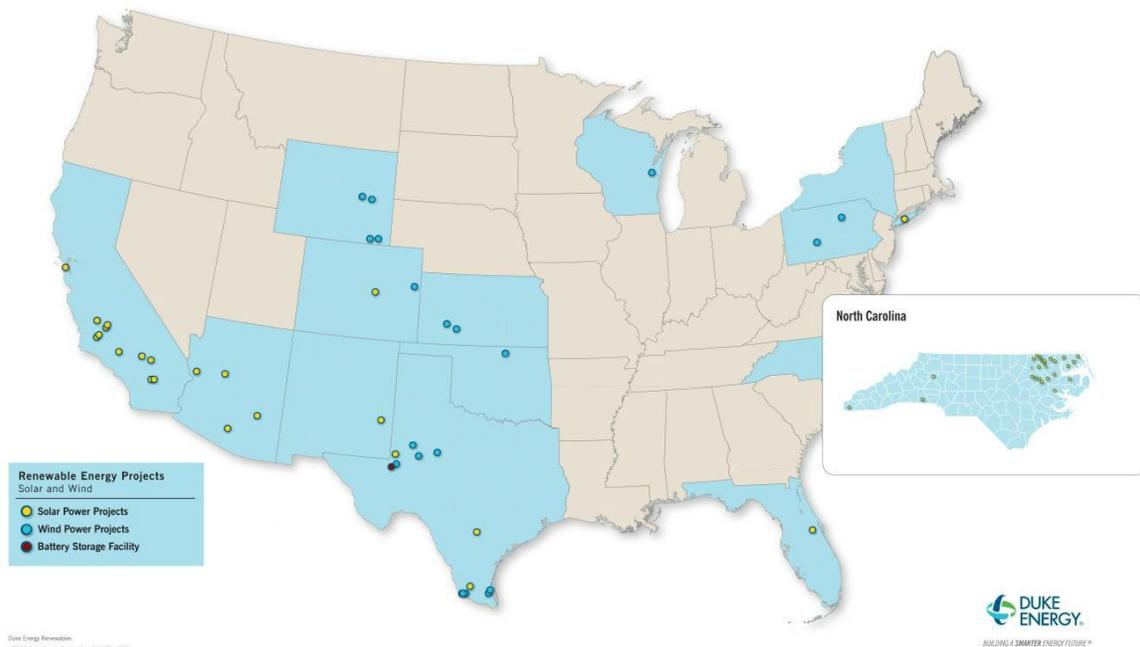
Gas Utilities and Infrastructure is subject to the jurisdiction of the EPA and state and local environmental agencies. For a discussion of environmental regulation, see “Environmental Matters” in this section. See “Other Matters” section of Management’s Discussion and Analysis for a discussion about 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.

COMMERCIAL RENEWABLES

Commercial Renewables primarily acquires, develops, builds, operates and owns wind and solar renewable generation throughout the continental U.S. The portfolio includes nonregulated renewable energy and energy storage businesses. On April 24, 2019, Duke Energy executed an agreement to sell a minority interest in a portion of certain renewable assets. The sale closed on September 6, 2019, See Note 2 to the Consolidated Financial Statements, “Acquisitions and Dispositions,” for additional information.

Commercial Renewables’ renewable energy includes utility-scale wind and solar generation assets, distributed solar generation assets, distributed fuel cell assets and a battery storage project, which total 2,282 MW across 19 states from 22 wind facilities, 126 solar projects, 11 fuel cell locations and one battery storage facility. Revenues are primarily generated by selling the power produced from renewable generation through long-term contracts to utilities, electric cooperatives, municipalities and corporate customers. In most instances, these customers have obligations under state-mandated renewable energy portfolio standards or similar state or local renewable energy goals. Energy and renewable energy credits generated by wind and solar projects are generally sold at contractual prices. The following map shows the locations of renewable generation facilities of which Commercial Renewables has an ownership interest as of December 31, 2019.

Commercial Renewables Portfolio



As eligible projects are placed in service, Commercial Renewables recognizes either PTCs as power is generated by wind projects over 10 years or ITCs when the renewable solar, fuel cells or wind project achieves commercial availability. ITCs are recognized over the useful life of the asset as a reduction to depreciation expense. Benefits of the tax basis adjustment due to the ITC are recognized in income in the year of commercial availability. The ITC is being phased down from the current 2019 rate of 30% to a permanent 10% rate if construction begins after 2021. The PTC is being phased out and wind turbines will earn 10 years of PTCs at phased-out rates if construction began in 2017 through 2020.

As part of its growth strategy, Commercial Renewables has expanded its investment portfolio through the addition of distributed solar companies and projects, energy storage systems and energy management solutions specifically tailored to commercial businesses. These investments include REC Solar, a California-based provider of solar installations for retail, manufacturing, agriculture, technology, government and nonprofit customers across the U.S. and Phoenix Energy Technologies Inc., a California-based provider of enterprise energy management and information software to commercial businesses.

Commercial Renewables has entered into agreements for certain of its generating assets that are held by LLCs whose members include a noncontrolling tax equity investor. The allocation of tax attributes and cash flows to the tax equity investor are governed by the provisions of the LLC agreements. The GAAP earnings allocations to the tax equity investors can result in variability in earnings to Duke Energy. As part of its growth strategy, Commercial Renewables expects to enter into these arrangements for future generating assets.

For additional information on Commercial Renewables' generation facilities, see Item 2, "Properties."

Market Environment and Competition

Commercial Renewables primarily competes for wholesale contracts for the generation and sale of electricity from generation assets it either develops or acquires and owns. The market price of commodities and services, along with the quality and reliability of services provided, drive competition in the wholesale energy business. The number and type of competitors may vary based on location, generation type and project size. Commercial Renewables' main competitors include other nonregulated generators and wholesale power providers.

Sources of Electricity

Commercial Renewables relies on wind, solar, fuel cells and battery resources for its generation of electric energy.

Regulation

Commercial Renewables is subject to regulation at the federal level, primarily from the FERC. Regulations of the FERC govern access to regulated market information by nonregulated entities and services provided between regulated and nonregulated utilities.

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 including costs to achieve strategic acquisitions, 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.

Employees

On December 31, 2019, Duke Energy had a total of 28,793 employees on its payroll. The total includes 5,399 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.

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	60	Chairman, President and Chief Executive Officer. Ms. Good was elected as Chairman of the Board, effective January 1, 2016, and assumed her position as President and Chief Executive Officer in July 2013. Prior to that, she served as Executive Vice President and Chief Financial Officer since 2009.
Steven K. Young	61	Executive Vice President and Chief Financial Officer. Mr. Young assumed his current position in August 2013. Prior to that, he served as 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.
Melissa H. Anderson	55	Executive Vice President and Chief Human Resources Officer. Ms. Anderson assumed her position in January 2015 and had responsibility for the Administration services organization from May 2016 until October 2019. Prior to joining Duke Energy, she served as Senior Vice President of Human Resources at Domtar Inc. since 2010.
Douglas F. Esamann	62	Executive Vice President, Energy Solutions and President, Midwest/Florida Regions and Natural Gas Business. Mr. Esamann assumed his current position in October 2019, was Executive Vice President, Energy Solutions and President, Midwest and Florida Regions since September 2016 and was Executive Vice President and President, Midwest and Florida Regions since June 2015. Prior to that, he served as President, Duke Energy Indiana since November 2010.
Kodwo Ghartey-Tagoe	56	Executive Vice President and Chief Legal Officer. Mr. Ghartey-Tagoe assumed the position of 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.
Dwight L. Jacobs	54	Senior Vice President, Chief Accounting Officer, Tax and Controller. Mr. Jacobs has served as Senior Vice President, Chief Accounting Officer, Tax and Controller since January 1, 2019. Prior to that, he served as Senior Vice President, Chief Accounting Officer and Controller since June 1, 2018. Prior to that, he served as Senior Vice President, Financial Planning & Analysis since February 2016 and as Chief Risk Officer since July 2014. Prior to his role as Chief Risk Officer, Mr. Jacobs served as Vice President, Rates & Regulatory Strategy since May 2010.
Dhiaa M. Jamil	63	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	54	Executive Vice President, External Affairs and President, Carolinas Region. Ms. Janson has held the position of Executive Vice President, External Affairs and President, Carolinas Region since October 2019. Prior to that, she held 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.
Brian D. Savoy	44	Senior Vice President, Chief Transformation and Administrative Officer. Mr. Savoy assumed his current position in October 2019. Prior to that, he served as Senior Vice President, Business Transformation and Technology since May 2016; 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.
Henry K. Sideris	49	Senior Vice President, Customer Experience 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.

(a) The ages of the officers provided are as of December 31, 2019.

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 CWA, 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 the 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.
- The ACE rule, which will require states to develop CO₂ reduction plans based on efficiency (heat rate) improvements at coal-fired power plants.

For more information on environmental matters, see Notes 5 and 9 to the Consolidated Financial Statements, "Commitments and Contingencies – Environmental" and "Asset Retirement Obligations," respectively, and the "Other Matters" section of 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 Management's Discussion and Analysis includes an estimate of future capital expenditures required to comply with 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 2.7 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, Electric Utilities and Infrastructure. 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, Electric Utilities and Infrastructure. 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 1.6 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, Electric Utilities and Infrastructure. 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 1.8 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, Electric Utilities and Infrastructure. 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 870,000 residential, commercial and industrial customers and provides transmission and distribution services for natural gas to approximately 542,000 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 Corporation.

Substantially all of Duke Energy Ohio's operations are regulated and qualify for regulatory accounting. Duke Energy Ohio has two reportable segments, Electric Utilities and Infrastructure and Gas Utilities and Infrastructure. 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 850,000 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.

Substantially all of Duke Energy Indiana's operations are regulated and qualify for regulatory accounting. Duke Energy Indiana operates one reportable business segment, Electric Utilities and Infrastructure. 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 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, Gas Utilities and Infrastructure. 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.**

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 strategy, which includes transforming the customer experience, modernizing the energy grid, generating cleaner energy and working to achieve net-zero carbon emissions by 2050, expanding the natural gas infrastructure, modernizing the regulatory construct and digital transformation, is subject to business, economic and competitive uncertainties and contingencies, many of which are beyond its control. As a consequence, Duke Energy may not be able to fully implement or realize the anticipated results of its strategy.

REGULATORY, LEGISLATIVE AND LEGAL RISKS**The Duke Energy Registrants' regulated utility revenues, earnings and results 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 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.

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 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 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 and increased EE could result in excess generation resources as well as stranded costs if Duke Energy is not 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 business 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, 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. 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, 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 CO₂ emissions. These regulations may require the Duke Energy Registrants to make additional capital expenditures and increase operating and maintenance costs.

Duke Energy Carolinas and Duke Energy Progress are subject to the terms of probation set out in judgments of the U.S. District Court for the Eastern District of North Carolina on May 14, 2015. The judgments are based on events and activities that took place prior to 2015. The terms of probation require the companies to comply with certain environmental regulatory obligations related to coal ash and subject the two companies to oversight by a Court Appointed Monitor. If Duke Energy Carolinas or Duke Energy Progress failed to comply with certain coal ash-related environmental laws and regulations or otherwise violated the terms of probation, it could result in the imposition of additional penalties, including the revocation of probation and re-prosecution of the underlying violations. Although it is not expected that the companies will violate the terms of probation or that additional material penalties would occur, a significant violation of probation could have a material adverse effect on the Duke Energy Registrants' reputation, results of operations, financial position and cash flows.

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, both nationally and internationally, about climate change. The EPA and state regulators may adopt and implement regulations to restrict emissions of GHGs to address global climate change. Increased regulation of GHG emissions could impose significant additional costs on the Duke Energy Registrants' operations, their suppliers and customers. Regulatory changes could also result in generation facilities to be retired early and result in stranded costs if Duke Energy is not able to fully recover the 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. 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 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 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 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, 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 other 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. 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 other 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. 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 appropriate engineered off-site or on-site lined landfills or conversion of the ash for beneficial use. Duke Energy has completed excavation of coal ash regulated by the Coal Ash Act at three of the four high priority 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 population changes, job and income growth, housing starts, new business formation and the overall level of economic activity.

Certain regulatory and legislative bodies have introduced or are considering requirements and/or incentives to reduce energy consumption by certain dates. Additionally, technological advances driven by federal laws mandating new levels of EE in end-use electric 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.

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' 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 associated with 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, extreme weather conditions such as hurricanes, droughts, heat waves, winter storms and severe weather associated with 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, tornadoes, severe thunderstorms, snow and ice storms, 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. 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.

Duke Energy may be unable to complete necessary or desirable pipeline expansion or infrastructure development or maintenance projects, which may prevent the Duke Energy Registrants from expanding the natural gas business.

In order to serve current or new natural gas customers or expand the service to existing customers, the Duke Energy Registrants need to maintain, expand or upgrade distribution, transmission and/or storage infrastructure, including laying new pipeline and building compressor stations. Duke Energy Registrants have made significant investments in pipeline development projects, which are being operated and constructed by third-party joint venture partners. The Duke Energy Registrants must rely on their third-party joint venture partners for proper construction management of the projects and are dependent upon contractors for the successful and timely completion of the projects. In addition, various factors, such as the inability to obtain required approval from local, state and/or federal regulatory and governmental bodies, public opposition to projects, adverse litigation rulings, inability to obtain adequate financing, competition for labor and materials, construction delays, cost overruns and the inability to negotiate acceptable agreements relating to rights of way, construction or other material development components, may prevent or delay the completion of projects or materially increase the cost of such projects, which could have a material adverse effect on the results of operations and financial position of Duke Energy.

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, 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, off-shore 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, 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.

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, 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.

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.

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 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 cyber security 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. While the Duke Energy Registrants believe they are in compliance with 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.

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.

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, 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 cyber attacks, 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.

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, the bankruptcy of an unrelated energy company, unfavorable capital market conditions, market prices for electricity and natural gas, actual or threatened terrorist attacks, or the overall health of the energy industry. 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. Systematic 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 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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

ELECTRIC UTILITIES AND INFRASTRUCTURE

The following table provides information related to the Electric Utilities and Infrastructure's generation stations as of December 31, 2019. 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	NC	2,220
Marshall	Fossil	Coal	NC	2,058
J.E. Rogers	Fossil	Coal	NC	1,388
Lincoln CT	Fossil	Gas/Oil	NC	1,193
Allen	Fossil	Coal	NC	1,098
Rockingham CT	Fossil	Gas/Oil	NC	825
W.S. Lee CC ^(b)	Fossil	Gas	NC	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	Fossil	Gas	SC	170
W.S. Lee CT	Fossil	Gas/Oil	SC	84
Clemson CHP	Fossil	Gas	SC	13
Bad Creek	Hydro	Water	SC	1,360
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	603
Distributed generation	Renewable	Solar	NC	30
Total Duke Energy Carolinas				20,192

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	741
Roxboro	Fossil	Coal	NC	2,439
Smith CC	Fossil	Gas/Oil	NC	1,085
H.F. Lee CC	Fossil	Gas/Oil	NC	888
Wayne County CT	Fossil	Gas/Oil	NC	857
Smith CT	Fossil	Gas/Oil	NC	772
Mayo	Fossil	Coal	NC	727
Darlington CT	Fossil	Gas/Oil	SC	613
L.V. Sutton CC	Fossil	Gas/Oil	NC	607
Asheville	Fossil	Coal	NC	344
Asheville CT	Fossil	Gas/Oil	NC	320
Asheville CC	Fossil	Gas/Oil	NC	237
Weatherspoon CT	Fossil	Gas/Oil	NC	124
L.V. Sutton CT (Black Start)	Fossil	Gas/Oil	NC	78
Blewett CT	Fossil	Oil	NC	52
Walters	Hydro	Water	NC	112
Other small facilities (3 plants)	Hydro	Water	NC	115
Distributed generation	Renewable	Solar	NC	49
Total Duke Energy Progress				12,994

PROPERTIES

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Florida				
Hines CC	Fossil	Gas/Oil	FL	2,054
Citrus County CC	Fossil	Gas	FL	1,610
Crystal River	Fossil	Coal	FL	1,422
Bartow CC	Fossil	Gas/Oil	FL	1,169
Anclote	Fossil	Gas	FL	1,013
Intercession City CT	Fossil	Gas/Oil	FL	951
Osprey CC	Fossil	Gas/Oil	FL	583
DeBary CT	Fossil	Gas/Oil	FL	559
Tiger Bay CC	Fossil	Gas/Oil	FL	200
Bayboro CT	Fossil	Oil	FL	171
Bartow CT	Fossil	Gas/Oil	FL	168
Suwannee River CT	Fossil	Gas	FL	149
Avon Park CT	Fossil	Gas/Oil	FL	48
University of Florida CoGen CT	Fossil	Gas	FL	43
Distributed generation	Renewable	Solar	FL	119
Total Duke Energy Florida				10,259

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
Total Duke Energy Ohio				1,076

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	450
Vermillion CT ^(e)	Fossil	Gas	IN	360
Gallagher	Fossil	Coal	IN	280
Noblesville CC	Fossil	Gas/Oil	IN	264
Henry County CT	Fossil	Gas/Oil	IN	129
Cayuga CT	Fossil	Gas/Oil	IN	86
Markland	Hydro	Water	IN	51
Distributed generation	Renewable	Solar	IN	11
Camp Atterbury Battery	Renewable	Storage	IN	4
Total Duke Energy Indiana				6,623

Totals by Type	Owned MW Capacity
Total Electric Utilities	51,144
Totals By Plant Type	
Nuclear	8,890
Fossil	38,544
Hydro	3,497
Renewable	213
Total Electric Utilities	51,144

- (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%.

PROPERTIES

- (d) Includes Cayuga Internal Combustion.
(e) Jointly owned with WVPA. Duke Energy Indiana's ownership is 62.50% of the facility.

The following table provides information related to Electric Utilities and Infrastructure's electric transmission and distribution properties as of December 31, 2019.

	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)	1,036	576	292	168	—	—
Miles of 345 kV	1,135	—	—	—	410	725
Miles of 230 kV	8,349	2,658	3,399	1,638	—	654
Miles of 100 to 161 kV	12,441	6,846	2,563	891	724	1,417
Miles of 13 to 69 kV	8,351	2,988	12	2,200	612	2,539
Total conductor miles of electric transmission lines	31,312	13,068	6,266	4,897	1,746	5,335
Electric Distribution Lines						
Miles of overhead lines	173,800	66,600	46,500	25,200	13,300	22,200
Miles of underground line	106,300	39,500	30,700	20,900	6,100	9,100
Total conductor miles of electric distribution lines	280,100	106,100	77,200	46,100	19,400	31,300
Number of electric transmission and distribution substations	3,316	1,491	512	496	314	503

Substantially all of Electric Utilities and Infrastructure'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

Gas Utilities and Infrastructure 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 Gas Utilities and Infrastructure service territories. The following table provides information related to Gas Utilities and Infrastructure's natural gas distribution.

	Duke Energy	Duke Energy Ohio	Piedmont
Miles of natural gas distribution and transmission pipelines	33,700	7,300	26,400
Miles of natural gas service lines	27,200	6,300	20,900

COMMERCIAL RENEWABLES

The following table provides information related to Commercial Renewables' electric generation facilities as of December 31, 2019. The MW displayed in the table below are based on nameplate capacity.

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity	Ownership Interest (%)
Commercial Renewables – Wind					
Los Vientos (five sites)	Renewable	Wind	TX	465	51%
Mesteno ^(a)	Renewable	Wind	TX	202	100%
Sweetwater IV	Renewable	Wind	TX	113	47%
Frontier	Renewable	Wind	OK	103	51%
Top of the World	Renewable	Wind	WY	102	51%
Notrees	Renewable	Wind	TX	78	51%
Mesquite Creek	Renewable	Wind	TX	55	26%
Campbell Hill	Renewable	Wind	WY	50	51%
Ironwood	Renewable	Wind	KS	44	26%
Sweetwater V	Renewable	Wind	TX	38	47%
North Allegheny	Renewable	Wind	PA	36	51%
Laurel Hill	Renewable	Wind	PA	35	51%
Cimarron II	Renewable	Wind	KS	33	26%
Ocotillo	Renewable	Wind	TX	30	51%
Kit Carson	Renewable	Wind	CO	26	51%
Silver Sage	Renewable	Wind	WY	21	51%
Happy Jack	Renewable	Wind	WY	15	51%
Shirley	Renewable	Wind	WI	10	51%
Total Renewables – Wind				1,456	
Commercial Renewables – Solar					
North Rosamond ^(a)	Renewable	Solar	CA	150	100%
Lapetus ^(a)	Renewable	Solar	TX	100	100%
Conetoe II	Renewable	Solar	NC	80	100%
Seville I & II	Renewable	Solar	CA	34	67%
Rio Bravo I & II	Renewable	Solar	CA	27	67%
Wildwood I & II	Renewable	Solar	CA	23	67%
Kelford	Renewable	Solar	NC	22	100%
Dogwood	Renewable	Solar	NC	20	100%
Halifax Airport	Renewable	Solar	NC	20	100%
Pasquotank	Renewable	Solar	NC	20	100%
Shawboro	Renewable	Solar	NC	20	100%
Caprock	Renewable	Solar	NM	17	67%
Creswell Alligood	Renewable	Solar	NC	14	100%
Pumpjack	Renewable	Solar	CA	13	67%
Longboat	Renewable	Solar	CA	13	67%
Shoreham ^(a)	Renewable	Solar	NY	13	51%
Washington White Post	Renewable	Solar	NC	12	100%
Whitakers	Renewable	Solar	NC	12	100%
Highlander I & II	Renewable	Solar	CA	11	51%
Other small solar ^(a)	Renewable	Solar	Various	177	Various
Total Renewables – Solar				798	
Commercial Renewables – Fuel Cells					
2018 ESA Portfolio ^(a)	Renewable	Fuel Cell	Various	10	100%
Total Renewables – Fuel Cells				10	
Commercial Renewables – Energy Storage					
Notrees Battery Storage	Renewable	Storage	TX	18	51%
Total Renewables – Energy Storage				18	
Total Commercial Renewables				2,282	

(a) Certain projects, including projects within Other small solar, are in tax-equity structures where investors have differing interests in the project's economic attributes. 100% of the tax-equity project's capacity is included in the table above.

OTHER

Duke Energy owns approximately 8 million square feet and leases approximately 2 million square feet of corporate, regional and district office space spread throughout its service territories.

ITEM 3. LEGAL PROCEEDINGS

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.

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. 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. The defendants have filed answers and will pursue summary judgment after the completion of discovery. Duke Energy cannot predict the outcome of this matter.

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, 2020, there were 140,942 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.

Securities Authorized for Issuance Under Equity Compensation Plans

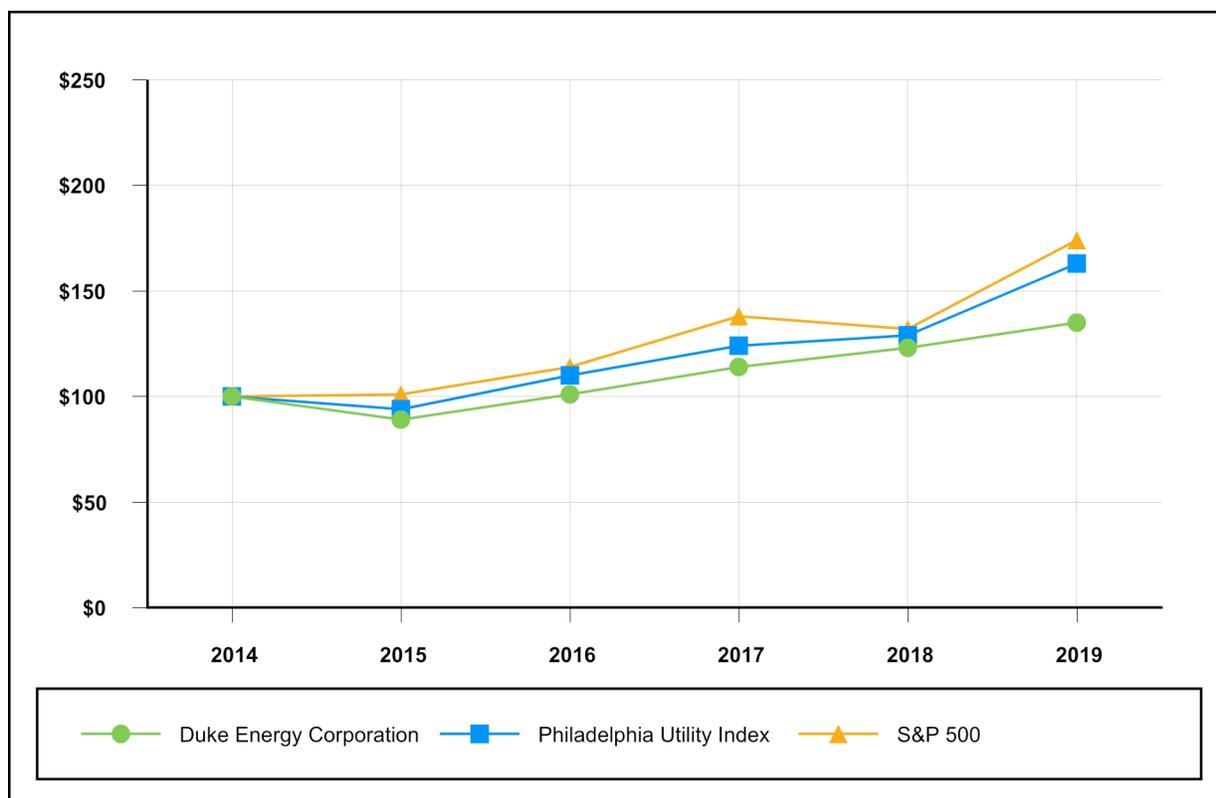
See Item 12 of Part III within this Annual Report for information regarding Securities Authorized for Issuance Under Equity Compensation Plans.

Issuer Purchases of Equity Securities for Fourth Quarter 2019

There were no repurchases of equity securities during the fourth quarter of 2019.

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, 2014, 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 on Form 10-K for the year ended December 31, 2019.

ITEM 6. SELECTED FINANCIAL DATA

The following table provides selected financial data for the years of 2015 through 2019. See also Item 7.

(in millions, except per share amounts)	2019	2018	2017	2016	2015
Statements of Operations^(a)					
Total operating revenues	\$ 25,079	\$ 24,521	\$ 23,565	\$ 22,743	\$ 22,371
Operating income	5,709	4,685	5,625	5,202	4,974
Income from continuing operations	3,578	2,625	3,070	2,578	2,654
(Loss) Income from discontinued operations, net of tax	(7)	19	(6)	(408)	177
Net income	3,571	2,644	3,064	2,170	2,831
Net income available to Duke Energy Corporation common stockholders	3,707	2,666	3,059	2,152	2,816
Common Stock Data					
Income from continuing operations available to Duke Energy Corporation common stockholders					
Basic and diluted	\$ 5.07	\$ 3.73	\$ 4.37	\$ 3.71	\$ 3.80
(Loss) Income from discontinued operations attributable to Duke Energy Corporation common stockholders					
Basic and diluted	\$ (0.01)	\$ 0.03	\$ (0.01)	\$ (0.60)	\$ 0.25
Net income available to Duke Energy Corporation common stockholders					
Basic and diluted	\$ 5.06	\$ 3.76	\$ 4.36	\$ 3.11	\$ 4.05
Dividends declared per share of common stock	3.75	3.64	3.49	3.36	3.24
Balance Sheets					
Total assets	\$ 158,838	\$ 145,392	\$ 137,914	\$ 132,761	\$ 121,156
Long-term debt including finance leases, less current maturities	54,985	51,123	49,035	45,576	36,842

- (a) Significant transactions reflected in the results above include: (i) growth in Commercial Renewables from new tax equity solar projects placed in service in 2019 (see Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies"); (ii) regulatory and legislative charges related to Duke Energy Progress and Duke Energy Carolinas North Carolina rate case orders and impairment charges in 2018 (see Notes 4, 12 and 13 to the Consolidated Financial Statements, "Regulatory Matters," "Goodwill and Intangible Assets" and "Investments in Unconsolidated Affiliates"); (iii) the sale of the International Disposal Group in 2016, including a loss on sale recorded within discontinued operations; and (iv) the acquisition of Piedmont in 2016, including losses on interest rate swaps related to the acquisition financing.

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, 2019, 2018 and 2017.

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, 2018, filed with the SEC on February 28, 2019, for a discussion of variance drivers for the year ended December 31, 2018, as compared to December 31, 2017.

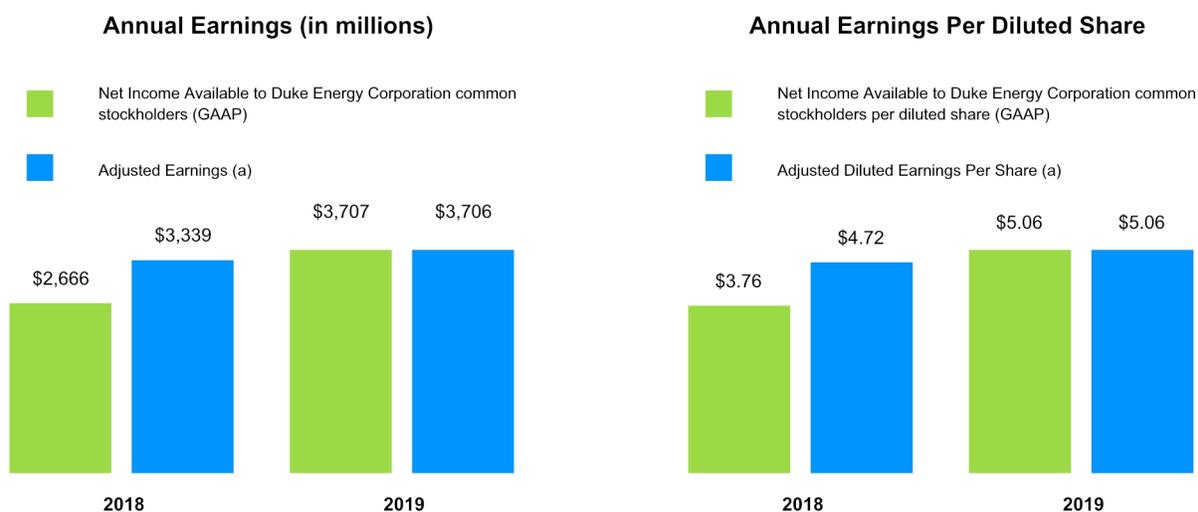
DUKE ENERGY

Duke Energy is an energy company headquartered in Charlotte, North Carolina. Duke Energy operates in the U.S. primarily through its wholly owned 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 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 2019, we met our near-term financial commitments and positioned the company for sustainable long-term growth. We are focused on a business portfolio that will deliver a reliable dividend with 4% to 6% EPS growth through 2024. This growth is supported by our capital plan, timely cost-recovery mechanisms in most jurisdictions and our ability to manage our cost structure. The strength of our balance sheet is of vital importance to the cost-effective financing of our growth strategy, and in 2019 we continued to strengthen it by issuing \$2 billion of preferred equity and \$2.5 billion of common stock through a forward sales agreement which is expected to settle on or prior to December 31, 2020.

Financial Results



- (a) See Results of Operations below for Duke Energy's definition of adjusted earnings and adjusted diluted 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 diluted share.

Duke Energy's 2019 Net Income Available to Duke Energy Corporation (GAAP Reported Earnings) were impacted by: favorable rate case and rider recovery outcomes, net of regulatory lag, and ongoing cost management efforts in Electric Utilities and Infrastructure; improved margins and increased ACP investment in Gas Utilities and Infrastructure; and growth in project investments in Commercial Renewables. 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 where financing costs increased in 2019 to fund segment operations and other liquidity needs.

2019 Areas of Focus and Accomplishments

Operational Excellence, Safety and Reliability. The reliable and safe operation of our power plants, electric distribution system and natural gas infrastructure in our communities is foundational to our customers, our financial results and our credibility with stakeholders. Our regulated generation fleet performance was strong throughout the year. All of our nuclear sites have achieved the industry's highest distinction rating. Our electric distribution system performed well throughout the year, with outage durations down when adjusted for storms. The safety of our workforce is a core value. Our employees delivered strong safety results in 2019, and we are at or near the top of our industry.

Storm Response and System Restoration. The 2019 Atlantic hurricane season was the fourth consecutive year of above-average damaging storms. Our ability to effectively handle all facets of the 2019 storm response efforts 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. Notably in 2019 Duke Energy earned EEI's Emergency Recovery Award, our 22nd EEI award since 1998 and a strong affirmation of the work of our employees to support customers when they need us most.

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 the most important to the customer experience. In 2019, we instituted billing and payment-related communications and options, and we continue to enhance outage-related communications to customers.

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. In 2019, Duke Energy, North Carolina regulators and environmentalists reached an agreement to permanently close all remaining coal ash basins in North Carolina. This agreement reduces the cost to close our coal ash basins for our Carolinas customers in comparison to the initial NCDEQ closure order. In 2019 we achieved constructive rate case outcomes driving earnings growth through rate base increases in South Carolina (electric), North Carolina (natural gas), Ohio (electric distribution) and Kentucky (natural gas). In addition, we have a multiyear rate plan in Florida and grid investment riders in the Midwest which enable more timely cost recovery and earnings growth.

Digital Transformation. Duke Energy has a demonstrated track record of driving efficiencies and productivity into the business. We continue to leverage new technology, digital tools and data analytics across the business in response to a transforming landscape. In 2019, we created a team dedicated to developing applications and other solutions to deliver productivity gains and improvements to the customer experience.

Modernizing the Power Grid. 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 ensure the system is better prepared for severe weather, improves the system's reliability and flexibility, and provides better information and services for customers. In 2019, 79% of our jurisdictions were equipped with smart meters and we remain on track to be fully deployed across all regions by 2021. We continue to expand our self-optimizing grid capabilities, and in 2019 that saved over a half million customer interruptions.

Generating Cleaner Energy. Overall, we have lowered our carbon emissions by 39% since 2005, consistent with our new goal to reduce carbon emissions by at least 50% by 2030 and to achieve net-zero carbon emissions by 2050. Our commitment for 2030 includes retiring plants, operating our existing carbon-free resources and investing in natural gas infrastructure, renewables and our energy delivery system. As we look beyond 2030, we will need additional tools to continue our progress. We will work actively to advocate for research and development of carbon-free, dispatchable resources. That includes longer-term energy storage, advanced nuclear technologies, carbon capture and zero-carbon fuels.

Expanding the Natural Gas Platform. We continue to pursue natural gas infrastructure investments. While the judicial and administrative challenges to date have been substantial, we are committed to the construction of the ACP pipeline to bring low-cost gas supply and economic development opportunities to the Southeast U.S. Construction is underway on a liquefied natural gas facility in Robeson County, North Carolina, on property Piedmont owns. This investment will help Piedmont provide a reliable gas supply to customers during peak usage periods and protect customers from price volatility when there is a higher-than-normal demand for natural gas.

Dividend Growth. In 2019, Duke Energy continued to grow the dividend payment to shareholders. 2019 represented the 93rd consecutive year Duke Energy paid a cash dividend on its common stock.

Duke Energy Objectives – 2020 and Beyond

Duke Energy will continue to deliver exceptional value to customers, be an integral part of the communities in which we do business and provide attractive returns to investors. We have an achievable, long-term strategy in place, and it is producing tangible results, yet the industry in which we operate is becoming more and more dynamic. We are adjusting, where necessary, and accelerating our focus in key areas to ensure the company is well positioned to be successful for many decades into the future. As we look ahead to 2020, our plans include:

- Continuing to place the customer at the center of all that we do which includes providing customized products and solutions
- Strengthening our relationships with all our vast stakeholders in the communities in which we operate and invest
- Generating cleaner energy and working to achieve net-zero carbon emissions by 2050
- Maintaining the safety of our communities and employees
- Modernizing and strengthening the energy grid
- Expanding the natural gas infrastructure
- Deploying digital tools across our business

Results of Operations

Non-GAAP Measures

Management evaluates financial performance in part based on non-GAAP financial measures, including adjusted earnings and adjusted diluted 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 diluted 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 diluted EPS is also used as a basis for employee incentive bonuses. The most directly comparable GAAP measures for adjusted earnings and adjusted diluted EPS are GAAP Reported Earnings and Diluted 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:

- Impairment Charges in 2019 represents a reduction of a prior year impairment at Citrus County CC and an OTTI on the remaining investment in Constitution. For 2018, it represents an impairment at Citrus County CC, a goodwill impairment at Commercial Renewables and an OTTI of an investment in Constitution.
- Costs to Achieve Mergers represents charges that result from strategic acquisitions.
- Regulatory and Legislative Impacts in 2018 represents charges related to the Duke Energy Progress and Duke Energy Carolinas North Carolina rate case orders and the repeal of the South Carolina Base Load Review Act.
- Sale of Retired Plant represents the loss associated with selling Beckjord, a nonregulated generating facility in Ohio.
- Impacts of the Tax Act represents amounts recognized related to the Tax Act.
- Severance Charges relate to companywide initiatives, excluding merger integration, to standardize processes and systems, leverage technology and workforce optimization.

Duke Energy's adjusted earnings and adjusted diluted 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 diluted EPS to the most directly comparable GAAP measures.

(in millions, except per share amounts)	Years Ended December 31,			
	2019		2018	
	Earnings	EPS	Earnings	EPS
GAAP Reported Earnings/EPS	\$ 3,707	\$ 5.06	\$ 2,666	\$ 3.76
Adjustments to Reported:				
Impairment Charges ^(a)	(8)	(0.01)	179	0.25
Costs to Achieve Piedmont Merger ^(b)	—	—	65	0.09
Regulatory and Legislative Impacts ^(c)	—	—	202	0.29
Sale of Retired Plant ^(d)	—	—	82	0.12
Impacts of the Tax Act ^(e)	—	—	20	0.03
Severance Charges ^(f)	—	—	144	0.21
Discontinued Operations	7	0.01	(19)	(0.03)
Adjusted Earnings/Adjusted Diluted EPS	\$ 3,706	\$ 5.06	\$ 3,339	\$ 4.72

(a) Net of tax expense of \$3 million in 2019. Net of tax benefit of \$27 million and Noncontrolling Interests of \$2 million in 2018.

(b) Net of tax benefit of \$19 million.

(c) Net of tax benefit of \$63 million.

(d) Net of \$25 million tax benefit.

(e) The Tax Act reduced the corporate income tax rate from 35% to 21%, effective January 1, 2018. As the tax change was enacted in 2017, Duke Energy was required to remeasure its existing deferred tax assets and liabilities at the lower rate at December 31, 2017. For Duke Energy's regulated operations, where the reduction in the net accumulated deferred income tax liability is expected to be returned to customers in future rates, the remeasurement has been deferred as a regulatory liability. This amount represents a true up of existing regulatory liabilities related to the Tax Act. See Note 24 to the Consolidated Financial Statements, "Income Taxes" for more information.

(f) Net of tax benefit of \$43 million.

Year Ended December 31, 2019, as compared to 2018

GAAP Reported EPS was \$5.06 for the year ended December 31, 2019, compared to \$3.76 for the year ended December 31, 2018. The increase in GAAP Reported earnings was primarily due to current year favorable rate case and rider recovery outcomes, an adjustment related to income tax recognition for equity method investments, growth in Commercial Renewables from new solar farms commencing commercial operations and prior year regulatory and legislative impacts, impairments, severance, loss on sale of a retired plant and costs to achieve merger. This favorability was partially offset by higher depreciation and higher financing costs in the current year. The equity method investment adjustment was immaterial and relates to prior years.

As discussed and shown in the table above, management also evaluates financial performance based on adjusted diluted EPS. Duke Energy's adjusted diluted EPS was \$5.06 for the year ended December 31, 2019, compared to \$4.72 for the year ended December 31, 2018.

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 the following segments: Electric Utilities and Infrastructure, Gas Utilities and Infrastructure and Commercial Renewables. 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,		
	2019	2018	Variance
Operating Revenues	\$ 22,831	\$ 22,273	\$ 558
Operating Expenses			
Fuel used in electric generation and purchased power	6,904	6,917	(13)
Operations, maintenance and other	5,497	5,631	(134)
Depreciation and amortization	3,951	3,523	428
Property and other taxes	1,175	1,134	41
Impairment charges	(8)	309	(317)
Total operating expenses	17,519	17,514	5
Gains on Sales of Other Assets and Other, net	1	8	(7)
Operating Income	5,313	4,767	546
Other Income and Expenses, net	353	378	(25)
Interest Expense	1,345	1,288	57
Income Before Income Taxes	4,321	3,857	464
Income Tax Expense	785	799	(14)
Segment Income	\$ 3,536	\$ 3,058	\$ 478
Duke Energy Carolinas GWh sales	89,920	92,280	(2,360)
Duke Energy Progress GWh sales	68,356	69,331	(975)
Duke Energy Florida GWh sales	42,173	41,559	614
Duke Energy Ohio GWh sales	24,729	25,329	(600)
Duke Energy Indiana GWh sales	31,886	34,229	(2,343)
Total Electric Utilities and Infrastructure GWh sales	257,064	262,728	(5,664)
Net proportional MW capacity in operation	50,070	49,684	386

Year Ended December 31, 2019, as compared to 2018

Electric Utilities and Infrastructure's results were impacted by positive contributions from the Duke Energy Carolinas and Duke Energy Progress North Carolina and South Carolina rate cases and Duke Energy Florida's base rate adjustments due to the Citrus County CC being placed in service. These drivers were partially offset by higher depreciation from a growing asset base 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 \$603 million increase in retail pricing primarily due to the Duke Energy Carolinas and Duke Energy Progress North Carolina and South Carolina rate cases and Duke Energy Florida's base rate adjustments related to Citrus County CC being placed in service.

Partially offset by:

- a \$45 million decrease in weather-normal retail sales volumes.

Operating Expenses. The variance was driven primarily by:

- a \$428 million increase in depreciation and amortization expense primarily due to additional plant in service and new depreciation rates associated with the Duke Energy Carolinas and Duke Energy Progress North Carolina and South Carolina rate cases and Duke Energy Florida's Citrus County CC being placed in service; and
- a \$41 million increase in property and other taxes primarily due to higher property taxes for additional plant in service at Duke Energy Florida and current year property tax reassessments at Duke Energy Progress and Duke Energy Ohio.

Partially offset by:

- a \$317 million decrease in impairment charges primarily due to the impacts associated with the Duke Energy Carolinas and Duke Energy Progress North Carolina rate cases as well as impairment impacts related to Duke Energy Florida's Citrus County CC; and
- a \$134 million decrease in operation, maintenance and other expense primarily due to lower payroll and benefit costs resulting from prior year workforce reductions and lower storm costs at Duke Energy Progress and Duke Energy Carolinas in the current year.

Other Income and Expenses, net. The variance was driven primarily by AFUDC equity return ending on the Citrus County CC in the fourth quarter of 2018 at Duke Energy Florida.

Interest Expense. The variance was driven primarily by higher debt outstanding in the current year and AFUDC debt return ending in the fourth quarter of 2018 on the Citrus County CC at Duke Energy Florida.

Income Tax Expense. The decrease in tax expense was primarily due to an increase in the amortization of excess deferred taxes, mostly offset by an increase in pretax income. The ETRs for the years ended December 31, 2019, and 2018, were 18.2% and 20.7%, respectively. The decrease in the ETR was primarily due to an increase in the amortization of excess deferred taxes.

Matters Impacting Future Electric Utilities and Infrastructure Results

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 in North Carolina with ash moved to on-site lined landfills. At the two remaining basins, uncapped basin ash will be excavated and moved to lined landfills. An order from regulatory authorities disallowing recovery of costs related to closure of these ash basins could have an adverse impact on Electric Utilities and Infrastructure's results of operations, financial position and cash flows. See Notes 4 and 5 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies," respectively, for additional information.

On May 21, 2019, Duke Energy Carolinas and Duke Energy Progress received orders from the PSCSC granting the companies' requests for retail rate increases but denying recovery of certain coal ash costs. Duke Energy Carolinas and Duke Energy Progress filed notices of appeals with the South Carolina Supreme Court on November 15, 2019. Appellant briefs are due on March 2, 2020, and Appellee response briefs are due on May 15, 2020. Electric Utilities and Infrastructure's results of operations, financial position and cash flows could be adversely impacted if coal ash costs are not ultimately approved for recovery. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

On June 22, 2018, Duke Energy Carolinas received an order from the NCUC, which denied the Grid Rider Stipulation and deferral treatment of grid improvement costs. Duke Energy Carolinas and Duke Energy Progress have petitioned for deferral of future grid improvement costs in their 2019 rate cases. Electric Utilities and Infrastructure's results of operations, financial position and cash flows could be adversely impacted if grid improvement costs are not ultimately approved for recovery and/or deferral treatment.

During the last half of 2018, Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida's service territories were impacted by several named storms. Hurricane Florence, Hurricane Michael and Winter Storm Diego caused flooding, extensive damage and widespread power outages to the service territories of Duke Energy Carolinas and Duke Energy Progress. Duke Energy Florida's service territory was also impacted by Hurricane Michael, a Category 5 hurricane and the most powerful storm to hit the Florida Panhandle in recorded history. In September 2019, Hurricane Dorian impacted Duke Energy Progress and Duke Energy Florida's service territories. A significant portion of the incremental operation and maintenance expenses related to these storms has been deferred. An order from regulatory authorities disallowing the deferral and future recovery of storm restoration costs could have an adverse impact on Electric Utilities and Infrastructure's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

In 2019, Duke Energy Indiana filed a general rate case with the IURC, and Duke Energy Carolinas and Duke Energy Progress filed general rate cases with the NCUC. The outcome of these rate cases could materially impact Electric Utilities and Infrastructure's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

On April 17, 2015, the EPA published in the Federal Register a rule to regulate the disposal of CCR from electric utilities as solid waste. Duke Energy Indiana has interpreted the 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. Duke Energy Indiana's interpretation of the requirements of the CCR rule is subject to potential legal challenges and further 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. An order from regulatory authorities disallowing recovery of costs related to closure of ash basins could have an adverse impact on Duke Energy Indiana's results of operations, financial position and cash flows.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

Gas Utilities and Infrastructure

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 1,866	\$ 1,881	\$ (15)
Operating Expenses			
Cost of natural gas	627	697	(70)
Operation, maintenance and other	446	421	25
Depreciation and amortization	256	245	11
Property and other taxes	106	107	(1)
Total operating expenses	1,435	1,470	(35)
Operating Income	431	411	20
Other Income and Expenses, net	140	47	93
Interest Expense	117	106	11
Income Before Income Taxes	454	352	102
Income Tax Expense	22	78	(56)
Segment Income	\$ 432	\$ 274	\$ 158
Piedmont Local Distribution Company (LDC) throughput (Dth)	511,243,774	557,145,128	(45,901,354)
Duke Energy Midwest LDC throughput (MCF)	89,025,972	90,604,833	(1,578,861)

Year Ended December 31, 2019, as compared to 2018

Gas Utilities and Infrastructure's results were primarily impacted by higher equity earnings at ACP, the OTTI recorded on the Constitution investment and a 2019 adjustment related to the income tax recognition for equity method investments. The equity method investment adjustment was immaterial and relates to prior years. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The variance was driven primarily by:

- a \$70 million decrease due to lower natural gas costs passed through to customers; and
- a \$13 million decrease due to rider revenues related to MGP and Accelerated Main Replacement Program.

Partially offset by:

- a \$37 million increase due to North Carolina and Kentucky base rate case increases;
- a \$19 million increase due to North Carolina and Tennessee IMR increases; and
- an \$11 million increase due to NCUC approval related to tax reform accounting from fixed rate contracts.

Operating Expenses. The variance was driven primarily by:

- a \$70 million decrease in the cost of natural gas due to lower natural gas prices.

Partially offset by:

- a \$25 million increase in operation, maintenance and other expense primarily due to increased labor, benefits and information technology costs; and
- an \$11 million increase in depreciation and amortization expense due to additional plant in service.

Other Income and Expenses, net. The increase was primarily due to higher equity earnings at ACP as a result of higher cumulative project spending and a higher OTTI recorded on the Constitution investment in the prior year.

Interest Expense. The variance was driven by higher debt outstanding in the current year and higher interest expense due to customers as a result of tax reform deferrals, partially offset by favorable AFUDC debt interest.

Income Tax Expense. The decrease in tax expense was primarily due to an adjustment related to the income tax recognition for equity method investments, partially offset by an increase in pretax income. The equity method investment adjustment was immaterial and relates to prior years. The ETRs for the years ended December 31, 2019, and 2018, were 4.8% and 22.2%, respectively. The decrease in the ETR was primarily due to an adjustment related to the income tax recognition for equity method investments that was recorded during the first quarter of 2019 and current year AFUDC equity. The equity method investment adjustment was immaterial and relates to prior years.

Matters Impacting Future Gas Utilities and Infrastructure Results

Gas Utilities and Infrastructure has a 47% ownership interest in ACP, which is building an approximately 600-mile interstate natural gas pipeline intended to transport diverse natural gas supplies into southeastern markets. Affected states (West Virginia, Virginia and North Carolina) have issued certain necessary permits; the project remains subject to other pending federal and state approvals, which will allow full construction activities to begin. In 2018, FERC issued a series of Notices to Proceed, which authorized the project to begin certain construction-related activities along the pipeline route. Given legal challenges and ongoing discussions with customers, ACP expects mechanical completion of the full project in late 2021 with in-service likely in the first half of 2022. The delays resulting from legal challenges have also impacted the cost for the project. Project cost is approximately \$8 billion, excluding financing costs. This estimate is based on the current facts available around construction costs and timelines, and is subject to future changes as those facts develop. Abnormal weather, work delays (including delays due to judicial or regulatory action) and other conditions may result in cost or schedule modifications, a suspension of AFUDC for ACP and/or impairment charges potentially material to Duke Energy's cash flows, financial position and results of operations. ACP and Duke Energy will continue to consider their options with respect to the foregoing given their existing contractual and legal obligations. See Notes 4 and 18 to the Consolidated Financial Statements, "Regulatory Matters" and "Variable Interest Entities," respectively, for additional information.

On November 13, 2013, the PUCO issued an order authorizing recovery of MGP costs at certain sites in Ohio with a deadline to complete the MGP environmental investigation and remediation work prior to December 31, 2016. This deadline was subsequently extended to December 31, 2019. Duke Energy Ohio has filed a request for extension of the deadline. A hearing on that request has not been scheduled. Disallowance of costs incurred, failure to complete the work by the deadline or failure to obtain an extension from the PUCO could result in an adverse impact on Gas Utilities and Infrastructure's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

Commercial Renewables

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 487	\$ 477	\$ 10
Operating Expenses			
Operation, maintenance and other	297	304	(7)
Depreciation and amortization	168	155	13
Property and other taxes	23	25	(2)
Impairment charges	—	93	(93)
Total operating expenses	488	577	(89)
Losses on Sales of Other Assets and Other, net	(3)	(1)	(2)
Operating Loss	(4)	(101)	97
Other Income and Expenses, net	5	23	(18)
Interest Expense	95	88	7
Loss Before Income Taxes	(94)	(166)	72
Income Tax Benefit	(115)	(147)	32
Less: Loss Attributable to Noncontrolling Interests	(177)	(28)	(149)
Segment Income	\$ 198	\$ 9	\$ 189
Renewable plant production, GWh	8,574	8,522	52
Net proportional MW capacity in operation ^(a)	3,485	2,991	494

(a) Certain projects are included in tax-equity structures where investors have differing interests in the project's economic attributes. In the table above, 100% of the tax-equity project's capacity is included.

Year Ended December 31, 2019, as compared to 2018

Commercial Renewables' results were favorable primarily due to new tax equity solar projects in the current year and a prior year goodwill impairment charge. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The increase was primarily due to new solar projects placed in service and higher irradiance.

Operating Expenses. The decrease was primarily due to a goodwill impairment charge in the prior year, partially offset by increased depreciation due to new solar projects placed in service.

Other Income and Expenses, net. The decrease was primarily due to income from the FES settlement agreement in the prior year.

Income Tax Benefit. The decrease in the tax benefit was primarily driven by taxes associated with Duke Energy's interest in tax equity solar projects recorded during 2019 and a reduction in PTCs generated.

Loss Attributable to Noncontrolling Interests. The variance was primarily due to an increase in solar projects with tax equity investors. HLBV accounting was utilized, resulting in allocation of losses to the noncontrolling interest partners. See Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies" for more information.

Matters Impacting Future Commercial Renewables Results

Commercial Renewables continues to experience growth with tax equity projects; however, the future expiration of federal tax incentives could result in adverse impacts to future results of operations, financial position and cash flows.

During 2019, Duke Energy evaluated recoverability of its renewable merchant plants principally in the Electric Reliability Council of Texas West market, due to declining market pricing and declining long-term forecasted energy prices, primarily driven by lower forecasted natural gas prices. These assets were not impaired; however, a continued decline in energy market pricing would likely result in a future impairment. Impairment of these assets could result in adverse impacts to the future results of operations, financial position and cash flows of Commercial Renewables. See Note 11 to the Consolidated Financial Statements, "Property, Plant and Equipment," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

Other

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 95	\$ 89	\$ 6
Operating Expenses	117	380	(263)
Losses on Sales of Other Assets and Other, net	(2)	(96)	94
Operating Loss	(24)	(387)	363
Other Income and Expenses, net	145	73	72
Interest Expense	705	657	48
Loss Before Income Taxes	(584)	(971)	387
Income Tax Benefit	(173)	(282)	109
Less: Net Income Attributable to Noncontrolling Interests	—	5	(5)
Less: Preferred Dividends	41	—	41
Net Loss	\$ (452)	\$ (694)	\$ 242

Year Ended December 31, 2019, as compared to 2018

The variance was driven by the prior year severance charges related to a corporate initiative, prior year loss on sale of the retired Beckjord station, and the absence in the current year of costs related to the Piedmont acquisition, offset by obligations to the Duke Energy Foundation in 2019. The following is a detailed discussion of the variance drivers by line item.

Operating Expenses. The variance was primarily due to prior year severance charges related to a corporate initiative as well as costs associated with the Piedmont acquisition, partially offset by obligations to the Duke Energy Foundation in 2019.

Losses on Sales of Other Assets and Other, net. The variance was driven by the prior year loss on sale of the retired Beckjord station, including the transfer of coal ash basins and other real property and indemnification from all potential future claims related to the property, whether arising under environmental laws or otherwise.

Other Income and Expenses, net. The variance was primarily due to higher returns on investments that fund certain employee benefit obligations and Bison investment income.

Interest Expense. The variance was primarily due to higher outstanding debt in the current year and higher short-term interest rates.

Income Tax Benefit. The decrease in the tax benefit was primarily driven by a decrease in pretax losses.

Preferred Dividends. The variance was driven by the declarations of preferred stock dividend on preferred stock issued in 2019.

Matters Impacting Future Other Results

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

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**

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 7,395	\$ 7,300	\$ 95
Operating Expenses			
Fuel used in electric generation and purchased power	1,804	1,821	(17)
Operation, maintenance and other	1,868	2,130	(262)
Depreciation and amortization	1,388	1,201	187
Property and other taxes	292	295	(3)
Impairment charges	17	192	(175)
Total operating expenses	5,369	5,639	(270)
Losses on Sales of Other Assets and Other, net	—	(1)	1
Operating Income	2,026	1,660	366
Other Income and Expenses, net	151	153	(2)
Interest Expense	463	439	24
Income Before Income Taxes	1,714	1,374	340
Income Tax Expense	311	303	8
Net Income	\$ 1,403	\$ 1,071	\$ 332

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	2019	2018
Residential sales	(2.9)%	11.7 %
General service sales	(0.1)%	4.5 %
Industrial sales	(1.9)%	(0.3)%
Wholesale power sales	(13.6)%	12.5 %
Joint dispatch sales	4.7 %	23.1 %
Total sales	(2.6)%	5.7 %
Average number of customers	2.1 %	1.5 %

Year Ended December 31, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$178 million increase in retail pricing due to the impacts of the prior year North Carolina rate case and the current year South Carolina rate case.

Partially offset by:

- a \$41 million decrease in rider revenues primarily due to excess deferred taxes, partially offset by EE programs and a decrement rider relating to nuclear decommissioning that ended in the prior year;
- a \$14 million decrease in weather-normal retail sales volumes; and
- a \$7 million decrease in retail sales, net of fuel revenues, due to unfavorable weather in the current year.

Operating Expenses. The variance was driven primarily by:

- a \$262 million decrease in operation, maintenance and other expense primarily due to decreased labor and storm restoration costs; and
- a \$175 million decrease in impairment charges primarily due to impacts of the prior year North Carolina rate order, the repeal of the South Carolina Base Load Review Act and charges related to coal ash costs in South Carolina.

Partially offset by:

- a \$187 million increase in depreciation and amortization expense primarily due to additional plant in service, new depreciation rates associated with the prior year North Carolina rate case and the current year South Carolina rate case and higher amortization of deferred coal ash costs associated with the prior year North Carolina rate case.

Interest Expense. The variance was primarily due to higher debt outstanding in the current year.

Matters Impacting Future Results

On December 31, 2019, Duke Energy Carolinas entered into a settlement agreement with NCDEQ and certain community groups under which Duke Energy Carolinas agreed to excavate five of the six remaining coal ash basins in North Carolina with ash moved to on-site lined landfills. At the one remaining basin, uncapped basin ash will be excavated and moved to lined landfills. An order from regulatory authorities disallowing recovery of costs related to closure of these ash basins could have an adverse impact on Duke Energy Carolinas' results of operations, financial position and cash flows. See Notes 4 and 5 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies," respectively, for additional information.

Duke Energy Carolinas filed a general rate case with the NCUC on September 30, 2019. The outcome of this rate case could materially impact Duke Energy Carolina's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

On May 21, 2019, the PSCSC issued an order granting Duke Energy Carolinas request for a retail rate increase but denying recovery of certain coal ash costs. Duke Energy Carolinas filed a notice of appeal with the South Carolina Supreme Court on November 15, 2019. Appellant briefs are due on March 2, 2020, and Appellee response briefs are due on May 15, 2020. Duke Energy Carolinas' results of operations, financial position and cash flows could be adversely impacted if coal ash costs are not ultimately approved for recovery. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

On June 22, 2018, Duke Energy Carolinas received an order from the NCUC, which denied the Grid Rider Stipulation and deferral treatment of grid improvement costs. Duke Energy Carolinas has petitioned for deferral of future grid improvement costs in its 2019 rate case. Duke Energy Carolinas' results of operations, financial position and cash flows could be adversely impacted if grid improvement costs are not ultimately approved for recovery and/or deferral treatment.

During the last half of 2018, Duke Energy Carolinas' service territory was impacted by several named storms. Hurricane Florence, Hurricane Michael and Winter Storm Diego caused flooding, extensive damage and widespread power outages in the service territory. A significant portion of the incremental operation and maintenance expenses related to these storms has been deferred. An order from regulatory authorities disallowing the deferral and future recovery of storm restoration costs could have an adverse impact on Duke Energy Carolinas' results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

PROGRESS ENERGY

Results of Operations

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 11,202	\$ 10,728	\$ 474
Operating Expenses			
Fuel used in electric generation and purchased power	4,024	3,976	48
Operation, maintenance and other	2,495	2,613	(118)
Depreciation and amortization	1,845	1,619	226
Property and other taxes	561	529	32
Impairment charges	(24)	87	(111)
Total operating expenses	8,901	8,824	77
Gains on Sales of Other Assets and Other, net	—	24	(24)
Operating Income	2,301	1,928	373
Other Income and Expenses, net	141	165	(24)
Interest Expense	862	842	20
Income Before Income Taxes	1,580	1,251	329
Income Tax Expense	253	218	35
Net Income	1,327	1,033	294
Less: Net Income Attributable to Noncontrolling Interests	—	6	(6)
Net Income Attributable to Parent	\$ 1,327	\$ 1,027	\$ 300

Year Ended December 31, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$366 million increase in retail pricing primarily due to the impacts of the prior year North Carolina rate case and current year South Carolina rate case at Duke Energy Progress, Duke Energy Florida's base rate adjustments related to Citrus County CC being placed in service and annual increases from the 2017 Settlement Agreement;
- a \$70 million increase in wholesale power revenues, net of fuel, primarily due to coal ash cost recovery in the current year at Duke Energy Progress and increased demand at Duke Energy Florida;
- a \$42 million increase in fuel revenues primarily related to increased fuel cost recovery due to extreme weather in the prior year at Duke Energy Progress, partially offset by a decrease in fuel and capacity rates billed to retail customers at Duke Energy Florida;
- a \$22 million increase in retail sales, net of fuel revenues, due to favorable weather in the current year at Duke Energy Florida; and
- a \$21 million increase in other revenues primarily due to increased transmission revenues and nonregulated products and services revenues at Duke Energy Florida.

Partially offset by:

- a \$47 million decrease in retail rider revenues primarily related to decreased revenue requirements in the current year; and
- a \$14 million decrease in weather-normal retail sales volumes at Duke Energy Florida.

Operating Expenses. The variance was driven primarily by:

- a \$226 million increase in depreciation and amortization expense primarily due to higher amortization of deferred coal ash costs, new depreciation rates associated with the prior year Duke Energy Progress North Carolina rate case and Duke Energy Florida's base rate adjustments related to Citrus County CC being placed in service;
- a \$48 million increase in fuel used in electric generation and purchased power primarily due to an increase in the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard requirement from the prior year at Duke Energy Progress, partially offset by lower purchased power and lower fuel costs, net of deferrals, at Duke Energy Florida; and
- a \$32 million increase in property and other taxes primarily due to current year property tax reassessments and a favorable sales and use tax credit in the prior year at Duke Energy Progress and higher property taxes for additional plant in service at Duke Energy Florida.

Partially offset by:

- a \$118 million decrease in operation, maintenance and other expense primarily due to lower storm costs, reduced outage costs, and lower employee benefit costs, partially offset by increased vegetation management costs at Duke Energy Florida; and
- a \$111 million decrease in impairment charges primarily due to prior year impacts associated with the North Carolina rate case at Duke Energy Progress as well as the impairment of Duke Energy Florida's Citrus County CC.

Other Income and Expenses, net. The variance was driven primarily by AFUDC equity return ending on the Citrus County CC in the fourth quarter of 2018 at Duke Energy Florida, partially offset by life insurance proceeds at Duke Energy Progress.

Interest Expense. The variance was driven primarily by AFUDC debt return ending in the fourth quarter of 2018 on the Citrus County CC at Duke Energy Florida.

Income Tax Expense. The increase in tax expense was primarily due to an increase in pretax income, partially offset by an increase in the amortization of excess deferred taxes and a Tax Act adjustment in the prior year related to excess deferred taxes.

Matters Impacting Future Results

On December 31, 2019, Duke Energy Progress entered into a settlement agreement with NCDEQ and certain community groups under which Duke Energy Progress agreed to excavate two of the three remaining coal ash basins in North Carolina with ash moved to on-site lined landfills. At the one remaining basin, uncapped basin ash will be excavated and moved to lined landfills. An order from regulatory authorities disallowing recovery of costs related to closure of these ash basins could have an adverse impact on Duke Energy Progress' results of operations, financial position and cash flows. See Notes 4 and 5 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies," respectively, for additional information.

Duke Energy Progress filed a general rate case with the NCUC on October 30, 2019. The outcome of this rate case could materially impact Progress Energy's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

On May 21, 2019, the PSCSC issued an order granting Duke Energy Progress' request for a retail rate increase but denying recovery of certain coal ash costs. Duke Energy Progress filed a notice of appeal with the South Carolina Supreme Court on November 15, 2019. Appellant briefs are due on March 2, 2020, and Appellee response briefs are due on May 15, 2020. Progress Energy's results of operations, financial position and cash flows could be adversely impacted if coal ash costs are not ultimately approved for recovery. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Duke Energy Progress has petitioned for deferral of future grid improvement costs in its 2019 rate case. Progress Energy's results of operations, financial position and cash flows could be adversely impacted if grid improvement costs are not ultimately approved for recovery and/or deferral treatment.

During the last half of 2018, Duke Energy Progress and Duke Energy Florida's service territories were impacted by several named storms. Hurricane Florence, Hurricane Michael and Winter Storm Diego caused flooding, extensive damage and widespread power outages to the service territory of Duke Energy Progress. Duke Energy Florida's service territory was also impacted by Hurricane Michael, a Category 5 hurricane and the most powerful storm to hit the Florida Panhandle in recorded history. In September 2019, Hurricane Dorian impacted Duke Energy Progress' and Duke Energy Florida's service territories. A significant portion of the incremental operation and maintenance expenses related to these storms has been deferred. An order from regulatory authorities disallowing the deferral and future recovery of storm restoration costs could have an adverse impact on Progress Energy's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

DUKE ENERGY PROGRESS

Results of Operations

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 5,957	\$ 5,699	\$ 258
Operating Expenses			
Fuel used in electric generation and purchased power	2,012	1,892	120
Operation, maintenance and other	1,446	1,578	(132)
Depreciation and amortization	1,143	991	152
Property and other taxes	176	155	21
Impairment charges	12	33	(21)
Total operating expenses	4,789	4,649	140
Gains on Sales of Other Assets and Other, net	—	9	(9)
Operating Income	1,168	1,059	109
Other Income and Expenses, net	100	87	13
Interest Expense	306	319	(13)
Income Before Income Taxes	962	827	135
Income Tax Expense	157	160	(3)
Net Income	\$ 805	\$ 667	\$ 138

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	2019	2018
Residential sales	(4.0)%	9.9%
General service sales	(1.6)%	2.3%
Industrial sales	0.6 %	0.8%
Wholesale power sales	(1.5)%	4.6%
Joint dispatch sales	(0.8)%	2.1%
Total sales	(1.4)%	3.8%
Average number of customers	1.3 %	1.5%

Year Ended December 31, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$110 million increase in retail pricing due to the impacts of the prior year North Carolina rate case and the current year South Carolina rate case;
- a \$101 million increase in fuel revenues primarily related to increased fuel cost recovery due to extreme weather in the prior year; and
- a \$54 million increase in wholesale power revenues, net of fuel, primarily due to coal ash cost recovery in the current year.

Partially Offset by:

- a \$21 million decrease primarily due to the return of excess deferred incomes taxes created by the reduction in the corporate income tax rate, partially offset by an increase in rider revenues related to EE programs.

Operating Expenses. The variance was driven primarily by:

- a \$152 million increase in depreciation and amortization expense primarily due to higher amortization of deferred coal ash costs and new depreciation rates associated with the prior year North Carolina and current year South Carolina rate cases, partially offset by the amortization credit for the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard requirement increase from prior year;
- a \$120 million increase in fuel used in electric generation and purchased power primarily due to a higher deferred fuel balance and an increase in the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard requirement from prior year, partially offset by lower demand and changes in generation mix; and
- a \$21 million increase in property and other taxes primarily due to current year property tax reassessments and a favorable sales and use tax credit in the prior year.

Partially offset by:

- a \$132 million decrease in operation, maintenance and other expense primarily due to lower storm costs in current year, reduced outage costs and lower employee benefit costs; and
- a \$21 million decrease in impairment charges primarily due to prior year impacts associated with the North Carolina rate case.

Other Income and Expenses, net. The variance was driven primarily by life insurance proceeds.

Interest Expense. The variance was driven primarily by lower interest rates on outstanding debt.

Matters Impacting Future Results

On December 31, 2019, Duke Energy Progress entered into a settlement agreement with NCDEQ and certain community groups under which Duke Energy Progress agreed to excavate two of the three remaining coal ash basins in North Carolina with ash moved to on-site lined landfills. At the one remaining basin, uncapped basin ash will be excavated and moved to lined landfills. An order from regulatory authorities disallowing recovery of costs related to closure of these ash basins could have an adverse impact on Duke Energy Progress' results of operations, financial position and cash flows. See Notes 4 and 5 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies," respectively, for additional information.

Duke Energy Progress filed a general rate case with the NCUC on October 30, 2019. The outcome of this rate case could materially impact Duke Energy Progress' results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

On May 21, 2019, the PSCSC issued an order granting Duke Energy Progress' request for a retail rate increase but denying recovery of certain coal ash costs. Duke Energy Progress filed a notice of appeal with the South Carolina Supreme Court on November 15, 2019. Appellant briefs are due on March 2, 2020, and Appellee response briefs are due on May 15, 2020. Duke Energy Progress' results of operations, financial position and cash flows could be adversely impacted if coal ash costs are not ultimately approved for recovery. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Duke Energy Progress has petitioned for deferral of future grid improvement costs in its 2019 rate case. Duke Energy Progress' results of operations, financial position and cash flows could be adversely impacted if grid improvement costs are not ultimately approved for recovery and/or deferral treatment.

During the last half of 2018, Duke Energy Progress' service territory was impacted by several named storms. Hurricane Florence, Hurricane Michael and Winter Storm Diego caused flooding, extensive damage and widespread power outages in the service territory. In September 2019, Hurricane Dorian reached the Carolinas bringing high winds, tornadoes and heavy rain, impacting about 300,000 customers within the service territory. A significant portion of the incremental operation and maintenance expenses related to these storms has been deferred. An order from regulatory authorities disallowing the deferral and future recovery of storm restoration costs could have an adverse impact on Duke Energy Progress' results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

DUKE ENERGY FLORIDA

Results of Operations

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 5,231	\$ 5,021	\$ 210
Operating Expenses			
Fuel used in electric generation and purchased power	2,012	2,085	(73)
Operation, maintenance and other	1,034	1,025	9
Depreciation and amortization	702	628	74
Property and other taxes	392	374	18
Impairment charges	(36)	54	(90)
Total operating expenses	4,104	4,166	(62)
Gains on Sales of Other Assets and Other, net	—	1	(1)
Operating Income	1,127	856	271
Other Income and Expenses, net	48	86	(38)
Interest Expense	328	287	41
Income Before Income Taxes	847	655	192
Income Tax Expense	155	101	54
Net Income	\$ 692	\$ 554	\$ 138

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	2019	2018
Residential sales	0.7 %	4.3 %
General service sales	0.3 %	1.9 %
Industrial sales	(4.6)%	(0.4)%
Wholesale power sales	28.8 %	5.2 %
Total sales	1.5 %	2.4 %
Average number of customers	1.6 %	1.5 %

Year Ended December 31, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$256 million increase in retail pricing due to base rate adjustments related to Citrus County CC being placed in service, annual increases from the 2017 Settlement Agreement and the Solar Base Rate Adjustment;
- a \$22 million increase in retail sales, net of fuel revenues, due to favorable weather in the current year;
- a \$21 million increase in other revenues primarily due to increased transmission revenues and nonregulated products and services revenues; and
- a \$16 million increase in wholesale power revenues, net of fuel, primarily due to increased demand.

Partially offset by:

- a \$59 million decrease in fuel and capacity revenues primarily due to a decrease in fuel and capacity rates billed to retail customers;
- a \$33 million decrease in retail rider revenues primarily related to decreased revenue requirements in the current year; and
- a \$14 million decrease in weather-normal retail sales volumes.

Operating Expenses. The variance was driven primarily by:

- a \$90 million decrease in impairment charges primarily due to a prior year impairment at Citrus County CC and a reduction of the impairment in the current year; and
- a \$73 million decrease in fuel used in electric generation and purchased power primarily due to lower purchased power and lower fuel costs, net of deferrals.

Partially offset by:

- a \$74 million increase in depreciation and amortization expense primarily due to base rate adjustments related to Citrus County CC being placed in service, other additional plant in service and increases resulting from the 2018 Crystal River Unit 3 nuclear decommissioning cost study;
- an \$18 million increase in property and other taxes primarily due to higher property taxes from additional plant in service; and
- a \$9 million increase in operation, maintenance and other expense primarily due to increased vegetation management costs and deregulation initiative costs, partially offset by lower severance charges.

Other Income and Expenses, net. The variance was driven primarily by AFUDC equity return ending on the Citrus County CC in the fourth quarter of 2018.

Interest Expense. The variance was driven primarily by AFUDC debt return ending on the Citrus County CC in the fourth quarter of 2018 and higher debt outstanding in the current year.

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

Matters Impacting Future Results

On October 10, 2018, Hurricane Michael made landfall on Florida's Panhandle as a Category 5 hurricane, the most powerful storm to hit the Florida Panhandle in recorded history. The storm caused significant damage within the service territory of Duke Energy Florida, particularly from Panama City Beach to Mexico Beach. In September 2019, Duke Energy Florida's service territory was threatened by Hurricane Dorian with landfall as a possible Category 5 hurricane and therefore Duke Energy Florida incurred costs to secure necessary resources to be prepared for that potential impact. A significant portion of the incremental operation and maintenance expenses related to these storms has been deferred. An order from regulatory authorities disallowing the future recovery of storm restoration costs could have an adverse impact on Duke Energy Florida's financial position, results of operations and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

DUKE ENERGY OHIO

Results of Operations

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues			
Regulated electric	\$ 1,456	\$ 1,450	\$ 6
Regulated natural gas	484	506	(22)
Nonregulated electric and other	—	1	(1)
Total operating revenues	1,940	1,957	(17)
Operating Expenses			
Fuel used in electric generation and purchased power – regulated	388	412	(24)
Cost of natural gas	95	113	(18)
Operation, maintenance and other	520	480	40
Depreciation and amortization	265	268	(3)
Property and other taxes	308	290	18
Total operating expenses	1,576	1,563	13
Losses on Sales of Other Assets and Other, net	—	(106)	106
Operating Income	364	288	76
Other Income and Expenses, net	24	23	1
Interest Expense	109	92	17
Income from Continuing Operations Before Income Taxes	279	219	60
Income Tax Expense from Continuing Operations	40	43	(3)
Income from Continuing Operations	239	176	63
Loss from Discontinued Operations, net of tax	(1)	—	(1)
Net Income	\$ 238	\$ 176	\$ 62

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.

Increase (Decrease) over prior year	Electric		Natural Gas	
	2019	2018	2019	2018
Residential sales	(3.9)%	12.2 %	(3.7)%	18.0%
General service sales	(1.9)%	3.3 %	(1.2)%	15.4%
Industrial sales	(2.1)%	1.0 %	(0.4)%	8.1%
Wholesale electric power sales	(4.9)%	(46.6)%	n/a	n/a
Other natural gas sales	n/a	n/a	0.7 %	0.7%
Total sales	(2.4)%	2.8 %	(1.7)%	11.9%
Average number of customers	0.7 %	0.8 %	0.7 %	0.9%

Year Ended December 31, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$45 million decrease in fuel related revenues primarily due to a decrease in price;
- a \$31 million decrease in rider revenues primarily due to the cessation of the Smart Grid Rider in 2018 and the Tax Cut and Jobs Act Rider beginning in 2019, partially offset by new riders implemented in conjunction with rate cases including the Price Stabilization Rider, Electric Service Reliability Rider and the Environmental Surcharge Mechanism;
- a \$15 million decrease in FTR rider revenues; and
- a \$12 million decrease in electric and natural gas retail sales, net of fuel revenues, due to unfavorable weather in the current year.

Partially offset by:

- a \$71 million increase in retail pricing primarily due to rate case impacts; and
- an \$18 million increase in PJM point-to-point transmission revenues due to an increase in the Network Integration Transmission Service rate primarily due to additional plant in service.

Operating Expenses. The variance was driven primarily by:

- a \$40 million increase in operations, maintenance and other expense primarily due to the FERC approved settlement refund of certain transmission costs previously billed by PJM recorded in 2018 and increased PJM transmission expansion fees; and
- an \$18 million increase in property and other taxes primarily due to additional plant in service, partially offset by a negotiated reassessment of property values and property tax true ups for prior periods.

Partially offset by:

- a \$24 million decrease in fuel used in electric generation and purchased power expense due to the prior year outage at East Bend Station and the deferral of OVEC related purchased power costs; and
- an \$18 million decrease in the cost of natural gas primarily due to lower costs passed through to customers, as a result of a lower natural gas prices.

Losses on Sales of Other Assets and Other, net. The increase was driven by the loss on the prior year sale of Beckjord.

Interest Expense. The variance was primarily due to higher debt outstanding in the current year.

Matters Impacting Future Results

On November 13, 2013, the PUCO issued an order authorizing recovery of MGP costs at certain sites in Ohio with a deadline to complete the MGP environmental investigation and remediation work prior to December 31, 2016. This deadline was subsequently extended to December 31, 2019. Duke Energy Ohio has filed a request for extension of the deadline. A hearing on that request has not been scheduled. Disallowance of costs incurred, failure to complete the work by the deadline or failure to obtain an extension from the PUCO could result in an adverse impact on Duke Energy Ohio's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

DUKE ENERGY INDIANA

Results of Operations

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 3,004	\$ 3,059	\$ (55)
Operating Expenses			
Fuel used in electric generation and purchased power	935	1,000	(65)
Operation, maintenance and other	790	788	2
Depreciation and amortization	525	520	5
Property and other taxes	69	78	(9)
Impairment charges	—	30	(30)
Total operating expenses	2,319	2,416	(97)
Operating Income	685	643	42
Other Income and Expenses, net	41	45	(4)
Interest Expense	156	167	(11)
Income Before Income Taxes	570	521	49
Income Tax Expense	134	128	6
Net Income	\$ 436	\$ 393	\$ 43

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	2019	2018
Residential sales	(3.9)%	12.5 %
General service sales	(2.2)%	2.8 %
Industrial sales	(2.6)%	0.5 %
Wholesale power sales	(27.7)%	(0.9)%
Total sales	(6.8)%	3.3 %
Average number of customers	1.2 %	1.3 %

Year Ended December 31, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$21 million decrease in wholesale power revenues primarily due to the expiration of a contract with a wholesale customer;
- a \$16 million decrease in other transmission FTR revenues due to lower congestion; and
- a \$14 million decrease in weather-normal retail sales volume.

Operating Expenses. The variance was driven primarily by:

- a \$65 million decrease in fuel used in electric generation and purchased power expense primarily due to lower coal and natural gas costs, partially offset by higher purchase power fuel clause, higher amortization of deferred fuel costs and higher deferred MISO charges; and
- a \$30 million decrease in impairments primarily due to the prior year Edwardsport IGCC settlement agreement.

Matters Impacting Future Results

On April 17, 2015, the EPA published in the Federal Register a rule to regulate the disposal of CCR from electric utilities as solid waste. Duke Energy Indiana has interpreted the 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. Duke Energy Indiana's interpretation of the requirements of the CCR rule is subject to potential legal challenges and further 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. An order from regulatory authorities disallowing recovery of costs related to closure of ash basins could have an adverse impact on Duke Energy Indiana's results of operations, financial position and cash flows.

Duke Energy Indiana filed a general rate case with the IURC on July 2, 2019, its first general rate case in Indiana in 16 years. The outcome of this rate case could materially impact Duke Energy Indiana's results of operations, financial position and cash flows. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

PIEDMONT

Results of Operations

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Operating Revenues	\$ 1,381	\$ 1,375	\$ 6
Operating Expenses			
Cost of natural gas	532	584	(52)
Operation, maintenance and other	328	357	(29)
Depreciation and amortization	172	159	13
Property and other taxes	45	49	(4)
Total operating expenses	1,077	1,149	(72)
Operating Income	304	226	78
Equity in earnings of unconsolidated affiliates	8	7	1
Other income and expenses, net	20	14	6
Total other income and expenses	28	21	7
Interest Expense	87	81	6
Income Before Income Taxes	245	166	79
Income Tax Expense	43	37	6
Net Income	\$ 202	\$ 129	\$ 73

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	2019	2018
Residential deliveries	(8.0)%	23.6 %
Commercial deliveries	(4.6)%	14.9 %
Industrial deliveries	1.7 %	4.2 %
Power generation deliveries	(11.8)%	23.6 %
For resale	4.8 %	17.0 %
Total throughput deliveries	(8.2)%	19.0 %
Secondary market volumes	(0.5)%	(8.1)%
Average number of customers	1.4 %	1.6 %

Piedmont's throughput was 511,243,774 Dth and 557,145,128 Dth for the years ended December 31, 2019, and 2018, respectively. Due to the margin decoupling mechanism in North Carolina, WNA mechanisms in South Carolina and Tennessee and fixed price contracts with most power generation customers, changes in throughput deliveries do not have a material impact on Piedmont's revenues or earnings. The margin decoupling mechanism adjusts for variations in residential and commercial use per customer, including those due to weather and conservation. The WNA 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, 2019, as compared to 2018

Operating Revenues. The variance was driven primarily by:

- a \$24 million increase due to North Carolina base rate case increases;
- a \$19 million increase due to North Carolina and Tennessee IMR increases; and

- an \$11 million increase due to NCUC approval related to tax reform accounting from fixed rate contracts.

Partially offset by:

- a \$52 million decrease due to lower natural gas costs passed through to customers.

Operating Expenses. The variance was driven primarily by:

- a \$52 million decrease in cost of natural gas due to lower natural gas prices; and
- a \$29 million decrease in operation, maintenance and other expense due to lower information technology outside services and labor costs.

Partially offset by:

- a \$13 million increase in depreciation and amortization expense due to additional plant in service.

Matters Impacting Future Results

Within this Item 7, see Liquidity and Capital Resources for discussion of risks associated with the Tax Act.

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.

Goodwill Impairment Assessments

Duke Energy performed its annual goodwill impairment tests for all reporting units as of August 31, 2019. 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, 2019, 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 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 2019 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, 2019, for each of Duke Energy's reporting units ranged from 5.2% to 5.9%. 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.

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 over a prolonged period may have a material impact on the fair value of equity.

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.

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.

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 2019, Duke Energy Florida, entered into an agreement for the accelerated decommissioning of the Crystal River Unit 3 nuclear power station. Closing of this agreement is contingent upon approval of the NRC and FPSC. The retirement obligations for the decommissioning of Crystal River Unit 3 nuclear power station are measured using probability weightings of an obligation based on accelerated decommissioning from 2020 continuing through 2027 and an obligation based on the unit in SAFSTOR, with decommissioning beginning in 2067 and ending in 2074. 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. During 2019, Duke Energy reached a settlement agreement with the NCDEQ and SELC to excavate 7 and partially excavate 2 of the remaining ash basins in Duke Energy Carolinas and Duke Energy Progress service territories. In 2019, Duke Energy Carolinas and Duke Energy Progress remeasured their obligations to reflect the results of the settlement.

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

Long-Lived Asset Impairment Assessments, Excluding Regulated Operations

Duke Energy evaluates property, plant and equipment for impairment when events or changes in circumstances (such as a significant change in cash flow projections or the determination that it is more likely than not that an asset or asset group will be sold) indicate the carrying value of such assets may not be recoverable. The determination of whether an impairment has occurred is based on an estimate of undiscounted future cash flows attributable to the assets, as compared with their carrying value.

Performing an impairment evaluation involves a significant degree of estimation and judgment in areas such as identifying circumstances that indicate an impairment may exist, identifying and grouping affected assets and developing the undiscounted future cash flows. If an impairment has occurred, the amount of the impairment recognized is determined by estimating the fair value and recording a loss if the carrying value is greater than the fair value. Additionally, determining fair value requires probability weighting future cash flows to reflect expectations about possible variations in their amounts or timing and the selection of an appropriate discount rate. Although cash flow estimates are based on relevant information available at the time the estimates are made, estimates of future cash flows are, by nature, highly uncertain and may vary significantly from actual results.

When determining whether an asset or asset group has been impaired, management groups assets at the lowest level that has discrete cash flows.

During 2019, Duke Energy sold a minority interest in a portion of certain Commercial Renewable assets. Following the sale, Duke Energy evaluated recoverability of the assets included in the sale as the fair value of consideration received for the portfolio was less than the carrying value of the assets. It was determined the assets were all recoverable. Additionally, Duke Energy evaluated recoverability of certain renewable merchant plants during 2019 due to declining market pricing and declining long-term forecasted energy prices. It was determined the assets were all recoverable as the carrying value of the assets approximated the aggregate estimated future cash flows.

For further information, see Notes 3 and 11 to the Consolidated Financial Statements, "Business Segments" and "Property, Plant and Equipment."

Equity Method Investments

Equity method investments are assessed for impairment when conditions exist that indicate that the fair value of the investment is less than book value. If the decline in value is considered to be other-than-temporary, an impairment charge is recorded and the investment is written down to its estimated fair value, which establishes a new cost basis in the investment.

Events or changes in circumstances are monitored that may indicate, in management's judgment, the carrying value of such investments may have experienced an other-than-temporary decline in value. The fair value of equity method investments is generally estimated using an income approach where significant judgments and assumptions include expected future cash flows, the appropriate discount rate, and probability weighted-scenarios, if applicable. In certain instances, a market approach may also be used to estimate the fair value of the equity method investment.

Events or changes in circumstances that may be indicative of an other-than-temporary decline in value will vary by investment, but may include:

- Significant delays in or failure to complete significant growth projects of investees;
- Adverse regulatory actions expected to substantially reduce the investee's product demand or profitability;
- Expected financial performance significantly worse than anticipated when initially invested;
- Prolonged period the fair value is below carrying value;
- A significant or sustained decline in the market value of an investee;
- Lower than expected cash distributions from investees;
- Significant asset impairments or operating losses recognized by investees; and
- Loss of significant customers or suppliers with no immediate prospects for replacement.

ACP

As of December 31, 2019, the carrying value of the equity method investment in ACP is \$1.2 billion, and Duke Energy's maximum exposure to loss for its guarantee of the ACP revolving credit facility is \$827 million. During 2018 and 2019, ACP received several adverse court rulings as described in Note 4 to the Consolidated Financial Statements, "Regulatory Matters." As a result, Duke Energy evaluated this investment for impairment and determined that fair value approximated carrying value and therefore no impairment was necessary.

Duke Energy estimated the fair value of its investment in ACP using an income approach that primarily considered probability-weighted scenarios of discounted future net cash flows based on the most recent estimate of total construction costs and revenues. These scenarios included assumptions of various court decisions and the impact those decisions may have on the timing and extent of investment, including scenarios assuming the full resolution of permitting issues in addition to a scenario where the project does not proceed. Certain scenarios within the analysis included growth expectations from additional compression or other expansion opportunities and reopeners for pricing. An after-tax discount rate of 5.9% was used in the analysis. The discount rate was derived using a market participant approach with an adjusted risk premium for the underlying investment. Higher probabilities were generally assigned to those scenarios where court approvals were received and the project moves forward reflecting interim rates at prices subject to the reopeners. A low probability was assigned to the scenario where the project does not proceed.

Judgments and assumptions are inherent in our estimates of future cash flows, discount rates, growth assumptions, and the likelihood of various scenarios. It is reasonably possible that future unfavorable developments, such as a reduced likelihood of success with court approvals, increased estimates of construction costs, material increases in the discount rate, important feedback on customer price increases or further significant delays, could result in a future impairment.

For further information on ACP, see Notes 4 and 13 to the Consolidated Financial Statements, "Regulatory Matters" and "Investments in Unconsolidated Affiliates".

Pension and Other Post-Retirement Benefits

The calculation of pension expense, other post-retirement benefit expense and net pension and other post-retirement assets or liabilities require the use of assumptions and election of permissible accounting alternatives. Changes in assumptions can result in different expense and reported asset or liability amounts and future actual experience can differ from the assumptions. Duke Energy believes the most critical assumptions for pension and other post-retirement benefits are:

- the expected long-term rate of return on plan assets;
- the assumed discount rate applied to future projected benefit payments; and
- the health care cost trend rate.

Duke Energy elects to amortize net actuarial gain or loss amounts that are in excess of 10% of the greater of the market-related value of plan assets or the plan's projected benefit obligation, into net pension or other post-retirement benefit expense over the average remaining service period of active participants expected to benefit under the plan. If all or almost all of a plan's participants are inactive, the average remaining life expectancy of the inactive participants is used instead of average remaining service period. Prior service cost or credit, which represents an increase or decrease in a plan's pension benefit obligation resulting from plan amendment, is amortized on a straight-line basis over the average expected remaining service period of active participants expected to benefit under the plan. If all or almost all of a plan's participants are inactive, the average remaining life expectancy of the inactive participants is used instead of average remaining service period.

As of December 31, 2019, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.85%. 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 liability. Real assets, return-seeking fixed income, 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 on investments.

Duke Energy discounted its future U.S. pension and other post-retirement obligations using a rate of 3.3% as of December 31, 2019. Discount rates used to measure benefit plan obligations for financial reporting purposes reflect rates at which pension benefits could be effectively settled. As of December 31, 2019, Duke Energy determined its discount rate for U.S. pension and other post-retirement obligations using 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.

Future changes in plan asset returns, assumed discount rates and various other factors related to the participants in Duke Energy's pension and post-retirement plans will impact future pension expense and liabilities. Duke Energy cannot predict with certainty what these factors will be in the future. The following table presents the approximate effect on Duke Energy's 2019 pretax pension expense, pretax other post-retirement expense, pension obligation and other post-retirement benefit obligation if a 0.25% change in rates were to occur.

(in millions)	Qualified and Non- Qualified Pension Plans		Other Post-Retirement Plans	
	0.25%	(0.25)%	0.25%	(0.25)%
	Effect on 2019 pretax pension and other post-retirement expense			
Expected long-term rate of return	\$ (21)	\$ 21	\$ (1)	\$ 1
Discount rate	(9)	9	—	(1)
Effect on pension and other post-retirement benefit obligation at December 31, 2019				
Discount rate	(197)	201	(14)	14

Duke Energy's other post-retirement plan uses a health care cost trend rate covering both pre- and post-age 65 retired plan participants, which is comprised of a medical care cost trend rate, which reflects the near- and long-term expectation of increases in medical costs, and a prescription drug cost trend rate, which reflects the near- and long-term expectation of increases in prescription drug costs. As of December 31, 2019, the health care cost trend rate was 6.0%, trending down to 4.75% by 2026. These plans are closed to new employees.

For further information, see Note 23 to the Consolidated Financial Statements, "Employee Benefit Plans."

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.

Among other provisions, the Tax Act lowered the corporate federal income tax rate from 35% to 21% and eliminated bonus depreciation for regulated utilities. For Duke Energy's regulated operations, the reduction in federal income taxes will result in lower regulated customer rates. However, due to its existing NOL position and other tax credits, Duke Energy does not expect to be a significant federal cash tax payer through at least 2027. As a result, any reduction in customer rates could cause a material reduction in consolidated cash flows from operations in the short term. Over time, the reduction in deferred tax liabilities resulting from the Tax Act will increase Duke Energy's regulated rate base investments and customer rates. Impacts of Tax Act to Duke Energy's cash flows and credit metrics are subject to the regulatory actions of its state commissions, of which a substantial amount remain uncertain through ongoing rate case activity, and the FERC. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

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.

Equity Issuance

In order to strengthen its balance sheet and credit metrics and bolster cash flows, in November 2019, Duke Energy entered into forward sales agreements for \$2.5 billion of common stock equity expected to be settled in late 2020. Duke Energy plans to issue \$500 million of common stock equity per year through at least 2022 through the DRIP and ATM programs. Additionally, Duke Energy will utilize other instruments as needed. See Note 20 to the Consolidated Financial Statements, "Stockholders' Equity," for further information regarding Duke Energy's equity issuances in 2019.

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.

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 sectors. 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)	2020	2021	2022
New generation	\$ 115	\$ 230	\$ 475
Regulated renewables	515	450	410
Environmental	975	725	750
Nuclear fuel	465	410	415
Major nuclear	405	285	175
Customer additions	630	630	620
Grid modernization and other transmission and distribution projects	3,345	3,845	4,380
Maintenance and other	2,275	1,925	2,050
Total Electric Utilities and Infrastructure	8,725	8,500	9,275
Gas Utilities and Infrastructure	2,275	1,950	1,150
Commercial Renewables and Other	825	875	725
Total projected capital and investment expenditures	\$ 11,825	\$ 11,325	\$ 11,150

DEBT MATURITIES

See Note 7 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding significant components of Current Maturities of Long-Term Debt on the Consolidated Balance Sheets.

DIVIDEND PAYMENTS

In 2019, Duke Energy paid quarterly cash dividends for the 93rd 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 diluted EPS, and expects this trend to continue through 2024. In 2019 and 2018, Duke Energy increased the dividend by approximately 2% and 4%, respectively, 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 wholly owned 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, 2019, the amount of restricted net assets of wholly owned 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 Electric Utilities and Infrastructure and Gas Utilities and Infrastructure 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.

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).

At December 31, 2019, Duke Energy had cash and cash equivalents and short-term investments of \$311 million.

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 2020, Duke Energy anticipates issuing additional debt of \$5.2 billion, primarily 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 in 2019.

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

	Projected 2020	Actual 2019	Actual 2018
Equity	45%	44%	43%
Debt	55%	56%	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, 2019, each of the Duke Energy Registrants was in compliance with all covenants related to their debt agreements. 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. In January 2020, Fitch Ratings, Inc. publicly announced plans to withdraw the ratings on Duke Energy Corporation on or about February 20, 2020. The following table includes Duke Energy and certain subsidiaries' credit ratings and ratings outlook as of February 2020.

	Moody's	S&P
Duke Energy Corporation	Stable	Stable
Issuer Credit Rating	Baa1	A-
Senior Unsecured Debt	Baa1	BBB+
Commercial Paper	P-2	A-2
Duke Energy Carolinas	Stable	Stable
Senior Secured Debt	Aa2	A
Senior Unsecured Debt	A1	A-
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	A-
Duke Energy Ohio	Stable	Stable
Senior Secured Debt	A2	A
Senior Unsecured Debt	Baa1	A-
Duke Energy Indiana	Stable	Stable
Senior Secured Debt	Aa3	A
Senior Unsecured Debt	A2	A-
Duke Energy Kentucky	Stable	Stable
Senior Unsecured Debt	Baa1	A-
Piedmont Natural Gas	Stable	Stable
Senior Unsecured	A3	A-

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.

(in millions)	Years Ended December 31,	
	2019	2018
Cash flows provided by (used in):		
Operating activities	\$ 8,209	\$ 7,186
Investing activities	(11,957)	(10,060)
Financing activities	3,730	2,960
Net (decrease) increase in cash, cash equivalents and restricted cash	(18)	86
Cash, cash equivalents and restricted cash at beginning of period	591	505
Cash, cash equivalents and restricted cash at end of period	\$ 573	\$ 591

OPERATING CASH FLOWS

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

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Net income	\$ 3,571	\$ 2,644	\$ 927
Non-cash adjustments to net income	5,761	6,447	(686)
Contributions to qualified pension plans	(77)	(141)	64
Payments for AROs	(746)	(533)	(213)
Payment for disposal of other assets	—	(105)	105
Refund of AMT credit carryforwards	573	—	573
Working capital	(873)	(1,126)	253
Net cash provided by operating activities	\$ 8,209	\$ 7,186	\$ 1,023

The variance was driven primarily by:

- a \$241 million increase in net income after adjustment for non-cash items primarily due to increases in revenues as a result of rate increases in the current year, partially offset by decreases in current year non-cash adjustments;
- a \$573 million refund of AMT credit carryforwards;
- a \$253 million decrease in cash outflows from working capital primarily due to fluctuations in accounts receivable balances, including a prior year increase for AMT refunds, and prior year increases in regulatory assets related to fuel costs, partially offset by fluctuations in inventory levels and current year decreases in property tax and severance accruals; and
- a \$105 million payment in the prior year for disposal of Beckjord.

Partially offset by:

- a \$213 million increase in payments for AROs.

INVESTING CASH FLOWS

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

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Capital, investment and acquisition expenditures, net of return of investment capital	\$ (11,435)	\$ (9,668)	\$ (1,767)
Debt and equity securities, net	(5)	(15)	10
Other investing items	(517)	(377)	(140)
Net cash used in investing activities	\$ (11,957)	\$ (10,060)	\$ (1,897)

The primary use of cash related to investing activities is capital, investment and acquisition expenditures, net of return of investment capital detailed by reportable business segment in the following table. The increase includes expenditures related to line improvements in the Electric Utilities and Infrastructure segment and pipeline construction and improvement in the Gas Utilities and Infrastructure segment, as well as increased investment in the Commercial Renewables segment.

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Electric Utilities and Infrastructure	\$ 8,258	\$ 8,086	\$ 172
Gas Utilities and Infrastructure	1,533	1,133	400
Commercial Renewables	1,423	193	1,230
Other	221	256	(35)
Total capital, investment and acquisition expenditures, net of return of investment capital	\$ 11,435	\$ 9,668	\$ 1,767

FINANCING CASH FLOWS

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

(in millions)	Years Ended December 31,		
	2019	2018	Variance
Issuance of common stock	\$ 384	\$ 1,838	\$ (1,454)
Issuance of preferred stock	1,962	—	1,962
Issuances of long-term debt, net	3,615	2,393	1,222
Notes payable and commercial paper	(380)	1,171	(1,551)
Dividends paid	(2,668)	(2,471)	(197)
Contributions from noncontrolling interests	843	41	802
Other financing items	(26)	(12)	(14)
Net cash provided by financing activities	\$ 3,730	\$ 2,960	\$ 770

The variance was driven primarily by:

- a \$1,962 million increase in proceeds from the issuance of preferred stock;
- a \$1,222 million net increase in proceeds from issuances of long-term debt primarily due to timing of issuances and redemptions of long-term debt; and
- an \$802 million increase in contributions from noncontrolling interests, including \$415 million related to the sale of a noncontrolling interest in the Commercial Renewables segment.

Partially offset by:

- a \$1,454 million decrease in proceeds from the issuance of common stock; and
- a \$1,551 million decrease in net borrowings from notes payable and commercial paper primarily due to the use of proceeds from the preferred stock issuance and increased long-term debt issuances used to pay down outstanding commercial paper.

Off-Balance Sheet Arrangements

Duke Energy and certain of its subsidiaries enter into guarantee arrangements in the normal course of business to facilitate commercial transactions with third parties. These arrangements include performance guarantees, standby letters of credit, debt guarantees, surety bonds and indemnifications.

Most of the guarantee arrangements entered into by Duke Energy enhance the credit standing of certain subsidiaries, non-consolidated entities or less than wholly owned entities, enabling them to conduct business. As such, these guarantee arrangements involve elements of performance and credit risk, which are not always included on the Consolidated Balance Sheets. The possibility of Duke Energy, either on its own or on behalf of Spectra Capital through indemnification agreements entered into as part of the January 2, 2007, spin-off of Spectra Energy Corp, having to honor its contingencies is largely dependent upon the future operations of the subsidiaries, investees and other third parties, or the occurrence of certain future events.

Duke Energy performs ongoing assessments of its respective guarantee obligations to determine whether any liabilities have been incurred as a result of potential increased non-performance 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.

In November 2019, Duke Energy executed equity forward sales agreements. Settlement of the forward sales agreements are expected to occur on or prior to December 31, 2020. See Note 20 to the Consolidated Financial Statements, "Stockholders' Equity" for further details on the equity forward sales agreements.

Other than the guarantee arrangements discussed above, the equity forward sales agreements 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".

Contractual Obligations

Duke Energy enters into contracts that require payment of cash at certain specified periods, based on certain specified minimum quantities and prices. The following table summarizes Duke Energy's contractual cash obligations as of December 31, 2019.

(in millions)	Total	Payments Due By Period			
		Less than 1 year (2020)	2-3 years (2021 & 2022)	4-5 years (2023 & 2024)	More than 5 years (2025 & beyond)
Long-term debt ^(a)	\$ 56,174	\$ 3,021	\$ 9,135	\$ 4,870	\$ 39,148
Interest payments on long-term debt ^(b)	33,988	2,163	3,986	3,516	24,323
Finance leases ^(c)	1,659	181	359	296	823
Operating leases ^(c)	2,036	268	417	367	984
Purchase obligations: ^(d)					
Fuel and purchased power ^{(e)(f)}	26,250	4,124	5,390	3,798	12,938
Other purchase obligations ^(g)	5,456	4,836	322	76	222
Nuclear decommissioning trust annual funding ^(h)	606	24	62	62	458
Land easements ⁽ⁱ⁾	217	9	18	20	170
Total contractual cash obligations ^{(j)(k)}	\$ 126,386	\$ 14,626	\$ 19,689	\$ 13,005	\$ 79,066

- (a) See Note 7 to the Consolidated Financial Statements, "Debt and Credit Facilities."
- (b) Interest payments on variable rate debt instruments were calculated using December 31, 2019, interest rates and holding them constant for the life of the instruments.
- (c) See Note 6 to the Consolidated Financial Statements, "Leases." Amounts in the table above include the interest component of finance leases based on the interest rates stated in the lease agreements and exclude certain related executory costs. Amounts exclude contingent lease obligations.
- (d) Current liabilities, except for current maturities of long-term debt, and purchase obligations reflected on the Consolidated Balance Sheets have been excluded from the above table.
- (e) 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. For contracts where the price paid is based on an index, the amount is based on market prices at December 31, 2019, or the best projections of the index. For certain of these amounts, Duke Energy may settle on a net cash basis since Duke Energy has entered into payment netting arrangements with counterparties that permit Duke Energy to offset receivables and payables with such counterparties.
- (f) Amounts exclude obligations under the OVEC PPA. See Note 18 to the Consolidated Financial Statements, "Variable Interest Entities," for additional information.
- (g) Includes contracts for software, telephone, data and consulting or advisory services. Amount also includes contractual obligations for EPC costs for new generation plants, wind and 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.
- (h) Related to future annual funding obligations to NDTF through nuclear power stations' relicensing dates. See Note 10 to the Consolidated Financial Statements, "Asset Retirement Obligations."
- (i) Related to Commercial Renewables wind facilities.
- (j) Unrecognized tax benefits of \$126 million are not reflected in this table as Duke Energy cannot predict when open income tax years will close with completed examinations. See Note 24 to the Consolidated Financial Statements, "Income Taxes."
- (k) The table above excludes reserves for litigation, environmental remediation, asbestos-related injuries and damages claims and self-insurance claims (see Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies") because Duke Energy is uncertain as to the timing and amount of cash payments that will be required. Additionally, the table above excludes annual insurance premiums that are necessary to operate the business, including nuclear insurance (see Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies"), funding of pension and other post-retirement benefit plans (see Note 23 to the Consolidated Financial Statements, "Employee Benefit Plans"), AROs, including ash management expenditures (see Note 10 to the Consolidated Financial Statements, "Asset Retirement Obligations") and regulatory liabilities (see Note 4 to the Consolidated Financial Statements, "Regulatory Matters") because the amount and timing of the cash payments are uncertain. Also excluded are Deferred Income Taxes and ITCs recorded on the Consolidated Balance Sheets since cash payments for income taxes are determined based primarily on taxable income for each discrete fiscal 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

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 is primarily limited by the cost-based regulation of its regulated operations as these operations 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. Within Duke Energy's Commercial Renewables segment, the company has limited exposure to market price fluctuations in prices of energy-related products as a result of its ownership of renewable assets.

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 contract size, length, market liquidity, location and unique or specific contract terms. 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."

Hedging Strategies

Duke Energy closely 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 forward 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. Additionally, Duke Energy's Commercial Renewables business may enter into short-term or long-term hedge agreements to manage price risk associated with project output.

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. Undesignated contracts entered into by unregulated businesses are marked-to-market each period, with changes in the fair value of the derivative instruments reflected in earnings.

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.

Generation Portfolio Risks

The Duke Energy Registrants optimize the value of their generation portfolios, which include generation assets, fuel and emission allowances. Modeled forecasts of future generation output and fuel requirements are based on forward power and fuel markets. The component pieces of the portfolio are bought and sold based on models and forecasts of generation in order to manage the economic value of the portfolio in accordance with the strategies of the business units.

For the Electric Utilities and Infrastructure 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 partially offset by mechanisms in these regulated jurisdictions that result in the sharing of net profits from these activities with retail customers.

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 \$8.6 billion of unhedged long- and short-term floating interest rate exposure at December 31, 2019. The impact of a 100-basis point change in interest rates on pretax income is approximately \$86 million at December 31, 2019. 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, 2019.

Certain Duke Energy Registrants have variable-rate debt and manage interest rate risk by entering into financial contracts including interest rate swaps. See Notes 7 and 15 to the Consolidated Financial Statements, "Debt and Credit Facilities" and "Derivatives and Hedging." Such financial arrangements generally are indexed based upon LIBOR, which is expected to be phased out by the end of 2021. The Secured Overnight Financing Rate (SOFR) has been identified by regulators and industry participants as the preferred successor rate for U.S. dollar-based LIBOR at that time. Impacted financial arrangements extending beyond 2021 may require contractual amendment or termination and renegotiation to fully adapt to a post-LIBOR environment, and there may be uncertainty regarding the effectiveness of any such alternative index methodologies. Alternative index provisions are being assessed and incorporated into new financial arrangements that extend beyond 2021. Additionally, the progress of the phaseout is being monitored, including proposed transition relief from the FASB.

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 non-performance. 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 and payment patterns to ensure the adequacy of bad debt reserves. 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." Duke Energy also provides certain non-tariff services, primarily to large commercial and industrial customers in which incurred costs are intended to be recovered from the individual customer and therefore are not subject to rate recovery in the event of customer default. Customer credit worthiness is assessed prior to entering into these transactions.

Duke Energy's Commercial Renewables segment enters into long-term agreements with certain creditworthy buyers that may not include the right to call for collateral in the event of a credit rating downgrade. Credit concentration exists to certain counterparties on these agreements, including entities that could be subject to wildfire liability. Additionally, Commercial Renewables may invest in projects for which buyers are below investment grade, although such buyers are required to post negotiated amounts of credit support. Also, power sales agreements and/or hedges of project output are generally for an initial term that does not cover the entire life of the asset. As a result, Commercial Renewables is exposed to market price risk and credit risk related to these agreements.

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.

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 non-performance 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, 2019, 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 fund 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. Various industry and environmental parties appealed EPA's CCR rule in the D.C. Circuit Court. On April 18, 2016, EPA filed a motion with the federal court to settle five issues raised in litigation. On June 14, 2016, the court approved the motion with respect to all of those issues. Duke Energy does not expect a material impact from the settlement or that it will result in additional ARO adjustments. On September 13, 2017, EPA responded to a petition by the Utility Solid Waste Activities Group that the agency would reconsider certain provisions of the final rule, and asked the D.C. Circuit Court to suspend the litigation. The D.C. Circuit Court denied EPA's petition to suspend the litigation and oral argument was held on November 20, 2017. On August 21, 2018, the D.C. Circuit issued its decision in the CCR rule litigation denying relief for industry petitioners' remaining claims and ruling in favor of environmental petitioners on a number of their challenges, including the regulation of inactive CCR surface impoundments at retired plants and the continued operation of unlined impoundments.

On March 15, 2018, EPA published proposed amendments to the federal CCR rule, including revisions that were required as part of the CCR litigation settlement, as well as changes that the agency considered warranted due to the passage of the Water Infrastructure Improvements for the Nation Act, which provides statutory authority for state and federal CCR permit programs. On July 17, 2018, EPA issued a rule (Phase 1, Part 1) finalizing certain, but not all, elements included in the agency's March 15, 2018, proposal. The final rule revises certain closure deadlines and groundwater protection standards in the CCR rule. It does not change the primary requirements for groundwater monitoring, corrective action, inspections and maintenance, and closure, and thus does not materially affect Duke Energy's coal ash basin closure plans or compliance obligations under the CCR rule. On October 22, 2018, a coalition of environmental groups filed a petition for review in the D.C. Circuit Court challenging EPA's final Phase 1, Part 1 revisions to the CCR rule. On March 13, 2019, the D.C. Circuit Court issued an order in the Phase 1, Part 1 litigation granting EPA's motion to remand the rule without vacatur. EPA is currently conducting multiple notice-and-comment rulemakings to implement the court's decision on remand.

In addition to the requirements of the federal CCR rule, CCR landfills and surface impoundments will continue to be regulated by most 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 Management Act of 2014

AROs recorded on the Duke Energy Carolinas and Duke Energy Progress Consolidated Balance Sheets at December 31, 2019, and December 31, 2018, 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 plans to NCDEQ. In addition, on December 31, 2019, Duke Energy submitted updated groundwater corrective action plans and site-specific coal ash impoundment closure plans to NCDEQ.

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. For more information, see Note 5, "Commitments and Contingencies," to the Consolidated Financial Statements.

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 lowers 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 is now approximately \$8 billion to \$9 billion, of which approximately \$2.3 billion has been spent through 2019. The majority of the remaining spend is expected to occur over the next 15-20 years. Duke Energy intends to seek recovery of all costs through the ratemaking process consistent with previous proceedings.

In 2019, Duke Energy completed excavation of all coal ash at the Riverbend and Dan River plants and coal ash regulated by the Coal Ash Act at the Sutton plant.

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.

Estimated Cost and Impacts of Rulemakings

Duke Energy will incur capital expenditures to comply with the environmental regulations and rules discussed above. The following table, as of December 31, 2019, provides five-year estimated costs, excluding AFUDC, of new control equipment that may need to be installed on existing power plants primarily to comply with the Coal Ash Act requirements for conversion to dry disposal of bottom ash and fly ash, CWA 316(b) and Effluent Limitations Guidelines through December 31, 2024. The table excludes ash basin closure costs recorded in Asset retirement obligations on the Consolidated Balance Sheets. For more information related to AROs, see Note 10 to the Consolidated Financial Statements.

(in millions)	Five-Year Estimated Costs
Duke Energy	\$ 280
Duke Energy Carolinas	135
Progress Energy	90
Duke Energy Progress	60
Duke Energy Florida	30
Duke Energy Ohio	5
Duke Energy Indiana	50

The Duke Energy Registrants also expect to incur increased fuel, purchased power, operation and maintenance and other expenses, in addition to costs for replacement generation for potential coal-fired power plant retirements, as a result of these regulations. Actual compliance costs incurred may be materially different from these estimates due to reasons such as the timing and requirements of EPA regulations and the resolution of legal challenges to the rules. The Duke Energy Registrants intend to seek rate recovery of necessary and prudently incurred costs associated with regulated operations to comply with these regulations.

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, including the following:

- Clean Water Act
- Steam Effluent Limitation Guidelines
- Cross-State Air Pollution Rule
- Clean Power Plan/ACE Rule

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.

Section 126 Petitions

On November 16, 2016, the state of Maryland filed a petition with EPA under Section 126 of the Clean Air Act alleging that 19 power plants, including two plants (three units) that Duke Energy Registrants own and operate, contribute to violations of EPA's National Ambient Air Quality Standards (NAAQS) for ozone in the state of Maryland. On March 12, 2018, the state of New York filed a petition with EPA, also under Section 126 of the Clean Air Act alleging that over 60 power plants, including six that Duke Energy Registrants own and operate, contribute to violations of EPA's ozone NAAQS in the state of New York. Both Maryland and New York sought EPA orders requiring the states in which the named power plants operate impose more stringent NO_x emission limitations on the plants. On October 5, 2018, EPA denied the Maryland petition. That same day, Maryland appealed EPA's denial. On October 18, 2019, EPA denied the New York petition, and New York appealed that decision on October 29, 2019. Both appeals are before the D.C. Circuit Court. The impact of these petitions could be more stringent requirements for the operation of NO_x emission controls at these plants. The Duke Energy Registrants cannot predict the outcome of these matters.

Global Climate Change

On September 17, 2019, Duke Energy announced an updated climate strategy with a new goal of net-zero carbon emissions from electric generation by 2050. Timelines and initiatives, as well as implementation of new technologies, will vary in each state in which the company operates and will involve collaboration with regulators, customers and other stakeholders.

The Duke Energy Registrants' GHG emissions consist primarily of CO₂ and result primarily from operating a fleet of coal-fired and natural gas-fired power plants. In 2019, the Duke Energy Registrants' power plants emitted approximately 93 million tons of CO₂. Future levels of CO₂ emissions will be influenced by variables that include fuel prices, market prices, compliance with new or existing regulations, economic conditions that affect electricity demand and the technologies deployed to generate the electricity necessary to meet the customer demand.

The Duke Energy Registrants have taken actions that have resulted in a reduction of CO₂ emissions over time. Actions have included the retirement of 47 coal-fired Electric Generating Units with a combined generating capacity of 5,425 MW. Much of that capacity has been replaced with state-of-the-art highly efficient natural gas-fired generation that produces far fewer CO₂ emissions per unit of electricity generated. Duke Energy also has made investments to expand its portfolio of wind and solar projects, increase EE offerings and invest in its zero-CO₂ emissions hydropower and nuclear plants. These efforts have diversified its system and significantly reduced CO₂ emissions. Between 2005 and 2019, the Duke Energy Registrants have collectively lowered the CO₂ emissions from their electricity generation by 39%, which potentially lowers the exposure to any future mandatory CO₂ emission reduction requirements or carbon tax, whether as a result of federal legislation, EPA regulation, state regulation or other as yet unknown emission reduction requirement. Duke Energy will continue to explore the use of currently available and commercially demonstrated technology to reduce CO₂ emissions, including EE, wind, solar, storage and nuclear. Duke Energy will adjust to evolving and innovative technologies in a way that balances the reliability and affordability that customers expect. Under any future scenario involving mandatory CO₂ limitations, the Duke Energy Registrants would plan to seek recovery of their compliance costs through appropriate regulatory mechanisms.

The Duke Energy Registrants recognize certain groups associate severe weather events with increasing levels of GHGs in the atmosphere and forecast the possibility 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 any potential future financial risk to the Duke Energy Registrants' operations impossible.

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 resource planning decisions. The IRP process helps to evaluate a range of options, taking into account 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 CO₂ emissions in their IRP planning process to account for the potential regulation of CO₂ emissions. Incorporating a price on CO₂ 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 CO₂ 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 CO₂ prices to reflect a range of potential policy outcomes.

The Duke Energy Registrants routinely take steps to reduce the potential impact of severe weather events on their electric distribution systems by modernizing the electric grid through smart meters, storm hardening, self-healing and targeted undergrounding and applying lessons learned from previous storms to restoration efforts. The Duke Energy Registrants' electric generating facilities are designed to withstand extreme weather events without significant damage. The Duke Energy Registrants maintain an inventory of coal and oil on-site 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.

State Legislation

In July 2017, the North Carolina General Assembly passed House Bill 589, and it was subsequently signed into law by the governor. The law includes, among other things, overall reform of the application of PURPA for new solar projects in the state, a requirement for the utility to procure approximately 2,600 MW of renewable energy through a competitive bidding process and recovery of costs related to the competitive bidding process through the fuel clause and a competitive procurement rider.

In accordance with the provisions of HB 589, total procurement was changed based upon how much generation with no economic dispatch or curtailment occurs over the procurement period. Most of this type of generation is solar procured under PURPA. Based upon the current forecasted amount of such generation that will occur over procurement period, Duke Energy estimates the total under HB 589 competitive procurement will be approximately 1,500 to 2,000 MW.

Based on an independent evaluation process, Duke Energy will own or purchase a total of 551 MW of renewable energy from projects under the North Carolina's CPRE program. The process used was approved by the NCUC to select projects that would deliver the lowest cost renewable energy for customers. Five Duke Energy projects, totaling about 190 MW, were selected during the competitive bidding process. Duke Energy has completed the contracting process for the winning projects. A second tranche for CPRE opened in October 2019 and bids are due by March 9, 2020; the current target date for execution of the contracts is the fourth quarter of 2020.

In various states, legislation is being considered to allow third-party sales of electricity. Deregulation or restructuring in the electric industry may result in increased competition and unrecovered costs. The Duke Energy Registrants cannot predict the outcome of these initiatives.

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."

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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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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, 2019, 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 20, 2020, 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 separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Investment in Unconsolidated Affiliates - Equity Method Investments - Refer to Notes 4 and 13 to the financial statements.***Critical Audit Matter Description***

Investments in affiliates that are not controlled by the Company but over which the Company has significant influence are accounted for using the equity method of accounting. Equity method investments are assessed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. If the decline in value is considered to be other than temporary, the investment is written down to its estimated fair value, which establishes a new cost basis in the investment.

At December 31, 2019, the carrying value of the equity method investment in Atlantic Coast Pipeline, LLC (ACP) was \$1.2 billion. ACP has received several adverse court rulings, and as a result, the Company evaluated this investment for impairment. The Company has determined that fair value approximates carrying value and, therefore, concluded the investment is not impaired. The Company used probability-weighted outcome scenarios of discounted future cash flows to estimate the fair value of the investment. The use of probability-weighted, discounted cash flows requires management to make significant estimates regarding the likelihood of various scenarios, the key assumptions including total construction cost and revenues, and the discount rate utilized to determine the fair value estimate. Changes in these assumptions could have a significant impact on the fair value estimate, which is used to determine the amount of any impairment.

We identified the impairment evaluation of ACP as a critical audit matter because of the significant estimates and assumptions management makes related to the probability-weighted, discounted cash flows. The audit procedures to evaluate the reasonableness of management's estimates and assumptions related to the likelihood of various scenarios, the key assumptions including total construction cost and revenues, and the discount rate required a high degree of auditor judgement and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the discounted, probability-weighted forecasts of future cash flows and determination of the fair value of the ACP equity method investment, included the following, among others:

- We tested the effectiveness of controls over the accounting for the ACP equity method investment, including those over the development of the fair value estimate.
- We evaluated the likelihood of the various outcomes used by management to develop the probability-weighted scenarios of future cash flows by:

- Obtaining letters and making inquiries from the ACP's internal and external legal counsel regarding likely outcomes of future court rulings
 - Reading information included in the Company's and the project manager's press releases, regulatory filings and orders, legal briefs and orders, and analyst and industry reports
 - Reading internal communications to management and the Board of Directors
 - Comparing the various scenarios to scenarios previously developed by management
- We evaluated the reasonableness of the key assumptions used to develop the scenarios of future cash flows by comparing key assumptions to:
 - Internal communications and schedules to management and the Board of Directors
 - Information included in the Company's and the project manager's press releases, regulatory filings and related orders
 - Industry reports and external transaction data
 - Executed contracts and invoices
 - With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodology and (2) discount rate used to develop the fair value estimate by:
 - Determining the appropriateness of the valuation methodology by comparing management's methodology to generally accepted valuation practice
 - Testing the mathematical accuracy of the fair value estimate
 - Testing the source information underlying the determination of the discount rate
 - Developing a range of independent estimates of the discount rate and comparing those to the discount rate selected by management

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 of December 31, 2019, the Company has \$15 billion recorded as regulatory assets.

We identified the impact of rate regulation 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. As such, auditing these judgments required specialized knowledge of accounting for rate regulation due to its inherent complexities, a high degree of auditor judgment, and an increased extent of effort.

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 of regulatory assets 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 precedence of the Commission's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and interveners' filings with the Commissions that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We performed audit procedures on the incurred costs requested for recovery to confirm their completeness and accuracy.
- We obtained an analysis from management and letters from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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,		
	2019	2018	2017
Operating Revenues			
Regulated electric	\$ 22,615	\$ 22,097	\$ 21,177
Regulated natural gas	1,759	1,773	1,734
Nonregulated electric and other	705	651	654
Total operating revenues	25,079	24,521	23,565
Operating Expenses			
Fuel used in electric generation and purchased power	6,826	6,831	6,350
Cost of natural gas	627	697	632
Operation, maintenance and other	6,066	6,463	5,944
Depreciation and amortization	4,548	4,074	3,527
Property and other taxes	1,307	1,280	1,233
Impairment charges	(8)	402	282
Total operating expenses	19,366	19,747	17,968
(Losses) Gains on Sales of Other Assets and Other, net	(4)	(89)	28
Operating Income	5,709	4,685	5,625
Other Income and Expenses			
Equity in earnings of unconsolidated affiliates	162	83	119
Other income and expenses, net	430	399	508
Total other income and expenses	592	482	627
Interest Expense	2,204	2,094	1,986
Income From Continuing Operations Before Income Taxes	4,097	3,073	4,266
Income Tax Expense From Continuing Operations	519	448	1,196
Income From Continuing Operations	3,578	2,625	3,070
(Loss) Income From Discontinued Operations, net of tax	(7)	19	(6)
Net Income	3,571	2,644	3,064
Less: Net (Loss) Income Attributable to Noncontrolling Interests	(177)	(22)	5
Net Income Attributable to Duke Energy Corporation	3,748	2,666	3,059
Less: Preferred Dividends	41	—	—
Net Income Available to Duke Energy Corporation Common Stockholders	\$ 3,707	\$ 2,666	\$ 3,059
Earnings Per Share – Basic and Diluted			
Income from continuing operations available to Duke Energy Corporation common stockholders			
Basic and Diluted	\$ 5.07	\$ 3.73	\$ 4.37
(Loss) Income from discontinued operations attributable to Duke Energy Corporation common stockholders			
Basic and Diluted	\$ (0.01)	\$ 0.03	\$ (0.01)
Net income available to Duke Energy Corporation common stockholders			
Basic and Diluted	\$ 5.06	\$ 3.76	\$ 4.36
Weighted average shares outstanding			
Basic and Diluted	729	708	700

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in millions)	Years Ended December 31,		
	2019	2018	2017
Net Income	\$ 3,571	\$ 2,644	\$ 3,064
Other Comprehensive (Loss) Income, net of tax^(a)			
Pension and OPEB adjustments	9	(6)	3
Net unrealized (losses) gains on cash flow hedges	(47)	(10)	2
Reclassification into earnings from cash flow hedges	6	6	8
Unrealized gains (losses) on available-for-sale securities	8	(3)	13
Other Comprehensive (Loss) Income, net of tax	(24)	(13)	26
Comprehensive Income	3,547	2,631	3,090
Less: Comprehensive (Loss) Income Attributable to Noncontrolling Interests	(177)	(22)	5
Comprehensive Income Attributable to Duke Energy Corporation	3,724	2,653	3,085
Less: Preferred Dividends	41	—	—
Comprehensive Income Available to Duke Energy Corporation Common Stockholders	\$ 3,683	\$ 2,653	\$ 3,085

(a) Tax impacts are insignificant for all periods presented.

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 311	\$ 442
Receivables (net of allowance for doubtful accounts of \$22 at 2019 and \$16 at 2018)	1,066	962
Receivables of VIEs (net of allowance for doubtful accounts of \$54 at 2019 and \$55 at 2018)	1,994	2,172
Inventory	3,232	3,084
Regulatory assets (includes \$52 at 2019 and 2018 related to VIEs)	1,796	2,005
Other (includes \$242 at 2019 and \$162 at 2018 related to VIEs)	764	1,049
Total current assets	9,163	9,714
Property, Plant and Equipment		
Cost	147,654	134,458
Accumulated depreciation and amortization	(45,773)	(43,126)
Generation facilities to be retired, net	246	362
Net property, plant and equipment	102,127	91,694
Other Noncurrent Assets		
Goodwill	19,303	19,303
Regulatory assets (includes \$989 at 2019 and \$1,041 at 2018 related to VIEs)	13,222	13,617
Nuclear decommissioning trust funds	8,140	6,720
Operating lease right-of-use assets, net	1,658	—
Investments in equity method unconsolidated affiliates	1,936	1,409
Other (includes \$110 at 2019 and \$261 at 2018 related to VIEs)	3,289	2,935
Total other noncurrent assets	47,548	43,984
Total Assets	\$ 158,838	\$ 145,392
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 3,487	\$ 3,487
Notes payable and commercial paper	3,135	3,410
Taxes accrued	392	577
Interest accrued	565	559
Current maturities of long-term debt (includes \$216 at 2019 and \$227 at 2018 related to VIEs)	3,141	3,406
Asset retirement obligations	881	919
Regulatory liabilities	784	598
Other	2,367	2,085
Total current liabilities	14,752	15,041
Long-Term Debt (includes \$3,997 at 2019 and \$3,998 at 2018 related to VIEs)	54,985	51,123
Other Noncurrent Liabilities		
Deferred income taxes	8,878	7,806
Asset retirement obligations	12,437	9,548
Regulatory liabilities	15,264	14,834
Operating lease liabilities	1,432	—
Accrued pension and other post-retirement benefit costs	934	988
Investment tax credits	624	568
Other (includes \$228 at 2019 and \$212 at 2018 related to VIEs)	1,581	1,650
Total other noncurrent liabilities	41,150	35,394
Commitments and Contingencies		
Equity		
Preferred stock, Series A, \$0.001 par value, 40 million depositary shares authorized and outstanding at 2019	973	—
Preferred stock, Series B, \$0.001 par value, 1 million shares authorized and outstanding at 2019	989	—
Common stock, \$0.001 par value, 2 billion shares authorized; 733 million shares outstanding at 2019 and 727 million shares outstanding at 2018	1	1
Additional paid-in capital	40,881	40,795
Retained earnings	4,108	3,113
Accumulated other comprehensive loss	(130)	(92)
Total Duke Energy Corporation stockholders' equity	46,822	43,817
Noncontrolling interests	1,129	17
Total equity	47,951	43,834
Total Liabilities and Equity	\$ 158,838	\$ 145,392

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 3,571	\$ 2,644	\$ 3,064
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	5,176	4,696	4,046
Equity component of AFUDC	(139)	(221)	(237)
Losses (Gains) on sales of other assets	4	88	(33)
Impairment charges	(8)	402	282
Deferred income taxes	806	1,079	1,433
Equity in earnings of unconsolidated affiliates	(162)	(83)	(119)
Accrued pension and other post-retirement benefit costs	24	61	8
Contributions to qualified pension plans	(77)	(141)	(19)
Payments for asset retirement obligations	(746)	(533)	(571)
Payment for the disposal of other assets	—	(105)	—
Provision for rate refunds	60	425	—
Refund of AMT credit carryforwards	573	—	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	(48)	22	18
Receivables	78	(345)	(83)
Inventory	(122)	156	268
Other current assets	10	(721)	(400)
Increase (decrease) in			
Accounts payable	(164)	479	(204)
Taxes accrued	(224)	23	149
Other current liabilities	172	270	(482)
Other assets	(520)	(971)	(436)
Other liabilities	(55)	(39)	(60)
Net cash provided by operating activities	8,209	7,186	6,624
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(11,122)	(9,389)	(8,052)
Contributions to equity method investments	(324)	(416)	(414)
Return of investment capital	11	137	281
Purchases of debt and equity securities	(3,348)	(3,762)	(4,071)
Proceeds from sales and maturities of debt and equity securities	3,343	3,747	4,098
Other	(517)	(377)	(284)
Net cash used in investing activities	(11,957)	(10,060)	(8,442)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the:			
Issuance of long-term debt	7,091	5,299	6,909
Issuance of preferred stock	1,962	—	—
Issuance of common stock	384	1,838	—
Payments for the redemption of long-term debt	(3,476)	(2,906)	(2,316)
Proceeds from the issuance of short-term debt with original maturities greater than 90 days	397	472	319
Payments for the redemption of short-term debt with original maturities greater than 90 days	(479)	(282)	(272)
Notes payable and commercial paper	(298)	981	(409)
Contributions from noncontrolling interests	843	41	—
Dividends paid	(2,668)	(2,471)	(2,450)
Other	(26)	(12)	1
Net cash provided by financing activities	3,730	2,960	1,782
Net (decrease) increase in cash, cash equivalents, and restricted cash	(18)	86	(36)
Cash, cash equivalents, and restricted cash at beginning of period	591	505	541
Cash, cash equivalents, and restricted cash at end of period	\$ 573	\$ 591	\$ 505
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 2,195	\$ 2,086	\$ 1,963
Cash (received from) paid for income taxes	(651)	(266)	4
Significant non-cash transactions:			
Accrued capital expenditures	1,356	1,112	1,032
Non-cash dividends	108	107	—

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION
 CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Duke Energy Corporation Stockholders' Accumulated Other Comprehensive Income (Loss)												
	Preferred Stock	Common Stock Shares	Common Stock	Additional Paid-in Capital	Retained Earnings	Net Losses on Cash Flow Hedges	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, 2016	—	700	\$ 1	\$ 38,741	\$ 2,384	\$ (20)	\$ (1)	\$ (72)	\$ 41,033	\$ 8	\$ 41,041		
Net income	—	—	—	—	3,059	—	—	—	3,059	5	3,064		
Other comprehensive income	—	—	—	—	—	10	13	3	26	—	26		
Common stock issuances, including dividend reinvestment and employee benefits	—	—	—	51	—	—	—	—	51	—	51		
Common stock dividends	—	—	—	—	(2,450)	—	—	—	(2,450)	—	(2,450)		
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(2)	(2)		
Other ^(a)	—	—	—	—	20	—	—	—	20	(13)	7		
Balance at December 31, 2017	—	700	\$ 1	\$ 38,792	\$ 3,013	\$ (10)	\$ 12	\$ (69)	\$ 41,739	\$ (2)	\$ 41,737		
Net income	—	—	—	—	2,666	—	—	—	2,666	(22)	2,644		
Other comprehensive loss	—	—	—	—	—	(4)	(3)	(6)	(13)	—	(13)		
Common stock issuances, including dividend reinvestment and employee benefits	—	27	—	2,003	—	—	—	—	2,003	—	2,003		
Common stock dividends	—	—	—	—	(2,578)	—	—	—	(2,578)	—	(2,578)		
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(1)	(1)		
Other ^(b)	—	—	—	—	12	—	(12)	—	—	42	42		
Balance at December 31, 2018	—	727	\$ 1	\$ 40,795	\$ 3,113	\$ (14)	\$ (3)	\$ (75)	\$ 43,817	\$ 17	\$ 43,834		
Net income	—	—	—	—	3,707	—	—	—	3,707	(177)	3,530		
Other comprehensive (loss) income	—	—	—	—	—	(41)	8	9	(24)	—	(24)		
Preferred stock, Series A, issuances, net of issuance costs ^(c)	973	—	—	—	—	—	—	—	973	—	973		
Preferred stock, Series B, issuances, net of issuance costs ^(d)	989	—	—	—	—	—	—	—	989	—	989		
Common stock issuances, including dividend reinvestment and employee benefits	—	6	—	552	—	—	—	—	552	—	552		
Common stock dividends	—	—	—	—	(2,735)	—	—	—	(2,735)	—	(2,735)		
Sale of noncontrolling interest ^(e)	—	—	—	(466)	—	10	—	—	(456)	863	407		
Contribution from noncontrolling interest	—	—	—	—	—	—	—	—	—	428	428		
Distributions to noncontrolling interests in subsidiaries	—	—	—	—	—	—	—	—	—	(4)	(4)		
Other ^(f)	—	—	—	—	23	(6)	(2)	(16)	(1)	2	1		
Balance at December 31, 2019	1,962	733	\$ 1	\$ 40,881	\$ 4,108	\$ (51)	\$ 3	\$ (82)	\$ 46,822	\$ 1,129	\$ 47,951		

- (a) Retained Earnings relates to a cumulative-effect adjustment due to implementation of a new accounting standard related to stock-based compensation and the associated income taxes. See Note 1 to the Consolidated Financial Statements for additional information. Noncontrolling Interests relates to the purchase of remaining interest in REC Solar.
- (b) Amounts in Retained Earnings and AOCI represent a cumulative-effect adjustment due to implementation of a new accounting standard related to Financial Instruments Classification and Measurement. See Note 1 for more information. Amount in Noncontrolling Interests primarily relates to tax equity financing activity in the Commercial Renewables segment.
- (c) Duke Energy issued 40 million depository shares of preferred stock, series A, in the first quarter of 2019.
- (d) Duke Energy issued 1 million shares of preferred stock, series B, in the third quarter of 2019.
- (e) See Note 3 for additional discussion of the transaction.
- (f) Amounts in Retained Earnings and AOCI primarily represent impacts to accumulated other comprehensive income due to implementation of a new accounting standard related to Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.

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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
Operating Revenues	\$ 7,395	\$ 7,300	\$ 7,302
Operating Expenses			
Fuel used in electric generation and purchased power	1,804	1,821	1,822
Operation, maintenance and other	1,868	2,130	2,021
Depreciation and amortization	1,388	1,201	1,090
Property and other taxes	292	295	281
Impairment charges	17	192	—
Total operating expenses	5,369	5,639	5,214
(Losses) Gains on Sales of Other Assets and Other, net	—	(1)	1
Operating Income	2,026	1,660	2,089
Other Income and Expenses, net	151	153	199
Interest Expense	463	439	422
Income Before Income Taxes	1,714	1,374	1,866
Income Tax Expense	311	303	652
Net Income	\$ 1,403	\$ 1,071	\$ 1,214
Other Comprehensive Income, net of tax			
Reclassification into earnings from cash flow hedges	—	1	2
Other Comprehensive Income, net of tax	—	1	2
Comprehensive Income	\$ 1,403	\$ 1,072	\$ 1,216

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS
**DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED BALANCE SHEETS**

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 18	\$ 33
Receivables (net of allowance for doubtful accounts of \$3 at 2019 and \$2 at 2018)	324	219
Receivables of VIEs (net of allowance for doubtful accounts of \$7 at 2019 and 2018)	642	699
Receivables from affiliated companies	114	182
Inventory	996	948
Regulatory assets	550	520
Other	21	72
Total current assets	2,665	2,673
Property, Plant and Equipment		
Cost	48,922	44,741
Accumulated depreciation and amortization	(16,525)	(15,496)
Net property, plant and equipment	32,397	29,245
Other Noncurrent Assets		
Regulatory assets	3,360	3,457
Nuclear decommissioning trust funds	4,359	3,558
Operating lease right-of-use assets, net	123	—
Other	1,149	1,027
Total other noncurrent assets	8,991	8,042
Total Assets	\$ 44,053	\$ 39,960
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 954	\$ 988
Accounts payable to affiliated companies	210	230
Notes payable to affiliated companies	29	439
Taxes accrued	46	171
Interest accrued	115	102
Current maturities of long-term debt	458	6
Asset retirement obligations	206	290
Regulatory liabilities	255	199
Other	611	571
Total current liabilities	2,884	2,996
Long-Term Debt	11,142	10,633
Long-Term Debt Payable to Affiliated Companies	300	300
Other Noncurrent Liabilities		
Deferred income taxes	3,921	3,689
Asset retirement obligations	5,528	3,659
Regulatory liabilities	6,423	5,999
Operating lease liabilities	102	—
Accrued pension and other post-retirement benefit costs	84	99
Investment tax credits	231	231
Other	627	671
Total other noncurrent liabilities	16,916	14,348
Commitments and Contingencies		
Equity		
Member's equity	12,818	11,689
Accumulated other comprehensive loss	(7)	(6)
Total equity	12,811	11,683
Total Liabilities and Equity	\$ 44,053	\$ 39,960

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 1,403	\$ 1,071	\$ 1,214
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	1,671	1,487	1,409
Equity component of AFUDC	(42)	(73)	(106)
Losses (Gains) on sales of other assets	—	1	(1)
Impairment charges	17	192	—
Deferred income taxes	133	305	410
Accrued pension and other post-retirement benefit costs	(5)	4	(4)
Contributions to qualified pension plans	(7)	(46)	—
Payments for asset retirement obligations	(278)	(230)	(271)
Provision for rate refunds	36	182	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	(8)	2	9
Receivables	(21)	(86)	(9)
Receivables from affiliated companies	68	(87)	68
Inventory	(48)	25	78
Other current assets	(73)	(161)	7
Increase (decrease) in			
Accounts payable	(50)	168	23
Accounts payable to affiliated companies	(20)	21	(38)
Taxes accrued	(127)	(65)	86
Other current liabilities	127	89	(161)
Other assets	(31)	(179)	(49)
Other liabilities	(36)	(90)	(31)
Net cash provided by operating activities	2,709	2,530	2,634
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(2,714)	(2,706)	(2,524)
Purchases of debt and equity securities	(1,658)	(1,810)	(2,124)
Proceeds from sales and maturities of debt and equity securities	1,658	1,810	2,128
Notes receivable from affiliated companies	—	—	66
Other	(204)	(147)	(109)
Net cash used in investing activities	(2,918)	(2,853)	(2,563)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	886	1,983	569
Payments for the redemption of long-term debt	(6)	(1,205)	(116)
Notes payable to affiliated companies	(410)	335	104
Distributions to parent	(275)	(750)	(625)
Other	(1)	(23)	(1)
Net cash provided by (used in) financing activities	194	340	(69)
Net (decrease) increase in cash and cash equivalents	(15)	17	2
Cash and cash equivalents at beginning of period	33	16	14
Cash and cash equivalents at end of period	\$ 18	\$ 33	\$ 16
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 433	\$ 452	\$ 398
Cash paid for income taxes	122	89	193
Significant non-cash transactions:			
Accrued capital expenditures	347	302	315

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity	Accumulated Other Comprehensive Loss		Total Equity
			Net Gains (Losses) on Cash Flow Hedges	
Balance at December 31, 2016	\$ 10,781	\$	(9)	\$ 10,772
Net income	1,214		—	1,214
Other comprehensive income	—		2	2
Distributions to parent	(625)		—	(625)
Other	(2)		—	(2)
Balance at December 31, 2017	\$ 11,368	\$	(7)	\$ 11,361
Net income	1,071		—	1,071
Other comprehensive income	—		1	1
Distributions to parent	(750)		—	(750)
Balance at December 31, 2018	\$ 11,689	\$	(6)	\$ 11,683
Net income	1,403		—	1,403
Distributions to parent	(275)		—	(275)
Other	1		(1)	—
Balance at December 31, 2019	\$ 12,818	\$	(7)	\$ 12,811

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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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,		
	2019	2018	2017
Operating Revenues	\$ 11,202	\$ 10,728	\$ 9,783
Operating Expenses			
Fuel used in electric generation and purchased power	4,024	3,976	3,417
Operation, maintenance and other	2,495	2,613	2,301
Depreciation and amortization	1,845	1,619	1,285
Property and other taxes	561	529	503
Impairment charges	(24)	87	156
Total operating expenses	8,901	8,824	7,662
Gains on Sales of Other Assets and Other, net	—	24	26
Operating Income	2,301	1,928	2,147
Other Income and Expenses, net	141	165	209
Interest Expense	862	842	824
Income Before Income Taxes	1,580	1,251	1,532
Income Tax Expense	253	218	264
Net Income	1,327	1,033	1,268
Less: Net Income Attributable to Noncontrolling Interests	—	6	10
Net Income Attributable to Parent	\$ 1,327	\$ 1,027	\$ 1,258
Net Income	\$ 1,327	\$ 1,033	\$ 1,268
Other Comprehensive Income, net of tax			
Pension and OPEB adjustments	2	5	4
Net unrealized gain on cash flow hedges	5	6	5
Unrealized gains (losses) on available-for-sale securities	1	(1)	4
Other Comprehensive Income, net of tax	8	10	13
Comprehensive Income	1,335	1,043	1,281
Less: Comprehensive Income Attributable to Noncontrolling Interests	—	6	10
Comprehensive Income Attributable to Parent	\$ 1,335	\$ 1,037	\$ 1,271

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 48	\$ 67
Receivables (net of allowance for doubtful accounts of \$7 at 2019 and \$5 at 2018)	220	220
Receivables of VIEs (net of allowance for doubtful accounts of \$9 at 2019 and \$8 at 2018)	830	909
Receivables from affiliated companies	76	168
Notes receivable from affiliated companies	164	—
Inventory	1,423	1,459
Regulatory assets (includes \$52 at 2019 and 2018 related to VIEs)	946	1,137
Other (includes \$39 at 2019 and 2018 related to VIEs)	210	125
Total current assets	3,917	4,085
Property, Plant and Equipment		
Cost	55,070	50,260
Accumulated depreciation and amortization	(17,159)	(16,398)
Generation facilities to be retired, net	246	362
Net property, plant and equipment	38,157	34,224
Other Noncurrent Assets		
Goodwill	3,655	3,655
Regulatory assets (includes \$989 at 2019 and \$1,041 at 2018 related to VIEs)	6,346	6,564
Nuclear decommissioning trust funds	3,782	3,162
Operating lease right-of-use assets, net	788	—
Other	1,049	974
Total other noncurrent assets	15,620	14,355
Total Assets	\$ 57,694	\$ 52,664
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 1,104	\$ 1,172
Accounts payable to affiliated companies	310	360
Notes payable to affiliated companies	1,821	1,235
Taxes accrued	46	109
Interest accrued	228	246
Current maturities of long-term debt (includes \$54 at 2019 and \$53 at 2018 related to VIEs)	1,577	1,672
Asset retirement obligations	485	514
Regulatory liabilities	330	280
Other	902	821
Total current liabilities	6,803	6,409
Long-Term Debt (includes \$1,632 at 2019 and \$1,636 at 2018 related to VIEs)	17,907	17,089
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	4,462	3,941
Asset retirement obligations	5,986	4,897
Regulatory liabilities	5,225	5,049
Operating lease liabilities	697	—
Accrued pension and other post-retirement benefit costs	488	521
Other	383	351
Total other noncurrent liabilities	17,241	14,759
Commitments and Contingencies		
Equity		
Common stock, \$0.01 par value, 100 shares authorized and outstanding at 2019 and 2018	—	—
Additional paid-in capital	9,143	9,143
Retained earnings	6,465	5,131
Accumulated other comprehensive loss	(18)	(20)
Total Progress Energy, Inc. stockholder's equity	15,590	14,254
Noncontrolling interests	3	3
Total equity	15,593	14,257
Total Liabilities and Equity	\$ 57,694	\$ 52,664

See Notes to Consolidated Financial Statements

**PROGRESS ENERGY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS**

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 1,327	\$ 1,033	\$ 1,268
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	2,207	1,987	1,516
Equity component of AFUDC	(66)	(104)	(92)
Gains on sales of other assets	—	(24)	(28)
Impairment charges	(24)	87	156
Deferred income taxes	433	358	703
Accrued pension and other post-retirement benefit costs	20	24	(28)
Contributions to qualified pension plans	(57)	(45)	—
Payments for asset retirement obligations	(412)	(230)	(248)
Provision for rate refunds	15	122	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	(34)	18	—
Receivables	47	(207)	(89)
Receivables from affiliated companies	81	(137)	71
Inventory	62	121	125
Other current assets	184	(12)	(397)
Increase (decrease) in			
Accounts payable	(4)	217	(260)
Accounts payable to affiliated companies	(50)	109	(97)
Taxes accrued	(74)	8	17
Other current liabilities	25	129	(166)
Other assets	(336)	(876)	(300)
Other liabilities	(135)	(34)	(98)
Net cash provided by operating activities	3,209	2,544	2,053
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(3,952)	(3,854)	(3,152)
Purchases of debt and equity securities	(1,511)	(1,753)	(1,806)
Proceeds from sales and maturities of debt and equity securities	1,504	1,769	1,824
Notes receivable from affiliated companies	(164)	240	(160)
Other	(190)	(162)	(59)
Net cash used in investing activities	(4,313)	(3,760)	(3,353)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	2,187	1,833	2,118
Payments for the redemption of long-term debt	(1,667)	(771)	(813)
Notes payable to affiliated companies	586	430	100
Dividends to parent	—	(250)	(124)
Other	12	(1)	(4)
Net cash provided by financing activities	1,118	1,241	1,277
Net increase (decrease) in cash, cash equivalents, and restricted cash	14	25	(23)
Cash, cash equivalents, and restricted cash at beginning of period	112	87	110
Cash, cash equivalents, and restricted cash at end of period	\$ 126	\$ 112	\$ 87
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 892	\$ 798	\$ 773
Cash received from income taxes	(79)	(348)	(146)
Significant non-cash transactions:			
Accrued capital expenditures	447	478	391
Equitization of certain notes payable to affiliates	—	—	1,047
Dividend to parent related to a legal entity restructuring	—	—	547

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)			Accumulated Other Comprehensive Income (Loss)			Total Progress Energy, Inc. Stockholder's Equity	Noncontrolling Interests	Total Equity
	Additional Paid-in Capital	Retained Earnings	Net Gains (Losses) on Cash Flow Hedges	Net Unrealized Gains (Losses) on Available-for-Sale Securities	Pension and OPEB Adjustments			
Balance at December 31, 2016	\$ 8,094	\$ 3,764	\$ (23)	\$ 1	\$ (16)	\$ 11,820	\$ (13)	\$ 11,807
Net income	—	1,258	—	—	—	1,258	10	1,268
Other comprehensive income	—	—	5	4	4	13	—	13
Dividends to parent ^(a)	—	(672)	—	—	—	(672)	—	(672)
Equitization of certain notes payable to affiliates	1,047	—	—	—	—	1,047	—	1,047
Other	2	—	—	—	—	2	—	2
Balance at December 31, 2017	\$ 9,143	\$ 4,350	\$ (18)	\$ 5	\$ (12)	\$ 13,468	\$ (3)	\$ 13,465
Net income	—	1,027	—	—	—	1,027	6	1,033
Other comprehensive income (loss)	—	—	6	(1)	5	10	—	10
Distributions to noncontrolling interests	—	—	—	—	—	—	(1)	(1)
Dividends to parent	—	(250)	—	—	—	(250)	—	(250)
Other ^(b)	—	4	—	(5)	—	(1)	1	—
Balance at December 31, 2018	\$ 9,143	\$ 5,131	\$ (12)	\$ (1)	\$ (7)	\$ 14,254	\$ 3	\$ 14,257
Net income	—	1,327	—	—	—	1,327	—	1,327
Other comprehensive income	—	—	5	1	2	8	—	8
Other ^(c)	—	7	(3)	(1)	(2)	1	—	1
Balance at December 31, 2019	\$ 9,143	\$ 6,465	\$ (10)	\$ (1)	\$ (7)	\$ 15,590	\$ 3	\$ 15,593

(a) Includes a \$547 million non-cash dividend related to a legal entity restructuring.

(b) Amounts in Retained Earnings and AOCI represent a cumulative-effect adjustment due to implementation of a new accounting standard related to Financial Instruments Classification and Measurement. See Note 1 for more information.

(c) Amounts in Retained Earnings and AOCI primarily represent impacts to accumulated other comprehensive income due to implementation of a new accounting standard related to Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.

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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
Operating Revenues	\$ 5,957	\$ 5,699	\$ 5,129
Operating Expenses			
Fuel used in electric generation and purchased power	2,012	1,892	1,609
Operation, maintenance and other	1,446	1,578	1,439
Depreciation and amortization	1,143	991	725
Property and other taxes	176	155	156
Impairment charges	12	33	19
Total operating expenses	4,789	4,649	3,948
Gains on Sales of Other Assets and Other, net	—	9	4
Operating Income	1,168	1,059	1,185
Other Income and Expenses, net	100	87	115
Interest Expense	306	319	293
Income Before Income Taxes	962	827	1,007
Income Tax Expense	157	160	292
Net Income and Comprehensive Income	\$ 805	\$ 667	\$ 715

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 22	\$ 23
Receivables (net of allowance for doubtful accounts of \$3 at 2019 and \$2 at 2018)	123	75
Receivables of VIEs (net of allowance for doubtful accounts of \$5 at 2019 and 2018)	489	547
Receivables from affiliated companies	52	23
Inventory	934	954
Regulatory assets	526	703
Other	60	62
Total current assets	2,206	2,387
Property, Plant and Equipment		
Cost	34,603	31,459
Accumulated depreciation and amortization	(11,915)	(11,423)
Generation facilities to be retired, net	246	362
Net property, plant and equipment	22,934	20,398
Other Noncurrent Assets		
Regulatory assets	4,152	4,111
Nuclear decommissioning trust funds	3,047	2,503
Operating lease right-of-use assets, net	387	—
Other	651	612
Total other noncurrent assets	8,237	7,226
Total Assets	\$ 33,377	\$ 30,011
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 629	\$ 660
Accounts payable to affiliated companies	203	278
Notes payable to affiliated companies	66	294
Taxes accrued	17	53
Interest accrued	110	116
Current maturities of long-term debt	1,006	603
Asset retirement obligations	485	509
Regulatory liabilities	236	178
Other	478	408
Total current liabilities	3,230	3,099
Long-Term Debt	7,902	7,451
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	2,388	2,119
Asset retirement obligations	5,408	4,311
Regulatory liabilities	4,232	3,955
Operating lease liabilities	354	—
Accrued pension and other post-retirement benefit costs	238	237
Investment tax credits	137	142
Other	92	106
Total other noncurrent liabilities	12,849	10,870
Commitments and Contingencies		
Equity		
Member's Equity	9,246	8,441
Total Liabilities and Equity	\$ 33,377	\$ 30,011

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 805	\$ 667	\$ 715
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	1,329	1,183	936
Equity component of AFUDC	(60)	(57)	(47)
Gains on sales of other assets	—	(9)	(5)
Impairment charges	12	33	19
Deferred income taxes	197	236	384
Accrued pension and other post-retirement benefit costs	4	15	(20)
Contributions to qualified pension plans	(3)	(25)	—
Payments for asset retirement obligations	(390)	(195)	(192)
Provisions for rate refunds	12	122	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	(6)	5	(4)
Receivables	21	(107)	(58)
Receivables from affiliated companies	(29)	(20)	2
Inventory	20	63	59
Other current assets	101	(201)	(75)
Increase (decrease) in			
Accounts payable	32	219	(230)
Accounts payable to affiliated companies	(75)	99	(48)
Taxes accrued	(46)	(11)	(39)
Other current liabilities	68	46	(131)
Other assets	(198)	(447)	(53)
Other liabilities	29	12	(18)
Net cash provided by operating activities	1,823	1,628	1,195
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(2,108)	(2,220)	(1,715)
Purchases of debt and equity securities	(842)	(1,236)	(1,249)
Proceeds from sales and maturities of debt and equity securities	810	1,206	1,207
Notes receivable from affiliated companies	—	—	165
Other	(119)	(95)	(51)
Net cash used in investing activities	(2,259)	(2,345)	(1,643)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	1,269	845	812
Payments for the redemption of long-term debt	(605)	(3)	(470)
Notes payable to affiliated companies	(228)	54	240
Distributions to parent	—	(175)	(124)
Other	(1)	(1)	(1)
Net cash provided by financing activities	435	720	457
Net (decrease) increase in cash and cash equivalents	(1)	3	9
Cash and cash equivalents at beginning of period	23	20	11
Cash and cash equivalents at end of period	\$ 22	\$ 23	\$ 20
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 331	\$ 303	\$ 291
Cash (received from) paid for income taxes	(30)	(112)	59
Significant non-cash transactions:			
Accrued capital expenditures	175	220	191

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, 2016	\$ 7,358
Net income	715
Distribution to parent	(124)
Balance at December 31, 2017	\$ 7,949
Net income	667
Distribution to parent	(175)
Balance at December 31, 2018	\$ 8,441
Net income	805
Balance at December 31, 2019	\$ 9,246

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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
Operating Revenues	\$ 5,231	\$ 5,021	\$ 4,646
Operating Expenses			
Fuel used in electric generation and purchased power	2,012	2,085	1,808
Operation, maintenance and other	1,034	1,025	853
Depreciation and amortization	702	628	560
Property and other taxes	392	374	347
Impairment charges	(36)	54	138
Total operating expenses	4,104	4,166	3,706
Gains on Sales of Other Assets and Other, net	—	1	1
Operating Income	1,127	856	941
Other Income and Expenses, net	48	86	96
Interest Expense	328	287	279
Income Before Income Taxes	847	655	758
Income Tax Expense	155	101	46
Net Income	\$ 692	\$ 554	\$ 712
Other Comprehensive Income (Loss), net of tax			
Unrealized gains (losses) on available-for-sale securities	1	(1)	3
Other Comprehensive Income (Loss), net of tax	1	(1)	3
Comprehensive Income	\$ 693	\$ 553	\$ 715

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS
**DUKE ENERGY FLORIDA, LLC
CONSOLIDATED BALANCE SHEETS**

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 17	\$ 36
Receivables (net of allowance for doubtful accounts of \$3 at 2019 and 2018)	96	143
Receivables of VIEs (net of allowance for doubtful accounts of \$4 at 2019 and \$3 at 2018)	341	362
Receivables from affiliated companies	—	28
Notes receivable from affiliated companies	173	—
Inventory	489	504
Regulatory assets (includes \$52 at 2019 and 2018 related to VIEs)	419	434
Other (includes \$39 at 2019 and 2018 related to VIEs)	58	46
Total current assets	1,593	1,553
Property, Plant and Equipment		
Cost	20,457	18,792
Accumulated depreciation and amortization	(5,236)	(4,968)
Net property, plant and equipment	15,221	13,824
Other Noncurrent Assets		
Regulatory assets (includes \$989 at 2019 and \$1,041 at 2018 related to VIEs)	2,194	2,454
Nuclear decommissioning trust funds	734	659
Operating lease right-of-use assets, net	401	—
Other	311	311
Total other noncurrent assets	3,640	3,424
Total Assets	\$ 20,454	\$ 18,801
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 474	\$ 511
Accounts payable to affiliated companies	131	91
Notes payable to affiliated companies	—	108
Taxes accrued	43	74
Interest accrued	75	75
Current maturities of long-term debt (includes \$54 at 2019 and \$53 at 2018 related to VIEs)	571	270
Asset retirement obligations	—	5
Regulatory liabilities	94	102
Other	415	406
Total current liabilities	1,803	1,642
Long-Term Debt (includes \$1,307 at 2019 and \$1,336 at 2018 related to VIEs)	7,416	7,051
Other Noncurrent Liabilities		
Deferred income taxes	2,179	1,986
Asset retirement obligations	578	586
Regulatory liabilities	993	1,094
Operating lease liabilities	343	—
Accrued pension and other post-retirement benefit costs	218	254
Other	136	93
Total other noncurrent liabilities	4,447	4,013
Commitments and Contingencies		
Equity		
Member's equity	6,789	6,097
Accumulated other comprehensive loss	(1)	(2)
Total equity	6,788	6,095
Total Liabilities and Equity	\$ 20,454	\$ 18,801

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 692	\$ 554	\$ 712
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	869	793	570
Equity component of AFUDC	(6)	(47)	(45)
Gains on sales of other assets	—	(1)	(1)
Impairment charges	(36)	54	138
Deferred income taxes	180	159	245
Accrued pension and other post-retirement benefit costs	11	5	(13)
Contributions to qualified pension plans	(53)	(20)	—
Payments for asset retirement obligations	(22)	(35)	(56)
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	(33)	7	5
Receivables	26	(100)	(38)
Receivables from affiliated companies	17	(26)	—
Inventory	42	58	66
Other current assets	156	59	(138)
Increase (decrease) in			
Accounts payable	(36)	(1)	(32)
Accounts payable to affiliated companies	40	17	(51)
Taxes accrued	(31)	40	1
Other current liabilities	(36)	82	(37)
Other assets	(135)	(428)	(229)
Other liabilities	(167)	(61)	(82)
Net cash provided by operating activities	1,478	1,109	1,015
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(1,844)	(1,634)	(1,437)
Purchases of debt and equity securities	(669)	(517)	(557)
Proceeds from sales and maturities of debt and equity securities	695	563	617
Notes receivable from affiliated companies	(173)	313	(313)
Other	(67)	(65)	(7)
Net cash used in investing activities	(2,058)	(1,340)	(1,697)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	918	988	1,306
Payments for the redemption of long-term debt	(262)	(769)	(342)
Notes payable to affiliated companies	(108)	108	(297)
Distribution to parent	—	(75)	—
Other	13	1	(1)
Net cash provided by financing activities	561	253	666
Net (decrease) increase in cash, cash equivalents, and restricted cash	(19)	22	(16)
Cash, cash equivalents, and restricted cash at beginning of period	75	53	69
Cash, cash equivalents, and restricted cash at end of period	\$ 56	\$ 75	\$ 53
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 332	\$ 270	\$ 274
Cash paid for (received from) income taxes	1	(120)	(197)
Significant non-cash transactions:			
Accrued capital expenditures	272	258	199

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)		Total Equity
		Net Unrealized Gains (Losses) on Available-for- Sale Securities		
Balance at December 31, 2016	\$ 4,899	\$	1	\$ 4,900
Net income	712		—	712
Other comprehensive income	—		3	3
Other	3		—	3
Balance at December 31, 2017	\$ 5,614	\$	4	\$ 5,618
Net income	554		—	554
Other comprehensive loss	—		(1)	(1)
Distribution to parent	(75)		—	(75)
Other ^(a)	4		(5)	(1)
Balance at December 31, 2018	\$ 6,097	\$	(2)	\$ 6,095
Net income	692		—	692
Other comprehensive income	—		1	1
Balance at December 31, 2019	\$ 6,789	\$	(1)	\$ 6,788

(a) Amounts represent a cumulative-effect adjustment due to implementation of a new accounting standard related to Financial Instruments Classification and Measurement. See Note 1 for more information.

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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
Operating Revenues			
Regulated electric	\$ 1,456	\$ 1,450	\$ 1,373
Regulated natural gas	484	506	508
Nonregulated electric and other	—	1	42
Total operating revenues	1,940	1,957	1,923
Operating Expenses			
Fuel used in electric generation and purchased power – regulated	388	412	369
Fuel used in electric generation and purchased power – nonregulated	—	—	58
Cost of natural gas	95	113	107
Operation, maintenance and other	520	480	530
Depreciation and amortization	265	268	261
Property and other taxes	308	290	278
Impairment charges	—	—	1
Total operating expenses	1,576	1,563	1,604
(Losses) Gains on Sales of Other Assets and Other, net	—	(106)	1
Operating Income	364	288	320
Other Income and Expenses, net	24	23	23
Interest Expense	109	92	91
Income From Continuing Operations Before Income Taxes	279	219	252
Income Tax Expense From Continuing Operations	40	43	59
Income From Continuing Operations	239	176	193
Loss From Discontinued Operations, net of tax	(1)	—	(1)
Net Income and Comprehensive Income	\$ 238	\$ 176	\$ 192

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS
**DUKE ENERGY OHIO, INC.
CONSOLIDATED BALANCE SHEETS**

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 17	\$ 21
Receivables (net of allowance for doubtful accounts of \$4 at 2019 and \$2 at 2018)	84	102
Receivables from affiliated companies	92	114
Inventory	135	126
Regulatory assets	49	33
Other	21	24
Total current assets	398	420
Property, Plant and Equipment		
Cost	10,241	9,360
Accumulated depreciation and amortization	(2,843)	(2,717)
Net property, plant and equipment	7,398	6,643
Other Noncurrent Assets		
Goodwill	920	920
Regulatory assets	549	531
Operating lease right-of-use assets, net	21	—
Other	52	41
Total other noncurrent assets	1,542	1,492
Total Assets	\$ 9,338	\$ 8,555
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 288	\$ 316
Accounts payable to affiliated companies	68	78
Notes payable to affiliated companies	312	274
Taxes accrued	219	202
Interest accrued	30	22
Current maturities of long-term debt	—	551
Asset retirement obligations	1	6
Regulatory liabilities	64	57
Other	75	74
Total current liabilities	1,057	1,580
Long-Term Debt		
Long-Term Debt Payable to Affiliated Companies	25	25
Other Noncurrent Liabilities		
Deferred income taxes	922	817
Asset retirement obligations	79	87
Regulatory liabilities	763	840
Operating lease liabilities	21	—
Accrued pension and other post-retirement benefit costs	100	79
Other	94	93
Total other noncurrent liabilities	1,979	1,916
Commitments and Contingencies		
Equity		
Common stock, \$8.50 par value, 120 million shares authorized; 90 million shares outstanding at 2019 and 2018	762	762
Additional paid-in capital	2,776	2,776
Retained earnings (Accumulated deficit)	145	(93)
Total equity	3,683	3,445
Total Liabilities and Equity	\$ 9,338	\$ 8,555

See Notes to Consolidated Financial Statements

**DUKE ENERGY OHIO, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS**

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 238	\$ 176	\$ 192
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	269	271	265
Equity component of AFUDC	(13)	(11)	(11)
Losses (Gains) on sales of other assets	—	106	(1)
Impairment charges	—	—	1
Deferred income taxes	81	25	90
Accrued pension and other post-retirement benefit costs	2	3	2
Contributions to qualified pension plans	(2)	—	(4)
Payments for asset retirement obligations	(8)	(3)	(7)
Provision for rate refunds	7	24	—
(Increase) decrease in			
Receivables	20	(33)	2
Receivables from affiliated companies	22	19	(4)
Inventory	(9)	7	6
Other current assets	(5)	16	(22)
Increase (decrease) in			
Accounts payable	(17)	(19)	12
Accounts payable to affiliated companies	(10)	16	(1)
Taxes accrued	17	12	11
Other current liabilities	1	14	(19)
Other assets	(22)	(26)	(28)
Other liabilities	(45)	(27)	(5)
Net cash provided by operating activities	526	570	479
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(952)	(827)	(686)
Notes receivable from affiliated companies	—	14	80
Other	(68)	(89)	(41)
Net cash used in investing activities	(1,020)	(902)	(647)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	1,003	99	182
Payments for the redemption of long-term debt	(551)	(3)	(2)
Notes payable to affiliated companies	38	245	13
Dividends to parent	—	—	(25)
Other	—	—	(1)
Net cash provided by financing activities	490	341	167
Net (decrease) increase in cash and cash equivalents	(4)	9	(1)
Cash and cash equivalents at beginning of period	21	12	13
Cash and cash equivalents at end of period	\$ 17	\$ 21	\$ 12
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 97	\$ 87	\$ 85
Cash received from income taxes	(37)	(6)	(8)
Significant non-cash transactions:			
Accrued capital expenditures	109	95	82
Non-cash equity contribution from parent	—	106	—

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 (Deficit)	Total Equity
Balance at December 31, 2016	\$ 762	\$ 2,695	\$ (461)	\$ 2,996
Net income	—	—	192	192
Dividends to parent	—	(25)	—	(25)
Balance at December 31, 2017	\$ 762	\$ 2,670	\$ (269)	\$ 3,163
Net income	—	—	176	176
Contribution from parent	—	106	—	106
Balance at December 31, 2018	\$ 762	\$ 2,776	\$ (93)	\$ 3,445
Net income	—	—	238	238
Balance at December 31, 2019	\$ 762	\$ 2,776	\$ 145	\$ 3,683

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 subsidiaries (the "Company") as of December 31, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
Operating Revenues	\$ 3,004	\$ 3,059	\$ 3,047
Operating Expenses			
Fuel used in electric generation and purchased power	935	1,000	966
Operation, maintenance and other	790	788	743
Depreciation and amortization	525	520	458
Property and other taxes	69	78	76
Impairment charges	—	30	18
Total operating expenses	2,319	2,416	2,261
Operating Income	685	643	786
Other Income and Expenses, net	41	45	47
Interest Expense	156	167	178
Income Before Income Taxes	570	521	655
Income Tax Expense	134	128	301
Net Income and Comprehensive Income	\$ 436	\$ 393	\$ 354

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 25	\$ 24
Receivables (net of allowance for doubtful accounts of \$3 at 2019 and \$2 at 2018)	60	52
Receivables from affiliated companies	79	122
Inventory	517	422
Regulatory assets	90	175
Other	60	35
Total current assets	831	830
Property, Plant and Equipment		
Cost	16,305	15,443
Accumulated depreciation and amortization	(5,233)	(4,914)
Net property, plant and equipment	11,072	10,529
Other Noncurrent Assets		
Regulatory assets	1,082	982
Operating lease right-of-use assets, net	57	—
Other	234	194
Total other noncurrent assets	1,373	1,176
Total Assets	\$ 13,276	\$ 12,535
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 201	\$ 200
Accounts payable to affiliated companies	87	83
Notes payable to affiliated companies	30	167
Taxes accrued	49	43
Interest accrued	58	58
Current maturities of long-term debt	503	63
Asset retirement obligations	189	109
Regulatory liabilities	55	25
Other	112	107
Total current liabilities	1,284	855
Long-Term Debt	3,404	3,569
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	1,150	1,009
Asset retirement obligations	643	613
Regulatory liabilities	1,685	1,722
Operating lease liabilities	55	—
Accrued pension and other post-retirement benefit costs	148	115
Investment tax credits	164	147
Other	18	16
Total other noncurrent liabilities	3,863	3,622
Commitments and Contingencies		
Equity		
Member's Equity	4,575	4,339
Total Liabilities and Equity	\$ 13,276	\$ 12,535

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 436	\$ 393	\$ 354
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization, and accretion	531	524	462
Equity component of AFUDC	(18)	(32)	(28)
Impairment charges	—	30	18
Deferred income taxes	156	95	152
Accrued pension and other post-retirement benefit costs	6	7	2
Contributions to qualified pension plans	(2)	(8)	—
Payments for asset retirement obligations	(48)	(69)	(45)
Provision for rate refunds	—	53	—
(Increase) decrease in			
Receivables	(8)	7	59
Receivables from affiliated companies	41	3	(11)
Inventory	(95)	28	54
Other current assets	76	(25)	28
Increase (decrease) in			
Accounts payable	(10)	37	(86)
Accounts payable to affiliated companies	4	5	4
Taxes accrued	(25)	(52)	64
Other current liabilities	15	14	(10)
Other assets	(71)	29	(28)
Other liabilities	9	(33)	(20)
Net cash provided by operating activities	997	1,006	969
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(876)	(832)	(840)
Purchases of debt and equity securities	(26)	(48)	(20)
Proceeds from sales and maturities of debt and equity securities	20	44	7
Notes receivable from affiliated companies	—	—	86
Other	(49)	18	(65)
Net cash used in investing activities	(931)	(818)	(832)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	485	—	—
Payments for the redemption of long-term debt	(213)	(3)	(5)
Notes payable to affiliated companies	(137)	6	161
Distributions to parent	(200)	(175)	(300)
Other	—	(1)	(1)
Net cash used in financing activities	(65)	(173)	(145)
Net increase (decrease) in cash and cash equivalents	1	15	(8)
Cash and cash equivalents at beginning of period	24	9	17
Cash and cash equivalents at end of period	\$ 25	\$ 24	\$ 9
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 150	\$ 162	\$ 179
Cash (received from) paid for income taxes	(6)	75	117
Significant non-cash transactions:			
Accrued capital expenditures	102	88	125

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity
Balance at December 31, 2016	\$ 4,067
Net income	354
Distributions to parent	(300)
Balance at December 31, 2017	\$ 4,121
Net income	393
Distributions to parent	(175)
Balance at December 31, 2018	\$ 4,339
Net income	436
Distributions to parent	(200)
Balance at December 31, 2019	\$ 4,575

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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 20, 2020

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

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
Operating Revenues			
Regulated natural gas	\$ 1,369	\$ 1,365	\$ 1,319
Nonregulated natural gas and other	12	10	9
Total operating revenues	1,381	1,375	1,328
Operating Expenses			
Cost of natural gas	532	584	524
Operation, maintenance and other	328	357	304
Depreciation and amortization	172	159	148
Property and other taxes	45	49	48
Impairment charges	—	—	7
Total operating expenses	1,077	1,149	1,031
Operating Income	304	226	297
Equity in earnings (losses) of unconsolidated affiliates	8	7	(6)
Other income and expense, net	20	14	(11)
Total other income and expenses	28	21	(17)
Interest Expense	87	81	79
Income Before Income Taxes	245	166	201
Income Tax Expense	43	37	62
Net Income and Comprehensive Income	\$ 202	\$ 129	\$ 139

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31,	
	2019	2018
ASSETS		
Current Assets		
Receivables (net of allowance for doubtful accounts of \$6 at 2019 and \$2 at 2018)	\$ 241	\$ 266
Receivables from affiliated companies	10	22
Inventory	72	70
Regulatory assets	73	54
Other	28	19
Total current assets	424	431
Property, Plant and Equipment		
Cost	8,446	7,486
Accumulated depreciation and amortization	(1,681)	(1,575)
Net property, plant and equipment	6,765	5,911
Other Noncurrent Assets		
Goodwill	49	49
Regulatory assets	290	303
Operating lease right-of-use assets, net	24	—
Investments in equity method unconsolidated affiliates	83	64
Other	121	52
Total other noncurrent assets	567	468
Total Assets	\$ 7,756	\$ 6,810
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	\$ 215	\$ 203
Accounts payable to affiliated companies	3	38
Notes payable to affiliated companies	476	198
Taxes accrued	24	84
Interest accrued	33	31
Current maturities of long-term debt	—	350
Regulatory liabilities	81	37
Other	67	58
Total current liabilities	899	999
Long-Term Debt		
	2,384	1,788
Other Noncurrent Liabilities		
Deferred income taxes	708	551
Asset retirement obligations	17	19
Regulatory liabilities	1,131	1,181
Operating lease liabilities	23	—
Accrued pension and other post-retirement benefit costs	3	4
Other	148	177
Total other noncurrent liabilities	2,030	1,932
Commitments and Contingencies		
Equity		
Common stock, no par value: 100 shares authorized and outstanding at 2019 and 2018	1,310	1,160
Retained earnings	1,133	931
Total equity	2,443	2,091
Total Liabilities and Equity	\$ 7,756	\$ 6,810

See Notes to Consolidated Financial Statements

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

(in millions)	Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	\$ 202	\$ 129	\$ 139
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	174	161	151
Impairment charges	—	—	7
Deferred income taxes	136	(31)	154
Equity in (earnings) losses from unconsolidated affiliates	(8)	(7)	6
Accrued pension and other post-retirement benefit costs	(9)	(4)	23
Contributions to qualified pension plans	(1)	—	(11)
Provision for rate refunds	2	43	—
(Increase) decrease in			
Receivables	28	7	(40)
Receivables from affiliated companies	12	(15)	—
Inventory	(2)	(4)	—
Other current assets	(25)	71	(20)
Increase (decrease) in			
Accounts payable	(7)	15	(13)
Accounts payable to affiliated companies	(35)	25	5
Taxes accrued	(60)	65	(48)
Other current liabilities	1	21	(9)
Other assets	9	6	7
Other liabilities	(8)	(4)	(2)
Net cash provided by operating activities	409	478	349
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(1,053)	(721)	(585)
Contributions to equity method investments	(16)	—	(12)
Other	(14)	(10)	(6)
Net cash used in investing activities	(1,083)	(731)	(603)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	596	100	250
Payments for the redemption of long-term debt	(350)	—	(35)
Notes payable and commercial paper	—	—	(330)
Notes payable to affiliated companies	278	(166)	364
Capital contribution from parent	150	300	—
Other	—	—	(1)
Net cash provided by financing activities	674	234	248
Net decrease in cash and cash equivalents	—	(19)	(6)
Cash and cash equivalents at beginning of period	—	19	25
Cash and cash equivalents at end of period	\$ —	\$ —	\$ 19
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	\$ 84	\$ 79	\$ 78
Cash received from income taxes	(31)	(16)	(12)
Significant non-cash transactions:			
Accrued capital expenditures	109	96	34
Transfer of ownership interest of certain equity method investees to parent	—	—	149

See Notes to Consolidated Financial Statements

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

(in millions)	Common Stock	Retained Earnings	Total Equity
Balance at December 31, 2016	\$ 860	\$ 812	\$ 1,672
Net income	—	139	139
Transfer of ownership interest of certain equity method investees to parent	—	(149)	(149)
Balance at December 31, 2017	\$ 860	\$ 802	\$ 1,662
Net income	—	129	129
Contribution from parent	300	—	300
Balance at December 31, 2018	\$ 1,160	\$ 931	\$ 2,091
Net income	—	202	202
Contribution from parent	150	—	150
Balance at December 31, 2019	\$ 1,310	\$ 1,133	\$ 2,443

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.

Registrant	Applicable Notes																											
	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, 2019, or 2018.

(in millions)	Location	December 31,	
		2019	2018
Duke Energy			
Taxes receivable	Current Assets	\$ 357	\$ 729
Accrued compensation	Current Liabilities	862	793
Duke Energy Carolinas			
Accrued compensation	Current Liabilities	\$ 271	\$ 251
Other accrued liabilities	Current Liabilities	147	55
Progress Energy			
Customer deposits	Current Liabilities	\$ 354	\$ 345
Duke Energy Florida			
Customer deposits	Current Liabilities	\$ 209	\$ 208
Other accrued liabilities	Current Liabilities	89	85
Duke Energy Indiana			
Income taxes receivable	Current Assets	\$ 44	\$ 9
Customer deposits	Current Liabilities	49	47

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. See Note 2 for additional information.

Amounts Attributable to Controlling Interests

For the years ended December 31, 2019, 2018 and 2017, the Income (Loss) From Discontinued Operations, net of tax on Duke Energy's Consolidated Statements of Operations is entirely attributable to controlling interest.

Noncontrolling Interest

Duke Energy maintains a controlling financial interest in certain less-than wholly owned non-regulated 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.

Several operating agreements of Duke Energy's subsidiaries with noncontrolling interest are subject to allocations of tax attributes and cash flows in accordance with contractual agreements that vary throughout the lives of the subsidiaries. Therefore, Duke Energy and the other investors' (the owners) interests in the subsidiaries are not fixed, and the subsidiaries apply the HLBV method in allocating income or loss and other comprehensive income or loss (all measured on a pretax basis) to the owners. The HLBV method measures the amounts that each owner would hypothetically claim at each balance sheet reporting date, including tax benefits realized by the owners, upon a hypothetical liquidation of the subsidiary at the net book value of its underlying assets. The change in the amount that each owner would hypothetically receive at the reporting date compared to the amount it would have received on the previous reporting date represents the amount of income or loss allocated to each owner for the reporting period. During 2019, Duke Energy received \$428 million for the sale of noncontrolling interests to tax equity members subject to the HLBV method for projects totaling 718 MW in nameplate capacity. Duke Energy allocated approximately \$165 million of losses to noncontrolling tax equity members utilizing the HLBV method for the year ended December 31, 2019.

Other 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.

During the third quarter of 2019, Duke Energy completed a sale of minority interest in a portion of certain renewable assets to John Hancock. John Hancock's ownership interest in the assets represents a noncontrolling interest. See Note 2 for additional information on the sale.

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. 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. 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, 2019			December 31, 2018		
	Duke Energy	Progress Energy	Duke Energy Florida	Duke Energy	Progress Energy	Duke Energy Florida
Current Assets						
Cash and cash equivalents	\$ 311	\$ 48	\$ 17	\$ 442	\$ 67	\$ 36
Other	222	39	39	141	39	39
Other Noncurrent Assets						
Other	40	39	—	8	6	—
Total cash, cash equivalents and restricted cash	\$ 573	\$ 126	\$ 56	\$ 591	\$ 112	\$ 75

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, 2019, and 2018, respectively. The components of inventory are presented in the tables below.

December 31, 2019								
(in millions)	Duke			Duke		Duke		Duke
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Materials and supplies	\$ 2,297	\$ 768	\$ 1,038	\$ 686	\$ 351	\$ 79	\$ 318	\$ 5
Coal	586	187	186	138	48	15	198	—
Natural gas, oil and other	349	41	199	110	90	41	1	67
Total inventory	\$ 3,232	\$ 996	\$ 1,423	\$ 934	\$ 489	\$ 135	\$ 517	\$ 72

December 31, 2018								
(in millions)	Duke			Duke		Duke		Duke
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Materials and supplies	\$ 2,238	\$ 731	\$ 1,049	\$ 734	\$ 315	\$ 84	\$ 312	\$ 2
Coal	491	175	192	106	86	14	109	—
Natural gas, oil and other	355	42	218	114	103	28	1	68
Total inventory	\$ 3,084	\$ 948	\$ 1,459	\$ 954	\$ 504	\$ 126	\$ 422	\$ 70

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, except OTTI's that are included in earnings immediately. At the time gains and losses for debt securities are realized, they are reported through net income. For certain investments of regulated operations, such as substantially all of the NDTF, realized and unrealized gains and losses (including any OTTI's) 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.

Emission allowances permit the holder of the allowance to emit certain gaseous byproducts of fossil fuel combustion, including SO₂ and NO_x. Allowances are issued by the EPA at zero cost and may also be bought and sold via third-party transactions. Allowances allocated to or acquired by the Duke Energy Registrants are held primarily for consumption. Carrying amounts for emission allowances are based on the cost to acquire the allowances. Emission allowances are expensed to Fuel used in electric generation and purchased power on the Consolidated Statements of Operations.

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, 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 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.

Equity Method Investment Impairments

Investments in affiliates that are not controlled by Duke Energy, but over which it has significant influence, are accounted for using the equity method. Equity method investments are assessed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. If the decline in value is considered to be other than temporary, the investment is written down to its estimated fair value, which establishes a new cost basis in the investment.

Impairment assessments use a discounted cash flow income approach and include consideration of the severity and duration of any decline in the fair value of the investments. The estimated cash flows may be based on alternative expected outcomes that are probability weighted. Key inputs that involve estimates and significant management judgment include cash flow projections, selection of a discount rate, probability weighting of potential outcomes, and whether any decline in value is considered temporary.

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" 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,		
	2019	2018	2017
Duke Energy	3.1%	3.0%	2.8%
Duke Energy Carolinas	2.8%	2.8%	2.8%
Progress Energy	3.1%	2.9%	2.6%
Duke Energy Progress	3.1%	2.9%	2.6%
Duke Energy Florida	3.1%	3.0%	2.8%
Duke Energy Ohio	2.6%	2.8%	2.8%
Duke Energy Indiana	3.3%	3.3%	3.0%
Piedmont	2.4%	2.5%	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 Generation 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.

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.

For nonregulated operations, interest is capitalized during the construction phase with an offsetting non-cash credit to Interest Expense on the Consolidated Statements of Operations.

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.

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. In 2019, Duke Energy Florida entered into an agreement for the accelerated decommissioning of Crystal River Unit 3. See Note 4 for more information. 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, if known, or probability weightings of the potential closure methods if the closure plans are under development and multiple closure options are being considered and evaluated on a site-by-site basis. See Note 10 for additional information.

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.

Unamortized Debt Premium, Discount and Expense

Premiums, discounts and expenses incurred with the issuance of outstanding long-term debt are amortized over the term of the debt issue. The gain or loss on extinguishment associated with refinancing higher-cost debt obligations in the regulated operations is amortized over the remaining life of the original instrument. Amortization expense is recorded as Interest Expense in the Consolidated Statements of Operations and is reflected as Depreciation, amortization and accretion within Net cash provided by operating activities on the Consolidated Statements of Cash Flows.

Premiums, discounts and expenses are presented as an adjustment to the carrying value of the debt amount and included in Long-Term Debt on the Consolidated Balance Sheets presented.

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 is 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 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.

Pension and Other Post-Retirement Benefit Plans

Duke Energy maintains qualified, non-qualified and other post-retirement benefit plans. Eligible employees of the Subsidiary Registrants participate in the respective qualified, non-qualified and other post-retirement benefit plans and the Subsidiary Registrants are allocated their proportionate share of benefit costs. See Note 23 for further information, including significant accounting policies associated with these plans.

Severance and Special Termination Benefits

Duke Energy has severance plans under which in general, the longer a terminated employee worked prior to termination the greater the amount of severance benefits. 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. Any additional contingent loss for guarantee contracts subsequent to the initial recognition of a liability is accounted for and recognized at the time a loss is probable and can be reasonably estimated. See Note 8 for further information.

Stock-Based Compensation

Stock-based compensation represents costs related to stock-based awards granted to employees and Board of Directors members. Duke Energy recognizes stock-based compensation based upon the estimated fair value of awards, net of estimated forfeitures at the date of issuance. The recognition period for these costs begins at either the applicable service inception date or grant date and continues throughout the requisite service period. Compensation cost is recognized as expense or capitalized as a component of property, plant and equipment. See Note 22 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. If Duke Energy's 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 the reversal then Duke Energy's results of operations could be impacted.

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.

Accounting for Renewable Energy Tax Credits

When Duke Energy receives ITCs on wind or solar facilities, it reduces the basis of the property recorded on the Consolidated Balance Sheets by the amount of the ITC and, therefore, the ITC benefit is ultimately recognized in the statement of operations through reduced depreciation expense. Additionally, certain tax credits and government grants result in an initial tax depreciable base in excess of the book carrying value by an amount equal to one half of the ITC. Deferred tax benefits are recorded as a reduction to income tax expense in the period that the basis difference is created.

Duke Energy receives PTCs on wind facilities that are recognized as electricity is produced.

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 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.

(in millions)	Years Ended December 31,		
	2019	2018	2017
Duke Energy	\$ 421	\$ 405	\$ 376
Duke Energy Carolinas	39	35	36
Progress Energy	256	241	220
Duke Energy Progress	21	19	19
Duke Energy Florida	235	222	201
Duke Energy Ohio	101	105	98
Duke Energy Indiana	23	22	20
Piedmont	2	2	2

Dividend Restrictions and Unappropriated Retained Earnings

Duke Energy does not have any legal, regulatory or other restrictions on paying common stock dividends to shareholders. However, 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, 2019, and 2018, an insignificant amount of Duke Energy's consolidated Retained earnings balance represents undistributed earnings of equity method investments.

New Accounting Standards

Except as noted below, the new accounting standards adopted for 2019, 2018 and 2017 had no material impact on the presentation or results of operations, cash flows or financial position of the Duke Energy Registrants.

Leases. In February 2016, the FASB issued revised accounting guidance for leases. The core principle of this guidance is that a lessee should recognize the assets and liabilities that arise from leases on the balance sheet. This resulted in a material impact on the presentation for the statement of financial position of the Duke Energy Registrants for the period ended December 31, 2019, and an immaterial impact to the Duke Energy Registrants' results of operations and cash flows for the year ended December 31, 2019.

Duke Energy elected the modified retrospective method of adoption effective January 1, 2019. Under the modified retrospective method of adoption, prior year reported results are not restated. For adoption, Duke Energy elected to apply the following practical expedients:

Practical Expedient	Description
Package of transition practical expedients (for leases commenced prior to adoption date and must be adopted as a package)	Do not need to 1) reassess whether any expired or existing contracts are/or contain leases, 2) reassess the lease classification for any expired or existing leases and 3) reassess initial direct costs for any existing leases.
Short-term lease expedient (elect by class of underlying asset)	Elect as an accounting policy to not apply the recognition requirements to short-term leases by asset class.
Lease and non-lease components (elect by class of underlying asset)	Elect as an accounting policy to not separate non-lease components from lease components and instead account for each lease and associated non-lease component as a single lease component by asset class.
Hindsight expedient (when determining lease term)	Elect to use hindsight to determine the lease term.
Existing and expired land easements not previously accounted for as leases	Elect to not evaluate existing or expired easements under the new guidance and carry forward current accounting treatment.
Comparative reporting requirements for initial adoption	Elect to apply transition requirements at adoption date, recognize cumulative effect adjustment to retained earnings in period of adoption and not apply the new requirements to comparative periods, including disclosures.
Lessor expedient (elect by class of underlying asset)	Elect as an accounting policy to aggregate non-lease components with the related lease component when specified conditions are met by asset class. Account for the combined component based on its predominant characteristic (revenue or operating lease).

Duke Energy evaluated the financial statement impact of adopting the standard and monitored industry implementation issues. Under agreements considered leases, where Duke Energy is the lessee, for the use of certain aircraft, space on communication towers, industrial equipment, fleet vehicles, fuel transportation (barges and railcars), land, office space and PPAs are now recognized on the balance sheet. The Duke Energy Registrants did not have a material change to the financial statements from the adoption of the new standard for contracts where it is the lessor. See Note 6 for further information.

The following new accounting standard has been issued but not yet adopted by the Duke Energy Registrants as of December 31, 2019.

Credit Losses. In June 2016, the FASB issued new accounting guidance for credit losses. This guidance establishes a new impairment model applicable to certain financial assets, including trade and other receivables, net investments in leases, and debt securities classified as held-for-sale investments. The model also applies to financial guarantees.

For Duke Energy, the guidance is effective for interim and annual periods beginning January 1, 2020. This guidance will be applied using a modified retrospective approach. Under the modified retrospective approach of adoption, prior year reported results are not restated and a cumulative-effect adjustment is recorded to retained earnings at January 1, 2020.

Upon adoption, Duke Energy will recognize an allowance for credit losses based on management's estimate of losses expected to be incurred over the lives of certain assets or guarantees. Duke Energy expects the impacts of this standard to be driven by the reserve for credit losses on financial guarantees, trade and other receivables, and insurance receivables. Duke Energy does not intend to adopt any practical expedients.

Duke Energy currently expects to record a reserve for credit losses as shown in approximate amounts in the table below:

(in millions)	December 31, 2019					
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Piedmont
Total pretax impact to Retained Earnings	\$ 120	\$ 16	\$ 2	\$ 1	\$ 1	\$ 1

In addition to the reserve for credit losses, Duke Energy expects additional disclosures on management's evaluation of credit risks inherent in financial assets and how management monitors credit quality, changes in expected credit losses, and the appropriateness of the allowance for credit losses on a forward-looking basis. Duke Energy also expects additional disclosures around credit losses for new investments in leases, loan commitments, and other financial instruments.

2. ACQUISITIONS AND DISPOSITIONS

ACQUISITIONS

The Duke Energy Registrants consolidate assets and liabilities from acquisitions as of the purchase date and include earnings from acquisitions in consolidated earnings after the purchase date.

2016 Acquisition of Piedmont Natural Gas

On October 3, 2016, Duke Energy acquired all outstanding common stock of Piedmont for a total cash purchase price of \$5 billion and assumed Piedmont's existing long-term debt, which had a fair value of approximately \$2 billion at the time of the acquisition. The acquisition provides a foundation for Duke Energy to establish a broader, long-term strategic natural gas infrastructure platform to complement its existing natural gas pipeline investments and regulated natural gas business in the Midwest. In connection with the closing of the acquisition, Piedmont became a wholly owned subsidiary of Duke Energy.

Accounting Charges Related to the Acquisition

Duke Energy incurred pretax transaction and integration costs associated with the acquisition of \$84 million and \$103 million for the years ended December 31, 2018, and 2017, respectively. Amounts recorded on the Consolidated Statements of Operations in 2018 and 2017 were primarily system integration costs of \$78 million and \$71 million, respectively, related to combining the various operational and financial systems of Duke Energy and Piedmont, including a one-time software impairment resulting from planned accounting system and process integration in 2017. A \$7 million charge was recorded within Impairment Charges, with the remaining \$64 million recorded within Operation, maintenance and other in 2017.

The majority of transition and integration activities were completed by the end of 2018.

DISPOSITIONS

On April 24, 2019, Duke Energy executed an agreement to sell a minority interest in a portion of certain renewable assets within the Commercial Renewables segment. The sale closed on September 6, 2019, and resulted in pretax proceeds to Duke Energy of \$415 million. The portion of Duke Energy's commercial renewables energy portfolio sold includes 49% of 37 operating wind, solar and battery storage assets and 33% of 11 operating solar assets across the U.S. Duke Energy retained control of these assets, and, therefore, no gain or loss was recognized on the Consolidated Statements of Operations. The difference between the consideration received and the carrying value of the noncontrolling interest claim on net assets is \$466 million, net of a tax benefit of \$8 million, and was recorded in equity.

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. 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

Duke Energy's segment structure includes the following segments: Electric Utilities and Infrastructure, Gas Utilities and Infrastructure and Commercial Renewables.

The Electric Utilities and Infrastructure 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. Electric Utilities and Infrastructure also includes Duke Energy's electric transmission infrastructure investments.

The Gas Utilities and Infrastructure segment includes Piedmont, Duke Energy's natural gas local distribution companies in Ohio and Kentucky, and Duke Energy's natural gas storage and midstream pipeline investments. Gas Utilities and Infrastructure's operations are substantially all regulated and, accordingly, qualify for regulatory accounting treatment.

The Commercial Renewables segment is primarily comprised of nonregulated utility-scale wind and solar generation assets located throughout the U.S. On April 24, 2019, Duke Energy executed an agreement to sell a minority interest in a portion of certain renewable assets. See Note 2 for additional information on the minority interest sale.

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.

(in millions)	Year Ended December 31, 2019						
	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Commercial Renewables	Total Reportable Segments	Other	Eliminations	Total
Unaffiliated Revenues	\$ 22,798	\$ 1,770	\$ 487	\$ 25,055	\$ 24	\$ —	\$ 25,079
Intersegment Revenues	33	96	—	129	71	(200)	—
Total Revenues	\$ 22,831	\$ 1,866	\$ 487	\$ 25,184	\$ 95	\$ (200)	\$ 25,079
Interest Expense	\$ 1,345	\$ 117	\$ 95	\$ 1,557	\$ 705	\$ (58)	\$ 2,204
Depreciation and amortization	3,951	256	168	4,375	178	(5)	4,548
Equity in earnings (losses) of unconsolidated affiliates	9	114	(4)	119	43	—	162
Income tax expense (benefit)	785	22	(115)	692	(173)	—	519
Segment income (loss) ^{(a)(b)}	3,536	432	198	4,166	(452)	—	3,714
Add back noncontrolling interest ^(c)							(177)
Add back preferred stock dividend							41
Loss from discontinued operations, net of tax							(7)
Net income							\$ 3,571
Capital investments expenditures and acquisitions	\$ 8,263	\$ 1,539	\$ 1,423	\$ 11,225	\$ 221	\$ —	\$ 11,446
Segment assets	135,561	13,921	6,020	155,502	3,148	188	158,838

- (a) Electric Utilities and Infrastructure includes a \$27 million reduction of a prior year impairment at Citrus County CC related to the plant's cost cap. See Note 4 for additional information.
- (b) Gas Utilities and Infrastructure includes an after-tax impairment charge of \$19 million for the remaining investment in Constitution. See Note 13 for additional information.
- (c) Includes the allocation of losses to noncontrolling tax equity members. See Note 1 for additional information.

(in millions)	Year Ended December 31, 2018						
	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Commercial Renewables	Total Reportable Segments	Other	Eliminations	Total
Unaffiliated Revenues	\$ 22,242	\$ 1,783	\$ 477	\$ 24,502	\$ 19	\$ —	\$ 24,521
Intersegment Revenues	31	98	—	129	70	(199)	—
Total Revenues	\$ 22,273	\$ 1,881	\$ 477	\$ 24,631	\$ 89	\$ (199)	\$ 24,521
Interest Expense	\$ 1,288	\$ 106	\$ 88	\$ 1,482	\$ 657	\$ (45)	\$ 2,094
Depreciation and amortization	3,523	245	155	3,923	152	(1)	4,074
Equity in earnings (losses) of unconsolidated affiliates	5	27	(1)	31	52	—	83
Income tax expense (benefit) ^(a)	799	78	(147)	730	(282)	—	448
Segment income (loss) ^{(b)(c)(d)(e)}	3,058	274	9	3,341	(694)	—	2,647
Add back noncontrolling interest component							(22)
Loss from discontinued operations, net of tax							19
Net income							\$ 2,644
Capital investments expenditures and acquisitions	\$ 8,086	\$ 1,133	\$ 193	\$ 9,412	\$ 256	\$ —	\$ 9,668
Segment assets	125,364	12,361	4,204	141,929	3,275	188	145,392

- (a) All segments include adjustments to the December 31, 2017, estimate of the income tax effects of the Tax Act. Electric Utilities and Infrastructure includes a \$24 million expense, Gas Utilities and Infrastructure includes a \$1 million expense, Commercial Renewables includes a \$3 million benefit and Other includes a \$2 million benefit. See Note 24 for additional information.
- (b) Electric Utilities and Infrastructure includes after-tax regulatory and legislative impairment charges of \$202 million related to rate case orders, settlements or other actions of regulators or legislative bodies and an after-tax impairment charge of \$46 million related to the Citrus County CC at Duke Energy Florida. See Note 4 for additional information.
- (c) Gas Utilities and Infrastructure includes an after-tax impairment charge of \$42 million for the investment in Constitution. See Note 13 for additional information.

- (d) Commercial Renewables includes an impairment charge of \$91 million, net of \$2 million Noncontrolling interests, related to goodwill. See Note 12 for additional information.
- (e) Other includes \$65 million of after-tax costs to achieve the Piedmont merger, \$144 million of after-tax severance charges related to a companywide initiative and an \$82 million after-tax loss on the sale of Beckjord described below. For additional information, see Note 2 for the Piedmont Merger and Note 21 for severance charges.

In February 2018, Duke Energy sold Beckjord, a nonregulated facility retired during 2014, and recorded a pretax loss of \$106 million within (Losses) Gains on Sales of Other Assets and Other, net and \$1 million within Operation, maintenance and other on Duke Energy's Consolidated Statements of Operations for the year ended December 31, 2018. The sale included the transfer of coal ash basins and other real property and indemnification from any and all potential future claims related to the property, whether arising under environmental laws or otherwise.

(in millions)	Year Ended December 31, 2017							Total
	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Commercial Renewables	Total Reportable Segments	Other	Eliminations		
Unaffiliated Revenues	\$ 21,300	\$ 1,743	\$ 460	\$ 23,503	\$ 62	\$ —	\$ 23,565	
Intersegment Revenues	31	93	—	124	76	(200)	—	
Total Revenues	\$ 21,331	\$ 1,836	\$ 460	\$ 23,627	\$ 138	\$ (200)	\$ 23,565	
Interest Expense	\$ 1,240	\$ 105	\$ 87	\$ 1,432	\$ 574	\$ (20)	\$ 1,986	
Depreciation and amortization	3,010	231	155	3,396	131	—	3,527	
Equity in earnings (losses) of unconsolidated affiliates	5	62	(5)	62	57	—	119	
Income tax expense (benefit) ^(a)	1,355	116	(628)	843	353	—	1,196	
Segment income (loss) ^{(b)(c)(d)}	3,210	319	441	3,970	(905)	—	3,065	
Add back noncontrolling interest component							5	
Loss from discontinued operations, net of tax							(6)	
Net income							\$ 3,064	
Capital investments expenditures and acquisitions	\$ 7,024	\$ 907	\$ 92	\$ 8,023	\$ 175	\$ —	\$ 8,198	
Segment assets	119,423	11,462	4,156	135,041	2,685	188	137,914	

- (a) All segments include impacts of the Tax Act. Electric Utilities and Infrastructure includes a \$231 million benefit, Gas Utilities and Infrastructure includes a \$26 million benefit, Commercial Renewables includes a \$442 million benefit and Other includes charges of \$597 million.
- (b) Electric Utilities and Infrastructure includes after-tax regulatory settlement charges of \$98 million.
- (c) Commercial Renewables includes after-tax impairment charges of \$74 million related to certain wind projects and the Energy Management Solutions reporting unit. See Notes 11 and 12 for additional information.
- (d) Other includes \$64 million of after-tax costs to achieve the Piedmont merger. See Note 2 for additional information.

Geographical Information

Substantially all assets and revenues from continuing operations are within the U.S.

Major Customers

For the year ended December 31, 2019, revenues from one customer of Duke Energy Progress are \$635 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.

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
2019					
Electric Utilities and Infrastructure	\$ 19,745	\$ 2,231	\$ —	\$ 855	\$ 22,831
Gas Utilities and Infrastructure	—	—	1,782	84	1,866
Commercial Renewables	—	389	—	98	487
Total Reportable Segments	\$ 19,745	\$ 2,620	\$ 1,782	\$ 1,037	\$ 25,184
2018					
Electric Utilities and Infrastructure	\$ 19,013	\$ 2,345	\$ —	\$ 915	\$ 22,273
Gas Utilities and Infrastructure	—	—	1,817	64	1,881
Commercial Renewables	—	375	—	102	477
Total Reportable Segments	\$ 19,013	\$ 2,720	\$ 1,817	\$ 1,081	\$ 24,631
2017					
Electric Utilities and Infrastructure	\$ 18,177	\$ 2,104	\$ —	\$ 1,050	\$ 21,331
Gas Utilities and Infrastructure	—	—	1,732	104	1,836
Commercial Renewables	—	375	—	85	460
Total Reportable Segments	\$ 18,177	\$ 2,479	\$ 1,732	\$ 1,239	\$ 23,627

Duke Energy Ohio

Duke Energy Ohio has two reportable segments, Electric Utilities and Infrastructure and Gas Utilities and Infrastructure.

Electric Utilities and Infrastructure transmits and distributes electricity in portions of Ohio and generates, distributes and sells electricity in portions of Northern Kentucky. Gas Utilities and Infrastructure 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. In December 2018, the PUCO approved an order which allows the recovery or credit of revenues and expenses related to Duke Energy Ohio's contractual arrangement to buy power from OVEC power plants. Due to the change in regulatory treatment of these amounts, OVEC revenues and expenses are now reflected in the Electric Utilities and Infrastructure segment. Previously, OVEC revenues and expense were included in Other. These amounts are deemed immaterial for Duke Energy Ohio. Therefore, no prior period amounts were restated. See Note 4 for additional information on the PUCO order.

All Duke Energy Ohio assets and revenues from continuing operations are within the U.S.

(in millions)	Year Ended December 31, 2019					
	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	\$ 1,456	\$ 484	\$ 1,940	\$ —	\$ —	\$ 1,940
Interest expense	\$ 80	\$ 29	\$ 109	\$ —	\$ —	\$ 109
Depreciation and amortization	182	83	265	—	—	265
Income tax expense (benefit)	20	21	41	(1)	—	40
Segment income (loss)/Net income	159	85	244	(5)	—	239
Loss from discontinued operations, net of tax						(1)
Net income						\$ 238
Capital expenditures	\$ 680	\$ 272	\$ 952	\$ —	\$ —	\$ 952
Segment assets	6,188	3,116	9,304	34	—	9,338

Year Ended December 31, 2018						
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	\$ 1,450	\$ 506	\$ 1,956	\$ 1	\$ —	\$ 1,957
Interest expense	\$ 67	\$ 24	\$ 91	\$ 1	\$ —	\$ 92
Depreciation and amortization	183	85	268	—	—	268
Income tax expense (benefit)	47	24	71	(28)	—	43
Segment income (loss)/Net income ^(a)	186	93	279	(103)	—	176
Capital expenditures	\$ 655	\$ 172	\$ 827	\$ —	\$ —	\$ 827
Segment assets	5,643	2,874	8,517	38	—	8,555

(a) Other includes the loss on the sale of Beckjord, see discussion above.

Year Ended December 31, 2017						
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	\$ 1,373	\$ 508	\$ 1,881	\$ 42	\$ —	\$ 1,923
Interest expense	\$ 62	\$ 28	\$ 90	\$ 1	\$ —	\$ 91
Depreciation and amortization	178	83	261	—	—	261
Income tax expense (benefit)	40	39	79	(20)	—	59
Segment income (loss)	138	85	223	(30)	—	193
Loss from discontinued operations, net of tax						(1)
Net income						\$ 192
Capital expenditures	\$ 491	\$ 195	\$ 686	\$ —	\$ —	\$ 686
Segment assets	5,066	2,758	7,824	66	(15)	7,875

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.

(in millions)	Duke Energy		Progress Energy	
	December 31,		December 31,	
	2019	2018	2019	2018
Regulatory Assets				
AROs – coal ash	\$ 4,084	\$ 4,255	\$ 1,843	\$ 2,061
AROs – nuclear and other	739	772	668	601
Accrued pension and OPEB	2,391	2,654	897	1,074
Storm cost deferrals	1,399	1,117	1,214	953
Nuclear asset securitized balance, net	1,042	1,093	1,042	1,093
Debt fair value adjustment	1,019	1,099	—	—
Deferred fuel and purchased power	528	838	305	600
Deferred asset – Lee and Harris COLA	388	426	38	43
Hedge costs deferrals	356	204	129	74
Demand side management (DSM)/Energy Efficiency (EE)	343	449	241	256
Advanced metering infrastructure (AMI)	338	367	114	127
Retired generation facilities	331	402	266	324
Post-in-service carrying costs (PISCC) and deferred operating expenses	329	320	33	36
Vacation accrual	214	213	41	41
Derivatives – natural gas supply contracts	117	141	—	—
Nuclear deferral	107	133	40	46
Manufactured gas plant (MGP)	102	99	—	—
Deferred pipeline integrity costs	79	65	—	—
NCEMPA deferrals	72	50	72	50
East Bend deferrals	44	47	—	—
Transmission expansion obligation	36	39	—	—
Amounts due from customers	36	24	—	—
Grid modernization	28	31	—	—
Other	896	784	349	322
Total regulatory assets	15,018	15,622	7,292	7,701
Less: current portion	1,796	2,005	946	1,137
Total noncurrent regulatory assets	\$ 13,222	\$ 13,617	\$ 6,346	\$ 6,564
Regulatory Liabilities				
Net regulatory liability related to income taxes	\$ 7,872	\$ 8,058	\$ 2,595	\$ 2,710
Costs of removal	5,756	5,421	2,561	2,135
AROs – nuclear and other	1,100	538	—	—
Accrued pension and OPEB	176	301	—	149
Amounts to be refunded to customers	34	34	—	—
Deferred fuel and purchased power	1	16	1	16
Other	1,109	1,064	398	319
Total regulatory liabilities	16,048	15,432	5,555	5,329
Less: current portion	784	598	330	280
Total noncurrent regulatory liabilities	\$ 15,264	\$ 14,834	\$ 5,225	\$ 5,049

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.

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 deferrals. Represents deferred incremental costs incurred related to major weather-related 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.

Deferred fuel and purchased power. Represents certain energy-related costs that are recoverable or refundable as approved by the applicable regulatory body.

Deferred asset – Lee and Harris COLA. Represents deferred costs incurred for the canceled Lee and Harris nuclear projects.

Hedge costs and other deferrals. Amounts relate to unrealized gains and losses on derivatives recorded as a regulatory asset or liability, respectively, until the contracts are settled.

DSM/EE. Deferred costs related to various DSM and EE programs recoverable through various mechanisms.

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 expected future recovery of net book value of electromechanical meters that have been replaced with AMI meters at Duke Energy Indiana.

Retired generation facilities. Represents amounts to be recovered for facilities that have been retired and are probable of recovery.

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.

Vacation accrual. Represents vacation entitlement, which is generally recovered in the following year.

Derivatives – natural gas supply contracts. Represents costs for certain long-dated, fixed quantity forward gas supply contracts, which are recoverable through PGA clauses.

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.

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.

Deferred pipeline integrity costs. Represents pipeline integrity management costs in compliance with federal regulations recovered through a rider mechanism.

NCEMPA deferrals. Represents retail allocated cost deferrals and returns associated with the additional ownership interest in assets acquired from NCEMPA in 2015.

East Bend deferrals. Represents both deferred operating expenses and deferred depreciation as well as carrying costs on the portion of East Bend that was acquired from Dayton Power and Light and that had been previously operated as a jointly owned facility.

Transmission expansion obligation. Represents transmission expansion obligations related to Duke Energy Ohio's withdrawal from MISO.

Amounts due from customers. Relates primarily to margin decoupling and IMR recovery mechanisms.

Grid modernization. Amounts represent 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.

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.

Amounts to be refunded to customers. Represents required rate reductions to retail customers by the applicable regulatory body.

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, 2019.

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, 2019.

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 Florence, Hurricane Michael and Winter Storm Diego Deferral Filings

On December 21, 2018, Duke Energy Carolinas and Duke Energy Progress filed with the NCUC petitions for approval to defer the incremental costs incurred in connection with the response to Hurricane Florence, Hurricane Michael and Winter Storm Diego to a regulatory asset for recovery in the next base rate case. The NCUC issued an order requesting comments on the deferral positions. On March 5, 2019, the North Carolina Public Staff (Public Staff) filed comments. On April 2, 2019, Duke Energy Carolinas and Duke Energy Progress filed reply comments, which included revised estimates of approximately \$553 million in incremental operation and maintenance expenses (\$171 million and \$382 million for Duke Energy Carolinas and Duke Energy Progress, respectively) and approximately \$96 million in capital costs (\$20 million and \$76 million for Duke Energy Carolinas and Duke Energy Progress, respectively). On September 30, 2019, Duke Energy Carolinas requested that the NCUC consolidate its pending deferral request with its general rate case filed on that date. On October 30, 2019, Duke Energy Progress requested that the NCUC consolidate its pending deferral request with its general rate case filed on that date. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of these matters. Duke Energy Progress filed a deferral request for these storms with the PSCSC on January 11, 2019, which also included a request for the continuation of prior deferrals requested for ice storms and Hurricane Matthew, and on January 30, 2019, the PSCSC issued a directive approving the deferral request, followed by an order issued on February 21, 2019. On March 15, 2019, Duke Energy Progress filed a request with FERC requesting permission to defer transmission-related storm costs that would be charged to wholesale transmission customers through Duke Energy Progress' Open Access Transmission Tariff (OATT) and to recover those costs from wholesale transmission customers over a three-year recovery period. FERC accepted the filing on May 14, 2019, which allows Duke Energy Progress to proceed with the proposed cost deferral and recovery.

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,		Earns/Pays a Return	Recovery/Refund Period Ends
	2019	2018		
Regulatory Assets^(a)				
AROs – coal ash	\$ 1,696	\$ 1,725	(i)	(b)
Accrued pension and OPEB	477	581		(j)
Storm cost deferrals	178	160	Yes	(b)
Deferred fuel and purchased power	222	196	(f)	2021
Deferred asset – Lee COLA	350	383		(b)
Hedge costs deferrals ^(c)	198	101	Yes	2041
DSM/EE	100	169	(h)	(h)
AMI	166	176	Yes	(b)
Retired generation facilities ^(c)	16	21	Yes	2023
PISCC ^(c)	33	34	Yes	(b)
Vacation accrual	80	78	(e)	2020
Nuclear deferral	67	87		2021
Other	327	266		(b)
Total regulatory assets	3,910	3,977		
Less: current portion	550	520		
Total noncurrent regulatory assets	\$ 3,360	\$ 3,457		
Regulatory Liabilities^(a)				
Net regulatory liability related to income taxes ^(d)	\$ 3,060	\$ 3,082		(b)
Costs of removal ^(c)	1,936	1,968	Yes	(g)
AROs – nuclear and other	1,100	538		(b)
Accrued pension and OPEB	39	38		(j)
Other	543	572		(b)
Total regulatory liabilities	6,678	6,198		
Less: current portion	255	199		
Total noncurrent regulatory liabilities	\$ 6,423	\$ 5,999		

- (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.
- (e) Earns a return on outstanding balance in North Carolina.
- (f) 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.
- (g) Recovered over the life of the associated assets.
- (h) Includes incentives on DSM/EE investments and is recovered through an annual rider mechanism.
- (i) Earns a debt and equity return on coal ash expenditures for North Carolina and South Carolina retail customers as permitted by various regulatory orders.
- (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.

2017 North Carolina Rate Case

On August 25, 2017, Duke Energy Carolinas filed an application with the NCUC for a rate increase for retail customers of approximately \$647 million, which represented an approximate 13.6% increase in annual base revenues. The request for rate increase was driven by capital investments subsequent to the previous base rate case, including the W.S. Lee CC, grid improvement projects, AMI, investments in customer service technologies, costs of complying with CCR regulations and the Coal Ash Act and recovery of costs related to licensing and development of the William States Lee III Nuclear Station.

On February 28, 2018, Duke Energy Carolinas and the Public Staff filed an Agreement and Stipulation of Partial Settlement resolving certain portions of the proceeding. Terms of the settlement included a return on equity of 9.9% and a capital structure of 52% equity and 48% debt. As a result of the settlement, Duke Energy Carolinas recorded a pretax charge of approximately \$4 million in the first quarter of 2018 to Operation, maintenance and other on the Consolidated Statements of Operations.

On June 22, 2018, the NCUC issued an order approving the Stipulation of Partial Settlement and requiring a revenue reduction.

As a result of the June 22, 2018, order, Duke Energy Carolinas recorded a pretax charge of approximately \$150 million to Impairment charges and Operation, maintenance and other on the Consolidated Statements of Operations. The charge was primarily related to the denial of a return on the Lee Nuclear Project and the assessment of a \$70 million management penalty by reducing the annual recovery of deferred coal ash costs by \$14 million per year over a five-year recovery period. On July 27, 2018, NCUC approved Duke Energy Carolinas' compliance filing. As a result, revised customer rates were effective on August 1, 2018.

On July 20, 2018, the North Carolina Attorney General filed a Notice of Appeal to the North Carolina Supreme Court from the June 22, 2018, Order Accepting Stipulation, Deciding Contested Issues and Requiring Revenue Reduction issued by the NCUC. The Attorney General contends the commission's order should be reversed and remanded, as it is in excess of the commission's statutory authority; affected by errors of law; unsupported by competent, material and substantial evidence in view of the entire record as submitted; and arbitrary or capricious. The Sierra Club, North Carolina Sustainable Energy Association, North Carolina Justice Center, North Carolina Housing Coalition, Natural Resource Defense Council and Southern Alliance for Clean Energy also filed Notices of Appeal to the North Carolina Supreme Court. On August 8, 2018, the Public Staff filed a Notice of Cross Appeal to the North Carolina Supreme Court, which contends the commission's June 22, 2018, order should be reversed and remanded, as it is affected by errors of law, and is unsupported by substantial evidence with regard to the commission's failure to consider substantial evidence of coal ash related environmental violations. On November 29, 2018, the North Carolina Attorney General's Office filed a motion with the North Carolina Supreme Court requesting the court consolidate the Duke Energy Carolinas and Duke Energy Progress appeals and enter an order adopting the parties' proposed briefing schedule as set out in the filing. On November 29, 2018, the North Carolina Supreme Court adopted a schedule for briefing set forth in the motion to consolidate the Duke Energy Carolinas and Duke Energy Progress appeals. Appellant briefs were filed on April 26, 2019. The Appellee response briefs were filed on September 25, 2019. Oral arguments before the North Carolina Supreme Court are scheduled for March 11, 2020. Duke Energy Carolinas cannot predict the outcome of this matter.

2019 North Carolina Rate Case

On September 30, 2019, Duke Energy Carolinas filed an application with the NCUC for a net rate increase for retail customers of approximately \$291 million, which represents an approximate 6% increase in annual base revenues. The gross rate case revenue increase request is \$445 million, which is offset by an EDIT rider of \$154 million to return to customers North Carolina and federal EDIT resulting from recent reductions in corporate tax rates. The request for rate increase is driven by major capital investments subsequent to the previous base rate case, coal ash pond closure costs, accelerated coal plant depreciation and deferred 2018 storm costs. Duke Energy Carolinas requests rates be effective no later than August 1, 2020. The NCUC has established a procedural schedule with an evidentiary hearing to commence on March 23, 2020. Duke Energy Carolinas cannot predict the outcome of this matter.

2018 South Carolina Rate Case

On November 8, 2018, Duke Energy Carolinas filed an application with the PSCSC for a rate increase for retail customers of approximately \$168 million, which represents an approximate 10% increase in retail revenues. The request for rate increase was driven by capital investments and environmental compliance progress made by Duke Energy Carolinas since its previous rate case, including the further implementation of Duke Energy Carolinas' generation modernization program, which consists of retiring, replacing and upgrading generation plants, investments in customer service technologies and continued investments in base work to maintain its transmission and distribution systems. The request included net tax benefits resulting from the Tax Act of \$66 million to reflect the change in ongoing tax expense, primarily from the reduction in the federal income tax rate from 35% to 21%. The request also included \$46 million to return EDIT resulting from the federal tax rate change and deferred revenues since January 2018 related to the change and benefits of \$17 million from a reduction in North Carolina state income taxes allocable to South Carolina (EDIT Rider).

Duke Energy Carolinas also requested approval of its proposed Grid Improvement Plan (GIP), adjustments to its Prepaid Advantage Program and a variety of accounting orders related to ongoing costs for environmental compliance, including recovery over a five-year period of \$242 million of deferred coal ash related compliance costs, grid investments between rate changes, incremental depreciation expense, a result of new depreciation rates from the depreciation study approved in the 2017 North Carolina Rate Case above, and the balance of development costs associated with the cancellation of the Lee Nuclear Project. Finally, Duke Energy Carolinas sought approval to establish a reserve and accrual for end-of-life nuclear costs for nuclear fuel and materials and supplies. On March 8, 2019, the ORS moved to establish a new and separate hearing docket to review and consider the GIP proposed by Duke Energy Carolinas. Subsequently, on March 12, 2019, the ORS and Duke Energy Carolinas executed a Stipulation resolving the ORS's motion. The Stipulation provided that costs incurred for the GIP after January 1, 2019, would be deferred with a return, subject to evaluation in a future rate proceeding. The Stipulation was approved by the PSCSC on June 19, 2019. On December 16, 2019, Duke Energy Carolinas and Duke Energy Progress filed a Joint Petition to Establish an Informational Docket for Review and Consideration of Grid Improvement Plans through which Duke Energy Carolinas and Duke Energy Progress would provide interested stakeholders information on the companies' grid activities. The PSCSC requested parties comment on procedural matters by January 31; accordingly, various groups filed comments, none of which opposed an informational docket. Duke Energy Carolinas cannot predict the outcome of this matter.

After hearings in March 2019, the PSCSC issued an order on May 21, 2019, which included a return on equity of 9.5% and a capital structure of 53% equity and 47% debt. The order also included the following material components:

- Approval of cancellation of the Lee Nuclear Project, with Duke Energy Carolinas maintaining the Combined Operating License;
- Approval of recovery of \$125 million (South Carolina retail portion) of Lee Nuclear Project development costs (including AFUDC through December 2017) over a 12-year period, but denial of a return on the deferred balance of costs;
- Approval of recovery of \$96 million of coal ash costs over a five-year period with a return at Duke Energy Carolinas' WACC;
- Denial of recovery of \$115 million of certain coal ash costs deemed to be related to the Coal Ash Act and incremental to the federal CCR rule;
- Approval of a \$66 million decrease to base rates to reflect the change in ongoing tax expense, primarily the reduction in the federal income tax rate from 35% to 21%;
- Approval of a \$45 million decrease through the EDIT Rider to return EDIT resulting from the federal tax rate change and deferred revenues since January 2018 related to the change, to be returned in accordance with the Average Rate Assumption Method (ARAM) for protected EDIT, over a 20-year period for unprotected EDIT associated with Property, Plant and Equipment, over a five-year period for unprotected EDIT not associated with Property, Plant and Equipment and over a five-year period for the deferred revenues; and
- Approval of a \$17 million decrease through the EDIT Rider related to reductions in the North Carolina state income tax rate from 6.9% to 2.5% to be returned over a five-year period.

As a result of the order, revised customer rates were effective June 1, 2019. On May 31, 2019, Duke Energy Carolinas filed a Petition for Rehearing or Reconsideration of that order contending substantial rights of Duke Energy Carolinas were prejudiced by unlawful, arbitrary and capricious rulings by the commission on certain issues presented in the proceeding. On June 19, 2019, the PSCSC issued a Directive denying Duke Energy Carolinas' request to rehear or reconsider the commission's rulings on certain issues presented in the proceeding including coal ash remediation and disposal costs, return on equity and the recovery of a return on deferred operation and maintenance expenses. An order detailing the commission's decision in the Directive was issued on October 18, 2019. Duke Energy Carolinas filed a notice of appeal on November 15, 2019, with the South Carolina Supreme Court. On November 20, 2019, the South Carolina Energy Users Committee filed a Notice of Appeal and the ORS filed a Notice of Cross Appeal with the South Carolina Supreme Court. On January 8, 2020, Duke Energy Carolinas and the ORS filed a joint motion to extend briefing schedule deadlines. Appellant briefs are due on March 2, 2020, and Appellee response briefs are due on May 15, 2020. On February 12, 2020, Duke Energy Carolinas and the ORS filed a joint motion to extend briefing deadlines by 30 days. Based on legal analysis and the filing of the appeal, Duke Energy Carolinas has not recorded an adjustment for its deferred coal ash costs. Duke Energy Carolinas cannot predict the outcome of this matter.

FERC Formula Rate Matter

On July 31, 2017, PMPA filed a complaint with FERC alleging that Duke Energy Carolinas misapplied the formula rate under the PPA between the parties by including in its rates amortization expense associated with regulatory assets and recorded in a certain account without FERC approval. On February 15, 2018, FERC issued an order ruling in favor of PMPA and ordered Duke Energy Carolinas to refund to PMPA all amounts improperly collected under the PPA. Duke Energy Carolinas has issued to PMPA and similarly situated wholesale customers refunds of approximately \$25 million. FERC also set the matter for settlement and hearing. PMPA and other customers filed a protest to Duke Energy Carolinas' refund report claiming that the refunds are inadequate in that (1) Duke Energy Carolinas invoked the limitations periods in the contracts to limit the time period for which the refunds were paid and the customers disagree that this limitation applies, and (2) Duke Energy Carolinas refunded only amounts recovered through a certain account and the customers have asserted that the order applies to all regulatory assets. On July 3, 2018, FERC issued an order accepting Duke Energy Carolinas' refund report and ruling that these two claims are outside the scope of FERC's February order. The settlement agreements and revised formula rates for all parties to the proceeding were filed on December 28, 2018. On April 2, 2019, FERC issued an order approving the settlement agreement as filed. Since then, Duke Energy Carolinas has implemented the terms of the settlement in rates with all wholesale customers, including non-intervening customers. On July 25, 2019, Duke Energy Carolinas received FERC approval for the accounting treatment requested for certain assets included in the settlement agreements. This is the final approval needed from FERC and concludes this proceeding.

Sale of Hydroelectric (Hydro) Plants

In May 2018, Duke Energy Carolinas entered an agreement for the sale of five hydro plants with a combined 18.7-MW generation capacity in the Western Carolinas region to Northbrook Energy. The completion of the transaction was subject to approval from FERC for the four FERC-licensed plants, as well as other state regulatory agencies and was contingent upon regulatory approval from the NCUC and PSCSC to defer the total estimated loss on the sale of approximately \$40 million. On July 5, 2018, Duke Energy Carolinas filed with the NCUC for approval of the sale of the five hydro plants to Northbrook, to transfer the CPCNs for the four North Carolina hydro plants and to establish a regulatory asset for the North Carolina retail portion of the difference between sales proceeds and net book value. On June 5, 2019, the NCUC issued an order approving the transfer of the hydro plants from Duke Energy Carolinas to Northbrook, granting deferral accounting and denying the Public Staff's motion for reconsideration.

On August 28, 2018, Duke Energy Carolinas filed with PSCSC an Application for Approval of Transfer and Sale of Hydroelectric Generation Facilities, Acceptance for Filing of a Power Purchase Agreement and an Accounting Order to Establish a Regulatory Asset. On September 10, 2018, the ORS provided a letter to the commission stating its position on the application and on September 18, 2018, Duke Energy Carolinas requested this matter be carried over to allow Duke Energy Carolinas time to discuss certain accounting issues with the ORS. At its June 26, 2019, agenda meeting, the PSCSC voted to approve the transfer and sale subject to the recommendation of the ORS that the issuance of an Accounting Order will not preclude the ORS, the commission or any other party from addressing the reasonableness of these costs, any return sought and including any carrying costs in the next rate case.

On August 9, 2018, Duke Energy Carolinas and Northbrook filed a joint Application for Transfer of Licenses with the FERC. On December 27, 2018, the FERC issued its Order Approving Transfer of Licenses for the four FERC-licensed hydro plants. On January 18, 2019, Duke Energy Carolinas and Northbrook Carolina Hydro II, LLC requested a six-month extension of time to comply with the requirement of the December 27, 2018, order that Northbrook submit to FERC certified copies of all instruments of conveyance and signed acceptance sheets within 60 days of the date of the order. On February 14, 2019, FERC issued an order granting extensions until August 26, 2019, to comply with the requirements of the December 27, 2018, order.

The closing occurred on August 16, 2019. A regulatory asset was established for approximately \$32 million, which represents the total deferral amount for North Carolina and South Carolina retail. The North Carolina retail portion will be amortized pursuant to an order from the NCUC. Duke Energy Carolinas will purchase all the capacity and energy generated by these facilities at the avoided cost for five years through power purchase agreements.

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,		Earns/Pays a Return	Recovery/Refund Period Ends
	2019	2018		
Regulatory Assets^(a)				
AROs – coal ash	\$ 1,834	\$ 2,051	(h)	(b)
AROs – nuclear and other	509	429		(c)
Accrued pension and OPEB	423	542		(k)
Storm cost deferrals ^(d)	801	571	Yes	(b)
Deferred fuel and purchased power	266	397	(f)	2021
Deferred asset – Harris COLA	38	43		
Hedge costs deferrals	85	54		(b)
DSM/EE ^(e)	216	235	(i)	(i)
AMI	61	67		(b)
Retired generation facilities	83	105	Yes	(b)
PISCC and deferred operating expenses	33	36	Yes	2054
Vacation accrual	41	41		2020
Nuclear deferral	40	46		2021
NCEMPA deferrals	72	50	(g)	2042
Other	176	147		(b)
Total regulatory assets	4,678	4,814		
Less: current portion	526	703		
Total noncurrent regulatory assets	\$ 4,152	\$ 4,111		
Regulatory Liabilities^(a)				
Net regulatory liability related to income taxes ^(l)	\$ 1,802	\$ 1,863		(b)
Costs of removal	2,294	1,878	Yes	(j)
Accrued pension and OPEB	—	93		(k)
Other	372	299		(b)
Total regulatory liabilities	4,468	4,133		
Less: current portion	236	178		
Total noncurrent regulatory liabilities	\$ 4,232	\$ 3,955		

(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) South Carolina storm costs are included in rate base.

(e) Included in rate base.

(f) 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.

(g) South Carolina retail allocated costs are earning a return.

(h) Earns a debt and equity return on coal ash expenditures for North Carolina and South Carolina retail customers as permitted by various regulatory orders.

(i) Includes incentives on DSM/EE investments and is recovered through an annual rider mechanism.

(j) Recovered over the life of the associated assets.

(k) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.

(l) 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 23.

2017 North Carolina Rate Case

On June 1, 2017, Duke Energy Progress filed an application with the NCUC for a rate increase for retail customers of approximately \$477 million, which represented an approximate 14.9% increase in annual base revenues. Subsequent to the filing, Duke Energy Progress adjusted the requested amount to \$420 million, representing an approximate 13% increase. The request for rate increase was driven by capital investments subsequent to the previous base rate case, costs of complying with CCR regulations and the Coal Ash Act, costs relating to storm recovery, investments in customer service technologies and recovery of costs associated with renewable purchased power.

On November 22, 2017, Duke Energy Progress and the Public Staff filed an Agreement and Stipulation of Partial Settlement resolving certain portions of the proceeding. Terms of the settlement included a return on equity of 9.9% and a capital structure of 52% equity and 48% debt. On February 23, 2018, the NCUC issued an order approving the stipulation.

The order also impacted certain amounts that were similarly recorded on Duke Energy Carolinas' Consolidated Balance Sheets. As a result of the order, Duke Energy Progress and Duke Energy Carolinas recorded pretax charges of \$68 million and \$14 million, respectively, in the first quarter of 2018 to Impairment charges, Operation, maintenance and other and Interest Expense on the Consolidated Statements of Operations. Revised customer rates became effective on March 16, 2018.

On May 15, 2018, the Public Staff filed a Notice of Cross Appeal to the North Carolina Supreme Court from the NCUC's February 23, 2018, order. The Public Staff contends the NCUC's order should be reversed and remanded, as it is affected by errors of law, and is unsupported by competent, material and substantial evidence in view of the entire record as submitted. The North Carolina Attorney General and Sierra Club also filed Notices of Appeal to the North Carolina Supreme Court from the February 23, 2018, order. On November 29, 2018, the North Carolina Attorney General's Office filed a motion with the North Carolina Supreme Court requesting the court consolidate the Duke Energy Progress and Duke Energy Carolinas appeals and enter an order adopting the parties' proposed briefing schedule as set out in the filing. Appellant briefs were filed on April 26, 2019. The Appellee response briefs were filed on September 25, 2019. Oral arguments before the North Carolina Supreme Court are scheduled for March 11, 2020. Duke Energy Progress cannot predict the outcome of this matter.

2019 North Carolina Rate Case

On October 30, 2019, Duke Energy Progress filed an application with the NCUC for a net rate increase for retail customers of approximately \$464 million, which represents an approximate 12.3% increase in annual base revenues. The gross rate case revenue increase request is \$586 million, which is offset by riders of \$122 million, primarily an EDIT rider of \$120 million to return to customers North Carolina and federal EDIT resulting from recent reductions in corporate tax rates. The request for rate increase is driven by major capital investments subsequent to the previous base rate case, coal ash pond closure costs, accelerated coal plant depreciation and deferred 2018 storm costs. Duke Energy Progress seeks to defer and recover incremental Hurricane Dorian storm costs in this proceeding and requests rates be effective no later than September 1, 2020. The NCUC has established a procedural schedule with an evidentiary hearing to commence on May 4, 2020. Duke Energy Progress cannot predict the outcome of this matter.

Hurricane Dorian

Hurricane Dorian reached the Carolinas in September 2019 as a Category 2 hurricane making landfall within Duke Energy Progress' service territory. Approximately 270,000 North Carolina customers and 30,000 South Carolina customers were impacted by the slow-moving storm that brought high winds, tornadoes and heavy rain. With storm-response mobilization occurring in preparation for the storm and the assistance of mutual aid partners, full restoration was accomplished within four days for all customers able to receive service. Total estimated incremental operation and maintenance expenses incurred to repair and restore the system are approximately \$205 million with an additional \$4 million in capital investments made for restoration efforts. Approximately \$179 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, 2019. The balance of operation and maintenance expenses are included in Operation, maintenance and other on the Consolidated Statements of Operations for the year ended December 31, 2019. A request for an accounting order to defer incremental storm costs associated with Hurricane Dorian was included in Duke Energy Progress' October 30, 2019, general rate case filing with the NCUC. Duke Energy Progress cannot predict the outcome of this matter.

2018 South Carolina Rate Case

On November 8, 2018, Duke Energy Progress filed an application with the PSCSC for a rate increase for retail customers of approximately \$59 million, which represents an approximate 10.3% increase in annual base revenues. The request for rate increase was driven by capital investments and environmental compliance progress made by Duke Energy Progress since its previous rate case, including the further implementation of Duke Energy Progress' generation modernization program, which consists of retiring, replacing and upgrading generation plants, investments in customer service technologies and continued investments in base work to maintain its transmission and distribution systems. The request included a decrease resulting from the Tax Act of \$17 million to reflect the change in ongoing tax expense, primarily the reduction in the federal income tax rate from 35% to 21%. The request also included \$10 million to return EDIT resulting from the federal tax rate change and deferred revenues since January 2018 related to the change (EDIT Rider) and a \$12 million increase due to the expiration of EDITS related to reductions in North Carolina state income taxes allocable to South Carolina.

Duke Energy Progress also requested approval of its proposed GIP, approval of a Prepaid Advantage Program and a variety of accounting orders related to ongoing costs for environmental compliance, including recovery over a five-year period of \$51 million of deferred coal ash related compliance costs, AMI deployment, grid investments between rate changes and regulatory asset treatment related to the retirement of a generating plant located in Asheville, North Carolina. Finally, Duke Energy Progress sought approval to establish a reserve and accrual for end-of-life nuclear costs for materials and supplies and nuclear fuel. On March 8, 2019, the ORS moved to establish a new and separate hearing docket to review and consider the GIP proposed by Duke Energy Progress. Subsequently, on March 12, 2019, the ORS and Duke Energy Carolinas executed a Stipulation resolving the ORS's motion, and Duke Energy Progress agreed to the Stipulation, as did other parties in the rate case. The Stipulation provides that costs incurred for the GIP after January 1, 2019, would be deferred with a return, with all costs subject to evaluation in a future rate proceeding. The Stipulation was approved by the PSCSC on June 19, 2019. On December 16, 2019, Duke Energy Progress and Duke Energy Carolinas filed a Joint Petition to Establish an Informational Docket for Review and Consideration of Grid Improvement Plans through which Duke Energy Progress and Duke Energy Carolinas would provide interested stakeholders information on the companies' grid activities. The PSCSC requested parties comment on procedural matters by January 31; accordingly, various groups filed comments, none of which opposed an informational docket. Duke Energy Progress cannot predict the outcome of this matter.

After hearings in April 2019, the PSCSC issued an order on May 21, 2019, which included a return on equity of 9.5% and a capital structure of 53% equity and 47% debt. The order also included the following material components:

- Approval of recovery of \$4 million of coal ash costs over a five-year period with a return at Duke Energy Progress' WACC;

- Denial of recovery of \$65 million of certain coal ash costs deemed to be related to the Coal Ash Act and incremental to the federal CCR rule;
- Approval of a \$17 million decrease to base rates to reflect the change in ongoing tax expense, primarily the reduction in the federal income tax rate from 35% to 21%;
- Approval of a \$12 million decrease through the EDIT Tax Savings Rider resulting from the federal tax rate change and deferred revenues since January 2018 related to the change, to be returned in accordance with ARAM for protected EDIT, over a 20-year period for unprotected EDIT associated with Property, Plant and Equipment, over a five-year period for unprotected EDIT not associated with Property, Plant and Equipment and over a three-year period for the deferred revenues; and
- Approval of a \$12 million increase due to the expiration of EDIT related to reductions in the North Carolina state income tax rate from 6.9% to 2.5%.

As a result of the order, revised customer rates were effective June 1, 2019. On May 31, 2019, Duke Energy Progress filed a Petition for Rehearing or Reconsideration of that order contending substantial rights of Duke Energy Progress were prejudiced by unlawful, arbitrary and capricious rulings by the commission on certain issues presented in the proceeding. On June 19, 2019, the PSCSC issued a Directive denying Duke Energy Progress' request to rehear or reconsider the commission's rulings on certain issues presented in the proceeding including coal ash remediation and disposal costs, return on equity and the recovery of a return on deferred operation and maintenance expenses, but allowing additional litigation-related costs. As a result of the Directive allowing litigation-related costs, customer rates were revised effective July 1, 2019. An order detailing the commission's decision in the Directive was issued on October 18, 2019. Duke Energy Progress filed a notice of appeal on November 15, 2019, with the South Carolina Supreme Court. The ORS filed a Notice of Cross Appeal on November 20, 2019. On January 8, 2020, Duke Energy Progress and the ORS filed a joint motion to extend briefing schedule deadlines. Appellant briefs are due on March 2, 2020, and Appellee response briefs are on May 15, 2020. On February 12, 2020, Duke Energy Progress and the ORS filed a joint motion to extend briefing deadlines by 30 days. Based on legal analysis and the filing of the appeal, Duke Energy Progress has not recorded an adjustment for its deferred coal ash costs. Duke Energy Progress cannot predict the outcome of this matter.

Western Carolinas Modernization Plan

On November 4, 2015, Duke Energy Progress announced a Western Carolinas Modernization Plan, which included retirement of the existing Asheville coal-fired plant, the construction of two 280 MW combined-cycle natural gas plants having dual-fuel capability, with the option to build a third natural gas simple cycle unit in 2023 based upon the outcome of initiatives to reduce the region's power demand. The plan also included upgrades to existing transmission lines and substations, installation of solar generation and a pilot battery storage project. Duke Energy Progress worked with the local natural gas distribution company to upgrade and lease an existing natural gas pipeline to serve the natural gas plant. The lease for the new pipeline became effective on March 2, 2019.

On March 28, 2016, the NCUC issued an order approving a CPCN for the new combined-cycle natural gas plants, but is requiring Duke Energy Progress to refile for CPCN approval for the contingent simple cycle unit. On March 28, 2019, Duke Energy Progress filed an annual progress report for the construction of the combined-cycle plants with the NCUC, with an estimated cost of \$893 million.

On December 27, 2019, Asheville Combined Cycle Power Block 1 and the common systems that serve both combined cycle units went into commercial operation. Power Block 1 consists of the Unit 5 Combustion Turbine and Unit 6 Steam Turbine Generator (which together form the first combined cycle unit approved in the CPCN Order). Power Block 2 consists of the Unit 7 Combustion Turbine and Unit 8 Steam Turbine Generator (which together form the second combined cycle unit approved in the CPCN Order). Duke Energy Progress placed the Unit 7 Combustion Turbine portion of Power Block 2 into commercial operation in simple-cycle mode on January 15, 2020. Duke Energy Progress currently expects to place the Unit 8 Steam Turbine Generator into commercial operation in the first quarter of 2020, after final testing has been completed.

On October 8, 2018, Duke Energy Progress filed an application with the NCUC for a CPCN to construct the Hot Springs Microgrid Solar and Battery Storage Facility. On March 22, 2019, Duke Energy Progress and the Public Staff filed a Joint Proposed Order. On May 10, 2019, the NCUC issued an Order Granting Certificate of Public Convenience and Necessity with Conditions. On November 19, 2019, Duke Energy Progress filed a semiannual progress report for its Hot Springs Microgrid Solar and Battery Storage Facility. As required by an NCUC order issued December 6, 2019, an updated progress report was filed on January 15, 2020. Construction is expected to begin in March 2020 with commercial operation expected to begin in September 2020.

The carrying value of the 376-MW Asheville coal-fired plant, including associated ash basin closure costs, of \$214 million and \$327 million is included in Generation facilities to be retired, net on Duke Energy Progress' Consolidated Balance Sheets as of December 31, 2019, and 2018, respectively. Duke Energy Progress' request for a regulatory asset at the time of retirement with amortization over a 10-year period was approved by the NCUC on February 23, 2018. Duke Energy Progress retired the Asheville coal-fired plant on January 29, 2020.

FERC Return on Equity Complaint

On October 11, 2019, NCEMPA filed a complaint at FERC against Duke Energy Progress pursuant to Section 206 of the Federal Power Act (FPA). The complaint alleges that the return on equity component in the formula rate contained within the Full Requirements Power Purchase Agreement (FRPPA) is unjust and unreasonable. The FRPPA's return on equity is 11% as applied to the Production Capacity Rate for the full requirements service provided by Duke Energy Progress. The complaint does not definitively propose a replacement return on equity. Under FPA Section 206, the earliest refund effective date that FERC can establish is the date of the filing of the complaint. The complaint could raise risks across the Duke Energy Progress wholesale business because, depending on how FERC treats NCEMPA's complaint, other parties may come forward with similar complaints. Duke Energy Progress cannot predict the outcome of this matter.

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,		Earns/Pays a Return	Recovery/Refund Period Ends
	2019	2018		
Regulatory Assets^(a)				
AROs – coal ash ^(c)	\$ 9	\$ 10		(b)
AROs – nuclear and other ^(c)	159	172		(b)
Accrued pension and OPEB ^(c)	474	532	Yes	(g)
Storm cost deferrals ^(c)	413	382	(e)	2021
Nuclear asset securitized balance, net	1,042	1,093		2036
Deferred fuel and purchased power	39	203	(f)	2021
Hedge costs deferrals	44	20		2038
DSM/EE ^(c)	25	21	Yes	2024
AMI ^(c)	53	60	Yes	2032
Retired generation facilities ^(c)	183	219	Yes	(b)
Other	172	176	(d)	(b)
Total regulatory assets	2,613	2,888		
Less: current portion	419	434		
Total noncurrent regulatory assets	\$ 2,194	\$ 2,454		
Regulatory Liabilities^(a)				
Net regulatory liability related to income taxes ^(c)	\$ 793	\$ 847		(b)
Costs of removal ^(c)	267	257	(d)	(b)
Accrued pension and OPEB	—	56	Yes	(g)
Deferred fuel and purchased power ^(c)	1	16	(f)	2021
Other	26	20	(d)	(b)
Total regulatory liabilities	1,087	1,196		
Less: current portion	94	102		
Total noncurrent regulatory liabilities	\$ 993	\$ 1,094		

- (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.

Storm Restoration Cost Recovery

In September 2017, Duke Energy Florida's service territory suffered significant damage from Hurricane Irma, resulting in approximately 1 million customers experiencing outages. In the fourth quarter of 2017, Duke Energy Florida also incurred preparation costs related to Hurricane Nate. On December 28, 2017, Duke Energy Florida filed a petition with the FPSC to recover incremental storm restoration costs for Hurricane Irma and Hurricane Nate and to replenish the storm reserve. On February 6, 2018, the FPSC approved a stipulation that would apply tax savings resulting from the Tax Act toward storm costs effective January 2018 in lieu of implementing a storm surcharge. On May 31, 2018, Duke Energy Florida filed a petition for approval of actual storm restoration costs and associated recovery process related to Hurricane Irma and Hurricane Nate. The petition sought the approval for the recovery in the amount of \$510 million in actual recoverable storm restoration costs, including the replenishment of Duke Energy Florida's storm reserve of \$132 million, and the process for recovering these recoverable storm costs. On August 20, 2018, the FPSC approved Duke Energy Florida's unopposed Motion for Continuance filed August 17, 2018, to allow for an evidentiary hearing in this matter. On January 28, 2019, Duke Energy Florida made a supplemental filing to reduce the total storm cost recovery from \$510 million to \$508 million. On April 3, 2019, the FPSC issued an Order abating all remaining filing dates. On April 9, 2019, Duke Energy Florida filed an unopposed motion to approve a settlement agreement resolving all outstanding issues in this docket. On June 13, 2019, the FPSC issued its order approving the settlement agreement. The Storm Cost Settlement Agreement obligates Duke Energy Florida to capitalize \$18 million of storm costs and remove \$6 million of operating and maintenance expense, thereby reducing the requested storm cost recovery amount by \$24 million. Duke Energy Florida will also implement process changes with respect to storm cost restoration. At December 31, 2019, and December 31, 2018, Duke Energy Florida's Consolidated Balance Sheets included approximately \$43 million and \$217 million, respectively, of recoverable costs under the FPSC's storm rule in Regulatory assets within Current Assets and Other Noncurrent Assets related to storm recovery for Hurricane Irma and Hurricane Nate.

In October 2018, Duke Energy Florida's service territory suffered damage when Hurricane Michael made landfall as a Category 5 hurricane with maximum sustained winds of 160 mph. The storm caused catastrophic damage from wind and storm surge, particularly from Panama City Beach to Mexico Beach, resulting in widespread outages and significant damage to transmission and distribution facilities across the central Florida Panhandle. In response to Hurricane Michael, Duke Energy Florida restored service to approximately 72,000 customers. Total estimated incremental operation and maintenance and capital costs are \$311 million. Approximately \$107 million and \$35 million of the costs are included in Net property, plant and equipment on the Consolidated Balance Sheets as of December 31, 2019, and December 31, 2018, respectively. Approximately \$204 million and \$165 million of costs are included in Regulatory assets within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2019, and December 31, 2018, respectively, representing recoverable costs under the FPSC's storm rule and Duke Energy Florida's OATT formula rates.

Duke Energy Florida filed a petition with the FPSC on April 30, 2019, to recover the retail portion of incremental storm restoration costs for Hurricane Michael. On June 11, 2019, the FPSC approved the petition for recovery of incremental storm restoration costs related to Hurricane Michael. The FPSC also approved the stipulation Duke Energy Florida filed, which will allow Duke Energy Florida to use the tax savings resulting from the Tax Act to recover these storm costs in lieu of implementing a storm surcharge. Approved storm costs are currently expected to be fully recovered by approximately year-end 2021. On November 22, 2019, Duke Energy Florida filed a petition for approval of actual retail recoverable storm restoration costs related to Hurricane Michael in the amount of \$191 million plus interest. An Order Establishing Procedure was issued on January 30, 2020, and hearings are scheduled to begin September 15, 2020. Duke Energy Florida cannot predict the outcome of this matter.

Hurricane Dorian

In September 2019, Duke Energy Florida's service territory was threatened by Hurricane Dorian with landfall as a possible Category 5 hurricane. For several days, various forecasts and models predicted significant impact to Duke Energy Florida's service territory; accordingly, Duke Energy Florida incurred costs to secure necessary resources to be prepared for that potential impact. Although Hurricane Dorian never made landfall in Florida, its effects were still felt, and outages did occur. Preparations were required so that, if Hurricane Dorian had made landfall and impacts had been more severe, Duke Energy Florida would have been prepared to restore its customers' power in a timely fashion.

Total current estimated incremental costs are approximately \$167 million. These costs are included in Regulatory assets within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2019, representing recoverable costs under the FPSC's storm rule and Duke Energy Florida's OATT formula rates. On December 19, 2019, Duke Energy Florida filed a petition with the FPSC to recover the estimated retail portion of these costs, consistent with the provisions in the 2017 Settlement. The request seeks recovery over a 12-month period beginning in March 2020. The final actual amount will be filed later in 2020 and a hearing will be held at the FPSC to determine the final amount of incremental costs. Duke Energy Florida cannot predict the outcome of this matter.

Tax Act

Pursuant to Duke Energy Florida's 2017 Settlement, on May 31, 2018, Duke Energy Florida filed a petition related to the Tax Act, which included revenue requirement impacts of annual tax savings of \$134 million and estimated annual amortization of EDIT of \$67 million for a total of \$201 million. Of this amount, \$50 million would be offset by accelerated depreciation of Crystal River 4 and 5 coal units and an estimated \$151 million would be offset by Hurricane Irma storm cost recovery as explained in the Storm Restoration Cost Recovery section above. On December 27, 2018, Duke Energy Florida filed actual EDIT balances and amortization based on its 2017 filed tax return. This increased the revenue requirement impact of the amortization of EDIT by \$4 million, from \$67 million to \$71 million, which increased the total storm amortization from \$151 million to \$155 million. On January 8, 2019, the FPSC approved a joint motion by Duke Energy Florida and the Office of Public Counsel resolving all stipulated positions. As part of that stipulation, Duke Energy Florida agreed to seek a Private Letter Ruling (PLR) from the IRS on its treatment of cost of removal (COR) as mostly protected by tax normalization rules. If the IRS rules that COR is not protected by tax normalization rules, then Duke Energy Florida will make a final adjustment to the amortization of EDIT and an adjustment to the storm recovery amount retroactive to January 2018. The IRS has communicated that it will not issue individual PLRs on the treatment of COR. Rather, the IRS is drafting a notice that will request comments on a number of issues, including COR, and the IRS plans to issue industrywide guidance on those issues. Duke Energy Florida cannot predict the outcome of this matter.

Citrus County CC

Construction of the 1,640-MW combined-cycle natural gas plant in Citrus County, Florida, began in October 2015 with an estimated cost of \$1.5 billion, including AFUDC. Both units came on-line in the fourth quarter of 2018. The ultimate cost of the facility was estimated to be \$1.6 billion, and Duke Energy Florida recorded Impairment charges on Duke Energy's Consolidated Statements of Operations of \$60 million in the fourth quarter of 2018 for the overrun. In the year ended December 31, 2019, Duke Energy Florida recorded a \$36 million reduction to the prior-year impairment due to a decrease in the cost estimate of the Citrus County CC, primarily related to the settlement agreement with Fluor, the EPC contractor. This adjustment reduced the estimated cost of the facility to \$1.5 billion.

Solar Base Rate Adjustment

On July 31, 2018, Duke Energy Florida petitioned the FPSC to include in base rates the revenue requirements for its first two solar generation projects, the Hamilton Project and the Columbia Project, as authorized by the 2017 Settlement. The Hamilton Project, which was placed into service on December 22, 2018, has an annual retail revenue requirement of \$15 million. At its October 30, 2018, Agenda Conference, the FPSC approved the rate increase related to the Hamilton Project to go into effect beginning with the first billing cycle in January 2019 under its file and suspend authority, and revised customer rates became effective in January 2019. The Columbia Project has a projected annual revenue requirement of \$14 million and a projected in-service date in early 2020; the associated rate increase would take place with the first month's billing cycle after the Columbia Project goes into service. On April 2, 2019, the commission approved both solar projects as filed.

On March 25, 2019, Duke Energy Florida petitioned the FPSC to include in base rates the revenue requirements for its next wave of solar generation projects, the Trenton, Lake Placid and DeBary Solar Projects, as authorized by the 2017 Settlement. The annual retail revenue requirement for the Trenton and Lake Placid Projects is \$13 million and \$8 million, respectively, and were placed into service in December 2019 with rates taking effect in January 2020. The DeBary Project has a projected annual revenue requirement of \$11 million and a projected in-service date in the first half of 2020. The associated rate increase would take place with the first month's billing cycle after each solar generation project goes into service. On July 22, 2019, the FPSC issued an order approving Duke Energy Florida's request.

Crystal River Unit 3 Accelerated Decommissioning Filing

On May 29, 2019, Duke Energy Florida entered into a Decommissioning Services Agreement for the accelerated decommissioning of the Crystal River Unit 3 nuclear power station located in Citrus County, Florida, with ADP CR3, LLC and ADP SF1, LLC, each of which is a wholly owned subsidiary of Accelerated Decommissioning Partners, LLC, a joint venture between NorthStar Group Services, Inc. and Orano USA LLC. Closing of this agreement is contingent upon the approval of the NRC and FPSC. If approved, the decommissioning will be accelerated starting in 2020 and continuing through 2027, rather than the expected time frame under SAFSTOR of starting in 2067 and ending in 2074. Duke Energy Florida expects that the assets of the Nuclear Decommissioning Trust Fund will be sufficient to cover the contract price. On July 10, 2019, Duke Energy Florida petitioned the FPSC for approval of the agreement. 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,		Earns/Pays a Return	Recovery/Refund Period Ends
	2019	2018		
Regulatory Assets^(a)				
AROs – coal ash	\$ 16	\$ 20	Yes	(b)
Accrued pension and OPEB	155	146		(g)
Storm cost deferrals	7	4		2023
Deferred fuel and purchased power	1	2		2020
Hedge costs deferrals	6	5		(b)
DSM/EE	2	10	(f)	(e)
AMI	40	46		(b)
PISCC and deferred operating expenses ^(c)	17	17	Yes	2083
Vacation accrual	5	5		2020
MGP	102	99		(b)
Deferred pipeline integrity costs	17	14	Yes	(b)
East Bend deferrals	44	47	Yes	(b)
Transmission expansion obligation	40	43		(e)
Grid modernization	28	31	Yes	(b) (c)
Other	118	75		(b)
Total regulatory assets	598	564		
Less: current portion	49	33		
Total noncurrent regulatory assets	\$ 549	\$ 531		
Regulatory Liabilities^(a)				
Net regulatory liability related to income taxes	\$ 654	\$ 678		(b)
Costs of removal	86	126		(d)
Accrued pension and OPEB	16	18		(g)
Other	71	75		(b)
Total regulatory liabilities	827	897		
Less: current portion	64	57		
Total noncurrent regulatory liabilities	\$ 763	\$ 840		

(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 via a rider mechanism.

(f) Includes incentives on DSM/EE investments.

(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.

2017 Electric Security Plan Filing

On June 1, 2017, Duke Energy Ohio filed with the PUCO a request for a standard service offer in the form of an Electric Security Plan (ESP). On February 15, 2018, the procedural schedule was suspended to facilitate ongoing settlement discussions. On April 13, 2018, Duke Energy Ohio filed a Motion to consolidate this proceeding with several other cases pending before the PUCO, including, but not limited to, its Electric Base Rate Case. Additionally, on April 13, 2018, Duke Energy Ohio, along with certain intervenors, filed a Stipulation and Recommendation (Stipulation) with the PUCO resolving certain issues in this proceeding. The term of the ESP would be from June 1, 2018, to May 31, 2025, and included continuation of market-based customer rates through competitive procurement processes for generation, continuation and expansion of existing rider mechanisms and proposed new rider mechanisms relating to regulatory mandates, costs incurred to enhance the customer experience and transform the grid and a service reliability rider for vegetation management. The Stipulation established a regulatory model for the next seven years via the approval of the ESP and continued the current model for procuring supply for non-shopping customers, including recovery mechanisms. On December 19, 2018, the PUCO approved the Stipulation without material modification. Several parties, including the OCC, filed applications for rehearing. On February 6, 2019, the PUCO granted the parties rehearing. The PUCO issued its Second Entry on Rehearing on July 17, 2019, upholding its December 19, 2018, order and denying all assignments of error raised by the non-stipulating parties. On October 11, 2019, the OCC filed its Third Application for Rehearing arguing the PUCO erred in finding OCC's Second Application for Rehearing as improper. Duke Energy Ohio filed its Memorandum Contra on October 21, 2019. The PUCO denied OCC's Third Application for Rehearing as a matter of law. On September 13, 2019, Interstate Gas Supply/Retail Supply Association filed appeals to the Ohio Supreme Court claiming the PUCO's order was in error because it approved unsupported charges to competitive suppliers and cost subsidies shopping customers pay for non-shopping customers. On September 16, 2019, the OCC filed an appeal challenging the PUCO's approval of OVEC recovery through Rider PSR alleging the FPA pre-empts the commission's jurisdiction and that the record does not support finding that Rider PSR results in a limitation on shopping. Appellant briefs were filed on January 6, 2020. Appellee briefs will be due March 16, 2020. Duke Energy Ohio cannot predict the outcome of this matter.

Electric Base Rate Case

Duke Energy Ohio filed with the PUCO an electric distribution base rate case application and supporting testimony in March 2017. Duke Energy Ohio requested an estimated annual increase of approximately \$15 million and a return on equity of 10.4%. The application also included requests to continue certain current riders and establish new riders. On September 26, 2017, the PUCO staff filed a report recommending a revenue decrease between approximately \$18 million and \$29 million and a return on equity between 9.22% and 10.24%. On April 13, 2018, Duke Energy Ohio filed a Motion to consolidate this proceeding with several other cases pending before the PUCO. On April 13, 2018, Duke Energy Ohio, along with certain intervenors, filed the Stipulation with the PUCO resolving numerous issues including those in this base rate proceeding. Major components of the Stipulation related to the base distribution rate case included a \$19 million decrease in annual base distribution revenue with a return on equity unchanged from the current rate of 9.84% based upon a capital structure of 50.75% equity and 49.25% debt. Upon approval of new rates, Duke Energy Ohio's rider for recovering its initial SmartGrid implementation ended as these costs would be recovered through base rates. The Stipulation also renewed 14 existing riders, some of which were included in the company's ESP, and added two new riders including the Enhanced Service Reliability Rider to recover vegetation management costs not included in base rates, up to \$10 million per year (operation and maintenance only) and the PowerForward Rider to recover costs incurred to enhance the customer experience and further transform the grid (operation and maintenance and capital). In addition to the changes in revenue attributable to the Stipulation, Duke Energy Ohio's capital-related riders, including the Distribution Capital Investments Rider, began to reflect the lower federal income tax rate associated with the Tax Act with updates to customers' bills beginning April 1, 2018. This change reduced electric revenue by approximately \$20 million on an annualized basis. On December 19, 2018, the PUCO approved the Stipulation without material modification. New base rates were implemented effective January 2, 2019. Several parties including the OCC filed applications for rehearing. On February 6, 2019, the PUCO granted the parties rehearing. The PUCO issued its Second Entry on Rehearing on July 17, 2019, upholding its December 19, 2018, order and denying all assignments of error raised by the non-stipulating parties. On October 11, 2019, the OCC filed its Third Application for Rehearing arguing the PUCO erred in finding OCC's Second Application for Rehearing as improper. Duke Energy Ohio filed its Memorandum Contra on October 21, 2019. The PUCO denied OCC's Third Application for Rehearing as a matter of law. On September 13, 2019, Interstate Gas Supply/Retail Supply Association filed appeals to the Ohio Supreme Court claiming the PUCO's order was in error because it approved unsupported charges to competitive suppliers and cost subsidies shopping customers pay for non-shopping customers. On September 16, 2019, the OCC filed an appeal challenging the PUCO's approval of OVEC recovery through Rider PSR alleging the FPA pre-empts the commission's jurisdiction and that the record does not support finding that Rider PSR results in a limitation on shopping. Appellant briefs were filed on January 6, 2020. Appellee briefs will be due March 16, 2020. Duke Energy Ohio cannot predict the outcome of this matter.

Ohio Valley Electric Corporation

On March 31, 2017, Duke Energy Ohio filed for approval to adjust its existing Rider PSR to pass through net costs related to its contractual entitlement to capacity and energy from the generating assets owned by OVEC. Duke Energy Ohio sought deferral authority for net costs incurred from April 1, 2017, until the new rates under Rider PSR were put into effect. On April 13, 2018, Duke Energy Ohio filed a Motion to consolidate this proceeding with several other cases currently pending before the PUCO. Also, on April 13, 2018, Duke Energy Ohio, along with certain intervenors, filed a Stipulation with the PUCO resolving numerous issues including those related to Rider PSR. The Stipulation activated Rider PSR for recovery of net costs incurred from January 1, 2018, through May 2025. On December 19, 2018, the PUCO approved the Stipulation without material modification. The PSR rider became effective April 1, 2019. Several parties, including the OCC, filed applications for rehearing. On February 6, 2019, the PUCO granted the parties rehearing. The PUCO issued its Second Entry on Rehearing on July 17, 2019, upholding its December 19, 2018, order and denying all assignments of error raised by the non-stipulating parties. On October 11, 2019, the OCC filed its Third Application for Rehearing arguing the PUCO erred in finding OCC's Second Application for Rehearing as improper. Duke Energy Ohio filed its Memorandum Contra on October 21, 2019. The PUCO denied OCC's Third Application for Rehearing as a matter of law. On September 13, 2019, Interstate Gas Supply/Retail Supply Association filed appeals to the Ohio Supreme Court claiming the PUCO's order was in error because it approved unsupported charges to competitive suppliers and cost subsidies shopping customers pay for non-shopping customers. On September 16, 2019, the OCC filed an appeal challenging the PUCO's approval of OVEC recovery through Rider PSR alleging the FPA pre-empts the commission's jurisdiction and that the record does not support finding that Rider PSR results in a limitation on shopping. Appellant briefs were filed on January 6, 2020. Appellee briefs will be due March 16, 2020. Duke Energy Ohio cannot predict the outcome of this matter.

On July 23, 2019, an Ohio bill was signed into law that became effective January 1, 2020. Among other things, the bill allows for recovery of prudently incurred costs, net of any revenues, for Ohio investor-owned utilities that are participants under the OVEC power agreement. The recovery shall be through a non-bypassable rider that is to replace any existing recovery mechanism approved by the PUCO and will remain in place through 2030. The amounts recoverable from customers will be subject to an annual cap, with incremental costs that exceed such cap eligible for deferral and recovery subject to review. See Note 18 for additional discussion of Duke Energy Ohio's ownership interest in OVEC.

Tax Act – Ohio

On July 25, 2018, Duke Energy Ohio filed an application to establish a new rider to implement the benefits of the Tax Act for electric distribution customers. The new rider will flow through to customers the benefit of the lower 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 will be refunded consistent with federal law and deferred income taxes not subject to normalization rules will be refunded over a 10-year period. Duke Energy Ohio's transmission rates reflect lower federal income tax but guidance from FERC on amortization of both protected and unprotected transmission-related EDITs is still pending. On October 24, 2018, the PUCO issued a Finding and Order that, among other things, directed all utilities over which the commission has ratemaking authority to file an application to pass the benefits of the Tax Act to customers by January 1, 2019, unless otherwise exempted or directed by the PUCO. Duke Energy Ohio's July 25, 2018, filing for electric distribution operations is consistent with the commission's October 24, 2018, Finding and Order and no further action is needed. On February 20, 2019, the PUCO approved the application without material modification. Rates became effective March 1, 2019.

On December 21, 2018, Duke Energy Ohio filed an application to change its base rates and establish a new rider to implement the benefits of the Tax Act for natural gas customers. Duke Energy Ohio requested commission approval to implement the changes and rider effective April 1, 2019. The new rider will flow through to customers the benefit of the lower 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 will be refunded consistent with federal law and deferred income taxes not subject to normalization rules will be refunded over a 10-year period. The PUCO established a procedural schedule and testimony was filed on July 31, 2019. An evidentiary hearing occurred on August 7, 2019. Initial briefs were filed on September 11, 2019. Reply briefs were filed on September 25, 2019. Duke Energy Ohio cannot predict the outcome of this matter.

Energy Efficiency Cost Recovery

On March 28, 2014, Duke Energy Ohio filed an application for recovery of program costs, lost distribution revenue and performance incentives related to its energy efficiency and peak demand reduction programs. These programs are undertaken to comply with environmental mandates set forth in Ohio law. The PUCO approved Duke Energy Ohio's application but found that Duke Energy Ohio was not permitted to use banked energy savings from previous years in order to calculate the amount of allowed incentive. This conclusion represented a change to the cost recovery mechanism that had been agreed upon by intervenors and approved by the PUCO in previous cases. The PUCO granted the applications for rehearing filed by Duke Energy Ohio and an intervenor. On January 6, 2016, Duke Energy Ohio and the PUCO Staff entered into a stipulation, pending the PUCO's approval, to resolve issues related to performance incentives and the PUCO Staff audit of 2013 costs, among other issues. In December 2015, based upon the stipulation, Duke Energy Ohio re-established approximately \$20 million of the revenues that had been previously reversed. On October 26, 2016, the PUCO issued an order approving the stipulation without modification. In December 2016, the PUCO granted the intervenors request for rehearing for the purpose of further review. On April 10, 2019, the PUCO issued an Entry on Rehearing denying the rehearing applications.

On June 15, 2016, Duke Energy Ohio filed an application for approval of a three-year energy efficiency and peak demand reduction portfolio of programs. A stipulation and modified stipulation were filed on December 22, 2016, and January 27, 2017, respectively. Under the terms of the stipulations, which included support for deferral authority of all costs and a cap on shared savings incentives, Duke Energy Ohio has offered its energy efficiency and peak demand reduction programs throughout 2017. On February 3, 2017, Duke Energy Ohio filed for deferral authority of its costs incurred in 2017 in respect of its proposed energy efficiency and peak demand reduction portfolio. On September 27, 2017, the PUCO issued an order approving a modified stipulation. The modifications impose an annual cap of approximately \$38 million on program costs and shared savings incentives combined, but allowed for Duke Energy Ohio to file for a waiver of costs in excess of the cap in 2017. The PUCO approved the waiver request for 2017 up to a total cost of \$56 million. On November 21, 2017, the PUCO granted Duke Energy Ohio's and intervenor's applications for rehearing of the September 27, 2017, order. On January 10, 2018, the PUCO denied the OCC's application for rehearing of the PUCO order granting Duke Energy Ohio's waiver request; however, a decision on Duke Energy Ohio's application for rehearing remains pending. On October 15, 2019, the Ohio Supreme Court issued an Opinion regarding a similar cap on energy efficiency imposed by the PUCO on Ohio Edison Company finding the PUCO lacked statutory authority to impose a cap on cost recovery. On December 9, 2019, and in response to recent changes to Ohio Law, the OCC filed a motion to eliminate shared savings from Duke Energy Ohio's energy efficiency calculation beginning in 2020. Duke Energy Ohio filed a memorandum contra and a notice of additional authority on December 16, 2019, arguing OCC's interpretation is incorrect and that the commission should amend its September 27, 2017 order to comply with recent precedent. Duke Energy Ohio cannot predict the outcome of this matter.

2014 Electric Security Plan

On May 30, 2018, the PUCO approved an extension of Duke Energy Ohio's then-current ESP, including all terms and conditions thereof, excluding an extension of Duke Energy Ohio's Distribution Capital Investment Rider. Following rehearing, on July 25, 2018, the PUCO granted the request and allowed a continuing cap on recovery under Rider DCI. The orders were upheld on rehearing requested by the Ohio Manufacturers' Association (OMA) and OCC. The time period for parties to file for rehearing or appeal has expired.

In 2018, the OMA and OCC filed separate appeals of PUCO's approval of Duke Energy Ohio's ESP with the Ohio Supreme Court, challenging PUCO's approval of Duke Energy Ohio's Rider PSR as a placeholder and its Rider DCI to recover incremental revenue requirement for distribution capital since Duke Energy Ohio's last base rate case. The Ohio Supreme Court issued an order on March 13, 2019, for the appellants to show cause why the appeals should not be dismissed as moot in light of the commission's approval of Duke Energy Ohio's current ESP. The OCC and OMA made the requested filings on March 20, 2019, and Duke Energy Ohio filed its response on March 27, 2019. Subsequent to OCC and OMA making the requested filings, the Ohio Supreme Court dismissed the appeals as moot on May 8, 2019.

Natural Gas Pipeline Extension

Duke Energy Ohio is proposing to install 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. Duke Energy Ohio currently estimates the pipeline development costs and construction activities will range from \$163 million to \$245 million in direct costs (excluding overheads and AFUDC). On January 20, 2017, Duke Energy Ohio filed an amended application with the Ohio Power Siting Board (OPSB) for approval of one of two proposed routes. A public hearing was held on June 15, 2017. In April 2018, Duke Energy Ohio filed a motion with OPSB to establish a procedural schedule and filed supplemental information supporting its application. On December 18, 2018, the OPSB established a procedural schedule that included a local public hearing on March 21, 2019. An evidentiary hearing began on April 9, 2019, and concluded on April 11, 2019. Briefs were filed on May 13, 2019, and reply briefs were filed on June 10, 2019. On November 21, 2019, the OPSB approved Duke Energy Ohio's application subject to 41 conditions on construction. Applications for rehearing were filed by several stakeholders on December 23, 2019, arguing that the OPSB approval was incorrect. Duke Energy Ohio filed a memorandum contra on January 2, 2020. On January 17, 2020, the OPSB granted rehearing for the purpose of further consideration. Construction of the pipeline extension is expected to be completed before the 2021/2022 winter season. Duke Energy Ohio cannot predict the outcome of this matter.

2012 Natural Gas Rate Case/MGP Cost Recovery

As part of its 2012 natural gas base rate case, Duke Energy Ohio has approval to defer and recover costs related to environmental remediation at two sites (East End and West End) that housed former MGP operations. Duke Energy Ohio has made annual applications for recovery of these deferred costs. Duke Energy Ohio has collected approximately \$55 million in environmental remediation costs between 2009 through 2012 through a separate rider, Rider MGP, which is currently suspended. Duke Energy Ohio has 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 rate case. To date, the PUCO has not ruled on Duke Energy Ohio's annual applications for the calendar years 2013 through 2017. On September 28, 2018, the staff of the PUCO issued a report recommending a disallowance of approximately \$12 million of the \$26 million in MGP remediation costs incurred between 2013 through 2017 that staff believes are not eligible for recovery. Staff interprets the PUCO's 2012 Order granting Duke Energy Ohio recovery of MGP remediation as limiting the recovery to work directly on the East End and West End sites. On October 30, 2018, Duke Energy Ohio filed reply comments objecting to the staff's recommendations and explaining, among other things, the obligation Duke Energy Ohio has under Ohio law to remediate all areas impacted by the former MGPs and not just physical property that housed the former plants and equipment. To date, the PUCO has not ruled on Duke Energy Ohio's applications. On March 29, 2019, Duke Energy Ohio filed its annual application to recover incremental remediation expense for the calendar year 2018 seeking recovery of approximately \$20 million in remediation costs. On July 12, 2019, the staff recommended a disallowance of approximately \$11 million for work that staff believes occurred in areas not authorized for recovery. Additionally, staff recommended that any discussion pertaining to Duke Energy Ohio's recovery of ongoing MGP costs should be directly tied to or netted against insurance proceeds collected by Duke Energy Ohio. An evidentiary hearing began on November 18, 2019, and concluded November 21, 2019. Initial briefs were filed on January 17, 2020, and reply briefs were filed on February 14, 2020. Duke Energy Ohio cannot predict the outcome of this matter.

The 2012 PUCO order also contained conditional deadlines for completing the MGP environmental investigation and remediation costs at the MGP sites. Subsequent to the order, the deadline was extended to December 31, 2019. On May 10, 2019, Duke Energy Ohio filed an application requesting a continuation of its existing deferral authority for MGP remediation and investigation that must occur after December 31, 2019. On September 13, 2019, intervenor comments were filed opposing Duke Energy Ohio's request for continuation of existing deferral authority and on October 2, 2019, Duke Energy Ohio filed reply comments. Duke Energy Ohio cannot predict the outcome of this matter.

Duke Energy Kentucky Natural Gas Base Rate Case

On August 31, 2018, Duke Energy Kentucky filed an application with the KPSC requesting an increase in natural gas base rates of approximately \$11 million, an approximate 11.1% average increase across all customer classes. The increase was net of approximately \$5 million in annual savings as a result of the Tax Act. The drivers for this case were capital invested since Duke Energy Kentucky's last rate case in 2009. Duke Energy Kentucky also sought implementation of a Weather Normalization Adjustment Mechanism, amortization of regulatory assets and to implement the impacts of the Tax Act, prospectively. On January 30, 2019, Duke Energy Kentucky entered into a settlement agreement with the Attorney General of Kentucky, the only intervenor in the case. The settlement provided for an approximate \$7 million increase in natural gas base revenue, a return on equity of 9.7% and approval of the proposed Weather Normalization Mechanism. A hearing was held on February 5, 2019. The commission issued its order approving the settlement without material modification on March 27, 2019. Revised customer rates were effective April 1, 2019.

Duke Energy Kentucky Electric Base Rate Case

On September 3, 2019, Duke Energy Kentucky filed a rate case with the KPSC requesting an increase in electric base rates of approximately \$46 million, which represents an approximate 12.5% increase across all customer classes. The request for rate increase is driven by increased investment in utility plant since the last electric base rate case in 2017. Duke Energy Kentucky seeks to implement a Storm Deferral Mechanism that will enable Duke Energy Kentucky to defer actual costs incurred for major storms that are over or under amounts in base rates. In response to large customers' desire to have access to renewable resources, Duke Energy Kentucky is proposing a Green Source Advantage tariff designed for those large customers that wish to invest in renewable energy resources to meet sustainability goals. Duke Energy Kentucky is proposing an electric vehicle (EV) infrastructure pilot and modest incentives to assist customers in investing in EV technologies. Additionally, Duke Energy Kentucky is proposing to build an approximate 3.4 MW distribution battery energy storage system to be attached to Duke Energy Kentucky's distribution system providing frequency regulation and enhanced reliability to Kentucky customers. The commission issued a procedural schedule with two rounds of discovery and opportunities for intervenor and rebuttal testimony. The Kentucky Attorney General filed its testimony recommending an increase of approximately \$26 million. On January 31, 2020, Duke Energy Kentucky filed rebuttal testimony updating its rate increase calculations to approximately \$44 million. Hearings began on February 19, 2020. Duke Energy Kentucky anticipates that rates will go into effect in the second quarter of 2020. Duke Energy Kentucky cannot predict the outcome of this matter.

Regional Transmission Organization Realignment

Duke Energy Ohio, including Duke Energy Kentucky, transferred control of its transmission assets from MISO to PJM, effective December 31, 2011. The PUCO approved a settlement related to Duke Energy Ohio's recovery of certain costs of the RTO realignment via a non-bypassable rider. Duke Energy Ohio is allowed to recover all MISO Transmission Expansion Planning (MTEP) costs directly or indirectly charged to Ohio customers. The KPSC also approved a request to effect the RTO realignment, subject to a commitment not to seek double recovery in a future rate case of the transmission expansion fees that may be charged by MISO and PJM in the same period or overlapping periods.

The following table provides a reconciliation of the beginning and ending balance of Duke Energy Ohio's recorded liability for its exit obligation and share of MTEP costs recorded in Other within Current Liabilities and Other Noncurrent Liabilities on the Consolidated Balance Sheets. The retail portions of MTEP costs billed by MISO are recovered by Duke Energy Ohio through a non-bypassable rider. As of December 31, 2019, and 2018, \$40 million and \$43 million, respectively, are recorded in Regulatory assets on Duke Energy Ohio's Consolidated Balance Sheets.

(in millions)	December 31, 2018	Provisions/ Adjustments	Cash Reductions	December 31, 2019
Duke Energy Ohio	\$ 58	\$ —	\$ (4)	\$ 54

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,		Earns/Pays	Recovery/Refund
	2019	2018	a Return	Period Ends
Regulatory Assets^(a)				
AROs – coal ash	\$ 529	\$ 450		(b)
Accrued pension and OPEB	243	222		(f)
Deferred fuel and purchased power	—	40		2020
Hedge costs deferrals	23	24		(b)
DSM/EE	—	14	(e)	(e)
AMI ^(c)	18	18	Yes	(b)
Retired generation facilities ^(c)	49	57	Yes	2026
PISCC and deferred operating expenses ^(c)	246	233	Yes	(b)
Vacation accrual	12	11		2020
Other	52	88		(b)
Total regulatory assets	1,172	1,157		
Less: current portion	90	175		
Total noncurrent regulatory assets	\$ 1,082	\$ 982		
Regulatory Liabilities^(a)				
Net regulatory liability related to income taxes	\$ 1,008	\$ 1,009		(b)
Costs of removal	599	628		(d)
Accrued pension and OPEB	90	67		(f)
Amounts to be refunded to customers	—	1		2020
Other	43	42		(b)
Total regulatory liabilities	1,740	1,747		
Less: current portion	55	25		
Total noncurrent regulatory liabilities	\$ 1,685	\$ 1,722		

(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) Includes incentives on DSM/EE investments and is recovered through a tracker mechanism over a two-year period.

(f) 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, its first general rate case in Indiana in 16 years, for a rate increase for retail customers of approximately \$395 million. The request for rate increase is driven by strategic investments to generate cleaner electricity, improve reliability and serve a growing customer base. The request is premised upon a Duke Energy Indiana rate base of \$10.2 billion as of December 31, 2018, and adjusted for projected changes through December 31, 2020. On September 9, 2019, Duke Energy Indiana revised its revenue request from \$395 million to \$393 million and filed updated testimony for the Retail Rate Case. The updated filing reflects a clarification in the presentation of Utility Receipts Tax, a \$2 million reduction in the revenue requirement for revenues that will remain in riders and changes to allocation of revenue requirements within rate classes. The Utility Receipts Tax is currently embedded in base rates and rider rates. The proposed treatment is to include the Utility Receipts Tax as a line item on the customer bill rather than included in rates. The request is an approximate 15% increase in retail revenues and approximately 17% when including estimated Utility Receipts Tax. 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. The commission determined to take two issues out of the rate case and place them in separate subdocket proceedings due to the complexity of the rate case. The commission moved the request for electric transportation pilot and future coal ash recovery issues to separate subdockets. Coal ash expenditures prior to 2019 are still included in the rate case. Hearings concluded on February 7, 2020 and rates are expected to be effective by mid-2020. Duke Energy Indiana cannot predict the outcome of these matters.

Edwardsport IGCC Plant

On September 20, 2018, Duke Energy Indiana, the Indiana Office of Utility Consumer Counselor, the Duke Industrial Group and Nucor Steel – Indiana entered into a settlement agreement to resolve IGCC ratemaking issues for calendar years 2018 and 2019. The agreement will remain in effect until new rates are established in Duke Energy Indiana's next base rate case, which was filed on July 2, 2019, with rates to be effective in mid-2020. An evidentiary hearing was held in December 2018, and on June 5, 2019, the IURC issued an order approving the 2018 Settlement Agreement.

Piedmont**Regulatory Assets and Liabilities**

The following tables present the regulatory assets and liabilities recorded on Piedmont's Consolidated Balance Sheets.

(in millions)	December 31,		Earns/Pays a Return	Recovery/Refund Period Ends
	2019	2018		
Regulatory Assets^(a)				
AROs – nuclear and other	16	19		(d)
Accrued pension and OPEB ^(c)	90	99	Yes	(f)
Vacation accrual	12	12		
Derivatives – natural gas supply contracts ^(e)	117	141		
Deferred pipeline integrity costs ^(c)	62	51	Yes	(b)
Amounts due from customers	36	24	Yes	(b)
Other	30	11		(b)
Total regulatory assets	363	357		
Less: current portion	73	54		
Total noncurrent regulatory assets	\$ 290	\$ 303		
Regulatory Liabilities^(a)				
Net regulatory liability related to income taxes	\$ 555	\$ 579		(b)
Costs of removal	574	564		(d)
Accrued pension and OPEB ^(c)	3	1	Yes	(f)
Amounts to be refunded to customers	34	33	Yes	(b)
Other	46	41		(b)
Total regulatory liabilities	1,212	1,218		
Less: current portion	81	37		
Total noncurrent regulatory liabilities	\$ 1,131	\$ 1,181		

(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) Balance will fluctuate with changes in the market. Current contracts extend into 2031.

(f) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 23 for additional detail.

North Carolina Integrity Management Rider Filing

On April 30, 2019, Piedmont filed a petition under the IMR mechanism to update rates, based on the eligible capital investments closed to integrity and safety projects over the six-month period ending March 31, 2019. The NCUC approved the petition on May 29, 2019, and rates became effective June 1, 2019. The effect of the update was an increase to annual revenues of approximately \$9 million. These revenues, along with eligible spending for the three months ended June 30, 2019, were subsequently included in base rates effective November 1, 2019, as part of the 2019 North Carolina Rate Case.

On October 31, 2019, Piedmont filed a petition under the IMR mechanism to update rates, based on the eligible capital investments closed to integrity and safety projects over the three-month period ending September 30, 2019. The NCUC approved the petition on December 3, 2019, and rates became effective December 1, 2019. The effect of the update was an increase to annual revenues of approximately \$11 million.

Tennessee Integrity Management Rider Filing

In November 2019, Piedmont filed a petition with the TPUC under the IMR mechanism to collect an additional \$4 million in annual revenues, effective January 2020, based on the eligible capital spending on integrity and safety projects over the 12-month period ending October 31, 2019. A procedural schedule has not yet been set for this matter. Piedmont cannot predict the outcome of this matter.

2019 North Carolina Rate Case

On April 1, 2019, Piedmont filed an application with the NCUC, its first general rate case in North Carolina in six years, for a rate increase for retail customers of approximately \$83 million, which represents an approximate 9% increase in retail revenues. The request for rate increase was driven by significant infrastructure upgrade investments (plant additions) since the last general rate case through June 30, 2019, offset by savings that customers will begin receiving due to federal and state tax reform. Approximately half of the plant additions being included in rate base are categories of plant investment not covered under the IMR mechanism, which was originally approved as part of the 2013 North Carolina Rate Case.

On August 13, 2019, Piedmont, the Public Staff, and two groups representing industrial customers filed an Agreement and Stipulation Settlement resolving issues in the base rate proceeding, which included a return on equity of 9.7% and a capital structure of 52% equity and 48% debt. The North Carolina Attorney General's Office did not support the settlement. Other major components of the Stipulation included:

- An annual increase in revenues of \$109 million before consideration of riders associated with federal and state tax reform;
- A decrease through a rider mechanism of \$23 million per year to return unprotected federal EDIT over a five-year period and deferred revenues related to the federal rate reduction of \$37 million to be returned over one year;
- A decrease through a rider mechanism of \$21 million per year related to reductions in the North Carolina state income tax rate to be returned over a three-year period;
- An overall cap on net revenue increase of \$83 million. This will impact Piedmont beginning November 1, 2022, only if the company does not file another general rate case in the interim;
- Continuation of the IMR mechanism; and
- Establishment of a new deferral mechanism for certain Distribution Integrity Management Program (DIMP) operations and maintenance expenses incurred effective November 1, 2019, and thereafter.

An evidentiary hearing began on August 19, 2019. On October 31, 2019, the NCUC approved the Stipulation and the revised customer rates were effective November 1, 2019.

OTHER REGULATORY MATTERS**Atlantic Coast Pipeline, LLC**

On September 2, 2014, Duke Energy, Dominion Energy, Inc. (Dominion), Piedmont and Southern Company Gas announced the formation of Atlantic Coast Pipeline, LLC (ACP) to build and own the proposed Atlantic Coast Pipeline (ACP pipeline), an approximately 600-mile interstate natural gas pipeline running from West Virginia to North Carolina. The ACP pipeline is designed to meet, in part, the needs identified by Duke Energy Carolinas, Duke Energy Progress and Piedmont. Dominion will be responsible for building and operating the ACP pipeline and holds a leading ownership percentage in ACP of 48%. Duke Energy owns a 47% interest, which is accounted for as an equity method investment through its Gas Utilities and Infrastructure segment. Southern Company Gas maintains a 5% interest. See Notes 13 and 18 for additional information related to Duke Energy's ownership interest. Duke Energy Carolinas, Duke Energy Progress and Piedmont, among others, will be customers of the pipeline. Purchases will be made under several 20-year supply contracts, subject to state regulatory approval.

In 2018, the FERC issued a series of Notices to Proceed, which authorized the project to begin certain construction-related activities along the pipeline route, including supply header and compressors. On May 11, 2018, and October 19, 2018, FERC issued Notices to Proceed allowing full construction activities in all areas of West Virginia except in the Monongahela National Forest. On July 24, 2018, FERC issued a Notice to Proceed allowing full construction activities along the project route in North Carolina. On October 19, 2018, the conditions to effectiveness of the Virginia 401 water quality certification were satisfied and, following receipt of the Virginia 401 certification, ACP filed a request for FERC to issue a Notice to Proceed with full construction activities in Virginia. Due to legal challenges not directly related to the request for a Notice to Proceed in Virginia, this request is still pending.

ACP is the subject of challenges in state and federal courts and agencies, including, among others, challenges of the project's biological opinion (BiOp) and incidental take statement (ITS), crossings of the Blue Ridge Parkway, the Appalachian Trail, and the Monongahela and George Washington National Forests, the project's U.S. Army Corps of Engineers (USACE) 404 permit, the project's air permit for a compressor station at Buckingham, Virginia, the FERC Environmental Impact Statement order and the FERC order approving the Certificate of Public Convenience and Necessity. Each of these challenges alleges non-compliance on the part of federal and state permitting authorities and adverse ecological consequences if the project is permitted to proceed. Since December 2018, notable developments in these challenges include a stay in December 2018 issued by the U.S. Court of Appeals for the Fourth Circuit (Fourth Circuit) and the same court's July 26, 2019, vacatur of the project's BiOp and ITS (which stay and subsequent vacatur halted most project construction activity), a Fourth Circuit decision vacating the project's permits to cross the Monongahela and George Washington National Forests and the Appalachian Trail, the Fourth Circuit's remand to USACE of ACP's Huntington District 404 verification, the Fourth Circuit's remand to the National Park Service of ACP's Blue Ridge Parkway right-of-way and the most recent vacatur of the air permit for a compressor station at Buckingham, Virginia. ACP is vigorously defending these challenges and coordinating with the federal and state authorities which are the direct parties to the challenges. The Solicitor General of the United States and ACP filed petitions for certiorari to the Supreme Court of the United States on June 25, 2019, regarding the Appalachian Trail crossing and certiorari was granted on October 4, 2019. The Supreme Court hearing is scheduled for February 24, 2020, and a ruling is expected in the second quarter of 2020. ACP is also evaluating possible legislative and other remedies to this issue.

In anticipation of the Fourth Circuit's vacatur of the BiOp and ITS, ACP and the FWS commenced work in mid-May of 2019 to set the basis for a reissued BiOp and ITS. On February 10, 2020, FERC issued a letter to FWS requesting the re-initiation of formal consultation in support of reissuing the BiOp and ITS. ACP continues coordinating and working with FWS and other parties in preparation for a reissuance of the BiOp and ITS.

ACP triggered the Adverse Government Actions (AGA) clause of its agreements with its customers in December 2019. Formal negotiations have commenced regarding pricing and construction timing, among other items, and are expected to be finalized in the first quarter of 2020. The results of these negotiations will directly impact the expected future cash flows of this project.

Given the legal challenges and ongoing discussions with customers, ACP expects mechanical completion of the full project in late 2021 with in-service likely in the first half of 2022.

The delays resulting from the legal challenges described above have also impacted the cost for the project. Project cost is approximately \$8 billion, excluding financing costs. This estimate is based on the current facts available around construction costs and timelines, and is subject to future changes as those facts develop. Abnormal weather, work delays (including delays due to judicial or regulatory action) and other conditions may result in cost or schedule modifications, a suspension of AFUDC for ACP and/or impairment charges potentially material to Duke Energy's cash flows, financial position and results of operations.

Duke Energy's investment in ACP was \$1.2 billion at December 31, 2019. Duke Energy evaluated this investment for impairment at December 31, 2019, and determined that fair value approximated carrying value and therefore no impairment was necessary. Duke Energy also has a guarantee agreement supporting its share of the ACP revolving credit facility. Duke Energy's maximum exposure to loss under the terms of the guarantee is \$827 million, which represents 47% of the outstanding borrowings under the credit facility as of December 31, 2019. See Note 13 for additional information.

Constitution Pipeline Company, LLC

Duke Energy owned a 24% ownership interest in Constitution, which is accounted for as an equity method investment. Constitution was a natural gas pipeline project slated to transport natural gas supplies from the Marcellus supply region in northern Pennsylvania to major northeastern markets. The pipeline was to be constructed and operated by Williams Partners L.P., which had a 41% ownership share. The remaining interest was held by Cabot Oil and Gas Corporation and WGL Holdings, Inc. In December 2014, Constitution received approval from the FERC to construct and operate the proposed pipeline. However, since April 2016, Constitution had stopped construction and discontinued capitalization of future development costs due to permitting delays and adverse rulings by regulatory agencies and courts.

In late 2019, Constitution determined that its principal shipper would not agree to an amended precedent agreement. Without such an amendment, the project would no longer be viable and, as of February 5, 2020, the Constitution partners formally resolved to initiate the dissolution of Constitution, and to terminate the Constitution Pipeline project. In the fourth quarter of 2019, Duke Energy recorded an OTTI of \$25 million related to Constitution within Equity in earnings of unconsolidated affiliates on Duke Energy's Consolidated Statements of Income, resulting in the full write-down of Duke Energy's investment in Constitution. See Notes 13 and 18 for additional information related to ownership interest and carrying value of the investment.

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. 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 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, 2019, and exclude capitalized asset retirement costs.

	Capacity (in MW)	Remaining Net Book Value (in millions)
Duke Energy Carolinas		
Allen Steam Station Units 1-3 ^(a)	585	\$ 152
Duke Energy Indiana		
Gallagher Units 2 and 4 ^(b)	280	114
Gibson Units 1-5 ^(c)	3,132	1,697
Cayuga Units 1-2 ^(c)	1,005	974
Total Duke Energy	\$ 5,002	\$ 2,937

- (a) Duke Energy Carolinas will retire Allen Steam Station Units 1 through 3 by December 31, 2024, as part of the resolution of a lawsuit involving alleged New Source Review violations.
- (b) Duke Energy Indiana committed to either retire or stop burning coal at Gallagher Units 2 and 4 by December 31, 2022, as part of the 2016 settlement of Edwardsport IGCC matters.
- (c) On July 1, 2019, Duke Energy Indiana filed its 2018 IRP with the IURC. The 2018 IRP included scenarios evaluating the potential retirement of coal-fired generating units at Gibson and Cayuga. The rate case filed July 2, 2019, includes proposed depreciation rates reflecting retirement dates from 2026 to 2038.

Duke Energy continues to evaluate the potential need to retire generating facilities earlier than the current estimated useful lives, and plans to seek regulatory recovery, as necessary, for amounts that would not be otherwise recovered when any of these assets are retired. However, such recovery, including recovery of carrying costs on remaining book values, could be subject to future approvals and therefore cannot be assured.

Duke Energy Carolinas and Duke Energy Progress are evaluating the potential for coal-fired generating unit retirements with a net carrying value of approximately \$721 million and \$1.2 billion, respectively, included in Net property, plant and equipment on the Consolidated Balance Sheets as of December 31, 2019.

Refer to the "Western Carolinas Modernization Plan" discussion above for details of Duke Energy Progress' planned retirements.

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 reached a SAFSTOR condition in January 2018 after the successful transfer of all used nuclear fuel assemblies to an on-site dry cask storage facility.

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 \$13.9 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 in compliance with the law.

Excess Liability Program

This program provides \$13.5 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 98 licensed commercial nuclear reactors in the U.S. Under this program, 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 McGuire and Catawba, \$462 million for Brunswick and Harris, \$406 million for Oconee and \$364 million for 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 to 10 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 \$155 million, \$94 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 laws regarding air and water quality, hazardous and solid waste disposal, coal ash and other environmental matters. These laws 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 the ARO 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 tables contain information regarding reserves for probable and estimable costs related to the various environmental sites. These reserves are recorded in Accounts payable within Current Liabilities and Other within Other Noncurrent Liabilities on the Consolidated Balance Sheets.

(in millions)	Duke		Duke		Duke		Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Balance at December 31, 2016	\$ 98	\$ 10	\$ 18	\$ 3	\$ 14	\$ 59	\$ 10	\$ 1
Provisions/adjustments	8	3	3	2	2	3	(4)	1
Cash reductions	(25)	(3)	(6)	(2)	(4)	(15)	(1)	—
Balance at December 31, 2017	81	10	15	3	12	47	5	2
Provisions/adjustments	26	3	2	3	(2)	21	1	1
Cash reductions	(30)	(2)	(6)	(2)	(4)	(20)	(1)	(1)
Balance at December 31, 2018	77	11	11	4	6	48	5	2
Provisions/adjustments	33	6	9	2	5	11	—	7
Cash reductions	(52)	(6)	(4)	(2)	(2)	(40)	(1)	(1)
Balance at December 31, 2019	\$ 58	\$ 11	\$ 16	\$ 4	\$ 9	\$ 19	\$ 4	\$ 8

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 except as presented in the table below.

(in millions)	
Duke Energy	\$ 59
Duke Energy Carolinas	11
Duke Energy Ohio	42
Piedmont	2

LITIGATION

Duke Energy Carolinas and Duke Energy Progress

NCDEQ Closure Litigation

The Coal Ash Act requires CCR surface impoundments in North Carolina to be closed, with the closure method and timing based on a risk ranking classification determined by legislation or state regulators. The NCDEQ previously classified the impoundments at Allen, Belews Creek, Rogers, Marshall, Mayo and Roxboro as low risk. The Coal Ash Act allowed a range of closure options for low risk rated basins. On April 1, 2019, NCDEQ issued a closure determination (NCDEQ's April 1 Order) requiring Duke Energy Carolinas and Duke Energy Progress to excavate all remaining coal ash impoundments at these facilities. 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 May 9, 2019, NCDEQ issued a supplemental order requiring that closure plans be submitted on December 31, 2019, but providing that the corrective action plans are not due until March 31, 2020. Duke Energy Carolinas and Duke Energy Progress filed amended petitions on May 24, 2019, incorporating the May 9, 2019, order.

On December 31, 2019, the parties executed a settlement agreement resolving the closure method for each of these sites. 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. On February 5, 2020, the North Carolina Superior court entered a consent order, after which this litigation was dismissed on February 11, 2020.

Coal Ash Insurance Coverage Litigation

In March 2017, Duke Energy Carolinas and Duke Energy Progress filed a civil action in the North Carolina Superior Court against various insurance providers. The lawsuit seeks payment for coal ash-related liabilities covered by third-party liability insurance policies. The insurance policies were issued between 1971 and 1986 and provide third-party liability insurance for property damage. The civil action seeks damages for breach of contract and indemnification for costs arising from the Coal Ash Act and the EPA CCR rule at 15 coal-fired plants in North Carolina and South Carolina. Despite a stay of the litigation from May 2019 through September 2019 to allow the parties to discuss potential resolution, no resolution was reached, and litigation resumed. In February and March 2020, the Court will hear arguments on numerous cross motions filed by the parties to seek legal determinations concerning, among other issues, the appropriate insurance allocation methods, the trigger of the applicable coverages and several coverage defenses raised by the insurance providers. Trial is scheduled for February 2021. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of this matter.

NCDEQ State Enforcement Actions

In the first quarter of 2013, SELC sent notices of intent to sue Duke Energy Carolinas and Duke Energy Progress related to alleged CWA violations from coal ash basins at two coal-fired power plants in North Carolina. The NCDEQ filed enforcement actions against Duke Energy Carolinas and Duke Energy Progress alleging violations of water discharge permits and North Carolina groundwater standards. The cases have been consolidated and are being heard before a single judge in the North Carolina Superior Court.

On August 16, 2013, the NCDEQ filed an enforcement action against Duke Energy Carolinas and Duke Energy Progress related to the remaining coal-fired power plants in North Carolina, alleging violations of the CWA and violations of the North Carolina groundwater standards. Both of these cases have been assigned to the judge handling the enforcement actions discussed above. SELC is representing several environmental groups who have been permitted to intervene in these cases.

The court issued orders in 2016 granting Motions for Partial Summary Judgment for seven of the 14 North Carolina plants with coal ash basins named in the enforcement actions. On February 13, 2017, the court issued an order denying motions for partial summary judgment brought by both the environmental groups and Duke Energy Carolinas and Duke Energy Progress for the remaining seven plants. On March 15, 2017, Duke Energy Carolinas and Duke Energy Progress filed a Notice of Appeal with the North Carolina Court of Appeals to challenge the trial court's order. The parties were unable to reach an agreement at mediation in April 2017 and submitted briefs to the trial court on remaining issues to be tried. On August 1, 2018, the Court of Appeals dismissed the appeal.

Pursuant to the terms of the December 31, 2019, settlement agreement, discussed above, between Duke Energy Carolinas, Duke Energy Progress, NCDEQ and the community groups represented by the SELC, this litigation was dismissed on February 5, 2020, upon entry of the consent order in the North Carolina Superior Court.

Federal Citizens Suits

On June 13, 2016, Roanoke River Basin Association (RRBA) filed a federal citizen suit in the Middle District of North Carolina alleging unpermitted discharges to surface water and groundwater violations at the Mayo Plant. On August 19, 2016, Duke Energy Progress filed a Motion to Dismiss. On April 26, 2017, the court entered an order dismissing four of the claims in the federal citizen suit. Two claims relating to alleged violations of National Pollution Discharge Elimination System (NPDES) permit provisions survived the motion to dismiss, and Duke Energy Progress filed its response on May 10, 2017. Duke Energy Progress and RRBA each filed motions for summary judgment on March 23, 2018.

On May 16, 2017, RRBA filed a federal citizen suit in the U.S. District Court for the Middle District of North Carolina, which asserts two claims relating to alleged violations of NPDES permit provisions at the Roxboro Plant and one claim relating to the use of nearby water bodies. Duke Energy Progress and RRBA each filed motions for summary judgment on April 17, 2018.

On May 8, 2018, on motion from Duke Energy Progress, the court ordered trial in both of the above matters to be consolidated. On April 5, 2019, Duke Energy Progress filed a motion to stay the case following the NCDEQ's April 1 Order. On August 2, 2019, the court ordered that this case is stayed.

On December 5, 2017, various parties filed a federal citizen suit in the U.S. District Court for the Middle District of North Carolina for alleged violations at Duke Energy Carolinas' Belews Creek under the CWA. Duke Energy Carolinas' answer to the complaint was filed on August 27, 2018. On October 10, 2018, Duke Energy Carolinas filed Motions to Dismiss for lack of standing, Motion for Judgment on the Pleadings and Motion to Stay Discovery. On January 9, 2019, the court entered an order denying Duke Energy Carolinas' motion to stay discovery. There has been no ruling on the other pending motions. On April 5, 2019, Duke Energy Carolinas filed a motion to stay the case following the NCDEQ's April 1 Order. On August 2, 2019, the court ordered that this case is stayed.

On December 31, 2019, Duke Energy Carolinas, Duke Energy Progress, the NCDEQ and various community groups including RRBA entered into a comprehensive settlement that, among other things, resolves the method of closure at the Mayo, Roxboro and Belews Creek ash basins. On February 5, 2020, the North Carolina Superior Court entered a consent order confirming the terms of the settlement agreement, upon which RRBA filed stipulations on February 11, 2020 voluntarily dismissing all three of these federal citizen suits with prejudice.

Duke Energy Carolinas***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. As of December 31, 2019, there were 123 asserted claims for non-malignant cases with the cumulative relief sought of up to \$32 million and 49 asserted claims for malignant cases with the cumulative relief sought of up to \$16 million. Based on Duke Energy Carolinas' experience, it is expected that the ultimate resolution of most of these claims likely will be less than the amount claimed.

Duke Energy Carolinas has recognized asbestos-related reserves of \$604 million and \$630 million at December 31, 2019, and 2018, respectively. These reserves are classified in Other within Other Noncurrent Liabilities and Other within Current Liabilities on the Consolidated Balance Sheets. These reserves are based upon Duke Energy Carolinas' best estimate for current and future asbestos claims through 2039 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 2039 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. Duke Energy Carolinas' cumulative payments began to exceed the self-insurance retention in 2008. Future payments up to the policy limit will be reimbursed by the third-party insurance carrier. The insurance policy limit for potential future insurance recoveries indemnification and medical cost claim payments is \$747 million in excess of the self-insured retention. Receivables for insurance recoveries were \$742 million and \$739 million at December 31, 2019, and 2018, respectively. These amounts are classified in Other within Other Noncurrent Assets and Receivables within Current Assets on the Consolidated Balance Sheets. 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.

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 Department of Energy 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 \$203 million for Duke Energy Progress and Duke Energy Florida, respectively. Discovery is ongoing and a trial is expected to occur in early 2021.

Duke Energy Florida**Fluor Contract Litigation**

On January 29, 2019, Fluor filed a breach of contract lawsuit in the U.S. District Court for the Middle District of Florida against Duke Energy Florida related to an EPC agreement for the CC natural gas plant in Citrus County, Florida. Fluor filed an amended complaint on February 13, 2019. Fluor's multicount complaint seeks civil, statutory and contractual remedies related to Duke Energy Florida's \$67 million draw in early 2019, on Fluor's letter of credit and offset of invoiced amounts. Duke Energy Florida moved to dismiss all counts of Fluor's amended complaint, and on April 16, 2019, the court dismissed Fluor's complaint without prejudice. On April 26, 2019, Fluor filed a second amended complaint.

On August 1, 2019, Duke Energy Florida and Fluor reached a settlement to resolve the pending litigation and other outstanding issues related to completing the Citrus County CC. Pursuant to the terms of the settlement, Fluor filed a notice of voluntary dismissal, and on August 27, 2019, the court dismissed the case with prejudice. As a result of the settlement with Fluor, Duke Energy Florida recorded a \$36 million reduction to a prior-year impairment within Impairment charges on Duke Energy's Consolidated Statements of Operations in 2019.

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.

The table below presents recorded reserves based on management's best estimate of probable loss for legal matters, excluding asbestos-related reserves. Reserves are classified on the Consolidated Balance Sheets in Other within Other Noncurrent Liabilities and Other within Current Liabilities. The reasonably possible range of loss in excess of recorded reserves is not material, other than as described above.

(in millions)	December 31,	
	2019	2018
Reserves for Legal Matters		
Duke Energy	\$ 62	\$ 65
Duke Energy Carolinas	2	9
Progress Energy	55	54
Duke Energy Progress	12	12
Duke Energy Florida	22	24
Piedmont	1	1

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. 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.

(in millions)	Contract Expiration	Minimum Purchase Amount at December 31, 2019						Total
		2020	2021	2022	2023	2024	Thereafter	
Duke Energy Progress ^(a)	2021-2032	\$ 46	\$ 66	\$ 63	\$ 55	\$ 56	\$ 123	\$ 409
Duke Energy Florida ^(b)	2021-2025	374	356	354	374	262	91	1,811
Duke Energy Ohio ^{(c)(d)}	2021-2022	132	107	32	—	—	—	271

- (a) Contracts represent either 100% of net plant output or vary.
(b) Contracts represent between 81% and 100% of net plant output.
(c) Contracts represent between 1% and 9% of net plant output.
(d) Excludes PPA with OVEC. See Note 18 for additional information.

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 15 years. The time periods for fixed payments under natural gas supply contracts are up to six years. The time period for the natural gas supply purchase commitments is up to 11 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, 2019.

(in millions)	Duke Energy	Duke Energy Ohio	Piedmont
2020	\$ 297	\$ 39	\$ 258
2021	280	33	247
2022	225	14	211
2023	129	3	126
2024	118	—	118
Thereafter	714	—	714
Total	\$ 1,763	\$ 89	\$ 1,674

6. LEASES

As described in Note 1, Duke Energy adopted the revised accounting guidance for Leases effective January 1, 2019, using the modified retrospective method of adoption, which does not require restatement of prior year reported results. Adoption of the new standard resulted in the recording of ROU assets and operating lease liabilities as follows:

(in millions)	As of January 1, 2019							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	Duke
	Energy	Carolin	Progress	Energy	Energy	Energy	Indiana	Piedmont
ROU assets	\$ 1,750	\$ 153	\$ 863	\$ 407	\$ 456	\$ 23	\$ 61	\$ 26
Operating lease liabilities – current	205	28	96	35	61	1	4	4
Operating lease liabilities – noncurrent	1,504	127	766	371	395	22	58	25

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, a liability will be recorded for the failed sale-leaseback obligation 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.

Duke Energy operates various renewable energy projects and sells the generated output to utilities, electric cooperatives, municipalities and commercial and industrial customers through long-term PPAs. In certain situations, these PPAs and the associated renewable energy projects qualify as operating leases. Rental income from these leases is accounted for as Nonregulated electric and other revenues in the Consolidated Statements of Operations. There are no minimum lease payments as all payments are contingent based on actual electricity generated by the renewable energy projects. Contingent lease payments were \$264 million, \$268 million and \$262 million for the years ended December 31, 2019, 2018, and 2017, respectively. Renewable energy projects owned by Duke Energy and accounted for as operating leases had a cost basis of \$3,349 million and \$3,358 million and accumulated depreciation of \$721 million and \$602 million at December 31, 2019, and 2018, respectively. These assets are principally classified as nonregulated electric generation and transmission assets.

Piedmont has an agreement with Duke Energy Carolinas for the construction and transportation of natural gas pipelines to supply its natural gas plant needs. Piedmont accounts for this pipeline lateral contract as a lessor and sales-type lease since the present value of the sum of the lease payments equals the fair value of the asset. As of December 31, 2019, the pipeline lateral assets owned by Piedmont had a current net investment basis of \$4 million and a long-term net investment basis of \$70 million. 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 contract as a finance lease. The activity for this contract is eliminated in consolidation at Duke Energy.

The following table presents the components of lease expense.

(in millions)	Year Ended December 31, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
	Operating lease expense ^(a)	\$ 292	\$ 47	\$ 161	\$ 69	\$ 92	\$ 11	\$ 20
Short-term lease expense ^(a)	16	5	9	4	5	1	2	—
Variable lease expense ^(a)	47	22	22	16	6	—	1	1
Finance lease expense								
Amortization of leased assets ^(b)	111	6	21	5	16	1	—	—
Interest on lease liabilities ^(c)	61	15	42	33	9	—	1	—
Total finance lease expense	172	21	63	38	25	1	1	—
Total lease expense	\$ 527	\$ 95	\$ 255	\$ 127	\$ 128	\$ 13	\$ 24	\$ 6

- (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 rental expense for operating leases, as reported under the former lease standard. These amounts are included in Operation, maintenance and other and Fuel used in electric generation and purchased power on the Consolidated Statements of Operations.

(in millions)	Years Ended December 31,	
	2018	2017
Duke Energy	\$ 268	\$ 241
Duke Energy Carolinas	49	44
Progress Energy	143	130
Duke Energy Progress	75	75
Duke Energy Florida	68	55
Duke Energy Ohio	13	15
Duke Energy Indiana	21	23
Piedmont	11	7

The following table presents operating lease maturities and a reconciliation of the undiscounted cash flows to operating lease liabilities.

(in millions)	December 31, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
	2020	\$ 268	\$ 31	\$ 123	\$ 51	\$ 72	\$ 2	\$ 5
2021	216	19	99	44	55	2	4	5
2022	201	19	95	40	55	2	4	5
2023	191	17	95	41	54	2	4	5
2024	176	13	95	41	54	2	4	5
Thereafter	984	57	462	283	179	21	64	5
Total operating lease payments	2,036	156	969	500	469	31	85	30
Less: present value discount	(396)	(27)	(177)	(109)	(68)	(9)	(27)	(3)
Total operating lease liabilities ^(a)	\$ 1,640	\$ 129	\$ 792	\$ 391	\$ 401	\$ 22	\$ 58	\$ 27

- (a) Certain operating lease payments include renewal options that are reasonably certain to be exercised.

The following table presents future minimum lease payments under operating leases, which at inception had a noncancelable term of more than one year, as reported under the former lease standard.

(in millions)	December 31, 2018								
	Duke			Duke		Duke		Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont	
2019	\$ 239	\$ 33	\$ 97	\$ 49	\$ 48	\$ 2	\$ 6	\$ 5	
2020	219	29	90	46	44	2	5	5	
2021	186	19	79	37	42	2	4	5	
2022	170	19	76	34	42	2	4	5	
2023	160	17	77	35	42	2	5	6	
Thereafter	1,017	68	455	314	141	23	66	11	
Total	\$ 1,991	\$ 185	\$ 874	\$ 515	\$ 359	\$ 33	\$ 90	\$ 37	

The following table presents finance lease maturities and a reconciliation of the undiscounted cash flows to finance lease liabilities.

(in millions)	December 31, 2019					
	Duke		Duke		Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Indiana
2020	\$ 181	\$ 28	\$ 69	\$ 44	\$ 25	\$ 1
2021	186	23	69	44	25	1
2022	173	23	69	44	25	1
2023	175	23	69	44	25	1
2024	121	23	55	44	11	1
Thereafter	823	314	539	528	11	27
Total finance lease payments	1,659	434	870	748	122	32
Less: amounts representing interest	(690)	(255)	(465)	(441)	(24)	(22)
Total finance lease liabilities	\$ 969	\$ 179	\$ 405	\$ 307	\$ 98	\$ 10

The following table presents future minimum lease payments under finance leases, as reported under the former lease standard.

(in millions)	December 31, 2018						
	Duke		Duke		Duke		Duke
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana
2019	\$ 170	\$ 20	\$ 45	\$ 20	\$ 25	\$ 2	\$ 1
2020	174	20	46	21	25	—	1
2021	177	15	45	20	25	—	1
2022	165	15	45	21	24	—	1
2023	165	15	45	21	24	—	1
Thereafter	577	204	230	209	21	—	27
Minimum annual payments	1,428	289	456	312	144	2	32
Less: amount representing interest	(487)	(180)	(205)	(175)	(30)	—	(22)
Total	\$ 941	\$ 109	\$ 251	\$ 137	\$ 114	\$ 2	\$ 10

The following tables contain additional information related to leases.

		December 31, 2019								
(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	\$ 1,658	\$ 123	\$ 788	\$ 387	\$ 401	\$ 21	\$ 57	\$ 24	
Finance	Net property, plant and equipment	926	198	443	308	135	—	7	—	
Total lease assets		\$ 2,584	\$ 321	\$ 1,231	\$ 695	\$ 536	\$ 21	\$ 64	\$ 24	
Liabilities										
Current										
Operating	Other current liabilities	\$ 208	\$ 27	\$ 95	\$ 37	\$ 58	\$ 1	\$ 3	\$ 4	
Finance	Current maturities of long-term debt	119	7	24	6	18	—	—	—	
Noncurrent										
Operating	Operating lease liabilities	1,432	102	697	354	343	21	55	23	
Finance	Long-Term Debt	850	172	381	301	80	—	10	—	
Total lease liabilities		\$ 2,609	\$ 308	\$ 1,197	\$ 698	\$ 499	\$ 22	\$ 68	\$ 27	

		Year Ended December 31, 2019								
(in millions)		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	\$ 285	\$ 34	\$ 131	\$ 53	\$ 78	\$ 2	\$ 7	\$ 7	
	Operating cash flows from finance leases	61	15	42	33	9	—	1	—	
	Financing cash flows from finance leases	111	6	21	5	16	1	—	—	
Lease assets obtained in exchange for new lease liabilities (non-cash)										
	Operating ^(b)	\$ 194	\$ 44	\$ 30	\$ 30	\$ —	\$ —	\$ —	\$ 1	
	Finance	251	76	175	175	—	—	—	—	

(a) No amounts were classified as investing cash flows from operating leases for the year ended December 31, 2019.

(b) Does not include ROU assets recorded as a result of the adoption of the new lease standard.

	December 31, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Duke Energy Piedmont
Weighted average remaining lease term (years)								
Operating leases	11	9	10	12	8	17	18	6
Finance leases	13	19	16	18	11	—	26	—
Weighted average discount rate^(a)								
Operating leases	3.9%	3.5%	3.8%	3.9%	3.8%	4.2%	4.1%	3.6%
Finance leases	8.1%	11.8%	11.9%	12.4%	8.3%	—%	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.

	December 31, 2019								
	Weighted Average Interest Rate	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Duke Energy Piedmont
(in millions)									
Unsecured debt, maturing 2020-2078	4.02%	\$ 22,477	\$ 1,150	\$ 3,650	\$ 700	\$ 350	\$ 1,110	\$ 405	\$ 2,399
Secured debt, maturing 2020-2052	3.30%	4,537	544	1,722	335	1,387	—	—	—
First mortgage bonds, maturing 2020-2049 ^(a)	4.13%	27,977	9,557	13,800	7,575	6,225	1,449	3,169	—
Finance leases, maturing 2022-2051 ^(b)	6.60%	969	179	405	307	98	—	10	—
Tax-exempt bonds, maturing 2022-2041 ^(c)	2.90%	730	243	48	48	—	77	362	—
Notes payable and commercial paper ^(d)	1.98%	3,588	—	—	—	—	—	—	—
Money pool/intercompany borrowings		—	329	1,970	216	—	337	180	476
Fair value hedge carrying value adjustment		5	5	—	—	—	—	—	—
Unamortized debt discount and premium, net ^(e)		1,294	(23)	(29)	(17)	(11)	(30)	(19)	(2)
Unamortized debt issuance costs ^(f)		(316)	(55)	(111)	(40)	(62)	(12)	(20)	(13)
Total debt	3.92%	\$ 61,261	\$ 11,929	\$ 21,455	\$ 9,124	\$ 7,987	\$ 2,931	\$ 4,087	\$ 2,860
Short-term notes payable and commercial paper		(3,135)	—	—	—	—	—	—	—
Short-term money pool/intercompany borrowings		—	(29)	(1,821)	(66)	—	(312)	(30)	(476)
Current maturities of long-term debt ^(g)		(3,141)	(458)	(1,577)	(1,006)	(571)	—	(503)	—
Total long-term debt^(g)		\$ 54,985	\$ 11,442	\$ 18,057	\$ 8,052	\$ 7,416	\$ 2,619	\$ 3,554	\$ 2,384

- (a) Substantially all electric utility property is mortgaged under mortgage bond indentures.
- (b) Duke Energy includes \$44 million and \$419 million of finance lease purchase accounting adjustments related to Duke Energy Progress and Duke Energy Florida, respectively, 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 14 days.
- (e) Duke Energy includes \$1,275 million and \$137 million in purchase accounting adjustments related to Progress Energy and Piedmont, respectively.
- (f) Duke Energy includes \$37 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, 2018									
(in millions)	Weighted								
	Average	Duke		Duke		Duke		Duke	
	Interest	Duke	Energy	Progress	Energy	Energy	Energy	Indiana	Piedmont
	Rate	Energy	Carolinas	Energy	Progress	Florida	Ohio	Indiana	Piedmont
Unsecured debt, maturing 2019-2078	4.26%	\$ 20,955	\$ 1,150	\$ 3,800	\$ 50	\$ 350	\$ 1,000	\$ 408	\$ 2,150
Secured debt, maturing 2020-2037	3.69%	4,297	450	1,703	300	1,403	—	—	—
First mortgage bonds, maturing 2019-2048 ^(a)	4.32%	25,628	8,759	13,100	7,574	5,526	1,099	2,670	—
Finance leases, maturing 2019-2051 ^(b)	5.06%	941	109	251	137	114	2	10	—
Tax-exempt bonds, maturing 2019-2041 ^(c)	3.40%	941	243	48	48	—	77	572	—
Notes payable and commercial paper ^(d)	2.73%	4,035	—	—	—	—	—	—	—
Money pool/intercompany borrowings		—	739	1,385	444	108	299	317	198
Fair value hedge carrying value adjustment		5	5	—	—	—	—	—	—
Unamortized debt discount and premium, net ^(e)		1,434	(23)	(29)	(15)	(11)	(31)	(8)	(1)
Unamortized debt issuance costs ^(f)		(297)	(54)	(112)	(40)	(61)	(7)	(20)	(11)
Total debt	4.13%	\$ 57,939	\$ 11,378	\$ 20,146	\$ 8,498	\$ 7,429	\$ 2,439	\$ 3,949	\$ 2,336
Short-term notes payable and commercial paper		(3,410)	—	—	—	—	—	—	—
Short-term money pool/intercompany borrowings		—	(439)	(1,235)	(294)	(108)	(274)	(167)	(198)
Current maturities of long-term debt ^(g)		(3,406)	(6)	(1,672)	(603)	(270)	(551)	(63)	(350)
Total long-term debt^(g)		\$ 51,123	\$ 10,933	\$ 17,239	\$ 7,601	\$ 7,051	\$ 1,614	\$ 3,719	\$ 1,788

- (a) Substantially all electric utility property is mortgaged under mortgage bond indentures.
- (b) Duke Energy includes \$63 million and \$531 million of finance lease purchase accounting adjustments related to Duke Energy Progress and Duke Energy Florida, respectively, 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 16 days.
- (e) Duke Energy includes \$1,380 million and \$156 million in purchase accounting adjustments related to Progress Energy and Piedmont, respectively.
- (f) Duke Energy includes \$41 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, 2019
Unsecured Debt			
Duke Energy (Parent)	June 2020	2.100%	\$ 330
Duke Energy Progress	December 2020	2.510% ^(a)	700
First Mortgage Bonds			
Duke Energy Florida	January 2020	1.850%	250
Duke Energy Florida	April 2020	4.550%	250
Duke Energy Carolinas	June 2020	4.300%	450
Duke Energy Indiana	July 2020	3.750%	500
Duke Energy Progress	September 2020	2.065% ^(a)	300
Other^(b)			
Current maturities of long-term debt			\$ 3,141

(a) Debt has a floating interest rate.

(b) Includes finance lease obligations, amortizing debt 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.

(in millions)	December 31, 2019							
	Duke Energy ^(a)	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2020	\$ 3,141	\$ 458	\$ 1,578	\$ 1,006	\$ 572	—	\$ 503	\$ —
2021	5,053	504	2,257	932	825	50	70	160
2022	4,334	830	1,048	508	90	—	94	—
2023	3,112	1,006	398	319	79	325	3	45
2024	1,965	306	227	160	67	25	154	40
Thereafter	39,542	8,875	14,267	6,190	6,427	2,261	3,272	2,155
Total long-term debt, including current maturities	\$ 57,147	\$ 11,979	\$ 19,775	\$ 9,115	\$ 8,060	\$ 2,661	\$ 4,096	\$ 2,400

(a) Excludes \$1,448 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.

(in millions)	December 31, 2019				
	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Energy Progress	Energy Ohio	Energy Indiana
Tax-exempt bonds	\$ 312	\$ —	\$ —	\$ 27	\$ 285
Commercial paper ^(a)	625	300	150	25	150
Total	\$ 937	\$ 300	\$ 150	\$ 52	\$ 435

(in millions)	December 31, 2018				
	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Energy Progress	Energy Ohio	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

The following tables summarize significant debt issuances (in millions).

Issuance Date	Maturity Date	Interest Rate	Year Ended December 31, 2019							
			Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unsecured Debt										
March 2019 ^(a)	Mar 2022	2.538% ^(b)	\$ 300	\$ 300	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
March 2019 ^(a)	Mar 2022	3.227%	300	300	—	—	—	—	—	—
May 2019 ^(e)	Jun 2029	3.500%	600	—	—	—	—	—	—	600
June 2019 ^(a)	Jun 2029	3.400%	600	600	—	—	—	—	—	—
June 2019 ^(a)	Jun 2049	4.200%	600	600	—	—	—	—	—	—
July 2019 ^(g)	Jul 2049	4.320%	40	—	—	—	—	40	—	—
September 2019 ^(g)	Oct 2025	3.230%	95	—	—	—	—	95	—	—
September 2019 ^(g)	Oct 2029	3.560%	75	—	—	—	—	75	—	—
November 2019 ^(h)	Nov 2021	2.167% ^(b)	200	—	—	—	200	—	—	—
First Mortgage Bonds										
January 2019 ^(c)	Feb 2029	3.650%	400	—	—	—	—	400	—	—
January 2019 ^(c)	Feb 2049	4.300%	400	—	—	—	—	400	—	—
March 2019 ^(d)	Mar 2029	3.450%	600	—	—	600	—	—	—	—
August 2019 ^(a)	Aug 2029	2.450%	450	—	450	—	—	—	—	—
August 2019 ^(a)	Aug 2049	3.200%	350	—	350	—	—	—	—	—
September 2019 ^(f)	Oct 2049	3.250%	500	—	—	—	—	—	500	—
November 2019 ⁽ⁱ⁾	Dec 2029	2.500%	700	—	—	—	700	—	—	—
Total issuances			\$ 6,210	\$ 1,800	\$ 800	\$ 600	\$ 900	\$ 1,010	\$ 500	\$ 600

- (a) Debt issued to pay down short-term debt and for general corporate purposes.
- (b) Debt issuance has a floating interest rate.
- (c) Debt issued to repay at maturity \$450 million first mortgage bonds due April 2019, pay down short-term debt and for general corporate purposes.
- (d) Debt issued to fund eligible green energy projects in the Carolinas.
- (e) Debt issued to repay in full the outstanding \$350 million Piedmont unsecured term loan due September 2019, pay down short-term debt and for general corporate purposes.
- (f) Debt issued to retire \$150 million of pollution control bonds, pay down short-term debt and for general corporate purposes.
- (g) Debt issued to repay at maturity \$100 million debentures due October 2019, pay down short-term debt and for general corporate purposes.
- (h) Debt issued to fund storm restoration costs and for general corporate purposes.
- (i) Debt issued to reimburse the payment of existing and new Eligible Green Expenditures in Florida.

In January 2020, Duke Energy Carolinas closed and funded \$900 million of first mortgage bonds of which \$500 million carry a fixed interest rate of 2.45% and mature February 2030 and \$400 million carry a fixed interest rate of 3.20% and mature August 2049. The proceeds will be used to repay at maturity \$450 million, 4.30% debentures maturing June 2020, and for general corporate purposes.

Issuance Date	Maturity Date	Interest Rate	Year Ended December 31, 2018				
			Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida
Unsecured Debt							
March 2018 ^(a)	April 2025	3.950%	\$ 250	\$ 250	\$ —	\$ —	\$ —
May 2018 ^(b)	May 2021	3.114%	500	500	—	—	—
September 2018 ^(c)	September 2078	5.625%	500	500	—	—	—
First Mortgage Bonds							
March 2018 ^(d)	March 2023	3.050%	500	—	500	—	—
March 2018 ^(d)	March 2048	3.950%	500	—	500	—	—
June 2018 ^(e)	July 2028	3.800%	600	—	—	—	600
June 2018 ^(e)	July 2048	4.200%	400	—	—	—	400
August 2018 ^(f)	September 2023	3.375%	300	—	—	300	—
August 2018 ^(f)	September 2028	3.700%	500	—	—	500	—
November 2018 ^(g)	May 2022	3.350%	350	—	350	—	—
November 2018 ^(g)	November 2028	3.950%	650	—	650	—	—
Total issuances			\$ 5,050	\$ 1,250	\$ 2,000	\$ 800	\$ 1,000

- (a) Debt issued to pay down short-term debt.
(b) Debt issued to pay down short-term debt. Debt issuance has a floating debt rate.
(c) Callable after September 2023 at par. Junior subordinated hybrid debt issued to pay down short-term debt and for general corporate purposes.
(d) Debt issued to repay at maturity a \$300 million first mortgage bond due April 2018, pay down intercompany short-term debt and for general corporate purposes.
(e) Debt issued to repay a portion of intercompany short-term debt under the money pool borrowing arrangement and for general corporate purposes.
(f) Debt issued to repay short-term debt and for general corporate purposes.
(g) Debt issued to fund eligible green energy projects, including zero-carbon solar and energy storage, in the Carolinas.

Available Credit Facilities

In March 2019, Duke Energy amended its existing \$8 billion Master Credit Facility to extend the termination date to March 2024. 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. Duke Energy Carolinas and Duke Energy Progress are also required to each maintain \$250 million of available capacity under the Master Credit Facility as security to meet obligations under plea agreements reached with the U.S. Department of Justice in 2015 related to violations at North Carolina facilities with ash basins.

The table below includes the current borrowing sublimits and available capacity under these credit facilities.

(in millions)	December 31, 2019							
	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Facility size ^(a)	\$ 8,000	\$ 2,650	\$ 1,500	\$ 1,250	\$ 800	\$ 600	\$ 600	\$ 600
Reduction to backstop issuances								
Commercial paper ^(b)	(2,537)	(1,119)	(325)	(207)	—	(296)	(176)	(414)
Outstanding letters of credit	(50)	(42)	(4)	(2)	—	—	—	(2)
Tax-exempt bonds	(81)	—	—	—	—	—	(81)	—
Coal ash set-aside	(500)	—	(250)	(250)	—	—	—	—
Available capacity	\$ 4,832	\$ 1,489	\$ 921	\$ 791	\$ 800	\$ 304	\$ 343	\$ 184

- (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.

Three-Year Revolving Credit Facility

Duke Energy (Parent) has a \$1 billion revolving credit facility. The facility had an initial termination date of June 2020, but in May 2019, Duke Energy extended the termination date of the facility to May 2022. Borrowings under this facility will be used for general corporate purposes. As of December 31, 2019, \$500 million has been drawn under this facility. This balance is classified as Long-term debt on Duke Energy's Consolidated Balance Sheets. Any undrawn commitments can be drawn, and borrowings can be prepaid, at any time throughout the term of the facility. The terms and conditions of the facility are generally consistent with those governing Duke Energy's Master Credit Facility.

Duke Energy Progress Term Loan Facility

In December 2018, Duke Energy Progress entered into a two-year term loan facility with commitments totaling \$700 million. Borrowings under the facility were used to pay storm-related costs, pay down commercial paper and to partially finance an upcoming bond maturity. As of December 31, 2019, the entire \$700 million has been drawn under the term loan. This balance is classified as Current maturities of long-term debt on Duke Energy Progress' Consolidated Balance Sheets.

Piedmont Term Loan Facility

In May 2019, the \$350 million Piedmont term loan was paid off in full with proceeds from the \$600 million Piedmont debt offering.

Other Debt Matters

In September 2019, 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 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. The expired Form S-3 was amended in March 2019, to allow Duke Energy to issue preferred stock.

Duke Energy has an effective Form S-3 with the SEC to sell up to \$3 billion of variable denomination floating-rate demand notes, called PremierNotes. The Form S-3 states that no more than \$1.5 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, 2019, and 2018, was \$1,049 million and \$1,010 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

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 wholly owned 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.

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, 2019, each of the Duke Energy Registrants was in compliance with all covenants related to their debt agreements. 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, 2019, and 2018, Duke Energy had loans outstanding of \$777 million, including \$36 million at Duke Energy Progress and \$741 million, including \$37 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. 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, 2019, 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 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, 2019, the maximum potential amount of future payments associated with these guarantees were \$65 million, the majority of which expires 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. Duke Energy's maximum exposure to loss under the terms of the guarantee is \$827 million as of December 31, 2019. This amount represents 47% of the outstanding borrowings under the credit facility.

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, 2019, was \$128 million, of which, \$114 million expire between 2020 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, 2019, Duke Energy had issued a total of \$634 million in letters of credit, which expire between 2020 and 2022. The unused amount under these letters of credit was \$81 million.

Duke Energy recognized \$23 million as of December 31, 2019, and 2018, 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.

(in millions except for ownership interest)	December 31, 2019			
	Ownership Interest	Property, Plant and Equipment	Accumulated Depreciation	Construction Work in Progress
Duke Energy Carolinas				
Catawba (units 1 and 2) ^(a)	19.25%	\$ 1,011	\$ 510	\$ 21
W.S. Lee CC ^(b)	87.27%	609	32	1
Duke Energy Indiana				
Gibson (unit 5) ^(c)	50.05%	410	183	3
Vermillion ^(d)	62.50%	172	119	—
Transmission and local facilities ^(c)	Various	5,421	1,436	172

(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.

(in millions)	December 31, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Duke Energy Piedmont
Decommissioning of nuclear power facilities ^(a)	\$ 6,633	\$ 2,551	\$ 4,028	\$ 3,499	\$ 529	\$ —	\$ —	\$ —
Closure of ash impoundments	6,333	3,118	2,368	2,352	16	41	805	—
Other	352	65	75	42	33	39	27	17
Total asset retirement obligation	\$ 13,318	\$ 5,734	\$ 6,471	\$ 5,893	\$ 578	\$ 80	\$ 832	\$ 17
Less: current portion	881	206	485	485	—	1	189	—
Total noncurrent asset retirement obligation	\$ 12,437	\$ 5,528	\$ 5,986	\$ 5,408	\$ 578	\$ 79	\$ 643	\$ 17

(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	\$ 24	\$ 9,152	2018 and 2019
Duke Energy Carolinas ^{(b)(c)}	—	4,365	2018
Duke Energy Progress ^(d)	24	4,181	2019
Duke Energy Florida ^(e)	—	606	2019

- (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 is expected to be filed with the NCUC and PSCSC during the first quarter 2020. Duke Energy Progress will also complete a new funding study, which will be completed and filed with the NCUC and PSCSC in July 2020.
- (e) During 2019, Duke Energy Florida reached an agreement to transfer decommissioning work for Crystal River Unit 3 to a third party. The agreement requires regulatory approval from the NRC and the FPSC. See Note 4 for more information.

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 is actively decommissioning 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.

(in millions)	December 31,	
	2019	2018
Duke Energy	\$ 6,766	\$ 5,579
Duke Energy Carolinas	3,837	3,133
Duke Energy Progress	2,929	2,446

Nuclear Operating Licenses

Operating licenses for nuclear units are potentially subject to extension. 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. In 2019, Duke Energy Florida entered into an agreement for the accelerated decommissioning of Crystal River Unit 3. The agreement is subject to the approval of the NRC and FPSC. 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 2019 and 2018.

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.

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, 2017	\$ 10,175	\$ 3,610	\$ 5,414	\$ 4,673	\$ 742	\$ 84	\$ 781	\$ 15
Accretion expense ^(a)	427	179	225	196	29	4	29	1
Liabilities settled ^(b)	(638)	(281)	(272)	(227)	(45)	(5)	(79)	—
Liabilities incurred in the current year ^(c)	39	8	5	—	5	—	25	—
Revisions in estimates of cash flows	464	433	39	178	(140)	10	(34)	3
Balance at December 31, 2018	10,467	3,949	5,411	4,820	591	93	722	19
Accretion expense ^(a)	508	235	252	227	25	3	28	1
Liabilities settled ^(b)	(895)	(329)	(499)	(460)	(39)	(12)	(54)	—
Liabilities incurred in the current year	25	18	7	—	7	—	—	—
Revisions in estimates of cash flows ^(d)	3,213	1,861	1,300	1,306	(6)	(4)	136	(3)
Balance at December 31, 2019	\$ 13,318	\$ 5,734	\$ 6,471	\$ 5,893	\$ 578	\$ 80	\$ 832	\$ 17

- (a) Substantially all accretion expense for the years ended December 31, 2019, and 2018, 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 of Crystal River Unit 3.
- (c) Amounts primarily relate to AROs recorded as a result of state agency closure requirements at Duke Energy Indiana.
- (d) Amounts primarily relate to increases in closure estimates for certain ash impoundments as a result of the NCDEQ's April 1 Order and the related settlement agreement dated December 31, 2019. See Note 5 for more information. The amount recorded in the fourth quarter of 2019 for coal ash closures as a result of the settlement was not material.

11. PROPERTY, PLANT AND EQUIPMENT

The following tables summarize the property, plant and equipment for Duke Energy and its subsidiary registrants.

		December 31, 2019							
		Estimated							
(in millions)	Useful	Duke	Duke	Progress	Duke	Duke	Duke	Duke	
	Life	Energy	Energy	Energy	Energy	Energy	Energy	Energy	Piedmont
	(Years)		Carolinas		Progress	Florida	Ohio	Indiana	
Land		\$ 2,091	\$ 520	\$ 884	\$ 449	\$ 435	\$ 150	\$ 117	\$ 388
Plant – Regulated									
Electric generation, distribution and transmission	15-100	111,739	42,723	48,142	30,018	18,124	5,838	15,032	—
Natural gas transmission and distribution	4-73	9,839	—	—	—	—	2,892	—	6,947
Other buildings and improvements	23-90	1,810	714	401	162	239	269	278	148
Plant – Nonregulated									
Electric generation, distribution and transmission	5-30	5,103	—	—	—	—	—	—	—
Other buildings and improvements	25-35	488	—	—	—	—	—	—	—
Nuclear fuel		3,253	1,891	1,362	1,362	—	—	—	—
Equipment	3-25	2,313	546	665	452	213	319	205	128
Construction in process		6,102	1,389	2,149	1,114	1,035	504	381	531
Other	2-40	4,916	1,139	1,467	1,046	411	269	292	304
Total property, plant and equipment ^{(a),(f)}		147,654	48,922	55,070	34,603	20,457	10,241	16,305	8,446
Total accumulated depreciation – regulated ^{(b),(c)}		(43,419)	(16,525)	(17,159)	(11,915)	(5,236)	(2,843)	(5,233)	(1,681)
Total accumulated depreciation – nonregulated ^{(d),(e)}		(2,354)	—	—	—	—	—	—	—
Generation facilities to be retired, net		246	—	246	246	—	—	—	—
Total net property, plant and equipment		\$102,127	\$ 32,397	\$ 38,157	\$ 22,934	\$ 15,221	\$ 7,398	\$ 11,072	\$ 6,765

- (a) Includes finance leases of \$952 million, \$211 million, \$443 million, \$308 million, \$135 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 \$143 million, \$17 million and \$126 million, respectively, of accumulated amortization of finance leases.
- (b) Includes \$1,807 million, \$1,082 million, \$725 million and \$725 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 \$6 million, \$13 million and \$3 million at Duke Energy, Duke Energy Carolinas and Duke Energy Indiana, respectively.
- (d) Includes accumulated amortization of finance leases of \$20 million at Duke Energy.
- (e) Includes gross property, plant and equipment cost of consolidated VIEs of \$5,747 million and accumulated depreciation of consolidated VIEs of \$1,041 million at Duke Energy.

During the year ended December 31, 2019, Duke Energy evaluated recoverability of the wind and solar generation assets included in the minority interest sale as a result of the portfolio fair value of consideration received being less than the carrying value of the assets and determined the assets were all recoverable. Additionally, in 2019, Duke Energy evaluated recoverability of its renewable merchant plants principally located in the Electric Reliability Council of Texas West market due to declining market pricing and declining long-term forecasted energy prices, primarily driven by lower forecasted natural gas prices. Duke Energy determined that the assets were not impaired because the carrying value of \$160 million approximates the aggregate estimated future cash flows. A continued decline in energy market pricing would likely result in a future impairment.

December 31, 2018									
(in millions)	Estimated Useful Life (Years)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Duke Energy Piedmont
Land		\$ 2,072	\$ 472	\$ 868	\$ 445	\$ 423	\$ 136	\$ 116	\$ 448
Plant – Regulated									
Electric generation, distribution and transmission	15-100	100,706	38,468	42,760	26,147	16,613	5,182	14,292	—
Natural gas transmission and distribution	12-80	8,808	—	—	—	—	2,719	—	6,089
Other buildings and improvements	24-90	1,966	681	636	295	341	270	253	126
Plant – Nonregulated									
Electric generation, distribution and transmission	5-30	4,410	—	—	—	—	—	—	—
Other buildings and improvements	25-35	494	—	—	—	—	—	—	—
Nuclear fuel		3,460	1,898	1,562	1,562	—	—	—	—
Equipment	3-55	2,141	467	565	399	166	384	178	141
Construction in process		5,726	1,678	2,515	1,659	856	412	325	382
Other	3-40	4,675	1,077	1,354	952	393	257	279	300
Total property, plant and equipment ^{(a)(d)}		134,458	44,741	50,260	31,459	18,792	9,360	15,443	7,486
Total accumulated depreciation – regulated ^{(b)(c)(d)}		(41,079)	(15,496)	(16,398)	(11,423)	(4,968)	(2,717)	(4,914)	(1,575)
Total accumulated depreciation – nonregulated ^{(c)(d)}		(2,047)	—	—	—	—	—	—	—
Generation facilities to be retired, net		362	—	362	362	—	—	—	—
Total net property, plant and equipment		\$ 91,694	\$ 29,245	\$ 34,224	\$ 20,398	\$ 13,824	\$ 6,643	\$ 10,529	\$ 5,911

- (a) Includes finance leases of \$1,237 million, \$135 million, \$257 million, \$137 million, \$120 million, \$73 million and \$35 million at Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio and Duke Energy Indiana, respectively, primarily within Plant – Regulated. The Progress Energy, Duke Energy Progress and Duke Energy Florida amounts are net of \$131 million, \$14 million and \$117 million, respectively, of accumulated amortization of finance leases.
- (b) Includes \$1,947 million, \$1,087 million, \$860 million and \$860 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 \$61 million, \$12 million, \$20 million and \$10 million at Duke Energy, Duke Energy Carolinas, Duke Energy Ohio and Duke Energy Indiana, respectively.
- (d) Includes gross property, plant and equipment cost of consolidated VIEs of \$4,007 million and accumulated depreciation of consolidated VIEs of \$698 million at Duke Energy.

During the year ended December 31, 2017, Duke Energy recorded a pretax impairment charge of \$69 million on a wholly owned non-contracted wind project. The impairment was recorded within Impairment charges on Duke Energy's Consolidated Statements of Operations. \$58 million of the impairment related to property, plant and equipment and \$11 million of the impairment related to a net intangible asset. The charge represents the excess carrying value over the estimated fair value of the project, which was based on a Level 3 Fair Value measurement that was determined from the income approach using discounted cash flows. The impairment was primarily due to the non-contracted wind project being located in a market that has experienced continued declining market pricing during 2017 and declining long-term forecasted energy and capacity prices, driven by low natural gas prices, additional renewable generation placed in service and lack of significant load growth.

The following tables present capitalized interest, which includes the debt component of AFUDC.

(in millions)	Years Ended December 31,		
	2019	2018	2017
Duke Energy	\$ 159	\$ 161	\$ 128
Duke Energy Carolinas	30	35	45
Progress Energy	31	51	45
Duke Energy Progress	28	26	21
Duke Energy Florida	3	25	24
Duke Energy Ohio	22	17	10
Duke Energy Indiana	26	27	9
Piedmont	26	17	12

12. GOODWILL AND INTANGIBLE ASSETS

GOODWILL

Duke Energy

The following table presents goodwill by reportable segment for Duke Energy included on Duke Energy's Consolidated Balance Sheets at December 31, 2019, and 2018.

(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Commercial Renewables	Total
Goodwill Balance at December 31, 2018	\$ 17,379	\$ 1,924	\$ 122	\$ 19,425
Accumulated impairment charges ^(a)	—	—	(122)	(122)
Goodwill balance at December 31, 2018, adjusted for accumulated impairment charges	\$ 17,379	\$ 1,924	\$ —	\$ 19,303
Goodwill Balance at December 31, 2019	\$ 17,379	\$ 1,924	\$ 122	\$ 19,425
Accumulated impairment charges ^(a)	—	—	(122)	(122)
Goodwill balance at December 31, 2019, adjusted for accumulated impairment charges	\$ 17,379	\$ 1,924	\$ —	\$ 19,303

- (a) Duke Energy evaluated the recoverability of goodwill during 2018 and 2017 and recorded impairment charges of \$93 million and \$29 million, respectively, related to the Commercial Renewables reporting unit included in Impairment charges on Duke Energy's Consolidated Statements of Operations. The fair value of the reporting unit was determined based on the income approach and market approach in 2018 and 2017, respectively. See "Goodwill Impairment Testing" below for the results of the 2019 goodwill impairment test.

Duke Energy Ohio

Duke Energy Ohio's Goodwill balance of \$920 million, allocated \$596 million to Electric Utilities and Infrastructure and \$324 million to Gas Utilities and Infrastructure, is presented net of accumulated impairment charges of \$216 million on the Consolidated Balance Sheets at December 31, 2019, and 2018.

Progress Energy

Progress Energy's Goodwill is included in the Electric Utilities and Infrastructure segment and there are no accumulated impairment charges.

Piedmont

Piedmont's Goodwill is included in the Gas Utilities and Infrastructure 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 2019.

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, 2019, and 2018.

(in millions)	December 31, 2019							
	Duke	Duke	Progress	Duke	Duke	Duke	Duke	
	Energy	Energy	Energy	Energy	Energy	Energy	Energy	Piedmont
Emission allowances	\$ 18	\$ —	\$ 5	\$ 2	\$ 3	\$ —	\$ 12	\$ —
Renewable energy certificates	172	53	118	118	—	1	—	—
Natural gas, coal and power contracts	24	—	—	—	—	—	24	—
Renewable operating and development projects	89	—	—	—	—	—	—	—
Other	2	—	—	—	—	—	—	—
Total gross carrying amounts	305	53	123	120	3	1	36	—
Accumulated amortization – natural gas, coal and power contracts	(21)	—	—	—	—	—	(21)	—
Accumulated amortization – renewable operating and development projects	(34)	—	—	—	—	—	—	—
Accumulated amortization – other	(1)	—	—	—	—	—	—	—
Total accumulated amortization	(56)	—	—	—	—	—	(21)	—
Total intangible assets, net	\$ 249	\$ 53	\$ 123	\$ 120	\$ 3	\$ 1	\$ 15	\$ —

(in millions)	December 31, 2018							
	Duke	Duke	Progress	Duke	Duke	Duke	Duke	
	Energy	Energy	Energy	Energy	Energy	Energy	Energy	Piedmont
Emission allowances	\$ 18	\$ —	\$ 5	\$ 2	\$ 3	\$ —	\$ 12	\$ —
Renewable energy certificates	168	46	120	120	—	2	—	—
Natural gas, coal and power contracts	24	—	—	—	—	—	24	—
Renewable operating and development projects	84	—	—	—	—	—	—	—
Other	6	—	—	—	—	—	—	3
Total gross carrying amounts	300	46	125	122	3	2	36	3
Accumulated amortization – natural gas, coal and power contracts	(20)	—	—	—	—	—	(20)	—
Accumulated amortization – renewable operating and development projects	(29)	—	—	—	—	—	—	—
Accumulated amortization – other	(5)	—	—	—	—	—	—	(3)
Total accumulated amortization	(54)	—	—	—	—	—	(20)	(3)
Total intangible assets, net	\$ 246	\$ 46	\$ 125	\$ 122	\$ 3	\$ 2	\$ 16	\$ —

See Note 11 for information related to 2017 impairment charge.

Amortization Expense

Amortization expense amounts for natural gas, coal and power contracts, renewable operating projects and other intangible assets are immaterial for the years ended December 31, 2019, 2018 and 2017, and are expected to be immaterial for the next five years as of December 31, 2019.

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.

(in millions)	Years Ended December 31,					
	2019		2018		2017	
	Investments	Equity in earnings	Investments	Equity in earnings	Investments	Equity in earnings
Electric Utilities and Infrastructure	\$ 122	\$ 9	\$ 97	\$ 6	\$ 89	\$ 5
Gas Utilities and Infrastructure	1,388	114	1,003	27	763	62
Commercial Renewables	314	(4)	201	(1)	190	(5)
Other	112	43	108	51	133	57
Total	\$ 1,936	\$ 162	\$ 1,409	\$ 83	\$ 1,175	\$ 119

During the years ended December 31, 2019, 2018 and 2017, Duke Energy received distributions from equity investments of \$55 million, \$108 million and \$13 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, 2019, 2018 and 2017, Duke Energy received distributions from equity investments of \$11 million, \$137 million and \$281 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, 2019, 2018 and 2017, Piedmont received distributions from equity investments of \$1 million, \$1 million and \$4 million, respectively, which are included in Other assets within Cash Flows from Operating Activities and \$4 million, \$3 million and \$2 million, respectively, which are included within Cash Flows from Investing Activities on the Consolidated Statements of Cash Flows.

Significant investments in affiliates accounted for under the equity method are discussed below.

Electric Utilities and Infrastructure

Duke Energy owns a 50% interest in DATC and in Pioneer, which build, own and operate electric transmission facilities in North America.

Gas Utilities and Infrastructure

The table below outlines Duke Energy's ownership interests in natural gas pipeline companies and natural gas storage facilities.

Entity Name	Ownership Interest	Investment Amount (in millions)	
		December 31, 2019	December 31, 2018
Pipeline Investments			
ACP	47%	\$ 1,179	\$ 797
Sabal Trail	7.5%	121	112 ^(c)
Constitution	24%	—	25
Cardinal ^(a)	21.49%	9	10
Storage Facilities			
Pine Needle ^(a)	45%	28	13
Hardy Storage ^(a)	50%	51	46
Total Investments^(b)		\$ 1,388	\$ 1,003

(a) Piedmont owns the Cardinal, Pine Needle and Hardy Storage investments.

(b) Duke Energy includes purchase accounting adjustments related to Piedmont.

(c) Sabal Trail returned capital of \$112 million during the year ended December 31, 2018.

In October 2017, Duke Energy entered into a guarantee agreement to support its share of the ACP revolving credit facility. See Note 8 for additional information. As a result of the financing, ACP returned capital of \$265 million to Duke Energy.

During 2018 and 2019, ACP received several adverse court rulings as described in Note 4. As a result, Duke Energy evaluated this investment for impairment and determined that fair value approximated carrying value and therefore no impairment was necessary.

For regulatory matters and other information on the ACP, Sabal Trail and Constitution investments, see Notes 4 and 18.

Commercial Renewables

DS Cornerstone, LLC, which owns wind farm projects in the U.S. was part of a sale of minority interest in a certain portion of renewable assets to John Hancock in 2019. See Note 2 for more information on the sale. Prior to the sale, Duke Energy had a 50% interest in DS Cornerstone, LLC. After the sale, Duke Energy has a 26% interest in the investment.

In 2019, Duke Energy acquired a majority ownership in a portfolio of distributed fuel cell projects from Bloom Energy Corporation. Duke Energy is not the primary beneficiary of the assets within the portfolio and does not consolidate the assets in the portfolio.

Impairment of Equity Method Investments

Duke Energy recorded OTTI of the Constitution investment within Equity in earnings of unconsolidated affiliates on Duke Energy's Consolidated Statements of Operations of \$25 million and \$55 million for the years ended December 31, 2019, and 2018, respectively. The current year charge resulted in the full write-down of Duke Energy's investment in Constitution. The impairments were primarily due to the continued delay in resolving project uncertainty through the courts and regulatory bodies, as well as recent pricing concerns between the customers and owners. For additional information on the Constitution investment, see Note 4.

Other

Duke Energy owns a 17.5% indirect interest in NMC, which owns and operates a methanol and MTBE business in Jubail, Saudi Arabia. Duke Energy's economic ownership interest decreased from 25% to 17.5% with the successful startup of NMC's polyacetal production facility in 2017. Duke Energy retains 25% of the board representation and voting rights of NMC.

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.

(in millions)	Years Ended December 31,		
	2019	2018	2017
Duke Energy Carolinas			
Corporate governance and shared service expenses ^(a)	\$ 841	\$ 985	\$ 858
Indemnification coverages ^(b)	20	22	23
Joint Dispatch Agreement (JDA) revenue ^(c)	60	84	49
JDA expense ^(c)	186	207	145
Intercompany natural gas purchases ^(d)	15	15	9
Progress Energy			
Corporate governance and shared service expenses ^(a)	\$ 778	\$ 906	\$ 736
Indemnification coverages ^(b)	37	34	38
JDA revenue ^(c)	186	207	145
JDA expense ^(c)	60	84	49
Intercompany natural gas purchases ^(d)	76	78	77
Duke Energy Progress			
Corporate governance and shared service expenses ^(a)	\$ 462	\$ 577	\$ 438
Indemnification coverages ^(b)	15	13	15
JDA revenue ^(c)	186	207	145
JDA expense ^(c)	60	84	49
Intercompany natural gas purchases ^(d)	76	78	77
Duke Energy Florida			
Corporate governance and shared service expenses ^(a)	\$ 316	\$ 329	\$ 298
Indemnification coverages ^(b)	22	21	23
Duke Energy Ohio			
Corporate governance and shared service expenses ^(a)	\$ 354	\$ 374	\$ 363
Indemnification coverages ^(b)	4	5	5
Duke Energy Indiana			
Corporate governance and shared service expenses ^(a)	\$ 412	\$ 405	\$ 370
Indemnification coverages ^(b)	7	7	8
Piedmont			
Corporate governance and shared service expenses ^(a)	\$ 138	\$ 170	\$ 50
Indemnification coverages ^(b)	3	2	2
Intercompany natural gas sales ^(d)	91	93	86
Natural gas storage and transportation costs ^(e)	23	25	25

- (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, 2019							
Intercompany income tax receivable	\$ —	\$ 125	\$ 28	\$ —	\$ 9	\$ 28	\$ 13
Intercompany income tax payable	5	—	—	2	—	—	—
December 31, 2018							
Intercompany income tax receivable	\$ 52	\$ 47	\$ 29	\$ —	\$ —	\$ 8	\$ —
Intercompany income tax payable	—	—	—	16	3	—	45

15. DERIVATIVES AND HEDGING

The Duke Energy Registrants use commodity and interest rate contracts to manage commodity price risk and interest 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.

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. Gains and losses reclassified out of AOCI for the years ended December 31, 2019, 2018 and 2017 were not material. Duke Energy's interest rate derivatives designated as hedges include interest rate swaps used to hedge existing debt within the Commercial Renewables business and 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, 2019					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio
Cash flow hedges	\$ 993	\$ —	\$ —	\$ —	\$ —	\$ —
Undesignated contracts	1,277	450	800	250	550	27
Total notional amount ^(a)	\$ 2,270	\$ 450	\$ 800	\$ 250	\$ 550	\$ 27

	December 31, 2018					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio
Cash flow hedges ^(a)	\$ 923	\$ —	\$ —	\$ —	\$ —	\$ —
Undesignated contracts	1,721	300	1,200	650	550	27
Total notional amount	\$ 2,644	\$ 300	\$ 1,200	\$ 650	\$ 550	\$ 27

(a) Duke Energy includes amounts related to consolidated VIEs of \$693 million in cash flow hedges as of December 31, 2019, and \$422 million in cash flow hedges and \$194 million in undesignated contracts as of December 31, 2018.

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 coal 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. For the Subsidiary Registrants, bulk power electricity and coal 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 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, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Electricity (GWh)	15,858	—	—	—	—	1,887	13,971	—
Natural gas (millions of Dth)	704	130	160	160	—	—	3	411

	December 31, 2018							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Electricity (GWh)	15,286	—	—	—	—	1,786	13,500	—
Natural gas (millions of Dth)	739	121	169	166	3	—	1	448

U.S. EQUITY SECURITIES RISK

In May 2019, Duke Energy Florida entered into a Decommissioning Services Agreement for the accelerated decommissioning of Crystal River Unit 3 with ADP CR3, LLC and ADP SF1, LLC. See Note 4 for additional information on the accelerated decommissioning. Duke Energy Florida executed U.S. equity option collars within the NDTF in May 2019 to preserve the U.S. equity portfolio value in the Duke Energy Florida NDTF in the event the accelerated decommissioning is approved. These option collars were executed as a purchase of a put option and the sale of a call option on certain U.S. equity index funds. The put and call options create a collar to guarantee a minimum and maximum investment value for the Duke Energy Florida NDTF U.S. equity portfolio. The put and call options were entered into at zero-cost, with the price to purchase the puts offset entirely by the funds received to sell the calls. As of December 31, 2019, the aggregate notional amount of both the put and call options was 305,000 units in U.S. equity security index funds. The options are not designated as hedging instruments. Substantially all of Duke Energy Florida's NDTF qualifies for regulatory accounting. With regulatory accounting, the mark-to-market gains or losses on the options are deferred as regulatory liabilities or regulatory assets, respectively.

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, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
(in millions)								
Commodity Contracts								
<i>Not Designated as Hedging Instruments</i>								
Current	\$ 17	\$ —	\$ —	\$ —	\$ —	\$ 3	\$ 13	\$ 1
Noncurrent	1	—	—	—	—	1	—	—
Total Derivative Assets – Commodity Contracts	\$ 18	\$ —	\$ —	\$ —	\$ —	\$ 4	\$ 13	\$ 1
Interest Rate Contracts								
<i>Not Designated as Hedging Instruments</i>								
Current	6	—	6	—	6	—	—	—
Total Derivative Assets – Interest Rate Contracts	\$ 6	\$ —	\$ 6	\$ —	\$ 6	\$ —	\$ —	\$ —
Equity Securities Contracts								
<i>Not Designated as Hedging Instruments</i>								
Current	1	—	1	—	1	—	—	—
Total Derivative Assets – Equity Securities Contracts	\$ 1	\$ —	\$ 1	\$ —	\$ 1	\$ —	\$ —	\$ —
Total Derivative Assets	\$ 25	\$ —	\$ 7	\$ —	\$ 7	\$ 4	\$ 13	\$ 1
Derivative Liabilities	December 31, 2019							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
(in millions)								
Commodity Contracts								
<i>Not Designated as Hedging Instruments</i>								
Current	\$ 67	\$ 33	\$ 26	\$ 26	\$ —	\$ —	\$ 1	\$ 7
Noncurrent	156	10	37	22	—	—	—	110
Total Derivative Liabilities – Commodity Contracts	\$ 223	\$ 43	\$ 63	\$ 48	\$ —	\$ —	\$ 1	\$ 117
Interest Rate Contracts								
<i>Designated as Hedging Instruments</i>								
Current	\$ 19	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Noncurrent	21	—	—	—	—	—	—	—
<i>Not Designated as Hedging Instruments</i>								
Current	8	6	1	1	—	1	—	—
Noncurrent	5	—	—	—	—	5	—	—
Total Derivative Liabilities – Interest Rate Contracts	\$ 53	\$ 6	\$ 1	\$ 1	\$ —	\$ 6	\$ —	\$ —
Equity Securities Contracts								
<i>Not Designated as Hedging Instruments</i>								
Current	24	—	24	—	24	—	—	—
Total Derivative Liabilities – Equity Security Contracts	\$ 24	\$ —	\$ 24	\$ —	\$ 24	\$ —	\$ —	\$ —
Total Derivative Liabilities	\$ 300	\$ 49	\$ 88	\$ 49	\$ 24	\$ 6	\$ 1	\$ 117

Derivative Assets		December 31, 2018							
		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
(in millions)									
Commodity Contracts									
<i>Not Designated as Hedging Instruments</i>									
Current	\$ 35	\$ 2	\$ 2	\$ 2	\$ —	\$ 6	\$ 23	\$ 3	
Noncurrent	4	1	2	2	—	—	—	—	
Total Derivative Assets – Commodity Contracts	\$ 39	\$ 3	\$ 4	\$ 4	\$ —	\$ 6	\$ 23	\$ 3	
Interest Rate Contracts									
<i>Designated as Hedging Instruments</i>									
Current	\$ 1	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	
Noncurrent	3	—	—	—	—	—	—	—	
<i>Not Designated as Hedging Instruments</i>									
Current	2	—	—	—	—	—	—	—	
Noncurrent	12	—	—	—	—	—	—	—	
Total Derivative Assets – Interest Rate Contracts	\$ 18	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	
Total Derivative Assets	\$ 57	\$ 3	\$ 4	\$ 4	\$ —	\$ 6	\$ 23	\$ 3	
Derivative Liabilities									
		December 31, 2018							
		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
(in millions)									
Commodity Contracts									
<i>Not Designated as Hedging Instruments</i>									
Current	\$ 33	\$ 14	\$ 10	\$ 5	\$ 6	\$ —	\$ —	\$ 8	
Noncurrent	158	10	15	6	—	—	—	133	
Total Derivative Liabilities – Commodity Contracts	\$ 191	\$ 24	\$ 25	\$ 11	\$ 6	\$ —	\$ —	\$ 141	
Interest Rate Contracts									
<i>Designated as Hedging Instruments</i>									
Current	\$ 12	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	
Noncurrent	6	—	—	—	—	—	—	—	
<i>Not Designated as Hedging Instruments</i>									
Current	23	9	13	11	2	1	—	—	
Noncurrent	10	—	6	5	1	4	—	—	
Total Derivative Liabilities – Interest Rate Contracts	\$ 51	\$ 9	\$ 19	\$ 16	\$ 3	\$ 5	\$ —	\$ —	
Total Derivative Liabilities	\$ 242	\$ 33	\$ 44	\$ 27	\$ 9	\$ 5	\$ —	\$ 141	

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, 2019							
(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	\$ 24	\$ —	\$ 7	\$ —	\$ 7	\$ 3	\$ 13	\$ 1	
Gross amounts offset	(1)	—	(1)	—	(1)	—	—	—	
Net amounts presented in Current Assets: Other	\$ 23	\$ —	\$ 6	\$ —	\$ 6	\$ 3	\$ 13	\$ 1	
Noncurrent									
Gross amounts recognized	\$ 1	\$ —	\$ —	\$ —	\$ —	\$ 1	\$ —	\$ —	
Gross amounts offset	—	—	—	—	—	—	—	—	
Net amounts presented in Other Noncurrent Assets: Other	\$ 1	\$ —	\$ —	\$ —	\$ —	\$ 1	\$ —	\$ —	

Derivative Liabilities		December 31, 2019							
(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	\$ 118	\$ 39	\$ 51	\$ 27	\$ 24	\$ 1	\$ 1	\$ 7	
Gross amounts offset	(24)	—	(24)	—	(24)	—	—	—	
Net amounts presented in Current Liabilities: Other	\$ 94	\$ 39	\$ 27	\$ 27	\$ —	\$ 1	\$ 1	\$ 7	
Noncurrent									
Gross amounts recognized	\$ 182	\$ 10	\$ 37	\$ 22	\$ —	\$ 5	\$ —	\$ 110	
Gross amounts offset	—	—	—	—	—	—	—	—	
Net amounts presented in Other Noncurrent Liabilities: Other	\$ 182	\$ 10	\$ 37	\$ 22	\$ —	\$ 5	\$ —	\$ 110	

Derivative Assets	December 31, 2018							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
(in millions)								
Current								
Gross amounts recognized	\$ 38	\$ 2	\$ 2	\$ 2	\$ —	\$ 6	\$ 23	\$ 3
Gross amounts offset	(3)	(2)	(2)	(2)	—	—	—	—
Net amounts presented in Current Assets: Other	\$ 35	\$ —	\$ —	\$ —	\$ —	\$ 6	\$ 23	\$ 3
Noncurrent								
Gross amounts recognized	\$ 19	\$ 1	\$ 2	\$ 2	\$ —	\$ —	\$ —	\$ —
Gross amounts offset	(3)	(1)	(2)	(2)	—	—	—	—
Net amounts presented in Other Noncurrent Assets: Other	\$ 16	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Derivative Liabilities	December 31, 2018							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
(in millions)								
Current								
Gross amounts recognized	\$ 68	\$ 23	\$ 23	\$ 16	\$ 8	\$ 1	\$ —	\$ 8
Gross amounts offset	(4)	(2)	(2)	(2)	—	—	—	—
Net amounts presented in Current Liabilities: Other	\$ 64	\$ 21	\$ 21	\$ 14	\$ 8	\$ 1	\$ —	\$ 8
Noncurrent								
Gross amounts recognized	\$ 174	\$ 10	\$ 21	\$ 11	\$ 1	\$ 4	\$ —	\$ 133
Gross amounts offset	(3)	(1)	(2)	(2)	—	—	—	—
Net amounts presented in Other Noncurrent Liabilities: Other	\$ 171	\$ 9	\$ 19	\$ 9	\$ 1	\$ 4	\$ —	\$ 133

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.

(in millions)	December 31, 2019			
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress
Aggregate fair value of derivatives in a net liability position	\$ 79	\$ 35	\$ 44	\$ 44
Fair value of collateral already posted	—	—	—	—
Additional cash collateral or letters of credit in the event credit-risk-related contingent features were triggered	79	35	44	44
	December 31, 2018			
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress
(in millions)				
Aggregate fair value of derivatives in a net liability position	\$ 44	\$ 19	\$ 25	\$ 25
Fair value of collateral already posted	—	—	—	—
Additional cash collateral or letters of credit in the event credit-risk-related contingent features were triggered	44	19	25	25

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 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 considered OTTI and 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 is other-than-temporarily impaired. The Duke Energy Registrants analyze all investment holdings each reporting period to determine whether a decline in fair value should be considered other-than-temporary. If an OTTI exists, the unrealized credit loss is included in earnings. There were no material credit losses as of December 31, 2019, and 2018.

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.

(in millions)	December 31, 2019			December 31, 2018		
	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	\$ —	\$ —	\$ 101	\$ —	\$ —	\$ 88
Equity securities	3,523	55	5,661	2,402	95	4,475
Corporate debt securities	37	1	603	4	13	566
Municipal bonds	13	—	368	1	4	353
U.S. government bonds	33	1	1,256	14	12	1,076
Other debt securities	3	—	141	—	2	148
Total NDTF Investments	\$ 3,609	\$ 57	\$ 8,130	\$ 2,421	\$ 126	\$ 6,706
Other Investments						
Cash and cash equivalents	\$ —	\$ —	\$ 52	\$ —	\$ —	\$ 22
Equity securities	57	—	122	36	1	99
Corporate debt securities	3	—	67	—	2	60
Municipal bonds	4	—	94	—	1	85
U.S. government bonds	2	—	41	1	—	45
Other debt securities	—	—	56	—	1	58
Total Other Investments	\$ 66	\$ —	\$ 432	\$ 37	\$ 5	\$ 369
Total Investments	\$ 3,675	\$ 57	\$ 8,562	\$ 2,458	\$ 131	\$ 7,075

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2019
Due in one year or less	\$ 372
Due after one through five years	550
Due after five through 10 years	452
Due after 10 years	1,252
Total	\$ 2,626

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, 2019, and 2018, and from sales of AFS securities for the year ended December 31, 2017, were as follows.

(in millions)	Years Ended December 31,	
	2019	2018
FV-NI:		
Realized gains	\$ 172	\$ 168
Realized losses	151	126
AFS:		
Realized gains	94	22
Realized losses	67	51

(in millions)	Year Ended December 31,
	2017
Realized gains	\$ 202
Realized losses	160

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.

(in millions)	December 31, 2019			December 31, 2018		
	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	\$ —	\$ —	\$ 21	\$ —	\$ —	\$ 29
Equity securities	1,914	8	3,154	1,309	54	2,484
Corporate debt securities	21	1	361	2	9	341
Municipal bonds	3	—	96	—	1	81
U.S. government bonds	16	1	578	5	8	475
Other debt securities	3	—	137	—	2	143
Total NDTF Investments	\$ 1,957	\$ 10	\$ 4,347	\$ 1,316	\$ 74	\$ 3,553

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2019
Due in one year or less	\$ 51
Due after one through five years	253
Due after five through 10 years	181
Due after 10 years	687
Total	\$ 1,172

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, 2019, and 2018, and from sales of AFS securities for the year ended December 31, 2017, were as follows.

(in millions)	Years Ended December 31,	
	2019	2018
FV-NI:		
Realized gains	\$ 113	\$ 89
Realized losses	107	73
AFS:		
Realized gains	55	19
Realized losses	38	35

(in millions)	Year Ended December 31,
	2017
Realized gains	\$ 135
Realized losses	103

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.

(in millions)	December 31, 2019			December 31, 2018		
	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	\$ —	\$ —	\$ 80	\$ —	\$ —	\$ 59
Equity securities	1,609	47	2,507	1,093	41	1,991
Corporate debt securities	16	—	242	2	4	225
Municipal bonds	10	—	272	1	3	272
U.S. government bonds	17	—	678	9	4	601
Other debt securities	—	—	4	—	—	5
Total NDTF Investments	\$ 1,652	\$ 47	\$ 3,783	\$ 1,105	\$ 52	\$ 3,153
Other Investments						
Cash and cash equivalents	\$ —	\$ —	\$ 49	\$ —	\$ —	\$ 17
Municipal bonds	3	—	51	—	—	47
Total Other Investments	\$ 3	\$ —	\$ 100	\$ —	\$ —	\$ 64
Total Investments	\$ 1,655	\$ 47	\$ 3,883	\$ 1,105	\$ 52	\$ 3,217

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2019
Due in one year or less	\$ 311
Due after one through five years	256
Due after five through 10 years	211
Due after 10 years	469
Total	\$ 1,247

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, 2019, and 2018, and from sales of AFS securities for the year ended December 31, 2017, were as follows.

(in millions)	Years Ended December 31,	
	2019	2018
FV-NI:		
Realized gains	\$ 59	\$ 79
Realized losses	44	53
AFS:		
Realized gains	36	3
Realized losses	29	15

(in millions)	Year Ended December 31,	
	2017	
Realized gains	\$	65
Realized losses		56

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.

(in millions)	December 31, 2019			December 31, 2018		
	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	\$ —	\$ —	\$ 53	\$ —	\$ —	\$ 46
Equity securities	1,258	21	2,077	833	30	1,588
Corporate debt securities	16	—	242	2	3	171
Municipal bonds	10	—	272	1	3	271
U.S. government bonds	16	—	403	6	3	415
Other debt securities	—	—	4	—	—	3
Total NDTF Investments	\$ 1,300	\$ 21	\$ 3,051	\$ 842	\$ 39	\$ 2,494
Other Investments						
Cash and cash equivalents	\$ —	\$ —	\$ 2	\$ —	\$ —	\$ 6
Total Other Investments	\$ —	\$ —	\$ 2	\$ —	\$ —	\$ 6
Total Investments	\$ 1,300	\$ 21	\$ 3,053	\$ 842	\$ 39	\$ 2,500

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2019
Due in one year or less	\$ 34
Due after one through five years	247
Due after five through 10 years	204
Due after 10 years	436
Total	\$ 921

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, 2019, and 2018, and from sales of AFS securities for the year ended December 31, 2017, were as follows.

(in millions)	Years Ended December 31,	
	2019	2018
FV-NI:		
Realized gains	\$ 38	\$ 68
Realized losses	33	48
AFS:		
Realized gains	7	2
Realized losses	5	10

(in millions)	Year Ended December 31,	
	2017	
Realized gains	\$	54
Realized losses		48

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.

(in millions)	December 31, 2019			December 31, 2018		
	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	\$ —	\$ —	\$ 27	\$ —	\$ —	\$ 13
Equity securities	351	26	430	260	11	403
Corporate debt securities	—	—	—	—	1	54
Municipal bonds	—	—	—	—	—	1
U.S. government bonds	1	—	275	3	1	186
Other debt securities	—	—	—	—	—	2
Total NDTF Investments^(a)	\$ 352	\$ 26	\$ 732	\$ 263	\$ 13	\$ 659
Other Investments						
Cash and cash equivalents	\$ —	\$ —	\$ 4	\$ —	\$ —	\$ 1
Municipal bonds	3	—	51	—	—	47
Total Other Investments	\$ 3	\$ —	\$ 55	\$ —	\$ —	\$ 48
Total Investments	\$ 355	\$ 26	\$ 787	\$ 263	\$ 13	\$ 707

(a) During the year ended December 31, 2019, Duke Energy Florida continued to receive reimbursements from the NDTF for costs related to ongoing decommissioning activity of the Crystal River Unit 3.

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2019
Due in one year or less	\$ 277
Due after one through five years	9
Due after five through 10 years	7
Due after 10 years	33
Total	\$ 326

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, 2019, and 2018, and from sales of AFS securities for the year ended December 31, 2017, were as follows.

(in millions)	Years Ended December 31,	
	2019	2018
FV-NI:		
Realized gains	\$ 21	\$ 11
Realized losses	11	5
AFS:		
Realized gains	29	1
Realized losses	24	5

(in millions)	Year Ended December 31,	
	2017	
Realized gains	\$	11
Realized losses		8

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.

(in millions)	December 31, 2019			December 31, 2018		
	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
Investments						
Equity securities	\$ 43	\$ —	\$ 81	\$ 29	\$ —	\$ 67
Corporate debt securities	—	—	6	—	—	8
Municipal bonds	1	—	36	—	1	33
U.S. government bonds	—	—	2	—	—	—
Total Investments	\$ 44	\$ —	\$ 125	\$ 29	\$ 1	\$ 108

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2019
Due in one year or less	\$ 4
Due after one through five years	16
Due after five through 10 years	7
Due after 10 years	17
Total	\$ 44

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the year ended December 31, 2019, and 2018, and from sales of AFS securities for the year ended December 31, 2017, were insignificant.

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 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 NAV 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. 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.

Other fair value considerations

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.

(in millions)	December 31, 2019				
	Total Fair Value	Level 1	Level 2	Level 3	Not Categorized
NDTF equity securities	\$ 5,684	\$ 5,633	\$ —	\$ —	51
NDTF debt securities	2,469	826	1,643	—	—
Other equity securities	122	122	—	—	—
Other debt securities	310	91	219	—	—
Derivative assets	25	3	7	15	—
Total assets	8,610	6,675	1,869	15	51
NDTF equity security contracts	(23)	—	(23)	—	—
Derivative liabilities	(277)	(15)	(145)	(117)	—
Net assets (liabilities)	\$ 8,310	\$ 6,660	\$ 1,701	\$ (102)	51

(in millions)	December 31, 2018				
	Total Fair Value	Level 1	Level 2	Level 3	Not Categorized
NDTF equity securities	\$ 4,475	\$ 4,410	\$ —	\$ —	\$ 65
NDTF debt securities	2,231	576	1,655	—	—
Other equity securities	99	99	—	—	—
Other debt securities	270	67	203	—	—
Derivative assets	57	4	25	28	—
Total assets	7,132	5,156	1,883	28	65
Derivative liabilities	(242)	(11)	(90)	(141)	—
Net assets (liabilities)	\$ 6,890	\$ 5,145	\$ 1,793	\$ (113)	\$ 65

The following table provides reconciliations of beginning and ending balances of assets and liabilities measured at fair value using Level 3 measurements.

(in millions)	December 31, 2019	December 31, 2018
	Derivatives (net)	Derivatives (net)
Balance at beginning of period	\$ (113)	\$ (114)
Purchases, sales, issuances and settlements:		
Purchases	37	57
Settlements	(44)	(57)
Total gains included on the Consolidated Balance Sheet	18	1
Balance at end of period	\$ (102)	\$ (113)

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.

(in millions)	December 31, 2019			
	Total Fair Value	Level 1	Level 2	Not Categorized
NDTF equity securities	\$ 3,154	\$ 3,103	\$ —	\$ 51
NDTF debt securities	1,193	227	966	—
Total assets	4,347	3,330	966	51
Derivative liabilities	(49)	—	(49)	—
Net assets	\$ 4,298	\$ 3,330	\$ 917	\$ 51

(in millions)	December 31, 2018			
	Total Fair Value	Level 1	Level 2	Not Categorized
NDTF equity securities	\$ 2,484	\$ 2,419	\$ —	\$ 65
NDTF debt securities	1,069	149	920	—
Derivative assets	3	—	3	—
Total assets	3,556	2,568	923	65
Derivative liabilities	(33)	—	(33)	—
Net assets	\$ 3,523	\$ 2,568	\$ 890	\$ 65

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.

(in millions)	December 31, 2019			December 31, 2018		
	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF equity securities	\$ 2,530	\$ 2,530	\$ —	\$ 1,991	\$ 1,991	\$ —
NDTF debt securities	1,276	599	677	1,162	427	735
Other debt securities	100	49	51	64	17	47
Derivative assets	7	—	7	4	—	4
Total assets	3,913	3,178	735	3,221	2,435	786
NDTF equity security contracts	(23)	—	(23)	—	—	—
Derivative liabilities	(65)	—	(65)	(44)	—	(44)
Net assets	\$ 3,825	\$ 3,178	\$ 647	\$ 3,177	\$ 2,435	\$ 742

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.

(in millions)	December 31, 2019			December 31, 2018		
	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF equity securities	\$ 2,077	\$ 2,077	\$ —	\$ 1,588	\$ 1,588	\$ —
NDTF debt securities	974	297	677	906	294	612
Other debt securities	2	2	—	6	6	—
Derivative assets	—	—	—	4	—	4
Total assets	3,053	2,376	677	2,504	1,888	616
Derivative liabilities	(49)	—	(49)	(27)	—	(27)
Net assets	\$ 3,004	\$ 2,376	\$ 628	\$ 2,477	\$ 1,888	\$ 589

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.

(in millions)	December 31, 2019			December 31, 2018		
	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF equity securities	\$ 453	\$ 453	\$ —	\$ 403	\$ 403	\$ —
NDTF debt securities	302	302	—	256	133	123
Other debt securities	55	4	51	48	1	47
Derivative assets	7	—	7	—	—	—
Total assets	817	759	58	707	537	170
NDTF equity security contracts	(23)	—	(23)	—	—	—
Derivative liabilities	(1)	—	(1)	(9)	—	(9)
Net assets	\$ 793	\$ 759	\$ 34	\$ 698	\$ 537	\$ 161

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, 2019, and 2018.

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.

(in millions)	December 31, 2019				December 31, 2018			
	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3
Other equity securities	\$ 81	\$ 81	\$ —	\$ —	\$ 67	\$ 67	\$ —	\$ —
Other debt securities	44	—	44	—	41	—	41	—
Derivative assets	13	2	—	11	23	1	—	22
Total assets	138	83	44	11	131	68	41	22
Derivative liabilities	(1)	(1)	—	—	—	—	—	—
Total assets	\$ 137	\$ 82	\$ 44	\$ 11	\$ 131	\$ 68	\$ 41	\$ 22

The following table provides a reconciliation of beginning and ending balances of assets and liabilities measured at fair value using Level 3 measurements.

(in millions)	Derivatives (net)	
	Years Ended December 31,	
	2019	2018
Balance at beginning of period	\$ 22	\$ 27
Purchases, sales, issuances and settlements:		
Purchases	28	50
Settlements	(36)	(53)
Total losses included on the Consolidated Balance Sheet	(3)	(2)
Balance at end of period	\$ 11	\$ 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.

(in millions)	December 31, 2019			December 31, 2018		
	Total Fair Value	Level 1	Level 3	Total Fair Value	Level 1	Level 3
Derivative assets	\$ 1	\$ 1	\$ —	\$ 3	\$ 3	\$ —
Derivative liabilities	(117)	—	(117)	(141)	—	(141)
Net (liabilities) assets	\$ (116)	\$ 1	\$ (117)	\$ (138)	\$ 3	\$ (141)

The following table provides a reconciliation of beginning and ending balances of assets and liabilities measured at fair value using Level 3 measurements.

(in millions)	Derivatives (net)	
	Years Ended December 31,	
	2019	2018
Balance at beginning of period	\$ (141)	\$ (142)
Total gains and settlements	24	1
Balance at end of period	\$ (117)	\$ (141)

QUANTITATIVE INFORMATION ABOUT UNOBSERVABLE INPUTS

The following tables include quantitative information about the Duke Energy Registrants' derivatives classified as Level 3.

December 31, 2019					
Investment Type	Fair Value (in millions)	Valuation Technique	Unobservable Input	Range	Weighted Average Range
Duke Energy Ohio					
FTRs	\$ 4	RTO auction pricing	FTR price – per MWh	\$ 0.59 – \$ 3.47	\$ 2.07
Duke Energy Indiana					
FTRs	11	RTO auction pricing	FTR price – per MWh	(0.66) – 9.24	1.15
Piedmont					
Natural gas contracts	(117)	Discounted cash flow	Forward natural gas curves – price per MMBtu	1.59 – 2.46	1.91
Duke Energy					
Total Level 3 derivatives	\$ (102)				

December 31, 2018					
Investment Type	Fair Value (in millions)	Valuation Technique	Unobservable Input	Range	
Duke Energy Ohio					
FTRs	\$ 6	RTO auction pricing	FTR price – per MWh	\$ 1.19 – \$ 4.59	
Duke Energy Indiana					
FTRs	22	RTO auction pricing	FTR price – per MWh	(2.07) – 8.27	
Piedmont					
Natural gas contracts	(141)	Discounted cash flow	Forward natural gas curves – price per MMBtu	1.87 – 2.95	
Duke Energy					
Total Level 3 derivatives	\$ (113)				

OTHER FAIR VALUE DISCLOSURES

The fair value and book value of long-term debt, including current maturities, is summarized in the following table. 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.

(in millions)	December 31, 2019		December 31, 2018	
	Book Value	Fair Value	Book Value	Fair Value
Duke Energy ^(a)	\$ 58,126	\$ 63,062	\$ 54,529	\$ 54,534
Duke Energy Carolinas	11,900	13,516	10,939	11,471
Progress Energy	19,634	22,291	18,911	19,885
Duke Energy Progress	9,058	9,934	8,204	8,300
Duke Energy Florida	7,987	9,131	7,321	7,742
Duke Energy Ohio	2,619	2,964	2,165	2,239
Duke Energy Indiana	4,057	4,800	3,782	4,158
Piedmont	2,384	2,642	2,138	2,180

- (a) Book value of long-term debt includes \$1.5 billion as of December 31, 2019, and \$1.6 billion as of December 31, 2018, 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, 2019, and December 31, 2018, 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, 2019, 2018, and 2017, 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. 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. 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.

(in millions)	Duke Energy			
	CRC	Duke Energy	Duke Energy	Duke Energy
		Carolinas	Progress	Florida
	DERF	DEPR	DEFR	
Expiration date	February 2023	December 2022	February 2021	April 2021
Credit facility amount	\$ 350	\$ 475	\$ 325	\$ 250
Amounts borrowed at December 31, 2019	350	474	325	250
Amounts borrowed at December 31, 2018	325	450	300	225
Restricted Receivables at December 31, 2019	522	642	489	336
Restricted Receivables at December 31, 2018	564	699	547	357

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.

(in millions)	December 31,	
	2019	2018
Receivables of VIEs	\$ 5	\$ 5
Regulatory Assets: Current	52	52
Current Assets: Other	39	39
Other Noncurrent Assets: Regulatory assets	989	1,041
Current Liabilities: Other	10	10
Current maturities of long-term debt	54	53
Long-Term Debt	1,057	1,111

Commercial Renewables

Certain of Duke Energy's renewable energy facilities are VIEs due to Duke Energy issuing guarantees for debt service and operations and maintenance reserves in support of debt financings. Assets are restricted and cannot be pledged as collateral or sold to third parties without prior approval of debt holders. Additionally, Duke Energy has VIEs associated with tax equity arrangements entered into with third-party investors in order to finance the cost of renewable assets eligible for tax credits. The activities that most significantly impacted the economic performance of these renewable energy facilities were decisions associated with siting, negotiating PPAs and EPC agreements, and decisions associated with ongoing operations and maintenance-related activities. Duke Energy is considered the primary beneficiary and consolidates the entities as it is responsible for all of these decisions.

The table below presents material balances reported on Duke Energy's Consolidated Balance Sheets related to Commercial Renewables VIEs.

(in millions)	December 31,	
	2019	2018
Current Assets: Other	\$ 203	\$ 123
Property, Plant and Equipment: Cost	5,747	4,007
Accumulated depreciation and amortization	(1,041)	(698)
Other Noncurrent Assets: Other	106	261
Current maturities of long-term debt	162	174
Long-Term Debt	1,541	1,587
Other Noncurrent Liabilities: AROs	127	106
Other Noncurrent Liabilities: Other	228	212

NON-CONSOLIDATED VIEs

The following tables summarize the impact of non-consolidated VIEs on the Consolidated Balance Sheets.

(in millions)	December 31, 2019					
	Duke Energy				Duke Energy Ohio	Duke Energy Indiana
	Pipeline Investments	Commercial Renewables	Other VIEs ^(a)	Total		
Receivables from affiliated companies	\$ —	\$ (1)	\$ —	\$ (1)	\$ 64	\$ 77
Investments in equity method unconsolidated affiliates	1,179	300	—	1,479	—	—
Total assets	\$ 1,179	\$ 299	\$ —	\$ 1,478	\$ 64	\$ 77
Taxes accrued	(1)	—	—	(1)	—	—
Other current liabilities	—	—	4	4	—	—
Deferred income taxes	59	—	—	59	—	—
Other noncurrent liabilities	—	—	11	11	—	—
Total liabilities	\$ 58	\$ —	\$ 15	\$ 73	\$ —	\$ —
Net assets (liabilities)	\$ 1,121	\$ 299	\$ (15)	\$ 1,405	\$ 64	\$ 77

- (a) Duke Energy holds a 50% equity interest in Pioneer. As of December 31, 2018, Pioneer was considered a VIE due to having insufficient equity to finance its own activities without subordinated financial support. In October 2019, Pioneer closed on a private placement debt offering that gave Pioneer sufficient equity to finance its own activities and, therefore, is no longer considered a VIE. Duke Energy's investment in Pioneer was \$57 million at December 31, 2019.

(in millions)	December 31, 2018					
	Duke Energy				Duke Energy Ohio	Duke Energy Indiana
	Pipeline Investments	Commercial Renewables	Other VIEs	Total		
Receivables from affiliated companies	\$ —	\$ —	\$ —	\$ —	\$ 93	\$ 118
Investments in equity method unconsolidated affiliates	822	190	48	1,060	—	—
Total assets	\$ 822	\$ 190	\$ 48	\$ 1,060	\$ 93	\$ 118
Taxes accrued	(1)	—	—	(1)	—	—
Other current liabilities	—	—	4	4	—	—
Deferred income taxes	21	—	—	21	—	—
Other noncurrent liabilities	—	—	12	12	—	—
Total liabilities	\$ 20	\$ —	\$ 16	\$ 36	\$ —	\$ —
Net assets	\$ 802	\$ 190	\$ 32	\$ 1,024	\$ 93	\$ 118

The Duke Energy Registrants are not aware of any situations where the maximum exposure to loss significantly exceeds the carrying values shown above except for the PPA with OVEC, which is discussed below, and various guarantees, including Duke Energy's guarantee agreement to support its share of the ACP revolving credit facility. Duke Energy's maximum exposure to loss under the terms of the guarantee is \$827 million, which represents 47% of the outstanding borrowings under the credit facility as of December 31, 2019. For more information on various guarantees, refer to Note 8.

Pipeline Investments

Duke Energy has investments in various joint ventures with pipeline projects currently under construction. 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.

The table below presents Duke Energy's ownership interest and investment balances in these joint ventures.

Entity Name	Ownership Interest	VIE Investment Amount (in millions)	
		December 31, 2019	December 31, 2018
ACP ^(a)	47%	\$ 1,179	\$ 797
Constitution ^(b)	24%	—	25
Total		\$ 1,179	\$ 822

- (a) Duke Energy evaluated this investment for impairment as of December 31, 2019, and 2018, and determined that fair value approximated carrying value and therefore no impairment was necessary.
- (b) During the years ended December 31, 2019, and 2018, Duke Energy recorded an OTTI of \$25 million and \$55 million, respectively, related to Constitution within Equity in earnings of unconsolidated affiliates on Duke Energy's Consolidated Statements of Income. The current year charge resulted in the full write-down of Duke Energy's investment in Constitution. See Notes 4 and 13 for additional information.

Commercial Renewables

Duke Energy has investments in various renewable energy project entities. Some of these entities are VIEs due to Duke Energy issuing guarantees for debt service and operations and maintenance reserves in support of debt financings. Duke Energy does not consolidate these VIEs because power to direct and control key activities is shared jointly by Duke Energy and other owners. In 2019, Duke Energy acquired a majority ownership in a portfolio of distributed fuel cell projects from Bloom Energy Corporation. Duke Energy is not the primary beneficiary of the assets within the portfolio and does not consolidate the assets in the portfolio.

OVEC

Duke Energy Ohio's 9% ownership interest in OVEC is considered a non-consolidated VIE due to OVEC having insufficient equity to finance its activities without subordinated financial support. The activities that most significantly impact OVEC's economic performance include fuel strategy and supply activities and decisions associated with ongoing operations and maintenance-related activities. Duke Energy Ohio does not have the unilateral power to direct these activities, and therefore, does not consolidate OVEC.

As a counterparty to an Inter-Company Power Agreement (ICPA), Duke Energy Ohio has a contractual arrangement to receive entitlements to capacity and energy from OVEC's power plants through June 2040 commensurate with its power participation ratio, which is equivalent to Duke Energy Ohio's ownership interest. Costs, including fuel, operating expenses, fixed costs, debt amortization and interest expense, are allocated to counterparties to the ICPA based on their power participation ratio. The value of the ICPA is subject to variability due to fluctuation in power prices and changes in OVEC's cost of business. On March 31, 2018, FES, a subsidiary of FirstEnergy Corp. and an ICPA counterparty with a power participation ratio of 4.85%, filed for Chapter 11 bankruptcy, which could increase costs allocated to the counterparties. On July 31, 2018, the bankruptcy court rejected the FES ICPA, which means OVEC is an unsecured creditor in the FES bankruptcy proceeding. Duke Energy Ohio cannot predict the impact of the bankruptcy filing on its OVEC interests. In addition, certain proposed environmental rulemaking could result in future increased OVEC cost allocations. See Note 4 for additional information.

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 OTTI has occurred.

Key assumptions used in estimating fair value are detailed in the following table.

	Duke Energy Ohio		Duke Energy Indiana	
	2019	2018	2019	2018
Anticipated credit loss ratio	0.6%	0.5%	0.3%	0.3%
Discount rate	3.3%	3.0%	3.3%	3.0%
Receivable turnover rate	13.4%	13.5%	11.5%	11.0%

The following table shows the gross and net receivables sold.

(in millions)	Duke Energy Ohio			Duke Energy Indiana		
	December 31,			December 31,		
	2019	2018		2019	2018	
Receivables sold	\$ 253	\$ 269		\$ 307	\$ 336	
Less: Retained interests	64	93		77	118	
Net receivables sold	\$ 189	\$ 176		\$ 230	\$ 218	

The following table shows sales and cash flows related to receivables sold.

(in millions)	Duke Energy Ohio			Duke Energy Indiana		
	Years Ended December 31,			Years Ended December 31,		
	2019	2018	2017	2019	2018	2017
Sales						
Receivables sold	\$ 1,979	\$ 1,987	\$ 1,879	\$ 2,837	\$ 2,842	\$ 2,711
Loss recognized on sale	14	13	10	17	16	12
Cash flows						
Cash proceeds from receivables sold	1,993	1,967	1,865	2,860	2,815	2,694
Collection fees received	1	1	1	1	1	1
Return received on retained interests	6	6	3	9	9	7

Cash flows from sales of receivables are reflected within Cash Flows From Operating 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 LIBOR plus a fixed rate of 1.00%.

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, Electric Utilities and Infrastructure, Gas Utilities and Infrastructure and Commercial Renewables.

Electric Utilities and Infrastructure

Electric Utilities and Infrastructure 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:

(in millions)	Remaining Performance Obligations							Total
	2020	2021	2022	2023	2024	Thereafter		
Progress Energy	\$ 121	\$ 92	\$ 87	\$ 44	\$ 45	\$ 58	\$ 447	
Duke Energy Progress	8	8	8	8	8	—	40	
Duke Energy Florida	113	84	79	36	37	58	407	
Duke Energy Indiana	10	5	—	—	—	—	15	

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

Gas Utilities and Infrastructure 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 Gas Utilities and Infrastructure 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:

(in millions)	Remaining Performance Obligations							Total
	2020	2021	2022	2023	2024	Thereafter		
Piedmont	\$ 69	\$ 64	\$ 64	\$ 61	\$ 58	\$ 372	\$ 688	

Commercial Renewables

Commercial Renewables earns the majority of its revenues through long-term PPAs and generally sells all of its wind and solar facility output, electricity and RECs to customers. The majority of these PPAs have historically been accounted for as leases. For PPAs that are not accounted for as leases, the delivery of electricity and the delivery of RECs are considered separate performance obligations.

The delivery of electricity is a performance obligation satisfied over time and represents generation and consumption of the electricity over the billing period, generally one month. The delivery of RECs is a performance obligation satisfied at a point in time and represents delivery of each REC generated by the wind or solar facility. The majority of self-generated RECs are bundled with energy in Duke Energy's contracts and, as such, related revenues are recognized as energy is generated and delivered as that pattern is consistent with Duke Energy's performance. Commercial Renewables recognizes revenue based on the energy generated and billed for the period, generally one month, at contractual rates (including unbilled estimates) according to the invoice practical expedient. Amounts are typically due within 30 days of invoice.

Commercial Renewables also earns revenues from installation of distributed solar generation resources, which is primarily composed of EPC projects to deliver functioning solar power systems, generally completed within two to 12 months from commencement of construction. The installation of distributed solar generation resources is a performance obligation that is satisfied over time. Revenue from fixed-price EPC contracts is recognized using the input method as work is performed based on the estimated ratio of incurred costs to estimated total costs.

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 Electric and Gas Utility and Infrastructure 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. For the Commercial Renewables segment, the majority of revenues from contracts with customers are from selling all of the unit-contingent output at contractually defined pricing under long-term PPAs with consistent expectations regarding the timing and certainty of cash flows. Disaggregated revenues are presented as follows:

(in millions)	Year Ended December 31, 2019							
	Duke Energy	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Duke Energy Piedmont
By market or type of customer								
<i>Electric Utilities and Infrastructure</i>								
Residential	\$ 9,863	\$ 3,044	\$ 4,998	\$ 2,144	\$ 2,854	\$ 733	\$ 1,087	\$ —
General	6,431	2,244	2,935	1,368	1,567	451	802	—
Industrial	3,071	1,215	934	675	259	147	774	—
Wholesale	2,212	462	1,468	1,281	187	46	235	—
Other revenues	770	276	548	317	231	80	89	—
Total Electric Utilities and Infrastructure revenue from contracts with customers	\$ 22,347	\$ 7,241	\$ 10,883	\$ 5,785	\$ 5,098	\$ 1,457	\$ 2,987	\$ —
<i>Gas Utilities and Infrastructure</i>								
Residential	\$ 976	\$ —	\$ —	\$ —	\$ —	\$ 315	\$ —	\$ 661
Commercial	508	—	—	—	—	130	—	378
Industrial	141	—	—	—	—	19	—	122
Power Generation	—	—	—	—	—	—	—	51
Other revenues	129	—	—	—	—	19	—	110
Total Gas Utilities and Infrastructure revenue from contracts with customers	\$ 1,754	\$ —	\$ —	\$ —	\$ —	\$ 483	\$ —	\$ 1,322
<i>Commercial Renewables</i>								
Revenue from contracts with customers	\$ 223	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
<i>Other</i>								
Revenue from contracts with customers	\$ 24	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Total revenue from contracts with customers	\$ 24,348	\$ 7,241	\$ 10,883	\$ 5,785	\$ 5,098	\$ 1,940	\$ 2,987	\$ 1,322
Other revenue sources ^(a)	\$ 731	\$ 154	\$ 319	\$ 172	\$ 133	\$ —	\$ 17	\$ 59
Total revenues	\$ 25,079	\$ 7,395	\$ 11,202	\$ 5,957	\$ 5,231	\$ 1,940	\$ 3,004	\$ 1,381

- (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.

(in millions)	Year Ended December 31, 2018							
	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	\$ 9,587	\$ 2,981	\$ 4,785	\$ 2,019	\$ 2,766	\$ 743	\$ 1,076	\$ —
General	6,127	2,119	2,809	1,280	1,529	422	778	—
Industrial	2,974	1,180	904	642	262	131	760	—
Wholesale	2,324	508	1,462	1,303	159	57	298	—
Other revenues	717	320	502	320	182	73	91	—
Total Electric Utilities and Infrastructure revenue from contracts with customers	\$ 21,729	\$ 7,108	\$ 10,462	\$ 5,564	\$ 4,898	\$ 1,426	\$ 3,003	\$ —
Gas Utilities and Infrastructure								
Residential	\$ 1,000	\$ —	\$ —	\$ —	\$ —	\$ 331	\$ —	\$ 669
Commercial	514	—	—	—	—	135	—	378
Industrial	147	—	—	—	—	18	—	128
Power Generation	—	—	—	—	—	—	—	54
Other revenues	139	—	—	—	—	19	—	120
Total Gas Utilities and Infrastructure revenue from contracts with customers	\$ 1,800	\$ —	\$ —	\$ —	\$ —	\$ 503	\$ —	\$ 1,349
Commercial Renewables								
Revenue from contracts with customers	\$ 209	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Other								
Revenue from contracts with customers	\$ 19	\$ —	\$ —	\$ —	\$ —	\$ 1	\$ —	\$ —
Total revenue from contracts with customers	\$ 23,757	\$ 7,108	\$ 10,462	\$ 5,564	\$ 4,898	\$ 1,930	\$ 3,003	\$ 1,349
Other revenue sources ^(a)	\$ 764	\$ 192	\$ 266	\$ 135	\$ 123	\$ 27	\$ 56	\$ 26
Total revenues	\$ 24,521	\$ 7,300	\$ 10,728	\$ 5,699	\$ 5,021	\$ 1,957	\$ 3,059	\$ 1,375

(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.

IMPACT OF WEATHER AND THE TIMING OF BILLING PERIODS

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. 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.

The estimated impact of weather on earnings for Electric Utilities and Infrastructure 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.

Gas Utilities and Infrastructure's costs and revenues are influenced by seasonal patterns due to peak natural gas sales occurring during the winter months as a result of space heating requirements. Residential customers are the most impacted by weather. There are certain regulatory mechanisms for the North Carolina, South Carolina, Tennessee, Ohio and Kentucky service territories that normalize the margins collected from certain customer classes during the winter. In North Carolina, rate design provides protection from both weather and other usage variations such as conservation, while South Carolina, Tennessee and Kentucky revenues are adjusted solely based on weather. Ohio primarily employs a fixed charge each month regardless of the season and usage.

UNBILLED REVENUE

Unbilled revenues are recognized by applying customer billing rates to the estimated volumes of energy or natural gas delivered but not yet billed. Unbilled revenues can vary significantly from period to period as a result of seasonality, weather, customer usage patterns, customer mix, average price in effect for customer classes, timing of rendering customer bills and meter reading schedules, and the impact of weather normalization or margin decoupling mechanisms.

Unbilled revenues are included within Receivables and Receivables of VIEs on the Consolidated Balance Sheets as shown in the following table.

(in millions)	December 31,	
	2019	2018
Duke Energy	\$ 843	\$ 896
Duke Energy Carolinas	298	313
Progress Energy	217	244
Duke Energy Progress	122	148
Duke Energy Florida	95	96
Duke Energy Ohio	1	2
Duke Energy Indiana	16	23
Piedmont	78	73

Additionally, 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 shown in the table below.

(in millions)	December 31,	
	2019	2018
Duke Energy Ohio	\$ 82	\$ 86
Duke Energy Indiana	115	128

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, 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, 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 stock options and 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 a reduction 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.

(in millions, except per share amounts)	Years Ended December 31,		
	2019	2018	2017
Income from continuing operations available to Duke Energy common stockholders excluding impact of participating securities and including accumulated preferred stock dividends	\$ 3,694	\$ 2,642	\$ 3,059
Weighted average common shares outstanding – basic and diluted	729	708	700
EPS from continuing operations available to Duke Energy common stockholders			
Basic and diluted	\$ 5.07	\$ 3.73	\$ 4.37
Potentially dilutive items excluded from the calculation ^(a)	2	2	2
Dividends declared per common share	\$ 3.75	\$ 3.64	\$ 3.49
Dividends declared on Series A preferred stock per depository share	\$ 1.03	\$ —	\$ —

(a) Performance stock awards were not included in the dilutive securities calculation because the performance measures related to the awards had not been met.

Common Stock

In February 2018, Duke Energy filed a prospectus supplement and executed an Equity Distribution Agreement (EDA) under which it may sell up to \$1 billion of its common stock through an ATM offering program, including an equity forward sales component. Under the terms of the EDA, Duke Energy was allowed to issue and sell shares of common stock. The existing ATM offering program expired in September 2019.

In June 2018, Duke Energy marketed two separate tranches, each for 1.3 million shares, of common stock through equity forward transactions under the ATM program. In December 2018, Duke Energy physically settled these equity forwards by delivering 2.6 million shares of common stock in exchange for net proceeds of approximately \$195 million.

In March 2018, Duke Energy marketed an equity offering of 21.3 million shares of common stock through an Underwriting Agreement. In connection with the offering, Duke Energy entered into equity forward sale agreements. The equity forwards required Duke Energy to either physically settle the transactions by issuing 21.3 million shares in exchange for net proceeds at the then-applicable forward sale price specified by the agreements, or net settle in whole or in part through the delivery or receipt of cash or shares. In June 2018, Duke Energy physically settled one-half of the equity forwards by delivering approximately 10.6 million shares of common stock in exchange for net cash proceeds of approximately \$781 million. In December 2018, Duke Energy physically settled the remaining equity forward by delivering 10.6 million shares of common stock in exchange for net cash proceeds of approximately \$766 million.

In March and April 2019, Duke Energy marketed two separate tranches, each for 1.1 million shares, of common stock through equity forward transactions under the ATM program. The first tranche had an initial forward price of \$89.83 per share and the second tranche had an initial forward price of \$88.82 per share. In May and June 2019, a third tranche of 1.6 million shares of common stock was marketed and had an initial forward price of \$86.23. The equity forwards required Duke Energy to either physically settle the transaction by issuing shares in exchange for net proceeds at the then-applicable forward sale price specified by the agreements or net settle in whole or in part through the delivery or receipt of cash or shares. The settlement alternative was at Duke Energy's election. In December 2019, Duke Energy physically settled the equity forwards by delivering 3.8 million shares of common stock in exchange for net cash proceeds of approximately \$331 million.

In November 2019, 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 2022.

In November 2019, Duke Energy marketed an equity offering of 28.75 million shares of common stock through an Underwriting Agreement. In connection with the offering, Duke Energy entered into equity forward sales agreements with an initial forward price of \$85.99 per share. The equity forward sales agreements require Duke Energy to either physically settle the transaction by issuing shares in exchange for net proceeds at the then-applicable forward sale price specified by the agreement, or net settle in whole or in part through the delivery or receipt of cash or shares. The settlement alternatives are at Duke Energy's election. Settlement of the forward sales agreements are expected to occur on or prior to December 31, 2020. If Duke Energy had elected to net share settle these contracts as of December 31, 2019, Duke Energy would have been required to deliver 1.6 million shares.

For the years ended December 31, 2019, and 2018, Duke Energy issued 1.8 million and 2.2 million shares, respectively, through its DRIP with an increase in additional paid-in capital of approximately \$160 million and \$174 million, respectively.

Preferred Stock

On March 29, 2019, Duke Energy completed the issuance of 40 million depository shares, each representing 1/1,000th share of its Series A Cumulative Redeemable Perpetual Preferred Stock, at a price of \$25 per depository share. The transaction resulted in net proceeds of \$973 million after issuance costs with proceeds used for general corporate purposes and to reduce short-term debt. The preferred stock has a \$25 liquidation preference per depository share and earns dividends on a cumulative basis at a rate of 5.75% per annum. Dividends are payable quarterly in arrears on the 16th day of March, June, September and December, and began on June 16, 2019.

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 depository 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 depository share. Duke Energy is also required to redeem all accumulated and unpaid dividends if either call option is exercised.

On September 12, 2019, Duke Energy completed the issuance of 1 million shares of its Series B Fixed-Rate Reset Cumulative Redeemable Perpetual Preferred Stock, at a price of \$1,000 per share. The transaction resulted in net proceeds of \$989 million after issuance costs with proceeds being used to pay down short-term debt, repay at maturity \$500 million senior notes due September 2019, and for general corporate purposes. The preferred stock has a \$1,000 liquidation preference per share and earns dividends on a cumulative basis at an initial rate of 4.875% per annum. Dividends are payable semiannually in arrears on the 16th day of March and September, beginning on March 16, 2020. On September 16, 2024, the First Call Date, and any fifth anniversary of the First Call Date (each a Reset Date), the dividend rate will reset based on the then current five-year U.S. treasury rate plus a spread of 3.388%.

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 2018, 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 skillsets 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 140 employees in 2019, 1,900 employees in 2018 and 100 employees in 2017 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, 2019	\$ 16	\$ 8	\$ 6	\$ 3	\$ 3	\$ —	\$ 1	\$ 1
Year Ended December 31, 2018	187	102	69	52	17	6	7	2
Year Ended December 31, 2017	15	2	2	1	1	—	1	9

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, 2018	\$ 205	\$ 100	\$ 51	\$ 41	\$ 9	\$ 2	\$ 2	\$ —
Provision/Adjustments	24	4	11	2	10	1	1	—
Cash Reductions	(188)	(93)	(49)	(37)	(12)	(2)	(1)	—
Balance at December 31, 2019	\$ 41	\$ 11	\$ 13	\$ 6	\$ 7	\$ 1	\$ 2	\$ —

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 reserves 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.

(in millions)	Years Ended December 31,		
	2019	2018	2017
Duke Energy	\$ 65	\$ 56	\$ 43
Duke Energy Carolinas	24	20	15
Progress Energy	24	21	16
Duke Energy Progress	15	13	10
Duke Energy Florida	9	8	6
Duke Energy Ohio	5	4	3
Duke Energy Indiana	6	5	4
Piedmont	3	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.

(in millions)	Years Ended December 31,		
	2019	2018	2017
RSU awards	\$ 44	\$ 43	\$ 41
Performance awards	45	35	27
Pretax stock-based compensation cost	\$ 89	\$ 78	\$ 68
Stock-based compensation costs capitalized	5	5	4
Stock-based compensation expense	\$ 84	\$ 73	\$ 64
Tax benefit associated with stock-based compensation expense	\$ 19	\$ 17	\$ 25

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,		
	2019	2018	2017
Shares granted (in thousands)	571	649	583
Fair value (in millions)	\$ 51	\$ 49	\$ 47

The following table summarizes information about RSU awards outstanding.

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)	
Outstanding at December 31, 2018	1,153	\$	77
Granted	571		89
Vested	(631)		77
Forfeited	(83)		82
Outstanding at December 31, 2019	1,010		83
RSU awards expected to vest	951		83

The total grant date fair value of shares vested during the years ended December 31, 2019, 2018 and 2017, was \$49 million, \$43 million and \$42 million, respectively. At December 31, 2019, Duke Energy had \$30 million of unrecognized compensation cost, which is expected to be recognized over a weighted average period of 23 months. Prior to Duke Energy's acquisition of Piedmont, Piedmont had an incentive compensation plan that had a series of three-year performance and RSU awards for eligible officers and other participants. The 2016-2018 performance award cycle was approved subsequent to the Agreement and Plan of Merger between Duke Energy and Piedmont and was converted into a Duke Energy RSU award at the consummation of the acquisition.

PERFORMANCE AWARDS

Stock-based performance awards generally vest after three years if 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 2019, the model used a risk-free interest rate of 2.5%, which reflects the yield on three-year Treasury bonds as of the grant date, and an expected volatility of 14.8% 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,		
	2019	2018	2017
Shares granted assuming target performance (in thousands)	320	372	461
Fair value (in millions)	\$ 27	\$ 27	\$ 37

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, 2018	1,117	\$ 77
Granted	320	86
Vested	(310)	75
Forfeited	(18)	81
Outstanding at December 31, 2019	1,109	80
Stock-based performance awards expected to vest	1,080	80

The total grant date fair value of shares vested during the years ended December 31, 2019, and 2018, was \$23 million and \$13 million, respectively. No performance awards vested during the year ended December 31, 2017. At December 31, 2019, Duke Energy had \$27 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. The Duke Energy 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-year, four-year, or five-year average earnings, (ii) highest three-year, four-year, 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 approved plan amendments to restructure its qualified non-contributory defined benefit retirement plans, effective January 1, 2018. The restructuring involved (i) the spin-off of the majority of inactive participants from two plans into a separate inactive plan and (ii) the merger of the active participant portions of such plans, along with a pension plan acquired as part of the Piedmont transaction, into a single active plan. Benefits offered to the plan participants remain unchanged except that the Piedmont plan's final average earnings formula was frozen as of December 31, 2017, and affected participants were moved into the active plan's cash balance formula. Actuarial gains and losses associated with the Inactive Plan will be amortized over the remaining life expectancy of the inactive participants. The longer amortization period lowered Duke Energy's 2018 pretax qualified pension plan expense by approximately \$33 million.

Duke Energy uses a December 31 measurement date for its defined benefit retirement plan assets and 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 the service cost and interest cost on projected benefit obligation components of net periodic pension costs) for one of its qualified pension plans, Duke Energy recognized settlement charges of \$94 million, primarily as a regulatory asset within Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2019 (an immaterial amount was recorded in Other income and expenses, net within the Consolidated Statement of Operations).

Settlement charges recognized by the Subsidiary Registrants as of December 31, 2019, 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, were \$53 million for Duke Energy Carolinas, \$26 million for Progress Energy, \$20 million for Duke Energy Progress, \$6 million for Duke Energy Florida, \$4 million for Duke Energy Indiana, \$2 million for Duke Energy Ohio and \$8 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, 2019. 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.

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. Duke Energy does not anticipate making any contributions in 2020. The following table includes information related to the Duke Energy Registrants' contributions to its qualified defined benefit pension plans.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Contributions Made:								
2019	\$ 77	\$ 7	\$ 57	\$ 4	\$ 53	\$ 2	\$ 2	\$ 1
2018	141	46	45	25	20	—	8	—
2017	19	—	—	—	—	4	—	11

QUALIFIED PENSION PLANS

Components of Net Periodic Pension Costs

(in millions)	Year Ended December 31, 2019							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Service cost	\$ 158	\$ 49	\$ 46	\$ 26	\$ 20	\$ 4	\$ 9	\$ 5
Interest cost on projected benefit obligation	317	75	100	45	54	18	26	10
Expected return on plan assets	(567)	(147)	(178)	(88)	(89)	(28)	(43)	(22)
Amortization of actuarial loss	108	24	39	15	24	4	8	8
Amortization of prior service credit	(32)	(8)	(3)	(2)	(1)	—	(2)	(9)
Amortization of settlement charges	6	2	1	1	—	2	—	—
Net periodic pension costs ^{(a)(b)}	\$ (10)	\$ (5)	\$ 5	\$ (3)	\$ 8	\$ —	\$ (2)	\$ (8)

(in millions)	Year Ended December 31, 2018							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Service cost	\$ 182	\$ 58	\$ 51	\$ 29	\$ 22	\$ 5	\$ 11	\$ 7
Interest cost on projected benefit obligation	299	72	94	43	50	17	23	11
Expected return on plan assets	(559)	(147)	(178)	(85)	(91)	(28)	(42)	(22)
Amortization of actuarial loss	132	29	44	21	23	5	10	11
Amortization of prior service credit	(32)	(8)	(3)	(2)	(1)	—	(2)	(10)
Net periodic pension costs ^{(a)(b)}	\$ 22	\$ 4	\$ 8	\$ 6	\$ 3	\$ (1)	\$ —	\$ (3)

(in millions)	Year Ended December 31, 2017							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Service cost	\$ 159	\$ 48	\$ 45	\$ 26	\$ 19	\$ 4	\$ 9	\$ 10
Interest cost on projected benefit obligation	328	79	100	47	53	18	26	14
Expected return on plan assets	(545)	(142)	(167)	(82)	(85)	(27)	(42)	(24)
Amortization of actuarial loss	146	31	52	23	29	5	12	11
Amortization of prior service credit	(24)	(8)	(3)	(2)	(1)	(1)	(2)	(2)
Settlement charge	12	—	—	—	—	—	—	12
Other	8	2	2	1	1	—	1	1
Net periodic pension costs ^{(a)(b)}	\$ 84	\$ 10	\$ 29	\$ 13	\$ 16	\$ (1)	\$ 4	\$ 22

- (a) Duke Energy amounts exclude \$4 million, \$5 million and \$7 million for the years ended December 2019, 2018 and 2017, 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 \$2 million, \$2 million and \$3 million for the years ended December 2019, 2018 and 2017, 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

(in millions)	Year Ended December 31, 2019							
	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)	\$ (212)	\$ (156)	\$ (79)	\$ (59)	\$ (20)	\$ 12	\$ 22	\$ —
Accumulated other comprehensive loss (income)								
Deferred income tax expense (benefit)	\$ 20	—	1	—	(1)	—	—	—
Amortization of prior year service credit	1	—	—	—	—	—	—	—
Amortization of prior year actuarial losses	(15)	—	(2)	—	3	—	—	—
Net amount recognized in accumulated other comprehensive income	\$ 6	\$ —	\$ (1)	\$ —	\$ 2	\$ —	\$ —	\$ —
(in millions)	Year Ended December 31, 2018							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net increase	\$ 298	\$ 170	\$ 40	\$ 31	\$ 9	\$ 10	\$ 30	\$ 8
Accumulated other comprehensive (income) loss								
Deferred income tax expense	\$ (2)	\$ —	\$ 1	\$ —	\$ —	\$ —	\$ —	\$ —
Prior year service credit arising during the year	1	—	—	—	—	—	—	—
Amortization of prior year actuarial losses	10	—	(4)	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	\$ 9	\$ —	\$ (3)	\$ —	\$ —	\$ —	\$ —	\$ —

Information for Plans with Accumulated Benefit Obligation in Excess of Plan Assets

(in millions)	December 31, 2019				
	Duke Energy Ohio		Duke Energy Indiana		
Projected benefit obligation	\$	155	\$	260	
Accumulated benefit obligation		146		252	
Fair value of plan assets		79		177	

(in millions)	December 31, 2018					
	Duke Energy Ohio		Duke Energy Indiana		Duke Energy Florida	
Projected benefit obligation	\$	679	\$	679	\$	679
Accumulated benefit obligation		651		651		651
Fair value of plan assets		610		610		610

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 12 years for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Florida, 13 years for Duke Energy Progress, Duke Energy Indiana and Duke Energy Ohio, and 9 years for Piedmont.

The following tables present the assumptions or range of assumptions used for pension benefit accounting.

	December 31,		
	2019	2018	2017
Benefit Obligations			
Discount rate	3.30%	4.30%	3.60%
Salary increase	3.50% – 4.00%	3.50% – 4.00%	3.50% – 4.00%
Net Periodic Benefit Cost			
Discount rate	4.30%	3.60%	4.10%
Salary increase	3.50% – 4.00%	3.50% – 4.00%	4.00% – 4.50%
Expected long-term rate of return on plan assets	6.85%	6.50%	6.50% – 6.75%

Expected Benefit Payments

(in millions)	Duke Energy Carolinas		Duke Energy Progress		Duke Energy Florida		Duke Energy Ohio		Duke Energy Indiana		Duke Energy Piedmont	
Years ending December 31,												
2020	\$	643	\$	167	\$	169	\$	89	\$	79	\$	37
2021		653		171		178		95		82		37
2022		649		177		176		92		84		37
2023		649		174		182		95		86		36
2024		638		168		184		96		87		35
2025-2029		2,851		714		871		419		448		156

NON-QUALIFIED PENSION PLANS

The accumulated benefit obligation, which equals the projected benefit obligation for non-qualified pension plans, was \$318 million for Duke Energy, \$15 million for Duke Energy Carolinas, \$110 million for Progress Energy, \$32 million for Duke Energy Progress, \$45 million for Duke Energy Florida, \$4 million for Duke Energy Ohio, \$3 million for Duke Energy Indiana and \$4 million for Piedmont as of December 31, 2019.

Employer contributions, which equal benefits paid for non-qualified pension plans, were \$25 million for Duke Energy, \$2 million for Duke Energy Carolinas, \$9 million for Progress Energy, \$3 million for Duke Energy Progress and \$3 million for Duke Energy Florida for the year ended December 31, 2019. Employer contributions were not material for Duke Energy Ohio, Duke Energy Indiana or Piedmont for the year ended December 31, 2019.

Net periodic pension costs for non-qualified pension plans were not material for the years ended December 31, 2019, 2018 or 2017.

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 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, 2019, 2018 or 2017.

Components of Net Periodic Other Post-Retirement Benefit Costs

(in millions)	Year Ended December 31, 2019							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Service cost	\$ 4	\$ 1	\$ 1	\$ —	\$ 1	\$ —	\$ 1	\$ —
Interest cost on accumulated post-retirement benefit obligation	30	7	12	7	5	1	3	1
Expected return on plan assets	(12)	(7)	—	—	—	—	—	(1)
Amortization of actuarial loss	4	2	1	—	1	—	4	—
Amortization of prior service credit	(19)	(5)	(8)	(1)	(7)	(1)	(1)	(2)
Net periodic post-retirement benefit costs ^{(a)(b)}	\$ 7	\$ (2)	\$ 6	\$ 6	\$ —	\$ —	\$ 7	\$ (2)

(in millions)	Year Ended December 31, 2018							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	Duke
	Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Service cost	\$ 6	\$ 1	\$ 1	\$ —	\$ 1	\$ 1	\$ 1	\$ 1
Interest cost on accumulated post-retirement benefit obligation	28	7	12	6	6	1	3	1
Expected return on plan assets	(13)	(8)	—	—	—	—	—	(2)
Amortization of actuarial loss	6	3	1	1	—	—	4	—
Amortization of prior service credit	(19)	(5)	(8)	(1)	(7)	(1)	(1)	(2)
Net periodic post-retirement benefit costs ^{(a)(b)}	\$ 8	\$ (2)	\$ 6	\$ 6	\$ —	\$ 1	\$ 7	\$ (2)

(in millions)	Year Ended December 31, 2017							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
	Service cost	\$ 4	\$ 1	\$ —	\$ —	\$ —	\$ —	\$ —
Interest cost on accumulated post-retirement benefit obligation	34	8	13	7	6	1	3	1
Expected return on plan assets	(14)	(8)	—	—	—	—	(1)	(2)
Amortization of actuarial loss (gain)	10	(2)	21	12	9	(2)	(1)	1
Amortization of prior service credit	(115)	(10)	(84)	(54)	(30)	—	(1)	—
Curtailement credit ^(c)	(30)	(4)	(16)	—	(16)	(2)	(2)	—
Net periodic post-retirement benefit costs ^{(a)(b)}	\$ (111)	\$ (15)	\$ (66)	\$ (35)	\$ (31)	\$ (3)	\$ (2)	\$ 1

- (a) Duke Energy amounts exclude \$6 million, \$7 million and \$7 million for the years ended December 2019, 2018 and 2017, 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 \$2 million, \$2 million and \$2 million for the years ended December 2019, 2018 and 2017, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.
- (c) Curtailement credit resulted from a reduction in average future service of plan participants due to a plan amendment.

Amounts Recognized in Accumulated Other Comprehensive Income and Regulatory Assets and Liabilities

(in millions)	Year Ended December 31, 2019							
	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)	\$ (127)	\$ —	\$ (127)	\$ (82)	\$ (45)	\$ —	\$ (5)
Regulatory liabilities, net increase (decrease)	\$ (152)	\$ 1	\$ (149)	\$ (93)	\$ (56)	\$ (1)	\$ (4)	\$ 3
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Amortization of prior year actuarial gain	(4)	—	—	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	\$ (4)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —

(in millions)	Year Ended December 31, 2018							
	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)	\$ 137	\$ —	\$ 133	\$ 84	\$ 49	\$ —	\$ (5)
Regulatory liabilities, net increase (decrease)	\$ 154	\$ (6)	\$ 149	\$ 93	\$ 56	\$ 2	\$ 3	\$ —
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	\$ (1)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Amortization of prior year prior service credit	1	—	—	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —

Reconciliation of Funded Status to Accrued Other Post-Retirement Benefit Costs

(in millions)	Year Ended December 31, 2019							
	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	\$ 728	\$ 174	\$ 303	\$ 166	\$ 137	\$ 29	\$ 67	\$ 30
Service cost	4	1	1	—	1	—	1	—
Interest cost	30	7	12	7	5	1	3	1
Plan participants' contributions	16	3	6	3	2	1	2	—
Actuarial losses	28	9	13	9	5	1	2	—
Transfers	—	—	—	—	—	—	—	—
Benefits paid	(83)	(19)	(32)	(17)	(15)	(3)	(11)	(1)
Accumulated post-retirement benefit obligation at measurement date	\$ 723	\$ 175	\$ 303	\$ 168	\$ 135	\$ 29	\$ 64	\$ 30
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	\$ 195	\$ 115	\$ —	\$ —	\$ —	\$ 8	\$ 5	\$ 29
Actual return on plan assets	32	20	(1)	—	—	1	—	6
Benefits paid	(83)	(19)	(32)	(17)	(15)	(3)	(11)	(1)
Employer contributions	60	11	26	13	13	2	9	—
Plan participants' contributions	16	3	6	3	2	1	2	—
Plan assets at measurement date	\$ 220	\$ 130	\$ (1)	\$ (1)	\$ —	\$ 9	\$ 5	\$ 34
Funded status of plan	\$ (503)	\$ (45)	\$ (304)	\$ (169)	\$ (135)	\$ (20)	\$ (59)	\$ 4
Year Ended December 31, 2018								
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
	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	\$ 813	\$ 189	\$ 342	\$ 184	\$ 156	\$ 30	\$ 78	\$ 32
Service cost	6	1	1	—	1	1	1	1
Interest cost	28	7	12	6	6	1	3	1
Plan participants' contributions	18	3	6	4	3	1	2	—
Actuarial losses (gains)	(51)	(8)	(23)	(9)	(13)	(2)	(5)	(1)
Transfers	—	—	—	—	—	—	—	(1)
Benefits paid	(86)	(18)	(35)	(19)	(16)	(2)	(12)	(2)
Accumulated post-retirement benefit obligation at measurement date	\$ 728	\$ 174	\$ 303	\$ 166	\$ 137	\$ 29	\$ 67	\$ 30
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	\$ 225	\$ 133	\$ —	\$ —	\$ —	\$ 7	\$ 11	\$ 31
Actual return on plan assets	(8)	(5)	—	—	—	—	—	(1)
Benefits paid	(86)	(18)	(35)	(19)	(16)	(2)	(12)	(2)
Employer contributions (reimbursements)	46	2	29	15	13	2	4	1
Plan participants' contributions	18	3	6	4	3	1	2	—
Plan assets at measurement date	\$ 195	\$ 115	\$ —	\$ —	\$ —	\$ 8	\$ 5	\$ 29
Funded status of plan	\$ (533)	\$ (59)	\$ (303)	\$ (166)	\$ (137)	\$ (21)	\$ (62)	\$ (1)

The average remaining service period of active covered employees is eight years for Duke Energy and Duke Energy Carolinas, seven years for Progress Energy, Duke Energy Florida, and Duke Energy Ohio, and six years for Duke Energy Progress, Duke Energy Indiana, and Piedmont.

The following tables present the assumptions used for other post-retirement benefits accounting.

	December 31,		
	2019	2018	2017
Benefit Obligations			
Discount rate	3.30%	4.30%	3.60%
Net Periodic Benefit Cost			
Discount rate	4.30%	3.60%	4.10%
Expected long-term rate of return on plan assets	6.85%	6.50%	6.50%
Assumed tax rate	23%	35%	35%

Assumed Health Care Cost Trend Rate

	December 31,	
	2019	2018
Health care cost trend rate assumed for next year	6.00%	6.50%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	4.75%	4.75%
Year that rate reaches ultimate trend	2026	2024

Sensitivity to Changes in Assumed Health Care Cost Trend Rates

(in millions)	Year Ended December 31, 2019							
	Duke		Duke		Duke		Duke	
	Duke	Energy	Progress	Energy	Energy	Ohio	Indiana	Piedmont
1-Percentage Point Increase								
Effect on total service and interest costs	\$ 1	\$ —	\$ 1	\$ 1	\$ —	\$ —	\$ —	\$ —
Effect on post-retirement benefit obligation	22	5	9	5	4	1	2	1
1-Percentage Point Decrease								
Effect on total service and interest costs	(1)	—	(1)	(1)	—	—	—	—
Effect on post-retirement benefit obligation	(20)	(5)	(8)	(4)	(4)	(1)	(2)	(1)

Expected Benefit Payments

(in millions)	Year Ended December 31, 2019							
	Duke		Duke		Duke		Duke	
	Duke	Energy	Progress	Energy	Energy	Ohio	Indiana	Piedmont
Years ending December 31,								
2020	\$ 76	\$ 18	\$ 29	\$ 16	\$ 13	\$ 4	\$ 8	\$ 2
2021	70	17	28	15	13	3	7	2
2022	66	16	27	14	12	3	7	2
2023	63	15	25	14	12	3	6	2
2024	59	15	24	13	11	3	6	2
2025-2029	246	60	101	55	46	11	23	11

PLAN ASSETS

Description and Allocations

Duke Energy Master Retirement Trust

Assets for both the qualified pension and other post-retirement benefits are maintained in the Duke Energy Master Retirement Trust. Approximately 98% of the Duke Energy 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, 2019, and 2018. The investment objective of the Duke Energy 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, 2019, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.85%. 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 liability. Real assets, return seeking fixed income, 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, 2019, the target asset allocation for the Duke Energy Retirement Master Trust is 58% liability hedging assets and 42% 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 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 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 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 Master Retirement Trust to sell the securities. The Duke Energy 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 \$351 million and \$154 million at December 31, 2019, and 2018, respectively. Cash and securities obtained as collateral exceeded the fair value of the securities loaned at December 31, 2019, and 2018, respectively. Securities lending income earned by the Duke Energy Master Retirement Trust was immaterial for the years ended December 31, 2019, 2018 and 2017, respectively.

Qualified pension and other post-retirement benefits for the Subsidiary Registrants are derived from the Duke Energy 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, 2019, and the actual asset allocations for the Duke Energy Master Retirement Trust.

	Target Allocation	Actual Allocation at December 31,	
		2019	2018
U.S. equity securities	—%	—%	11%
Global equity securities	28%	27%	18%
Global private equity securities	1%	1%	2%
Debt securities	58%	57%	63%
Return seeking debt securities	4%	5%	—%
Hedge funds	3%	3%	2%
Real estate and cash	6%	7%	2%
Other global securities	—%	—%	2%
Total	100%	100%	100%

Other post-retirement assets

Duke Energy's other post-retirement assets are comprised of VEBA trusts and 401(h) accounts held within the Duke Energy 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, 2019.

	Target Allocation	Actual Allocation at December 31,	
		2019	2018
U.S. equity securities	33%	35%	43%
Non-U.S. equity securities	7%	9%	8%
Real estate	2%	2%	2%
Debt securities	45%	37%	40%
Cash	13%	17%	7%
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.

Investments in real estate limited partnerships

Investments in real estate limited partnerships are valued by the trustee at each valuation date (monthly). As part of the trustee's valuation process, properties are externally appraised generally on an annual basis, conducted by reputable, independent appraisal firms, and signed by appraisers that are members of the Appraisal Institute, with the professional designation MAI. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. There are three valuation techniques that can be used to value investments in real estate assets: the market, income or cost approach. The appropriateness of each valuation technique depends on the type of asset or business being valued. In addition, the trustee may cause additional appraisals to be performed as warranted by specific asset or market conditions. Property valuations and the salient valuation-sensitive assumptions of each direct investment property are reviewed by the trustee quarterly and values are adjusted if there has been a significant change in circumstances related to the investment property since the last valuation. Value adjustments for interim capital expenditures are only recognized to the extent that the valuation process acknowledges a corresponding increase in fair value. An independent firm is hired to review and approve quarterly direct real estate valuations. Key inputs and assumptions used to determine fair value includes among others, rental revenue and expense amounts and related revenue and expense growth rates, terminal capitalization rates and discount rates. Development investments are valued using cost incurred to date as a primary input until substantive progress is achieved in terms of mitigating construction and leasing risk at which point a discounted cash flow approach is more heavily weighted. Key inputs and assumptions in addition to those noted above used to determine the fair value of development investments include construction costs and the status of construction completion and leasing. Investments in real estate limited partnerships are valued at net asset value of units held at year end and are not readily redeemable at the measurement date. Investments in real estate limited partnerships are not categorized within the fair value hierarchy.

Duke Energy Master Retirement Trust

The following tables provide the fair value measurement amounts for the Duke Energy Master Retirement Trust qualified pension and other post-retirement assets.

(in millions)	December 31, 2019					Not Categorized ^(b)
	Total Fair	Level 1	Level 2	Level 3		
	Value					
Equity securities	\$ 2,730	\$ 2,712	\$ —	\$ —	\$ 18	
Corporate debt securities	3,999	—	3,999	—	—	
Short-term investment funds	545	455	90	—	—	
Partnership interests	104	—	—	—	104	
Hedge funds	206	—	—	—	206	
Real estate limited partnerships	—	—	—	—	—	
U.S. government securities	1,231	—	1,231	—	—	
Guaranteed investment contracts	11	—	—	11	—	
Governments bonds – foreign	78	—	78	—	—	
Cash	75	75	—	—	—	
Net pending transactions and other investments	46	(43)	89	—	—	
Total assets^(a)	\$ 9,025	\$ 3,199	\$ 5,487	\$ 11	\$ 328	

- (a) Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana, and Piedmont were allocated approximately 26%, 31%, 15%, 17%, 5%, 7%, and 4%, respectively, of the Duke Energy Master Retirement Trust at December 31, 2019. 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.

(in millions)	December 31, 2018					Not Categorized ^(b)
	Total Fair	Level 1	Level 2	Level 3		
	Value					
Equity securities	\$ 2,373	\$ 1,751	\$ —	\$ —	\$ 622	
Corporate debt securities	4,054	—	4,054	—	—	
Short-term investment funds	363	279	84	—	—	
Partnership interests	120	—	—	—	120	
Hedge funds	226	—	—	—	226	
Real estate limited partnerships	144	—	—	—	144	
U.S. government securities	961	—	961	—	—	
Guaranteed investment contracts	27	—	—	27	—	
Governments bonds – foreign	30	—	30	—	—	
Cash	28	28	—	—	—	
Net pending transactions and other investments	(2)	(6)	4	—	—	
Total assets^(a)	\$ 8,324	\$ 2,052	\$ 5,133	\$ 27	\$ 1,112	

- (a) Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana, and Piedmont were allocated approximately 27%, 31%, 15%, 16%, 5%, 7%, and 4%, respectively, of the Duke Energy Master Retirement Trust and Piedmont's Pension assets at December 31, 2018. 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 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)	2019	2018
Balance at January 1	\$ 27	\$ 28
Sales	(18)	(1)
Total gains and other, net	2	—
Transfer of Level 3 assets to other classifications	—	—
Balance at December 31	\$ 11	\$ 27

Other post-retirement assets

The following tables provide the fair value measurement amounts for VEBA trust assets.

(in millions)	December 31, 2019	
	Total Fair	
	Value	Level 2
Cash and cash equivalents	\$ 9	\$ 9
Real estate	1	1
Equity securities	22	22
Debt securities	18	18
Total assets	\$ 50	\$ 50

(in millions)	December 31, 2018	
	Total Fair	
	Value	Level 2
Cash and cash equivalents	\$ 3	\$ 3
Real estate	1	1
Equity securities	25	25
Debt securities	20	20
Total assets	\$ 49	\$ 49

EMPLOYEE SAVINGS PLANS

Retirement Savings Plan

Duke Energy or its affiliates sponsor, 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 Progress		Duke Energy Florida		Duke Energy Ohio		Duke Energy Indiana		Piedmont
	Energy	Carolinas	Energy	Progress	Energy	Florida	Energy	Ohio	Energy	Indiana	
Years ended December 31,											
2019	\$ 214	\$ 66	\$ 58	\$ 38	\$ 20	\$ 5	\$ 11	\$ 13			
2018	213	68	58	40	19	4	10	12			
2017	179	61	53	37	16	3	9	7			

24. INCOME TAXES

Tax Act

On December 22, 2017, President Trump signed the Tax Act into law. Among other provisions, the Tax Act lowered the corporate federal income tax rate from 35% to 21%, limits interest deductions outside of regulated utility operations, requires the normalization of excess deferred taxes associated with property under the average rate assumption method as a prerequisite to qualifying for accelerated depreciation and repealed the federal manufacturing deduction. The Tax Act also repealed the corporate AMT and stipulates a refund of 50% of remaining AMT credit carryforwards (to the extent the credits exceed regular tax for the year) for tax years 2018, 2019, and 2020, with all remaining AMT credits to be refunded in tax year 2021.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin (SAB) 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, which provides guidance on accounting for the Tax Act's impact. SAB 118 provides a measurement period, which in no case should extend beyond one year from the Tax Act enactment date, during which a company acting in good faith may complete the accounting for the impacts of the Tax Act under ASC Topic 740. In accordance with SAB 118, a company must reflect the income tax effects of the Tax Act in the reporting period in which the accounting under ASC Topic 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete, a company can determine a reasonable estimate for those effects and record a provisional estimate in the financial statements in the first reporting period in which a reasonable estimate can be determined.

As of December 31, 2018, the accounting for the effects of the Tax Act was complete. During the year ended December 31, 2018, Duke Energy recorded the following measurement period adjustments in accordance with SAB 118:

- Additional tax expense of \$23 million related to the completion of the analysis of Duke Energy's existing regulatory liability related to deferred taxes;
- A \$10 million tax benefit for the remeasurement of deferred tax assets and deferred tax liabilities primarily related to the guidance on bonus depreciation issued by the IRS in August 2018, affecting the computation of the Company's 2017 Federal income tax liability;
- Additional tax expense of \$7 million related to the portion of the deferred tax asset as of December 31, 2017, that represents nondeductible long-term incentives under the Tax Act's limitation on the deductibility of executive compensation; and
- During the fourth quarter of 2018, the Company released the \$76 million valuation allowance that it recorded in the first quarter of 2018 as a result of additional guidance published by the IRS that stated refundable AMT credits would not be subject to sequestration.
- The majority of Duke Energy's operations are regulated and it is expected that the Subsidiary Registrants will ultimately pass on the savings associated with the amount representing the remeasurement of deferred tax balances related to regulated operations to customers. For Duke Energy's regulated operations, where the reduction is expected to be returned to customers in future rates, the remeasurement has been deferred as a regulatory liability. During 2018, Duke Energy recorded an additional regulatory liability of \$83 million, representing the revaluation of those deferred tax balances. The Subsidiary Registrants continue to respond to requests from regulators in various jurisdictions to determine the timing and magnitude of savings they will pass on to customers.

In addition, during 2018, Duke Energy reclassified \$573 million of AMT credit carryforwards from noncurrent deferred tax liabilities to a current federal income tax receivable. In 2019, Duke Energy received a refund of \$573 million related to AMT credit carryforwards based on the filing of Duke Energy's 2018 income tax return in 2019 and reclassified \$286 million of AMT credits from noncurrent deferred tax liabilities to a current federal income tax receivable.

Income Tax Expense

Components of Income Tax Expense

(in millions)	Year Ended December 31, 2019							
	Duke		Duke		Duke	Duke	Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Current income taxes								
Federal	\$ (299)	\$ 164	\$ (173)	\$ (36)	\$ (43)	\$ (41)	\$ (23)	\$ (92)
State	10	13	(7)	(3)	18	(1)	1	(1)
Foreign	2	—	—	—	—	—	—	—
Total current income taxes	(287)	177	(180)	(39)	(25)	(42)	(22)	(93)
Deferred income taxes								
Federal	855	175	422	220	153	77	128	133
State	(38)	(37)	17	(18)	27	5	28	3
Total deferred income taxes ^(a)	817	138	439	202	180	82	156	136
ITC amortization	(11)	(4)	(6)	(6)	—	—	—	—
Income tax expense from continuing operations	519	311	253	157	155	40	134	43
Tax benefit from discontinued operations	(2)	—	—	—	—	—	—	—
Total income tax expense included in Consolidated Statements of Operations	\$ 517	\$ 311	\$ 253	\$ 157	\$ 155	\$ 40	\$ 134	\$ 43

- (a) Total deferred income taxes includes the generation of tax credit carryforwards of \$8 million at Duke Energy Carolinas. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of \$243 million at Progress Energy, \$35 million at Duke Energy Progress, \$152 million at Duke Energy Florida, \$25 million at Duke Energy Ohio, \$60 million at Duke Energy Indiana, \$90 million at Piedmont and \$775 million at Duke Energy.

(in millions)	Year Ended December 31, 2018							
	Duke		Duke		Duke	Duke	Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Current income taxes								
Federal	\$ (647)	\$ (8)	\$ (135)	\$ (71)	\$ (49)	\$ 20	\$ 29	\$ 67
State	(11)	6	(5)	(5)	(10)	(1)	3	1
Foreign	3	—	—	—	—	—	—	—
Total current income taxes	(655)	(2)	(140)	(76)	(59)	19	32	68
Deferred income taxes								
Federal	1,064	299	341	256	115	21	74	(36)
State	49	11	20	(17)	45	3	22	5
Total deferred income taxes ^{(a)(b)}	1,113	310	361	239	160	24	96	(31)
ITC amortization	(10)	(5)	(3)	(3)	—	—	—	—
Income tax expense from continuing operations	448	303	218	160	101	43	128	37
Tax benefit from discontinued operations	(26)	—	—	—	—	—	—	—
Total income tax expense included in Consolidated Statements of Operations	\$ 422	\$ 303	\$ 218	\$ 160	\$ 101	\$ 43	\$ 128	\$ 37

- (a) Includes benefits of NOL carryforwards and tax credit carryforwards of \$22 million at Duke Energy Carolinas, \$293 million at Progress Energy, \$59 million at Duke Energy Progress, \$219 million at Duke Energy Florida, \$17 million at Duke Energy Ohio, \$21 million at Duke Energy Indiana and \$39 million at Piedmont. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of \$18 million at Duke Energy.
- (b) For the year ended December 31, 2018, the Company has revised the December 31, 2017, estimates of the income tax effects of the Tax Act, in accordance with SAB 118. See the Statutory Rate Reconciliation section below for additional information on the Tax Act's impact on income tax expense.

(in millions)	Year Ended December 31, 2017							
	Duke		Duke		Duke	Duke	Duke	Duke
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Current income taxes								
Federal	\$ (247)	\$ 221	\$ (436)	\$ (95)	\$ (188)	\$ (37)	\$ 128	\$ (90)
State	4	20	(5)	2	(11)	2	21	(3)
Foreign	3	—	—	—	—	—	—	—
Total current income taxes	(240)	241	(441)	(93)	(199)	(35)	149	(93)
Deferred income taxes								
Federal	1,344	381	664	378	194	99	138	147
State	102	35	44	10	51	(4)	14	8
Total deferred income taxes ^{(a)(b)}	1,446	416	708	388	245	95	152	155
ITC amortization	(10)	(5)	(3)	(3)	—	(1)	—	—
Income tax expense from continuing operations	1,196	652	264	292	46	59	301	62
Tax benefit from discontinued operations	(6)	—	—	—	—	—	—	—
Total income tax expense included in Consolidated Statements of Operations	\$ 1,190	\$ 652	\$ 264	\$ 292	\$ 46	\$ 59	\$ 301	\$ 62

- (a) Includes utilization of NOL carryforwards and tax credit carryforwards of \$428 million at Duke Energy, \$74 million at Progress Energy, \$36 million at Duke Energy Florida, \$17 million at Duke Energy Ohio, \$42 million at Duke Energy Indiana and \$79 million at Piedmont. In addition, total deferred income taxes includes benefits of NOL carryforwards and tax credit carryforwards of \$10 million at Duke Energy Carolinas and \$1 million at Duke Energy Progress.
- (b) As a result of the Tax Act, Duke Energy's deferred tax assets and liabilities were revalued as of December 31, 2017. See the Statutory Rate Reconciliation section below for additional information on the Tax Act's impact on income tax expense.

Duke Energy Income from Continuing Operations before Income Taxes

(in millions)	Years Ended December 31,		
	2019	2018	2017
Domestic ^(a)	\$ 4,053	\$ 3,018	\$ 4,207
Foreign	44	55	59
Income from continuing operations before income taxes	\$ 4,097	\$ 3,073	\$ 4,266

- (a) Includes a \$16 million expense in 2017 related to the Tax Act impact on equity earnings included within Equity in earnings of unconsolidated affiliates on the Consolidated Statement of Operations.

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.

(in millions)	Year Ended December 31, 2019							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	
	Energy	Energy	Progress	Energy	Energy	Energy	Energy	Piedmont
Income tax expense, computed at the statutory rate of 21%	\$ 860	\$ 360	\$ 332	\$ 202	\$ 178	\$ 59	\$ 120	\$ 51
State income tax, net of federal income tax effect	(22)	(19)	8	(17)	35	3	22	2
Amortization of excess deferred income tax	(121)	(29)	(64)	(10)	(54)	(12)	(6)	(10)
AFUDC equity income	(52)	(9)	(14)	(13)	(1)	(3)	(3)	—
AFUDC equity depreciation	34	19	10	5	5	1	4	—
Renewable energy PTCs	(120)	—	—	—	—	—	—	—
Other tax credits	(23)	(11)	(9)	(7)	(2)	(1)	(1)	(1)
Tax true up	(64)	(9)	(8)	(3)	(5)	(7)	(1)	—
Other items, net	27	9	(2)	—	(1)	—	(1)	1
Income tax expense from continuing operations	\$ 519	\$ 311	\$ 253	\$ 157	\$ 155	\$ 40	\$ 134	\$ 43
Effective tax rate	12.7%	18.1%	16.0%	16.3%	18.3%	14.3%	23.5%	17.6%

(in millions)	Year Ended December 31, 2018							
	Duke	Duke	Duke	Duke	Duke	Duke	Duke	
	Energy	Energy	Progress	Energy	Energy	Energy	Energy	Piedmont
Income tax expense, computed at the statutory rate of 21%	\$ 645	\$ 288	\$ 263	\$ 174	\$ 137	\$ 46	\$ 109	\$ 35
State income tax, net of federal income tax effect	30	14	13	(17)	28	2	20	4
Amortization of excess deferred income tax	(61)	—	(55)	(1)	(54)	(3)	(2)	—
AFUDC equity income	(42)	(15)	(22)	(12)	(10)	(2)	(2)	—
AFUDC equity depreciation	31	18	9	5	4	1	4	—
Renewable energy PTCs	(129)	—	—	—	—	—	—	—
Other tax credits	(28)	(7)	(13)	(5)	(8)	(1)	(1)	(3)
Tax Act ^(a)	20	1	25	19	—	2	—	—
Other items, net	(18)	4	(2)	(3)	4	(2)	—	1
Income tax expense from continuing operations	\$ 448	\$ 303	\$ 218	\$ 160	\$ 101	\$ 43	\$ 128	\$ 37
Effective tax rate	14.6%	22.1%	17.4%	19.3%	15.4%	19.6%	24.6%	22.3%

- (a) For the year ended December 31, 2018, the Company revised the December 31, 2017 estimates of the income tax effects of the Tax Act, in accordance with SAB 118. Amounts primarily include but are not limited to items that are excluded for ratemaking purposes related certain wholesale fixed rate contracts, remeasurement of nonregulated net deferred tax liabilities, Federal NOLs, and valuation allowance on foreign tax credits.

(in millions)	Year Ended December 31, 2017							
	Duke		Duke		Duke	Duke	Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Income tax expense, computed at the statutory rate of 35%	\$ 1,493	\$ 653	\$ 536	\$ 353	\$ 265	\$ 88	\$ 229	\$ 70
State income tax, net of federal income tax effect	69	36	25	8	26	(1)	23	3
AFUDC equity income	(81)	(37)	(32)	(17)	(16)	(4)	(8)	—
Renewable energy PTCs	(132)	—	—	—	—	—	—	—
Tax Act ^(a)	(112)	15	(246)	(40)	(226)	(23)	55	(12)
Tax true up	(52)	(24)	(19)	(13)	(7)	(5)	(6)	—
Other items, net	11	9	—	1	4	4	8	1
Income tax expense from continuing operations	\$ 1,196	\$ 652	\$ 264	\$ 292	\$ 46	\$ 59	\$ 301	\$ 62
Effective tax rate	28.0%	34.9%	17.2%	29.0%	6.1%	23.4%	46.0%	30.8%

- (a) Amounts primarily include but are not limited to items that are excluded for ratemaking purposes related to abandoned or impaired assets, certain wholesale fixed rate contracts, remeasurement of nonregulated net deferred tax liabilities, Federal NOLs, and valuation allowance on foreign tax credits.

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.

Valuation allowances have been established for foreign 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 Tax Act in the above tables.

DEFERRED TAXES

Net Deferred Income Tax Liability Components

(in millions)	December 31, 2019							
	Duke		Duke		Duke	Duke	Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Deferred credits and other liabilities	\$ 125	\$ 24	\$ 25	\$ 49	\$ —	\$ 14	\$ 5	\$ 22
Lease obligations	462	72	193	92	102	5	17	6
Pension, post-retirement and other employee benefits	303	(5)	88	38	44	17	27	(3)
Progress Energy merger purchase accounting adjustments ^(a)	389	—	—	—	—	—	—	—
Tax credits and NOL carryforwards	3,925	262	486	176	253	16	176	19
Regulatory liabilities and deferred credits	—	—	—	—	—	36	52	42
Investments and other assets	—	—	—	—	—	10	—	2
Other	97	5	8	3	2	8	1	6
Valuation allowance	(587)	—	—	—	—	—	—	—
Total deferred income tax assets	4,714	358	800	358	401	106	278	94
Investments and other assets	(1,664)	(981)	(577)	(390)	(190)	—	(12)	—
Accelerated depreciation rates	(10,813)	(3,254)	(3,798)	(1,918)	(1,913)	(1,028)	(1,416)	(802)
Regulatory assets and deferred debits, net	(1,115)	(44)	(887)	(438)	(477)	—	—	—
Total deferred income tax liabilities	(13,592)	(4,279)	(5,262)	(2,746)	(2,580)	(1,028)	(1,428)	(802)
Net deferred income tax liabilities	\$ (8,878)	\$ (3,921)	\$ (4,462)	\$ (2,388)	\$ (2,179)	\$ (922)	\$ (1,150)	\$ (708)

- (a) Primarily related to finance lease obligations and debt fair value adjustments.

The following table presents the expiration of tax credits and NOL carryforwards.

(in millions)	December 31, 2019		
	Amount	Expiration Year	
General Business Credits	\$ 1,821	2024	— 2039
AMT credits	286	Refundable by 2021	
Federal NOL carryforwards ^{(a) (f)}	169	2024	— Indefinite
Capital loss carryforward ^(e)	87	2024	
State carryforwards and credits ^{(b) (f)}	303	2020	— Indefinite
Foreign NOL carryforwards ^(c)	12	2027	— 2037
Foreign Tax Credits ^(d)	1,237	2024	— 2027
Charitable contribution carryforwards	10	2020	— 2024
Total tax credits and NOL carryforwards	\$ 3,925		

- (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 \$97 million has been recorded on the state NOL and credit 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 \$387 million has been recorded on the foreign tax credits, as presented in the Net Deferred Income Tax Liability Components table.
- (e) A valuation allowance of \$87 million has been recorded on the Federal capital loss carryforward, as presented in the Net Deferred Income Tax Liability Components table.
- (f) 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, 2018							
	Duke		Duke		Duke	Duke	Duke	
	Duke Energy	Energy Carolinas	Progress Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Energy Piedmont
Deferred credits and other liabilities	\$ 164	\$ 64	\$ 35	\$ 53	\$ —	\$ 17	\$ 6	\$ 17
Finance lease obligations	60	26	—	—	—	—	2	—
Pension, post-retirement and other employee benefits	347	24	110	47	58	16	24	(1)
Progress Energy merger purchase accounting adjustments ^(a)	483	—	—	—	—	—	—	—
Tax credits and NOL carryforwards	4,580	257	693	215	363	42	237	110
Regulatory liabilities and deferred credits	—	—	—	—	—	56	—	48
Investments and other assets	—	—	—	—	—	18	—	16
Other	25	6	5	5	—	1	(1)	—
Valuation allowance	(484)	—	—	—	—	—	—	—
Total deferred income tax assets	5,175	377	843	320	421	150	268	190
Investments and other assets	(1,317)	(795)	(430)	(272)	(163)	—	(5)	—
Accelerated depreciation rates	(10,124)	(3,207)	(3,369)	(1,735)	(1,670)	(967)	(1,081)	(733)
Regulatory assets and deferred debits, net	(1,540)	(64)	(985)	(432)	(574)	—	(191)	—
Other	—	—	—	—	—	—	—	(8)
Total deferred income tax liabilities	(12,981)	(4,066)	(4,784)	(2,439)	(2,407)	(967)	(1,277)	(741)
Net deferred income tax liabilities	\$ (7,806)	\$ (3,689)	\$ (3,941)	\$ (2,119)	\$ (1,986)	\$ (817)	\$ (1,009)	\$ (551)

- (a) Primarily related to finance 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, 2019								
	Duke		Progress	Duke		Duke	Duke	Duke	Duke
	Duke	Energy		Energy	Energy				
Energy	Carolinas	Energy	Progress	Florida	Ohio	Indiana	Piedmont		
Unrecognized tax benefits – January 1	\$ 24	\$ 6	\$ 9	\$ 6	\$ 3	\$ 1	\$ 1	\$ 4	
Unrecognized tax benefit increases	105	2	1	1	—	—	—	—	
Gross decreases – tax positions in prior periods	(3)	—	(1)	(1)	—	—	—	—	
Total changes	102	2	—	—	—	—	—	—	
Unrecognized tax benefits – December 31	\$ 126	\$ 8	\$ 9	\$ 6	\$ 3	\$ 1	\$ 1	\$ 4	

(in millions)	Year Ended December 31, 2018								
	Duke		Progress	Duke		Duke	Duke	Duke	Duke
	Duke	Energy		Energy	Energy				
Energy	Carolinas	Energy	Progress	Florida	Ohio	Indiana	Piedmont		
Unrecognized tax benefits – January 1	\$ 25	\$ 5	\$ 5	\$ 5	\$ 5	\$ 1	\$ 1	\$ 3	
Unrecognized tax benefits increases (decreases)									
Gross decreases – tax positions in prior periods	(2)	(1)	—	—	(4)	—	—	—	
Gross increases – tax positions in prior periods	7	2	4	1	2	—	—	1	
Decreases due to settlements	(6)	—	—	—	—	—	—	—	
Total changes	(1)	1	4	1	(2)	—	—	1	
Unrecognized tax benefits – December 31	\$ 24	\$ 6	\$ 9	\$ 6	\$ 3	\$ 1	\$ 1	\$ 4	

(in millions)	Year Ended December 31, 2017								
	Duke		Progress	Duke		Duke	Duke	Duke	Duke
	Duke	Energy		Energy	Energy				
Energy	Carolinas	Energy	Progress	Florida	Ohio	Indiana	Piedmont		
Unrecognized tax benefits – January 1	\$ 17	\$ 1	\$ 2	\$ 2	\$ 4	\$ 4	\$ —	\$ —	
Unrecognized tax benefits increases (decreases)									
Gross increases – tax positions in prior periods	12	4	3	3	1	1	1	3	
Gross decreases – tax positions in prior periods	(4)	—	—	—	—	(4)	—	—	
Total changes	8	4	3	3	1	(3)	1	3	
Unrecognized tax benefits – December 31	\$ 25	\$ 5	\$ 5	\$ 5	\$ 5	\$ 1	\$ 1	\$ 3	

The following table includes additional information regarding the Duke Energy Registrants' unrecognized tax benefits at December 31, 2019. It is reasonably possible that Duke Energy will reflect a \$3 million decrease in unrecognized tax benefits within the next 12 months.

(in millions)	December 31, 2019								
	Duke		Progress	Duke		Duke	Duke	Duke	Duke
	Duke	Energy		Energy	Energy				
Energy	Carolinas	Energy	Progress	Florida	Ohio	Indiana	Piedmont		
Amount that if recognized, would affect the effective tax rate or regulatory liability ^(a)	\$ 122	\$ 8	\$ 9	\$ 6	\$ 3	\$ 1	\$ 1	\$ 4	

- (a) The Duke Energy Registrants are unable to estimate the specific amounts that would affect the effective tax rate versus the regulatory liability.

OTHER TAX MATTERS

The following tables include interest recognized in the Consolidated Statements of Operations and the Consolidated Balance Sheets.

(in millions)	Year Ended December 31, 2019				
	Duke				
	Duke Energy	Progress Energy	Energy Progress	Piedmont	
Net interest income recognized related to income taxes	\$ 16	\$ 1	\$ 1	\$ —	
Interest receivable related to income taxes	1	—	—	—	
Interest payable related to income taxes	1	—	—	1	

(in millions)	Year Ended December 31, 2018			
	Duke			
	Duke Energy	Progress Energy	Energy Progress	
Net interest income recognized related to income taxes	\$ 2	\$ —	\$ —	
Interest payable related to income taxes	3	1	1	

(in millions)	Year Ended December 31, 2017				
	Duke		Duke		Duke
	Duke Energy	Carolinas	Progress Energy	Energy Progress	Energy Florida
Net interest income recognized related to income taxes	\$ —	\$ —	\$ 1	\$ —	\$ 1
Net interest expense recognized related to income taxes	—	2	—	—	—
Interest payable related to income taxes	5	25	1	1	—

Duke Energy and its subsidiaries are no longer subject to U.S. federal examination for years before 2016. With few exceptions, Duke Energy and its subsidiaries are no longer subject to state, local or non-U.S. income tax examinations by tax authorities for years before 2016.

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, 2019							
	Duke	Duke	Progress	Duke	Duke	Duke	Duke	
	Energy	Energy Carolinas	Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Interest income	\$ 31	\$ 1	\$ 11	\$ —	\$ 11	\$ 10	\$ 10	\$ 1
AFUDC equity	139	42	66	60	6	13	18	—
Post in-service equity returns	29	20	7	7	—	1	—	—
Nonoperating income, other	231	88	57	33	31	—	13	19
Other income and expense, net	\$ 430	\$ 151	\$ 141	\$ 100	\$ 48	\$ 24	\$ 41	\$ 20

(in millions)	Year Ended December 31, 2018							
	Duke	Duke	Progress	Duke	Duke	Duke	Duke	
	Energy	Energy Carolinas	Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Interest income	\$ 20	\$ 1	\$ 18	\$ 1	\$ 18	\$ 7	\$ 9	\$ 1
AFUDC equity	221	73	104	57	47	11	32	—
Post in-service equity returns	15	9	5	5	—	1	—	—
Nonoperating income, other	143	70	38	24	21	4	4	13
Other income and expense, net	\$ 399	\$ 153	\$ 165	\$ 87	\$ 86	\$ 23	\$ 45	\$ 14

(in millions)	Year Ended December 31, 2017							
	Duke	Duke	Progress	Duke	Duke	Duke	Duke	
	Energy	Energy Carolinas	Energy	Energy Progress	Energy Florida	Energy Ohio	Energy Indiana	Piedmont
Interest income	\$ 13	\$ 2	\$ 6	\$ 2	\$ 5	\$ 6	\$ 8	\$ —
AFUDC equity	237	106	92	47	45	11	28	—
Post in-service equity returns	40	28	12	12	—	—	—	—
Nonoperating income, other	218	63	99	54	46	6	11	(11)
Other income and expense, net	\$ 508	\$ 199	\$ 209	\$ 115	\$ 96	\$ 23	\$ 47	\$ (11)

26. SUBSEQUENT EVENTS

For information on subsequent events related to the adoption of the new credit losses accounting standard, regulatory matters and debt and credit facilities, see Notes 1, 4 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
2019					
Operating revenues	\$ 6,163	\$ 5,873	\$ 6,940	\$ 6,103	\$ 25,079
Operating income	1,373	1,298	1,929	1,109	5,709
Income from continuing operations	893	748	1,323	614	3,578
Loss from discontinued operations, net of tax	—	—	—	(7)	(7)
Net income	893	748	1,323	607	3,571
Net income available to Duke Energy Corporation common stockholders	900	820	1,327	660	3,707
Earnings per share:					
Income from continuing operations available to Duke Energy Corporation common stockholders					
Basic and diluted	\$ 1.24	\$ 1.12	\$ 1.82	\$ 0.89	\$ 5.07
Loss from discontinued operations attributable to Duke Energy Corporation common stockholders					
Basic and diluted	\$ —	\$ —	\$ —	\$ (0.01)	\$ (0.01)
Net income available to Duke Energy Corporation common stockholders					
Basic and diluted	\$ 1.24	\$ 1.12	\$ 1.82	\$ 0.88	\$ 5.06
2018					
Operating revenues	\$ 6,135	\$ 5,643	\$ 6,628	\$ 6,115	\$ 24,521
Operating income	1,256	979	1,579	871	4,685
Income from continuing operations	622	507	1,062	434	2,625
(Loss) Income from discontinued operations, net of tax	—	(5)	4	20	19
Net income	622	502	1,066	454	2,644
Net income attributable to Duke Energy Corporation	620	500	1,082	464	2,666
Earnings per share:					
Income from continuing operations attributable to Duke Energy Corporation common stockholders					
Basic and diluted	\$ 0.88	\$ 0.72	\$ 1.51	\$ 0.62	\$ 3.73
(Loss) Income from discontinued operations attributable to Duke Energy Corporation common stockholders					
Basic and diluted	\$ —	\$ (0.01)	\$ —	\$ 0.03	\$ 0.03
Net income attributable to Duke Energy Corporation common stockholders					
Basic and diluted	\$ 0.88	\$ 0.71	\$ 1.51	\$ 0.65	\$ 3.76

The following table includes unusual or infrequently occurring items in each quarter during the two most recently completed fiscal years. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Impairment Charges (see Notes 4 and 13)	\$ —	\$ —	\$ 25	\$ (14)	\$ 11
Total	\$ —	\$ —	\$ 25	\$ (14)	\$ 11
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (17)	\$ (20)	\$ (16)	\$ (31)	\$ (84)
Regulatory and Legislative Impacts (see Note 4)	(86)	(179)	—	—	(265)
Sale of Retired Plant (see Note 3)	(107)	—	—	—	(107)
Impairment Charges (see Notes 4, 12 and 13)	(55)	—	(93)	(60)	(208)
Severance Charges (see Note 21)	—	—	—	(187)	(187)
Impacts of the Tax Act (see Note 24)	(76)	—	3	53	(20)
Total	\$ (341)	\$ (199)	\$ (106)	\$ (225)	\$ (871)

DUKE ENERGY CAROLINAS

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 1,744	\$ 1,713	\$ 2,162	\$ 1,776	\$ 7,395
Operating income	435	451	793	347	2,026
Net income	293	301	590	219	1,403
2018					
Operating revenues	\$ 1,763	\$ 1,672	\$ 2,090	\$ 1,775	\$ 7,300
Operating income	482	224	713	241	1,660
Net income	323	117	496	135	1,071

The following table includes unusual or infrequently occurring items in each quarter during 2018. There were no unusual or infrequently occurring items for the year ended December 31, 2019. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (4)	\$ (2)	\$ (2)	\$ (1)	\$ (9)
Regulatory and Legislative Impacts (see Note 4)	(19)	(179)	—	—	(198)
Severance Charges (see Note 21)	—	—	—	(102)	(102)
Impacts of the Tax Act (see Note 24)	—	—	(1)	—	(1)
Total	\$ (23)	\$ (181)	\$ (3)	\$ (103)	\$ (310)

PROGRESS ENERGY

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 2,572	\$ 2,744	\$ 3,242	\$ 2,644	\$ 11,202
Operating income	488	580	786	447	2,301
Net income	248	329	521	229	1,327
Net income attributable to Parent	249	328	521	229	1,327
2018					
Operating revenues	\$ 2,576	\$ 2,498	\$ 3,045	\$ 2,609	\$ 10,728
Operating income	447	484	663	334	1,928
Net income	237	267	406	123	1,033
Net income attributable to Parent	235	265	404	123	1,027

The following table includes unusual or infrequently occurring items in each quarter during the two most recently completed fiscal years. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Impairment Charges (see Note 4)	\$ —	\$ —	\$ 25	\$ 11	\$ 36
Total	\$ —	\$ —	\$ 25	\$ 11	\$ 36
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (4)	\$ (3)	\$ (1)	\$ (2)	\$ (10)
Regulatory and Legislative Impacts (see Note 4)	(67)	—	—	—	(67)
Impairment Charges (see Note 4)	—	—	—	(60)	(60)
Severance Charges (see Note 21)	—	—	—	(69)	(69)
Impacts of the Tax Act (see Note 24)	(1)	—	(5)	(19)	(25)
Total	\$ (72)	\$ (3)	\$ (6)	\$ (150)	\$ (231)

DUKE ENERGY PROGRESS

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 1,484	\$ 1,387	\$ 1,688	\$ 1,398	\$ 5,957
Operating income	300	259	373	236	1,168
Net income	203	169	278	155	805
2018					
Operating revenues	\$ 1,460	\$ 1,291	\$ 1,582	\$ 1,366	\$ 5,699
Operating income	269	233	330	227	1,059
Net income	177	139	216	135	667

The following table includes unusual or infrequently occurring items in each quarter during 2018. There were no unusual or infrequently occurring items for the year ended December 31, 2019. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (2)	\$ (2)	\$ (1)	\$ (1)	\$ (6)
Regulatory and Legislative Impacts (see Note 4)	(67)	—	—	—	(67)
Severance Charges (see Note 21)	—	—	—	(52)	(52)
Impacts of the Tax Act (see Note 24)	—	—	(4)	(15)	(19)
Total	\$ (69)	\$ (2)	\$ (5)	\$ (68)	\$ (144)

DUKE ENERGY FLORIDA

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 1,086	\$ 1,353	\$ 1,548	\$ 1,244	\$ 5,231
Operating income	188	321	413	205	1,127
Net income	96	201	289	106	692
2018					
Operating revenues	\$ 1,115	\$ 1,203	\$ 1,462	\$ 1,241	\$ 5,021
Operating income	173	245	331	107	856
Net income	103	168	243	40	554

The following table includes unusual or infrequently occurring items in each quarter during the two most recently completed fiscal years. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Impairment Charges (see Note 4)	\$ —	\$ —	\$ 25	\$ 11	\$ 36
Total	\$ —	\$ —	\$ 25	\$ 11	\$ 36
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (2)	\$ (1)	\$ —	\$ (1)	\$ (4)
Impairment Charges (see Note 4)	—	—	—	(60)	(60)
Severance Charges (see Note 21)	—	—	—	(17)	(17)
Impacts of the Tax Act (see Note 24)	—	—	(2)	2	—
Total	\$ (2)	\$ (1)	\$ (2)	\$ (76)	\$ (81)

DUKE ENERGY OHIO

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 531	\$ 433	\$ 489	\$ 487	\$ 1,940
Operating income	104	74	108	78	364
Net income	69	47	74	48	238
2018					
Operating revenues	\$ 524	\$ 459	\$ 469	\$ 505	\$ 1,957
Operating (loss) income	(21)	77	139	93	288
Net (loss) income	(25)	46	100	55	176

The following table includes unusual or infrequently occurring items in each quarter during 2018. There were no unusual or infrequently occurring items for the year ended December 31, 2019. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (3)	\$ (5)	\$ —	\$ (6)	\$ (14)
Sale of Retired Plant (see Note 3)	(107)	—	—	—	(107)
Severance Charges (see Note 21)	—	—	—	(6)	(6)
Impacts of the Tax Act (see Note 24)	—	—	—	(2)	(2)
Total	\$ (110)	\$ (5)	\$ —	\$ (14)	\$ (129)

DUKE ENERGY INDIANA

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 768	\$ 714	\$ 807	\$ 715	\$ 3,004
Operating income	169	148	235	133	685
Net income	110	97	156	73	436
2018					
Operating revenues	\$ 731	\$ 738	\$ 819	\$ 771	\$ 3,059
Operating income	168	169	173	133	643
Net income	100	98	119	76	393

The following table includes unusual or infrequently occurring items in each quarter during 2018. There were no unusual or infrequently occurring items for the year ended December 31, 2019. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ —	\$ —	\$ (2)	\$ —	\$ (2)
Severance Charges (see Note 21)	—	—	—	(7)	(7)
Total	\$ —	\$ —	\$ (2)	\$ (7)	\$ (9)

PIEDMONT

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019					
Operating revenues	\$ 579	\$ 209	\$ 168	\$ 425	\$ 1,381
Operating income (loss)	172	6	(13)	139	304
Net income (loss)	122	(7)	(18)	105	202
2018					
Operating revenues	\$ 553	\$ 215	\$ 172	\$ 435	\$ 1,375
Operating income (loss)	161	5	(19)	79	226
Net income (loss)	110	(8)	(21)	48	129

The following table includes unusual or infrequently occurring items in each quarter during 2018. There were no unusual or infrequently occurring items for the year ended December 31, 2019. All amounts discussed below are pretax.

(in millions)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2018					
Costs to Achieve Piedmont Merger (see Note 2)	\$ (6)	\$ (9)	\$ (11)	\$ (22)	\$ (48)
Severance Charges (see Note 21)	—	—	—	(2)	(2)
Total	\$ (6)	\$ (9)	\$ (11)	\$ (24)	\$ (50)

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, 2019, 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, 2019, and have concluded no change has materially affected, or is reasonably likely to materially affect, internal control 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, 2019, 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, 2019.

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, 2019, 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, 2019, 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, 2019, of the Company and our report dated February 20, 2020, 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 & Touche LLP

Charlotte, North Carolina
February 20, 2020

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding Duke Energy's Executive Officers is set forth in Part I, Item 1, "Business – Executive Officers of the Registrants," in this Annual Report on Form 10-K. 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, 2019, 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	3,528,022 ⁽²⁾	n/a	5,248,541 ⁽³⁾
Equity compensation plans not approved by security holders	180,188 ⁽⁴⁾	n/a	n/a ⁽⁵⁾
Total	3,708,210	n/a	5,248,541

(1) As of December 31, 2019, 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. 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 base salary deferrals, short-term incentive compensation deferrals and matching contributions 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 2019 and 2018.

(in millions)	Year Ended December 31, 2019							
	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)	\$ 13.5	\$ 4.6	\$ 5.3	\$ 3.1	\$ 2.2	\$ 0.9	\$ 1.4	\$ 0.8
Audit-Related Fees ^(b)	0.6	0.1	0.2	0.1	0.1	0.2	—	—
Tax Fees ^(c)	0.2	0.1	0.1	—	—	—	—	—
Total Fees	\$ 14.3	\$ 4.8	\$ 5.6	\$ 3.2	\$ 2.3	\$ 1.1	\$ 1.4	\$ 0.8

(in millions)	Year Ended December 31, 2018							
	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)	\$ 14.0	\$ 5.0	\$ 5.5	\$ 3.3	\$ 2.2	\$ 0.9	\$ 1.4	\$ 0.8
Audit-Related Fees ^(b)	0.4	—	0.1	—	0.1	—	—	—
Tax Fees ^(c)	0.6	0.2	0.2	0.1	0.1	—	0.1	0.1
Total Fees	\$ 15.0	\$ 5.2	\$ 5.8	\$ 3.4	\$ 2.4	\$ 0.9	\$ 1.5	\$ 0.9

- (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 the 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.
- (c) Tax Fees are fees billed by Deloitte for tax return assistance and preparation, tax examination assistance and professional services related to tax planning and tax strategy.

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 2019 and 2018 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, Supplemental Financial Data 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, 2019, 2018 and 2017
 Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Balance Sheets as of December 31, 2019, and 2018
 Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017
 Notes to the Consolidated Financial Statements
 Quarterly Financial Data, (unaudited, included in Note 27 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, 2019, 2018 and 2017
 Consolidated Balance Sheets as of December 31, 2019, and 2018
 Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017
 Notes to the Consolidated Financial Statements
 Quarterly Financial Data, (unaudited, included in Note 27 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.

Progress Energy, Inc.

Consolidated Financial Statements
 Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Balance Sheets as of December 31, 2019, and 2018
 Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017
 Notes to the Consolidated Financial Statements
 Quarterly Financial Data, (unaudited, included in Note 27 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 Progress, LLC

Consolidated Financial Statements
 Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Balance Sheets as of December 31, 2019, and 2018
 Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017
 Notes to the Consolidated Financial Statements
 Quarterly Financial Data, (unaudited, included in Note 27 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 Florida, LLC

Consolidated Financial Statements
 Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Balance Sheets as of December 31, 2019, and 2018
 Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017
 Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017
 Notes to the Consolidated Financial Statements
 Quarterly Financial Data, (unaudited, included in Note 27 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 Ohio, Inc.

Consolidated Financial Statements

Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017

Consolidated Balance Sheets as of December 31, 2019, and 2018

Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017

Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017

Notes to the Consolidated Financial Statements

Quarterly Financial Data, (unaudited, included in Note 27 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 Indiana, LLC

Consolidated Financial Statements

Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017

Consolidated Balance Sheets as of December 31, 2019, and 2018

Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017

Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017

Notes to the Consolidated Financial Statements

Quarterly Financial Data, (unaudited, included in Note 27 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, 2019, 2018 and 2017

Consolidated Balance Sheets as of December 31, 2019, and 2018

Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017

Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019, 2018 and 2017

Notes to the Consolidated Financial Statements

Quarterly Financial Data, (unaudited, included in Note 27 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 herewithin 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							
3.3	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	

EXHIBITS

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	Limited Liability Company Operating Agreement of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.5 to registrant's Current Report on Form 8-K filed on January 4, 2016, 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 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).		X	
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

EXHIBITS

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

EXHIBITS

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 25, 2010, File No. 1-32853).	X	
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 of Form 8-A of the Company 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	

EXHIBITS

4.1.11	<u>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).</u>	X
4.1.12	<u>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).</u>	X
4.1.13	<u>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).</u>	X
4.1.14	<u>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).</u>	X
4.1.15	<u>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).</u>	X
4.1.16	<u>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).</u>	X
4.1.17	<u>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).</u>	X
4.1.18	<u>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).</u>	X
4.1.19	<u>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).</u>	X
4.1.20	<u>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).</u>	X
4.1.21	<u>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).</u>	X
4.1.22	<u>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).</u>	X
4.2	<u>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).</u>	X

EXHIBITS

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

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4.3.11	<u>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).</u>	X
4.3.12	<u>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).</u>	X
4.3.13	<u>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).</u>	X
4.3.14	<u>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).</u>	X
4.3.15	<u>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).</u>	X
4.3.16	<u>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).</u>	X
4.3.17	<u>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).</u>	X
4.3.18	<u>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).</u>	X
4.3.19	<u>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).</u>	X
4.3.20	<u>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).</u>	X
4.3.21	<u>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. 1-04928).</u>	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

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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

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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

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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

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4.4.61	<u>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).</u>	X
4.4.62	<u>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 dated March 19, 1999, File No. 1-3382).</u>	X
4.4.63	<u>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).</u>	X
4.4.64	<u>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 dated April 20, 2000, File No. 1-3382).</u>	X
4.4.65	<u>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 dated March 29, 2001, File No. 1-3382).</u>	X
4.4.66	<u>Seventieth Supplemental Indenture dated July 1, 2000 (incorporated by reference to Exhibit 4b(3) to Duke Energy Progress' Annual Report on Form 10-K dated March 29, 2001, File No. 1-3382).</u>	X
4.4.67	<u>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 dated March 28, 2002, File No. 1-3382 and 1-15929).</u>	X
4.4.68	<u>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).</u>	X
4.4.69	<u>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).</u>	X
4.4.70	<u>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).</u>	X
4.4.71	<u>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).</u>	X
4.4.72	<u>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).</u>	X

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4.4.73	<u>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).</u>	X
4.4.74	<u>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).</u>	X
4.4.75	<u>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).</u>	X
4.4.76	<u>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).</u>	X
4.4.77	<u>Eighty-second Supplemental Indenture, dated as of March 1, 2014, between the Company 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).</u>	X
4.4.78	<u>Eighty-third Supplemental Indenture, dated as of November 1, 2014, between the Company 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).</u>	X
4.4.79	<u>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).</u>	X
4.4.80	<u>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).</u>	X
4.4.81	<u>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).</u>	X
4.4.82	<u>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).</u>	X
4.5	<u>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).</u>	X

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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

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4.7.10	<u>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).</u>	X
4.7.11	<u>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).</u>	X
4.7.12	<u>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).</u>	X
4.7.13	<u>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).</u>	X
4.7.14	<u>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).</u>	X
4.7.15	<u>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).</u>	X
4.7.16	<u>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).</u>	X
4.7.17	<u>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).</u>	X
4.7.18	<u>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).</u>	X
4.8	<u>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).</u>	X
4.8.1	<u>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).</u>	X

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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

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4.12	<u>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).</u>	X
4.12.1	<u>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).</u>	X
4.12.2	<u>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).</u>	X
4.12.3	<u>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).</u>	X
4.12.4	<u>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).</u>	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

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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

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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
4.14	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-K for the year ended December 31, 1992, File No. 1-1232).	X	
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(yv) 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(zz) 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

EXHIBITS

4.22	<u>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).</u>	X
4.23	<u>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).</u>	X
4.24	<u>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).</u>	X
4.25	<u>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).</u>	X
4.26	<u>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).</u>	X
4.26.1	<u>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).</u>	X
4.26.2	<u>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).</u>	X
4.26.3	<u>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).</u>	X
4.26.4	<u>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).</u>	X
4.26.5	<u>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).</u>	X
4.26.6	<u>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).</u>	X

EXHIBITS

4.26.7	<u>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).</u>		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	<u>Medium-Term Note, Series A, dated as of September 19, 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).</u>		X
4.29	<u>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).</u>		X
4.30	<u>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).</u>		X
4.31	<u>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).</u>		X
4.32	<u>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).</u>		X
4.33	<u>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).</u>		X
4.34	<u>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).</u>		X
10.1	<u>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).</u>	X	
10.2	<u>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).</u>	X	
10.3	<u>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).</u>	X	

EXHIBITS

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	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 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.)	X	X

EXHIBITS

10.13**	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							
10.14	\$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	
10.14.1	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	
10.14.2	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	
10.14.3	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
10.14.4	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**	Duke Energy Corporation 2010 Long-Term Incentive Plan (incorporated by reference to Appendix A to registrant's Form DEF 14A filed on March 22, 2010, File No. 1-32853).	X							
10.15.1**	Amendment to Duke Energy Corporation 2010 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, filed on August 8, 2012, File No. 1-32853).	X							

EXHIBITS

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**	Performance-Based Retention Award Agreement (incorporated by reference to Exhibit 10.2 to registrant's Current Report on Form 10-Q for the quarter ended March 31, 2017 filed on May 9, 2017, File No. 1-32853).	X		
10.20**	Performance Award Agreement (incorporated by reference to Exhibit 10.3 to registrant's Current Report on Form 10-Q for the quarter ended March 31, 2017 filed on May 9, 2017, File No. 1-32853).	X		
10.21**	Performance Award Agreement (incorporated by reference to Exhibit 10.27 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		
10.22**	Performance Share Award Agreement (incorporated by reference to Exhibit 10.2 to Duke Energy Corporation's Current Report on Form 10-Q for the quarter ended March 31, 2019 filed on May 9, 2019, File No. 1-32853).	X		
10.23**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Current Report on Form 10-Q for the quarter ended March 31, 2019 filed on May 9, 2019, File No. 1-32853).	X		
10.24	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 Current Report on Form 8-K filed on November 29, 2012, File No. 1-32853).	X		
10.25	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		
10.26	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

EXHIBITS

10.27**	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
10.28**	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
10.29	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
10.30	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
10.31	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
10.32	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
10.33**	Progress Energy, Inc. 2007 Equity Incentive Plan (incorporated by reference to Exhibit C to registrant's Form DEF 14A filed on March 30, 2007, File No. 1-15929).	X

EXHIBITS

10.34	<u>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.)</u>	X	X
10.35	<u>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.)</u>	X	X
10.36**	<u>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).</u>		X
10.36.1**	<u>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).</u>		X
10.37**	<u>Duke Energy Corporation Executive Short-Term Incentive Plan, effective February 25, 2013. (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on May 7, 2013, File No. 1-32853).</u>		X
10.38**	<u>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).</u>		X
10.39**	<u>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).</u>		X

EXHIBITS

10.39.1	Amendment to Duke Energy Corporation Executive Savings Plan, effective 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	
10.40	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
10.41	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
10.42	Change in Control Agreement between Duke Energy Corporation and Lloyd M. Yates, dated as of April 30, 2014, (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on May 6, 2014, File No. 1-32853).	X	
10.43	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	
10.44	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	
10.45	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	
10.46	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	
10.47	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	

EXHIBITS

10.48**	<u>Amended and Restated Employment Agreement, dated May 25, 2012, between Piedmont Natural Gas Company, Inc. and Franklin H. Yoho (incorporated by reference to Exhibits 10.1 and 10.2 to Piedmont Natural Gas Company, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 31, 2012, filed on September 7, 2012, File No. 1-06196).</u>	X
10.49**	<u>Severance Agreements with Thomas E. Skains and Franklin H. Yoho, dated September 4, 2007, (incorporated by reference to Exhibits 10.2 and 10.2a to Piedmont Natural Gas Company, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 31, 2007, filed on September 7, 2007, File No. 1-06196).</u>	X
10.50**	<u>Piedmont Natural Gas Company, Inc. Incentive Compensation Plan (incorporated by reference to Exhibit 10.64 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016 filed on February 24, 2017, File No. 1-32853).</u>	X
10.50.1**	<u>First Amendment to Piedmont Natural Gas Company, Inc. Incentive Compensation Plan (incorporated by reference to Exhibit 4.2 to registrant's Registration Statement on Form S-8 filed on October 3, 2016, File No. 1-32853).</u>	X
10.51**	<u>Waiver of Certain Rights to Terminate for Good Reason between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.66 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016 filed on February 24, 2017, File No. 1-32853).</u>	X
10.52**	<u>Notice of Non-Renewal of Employment Agreement between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.67 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016 filed on February 24, 2017, File No. 1-32853).</u>	X
10.53**	<u>Retention Award Agreement, dated as of October 24, 2015, between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.68 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016 filed on February 24, 2017, File No. 1-32853).</u>	X
*10.54**	<u>Consulting Agreement, dated as of October 4, 2019, between Duke Energy Corporation and Franklin H. Yoho.</u>	X
10.55	<u>\$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, National Association, 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 National Association, 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).</u>	X
10.56	<u>\$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, National Association, 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, National Association, 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).</u>	X

EXHIBITS

*10.65	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.								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

EXHIBITS

*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	X
*101.SCH	XBRL Taxonomy Extension Schema Document	X	X	X	X	X	X	X	X	X
*101.CAL	XBRL Taxonomy Calculation Linkbase Document	X	X	X	X	X	X	X	X	X
*101.LAB	XBRL Taxonomy Label Linkbase Document	X	X	X	X	X	X	X	X	X
*101.PRE	XBRL Taxonomy Presentation Linkbase Document	X	X	X	X	X	X	X	X	X
*101.DEF	XBRL Taxonomy Definition Linkbase Document	X	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 20, 2020

DUKE ENERGY
CORPORATION
(Registrant)

By:

/s/ LYNN J. GOOD

Lynn J. Good
Chairman, 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
Chairman, President and Chief Executive Officer (Principal Executive Officer and Director)
- (ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)
- (iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)
- (iv) Directors:
- | | |
|--------------------------|--------------------------|
| Michael G. Browning* | William E. Kennard* |
| Annette K. Clayton* | E. Marie McKee* |
| Theodore F. Craver, Jr.* | Charles W. Moorman IV* |
| Robert M. Davis* | Marya M. Rose* |
| Daniel R. DiMicco* | Carlos A. Saladrigas* |
| Nicholas C. Fanandakis* | Thomas E. Skains* |
| Lynn J. Good* | William E. Webster, Jr.* |
| John T. Herron* | |

Steven K. Young, 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/ STEVEN K. YOUNG

Attorney-In-Fact

Date: February 20, 2020

