Duke Energy CORP
Form 10-K
February 28, 2019

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K
(Mark One)
ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal period ended December 31, 2018 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, NC 28202-1803 704-382-3853	20-2777218

Commission file number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number and IRS Employer Identification Number
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
1-6196	PIEDMONT NATURAL GAS COMPANY, INC. (a North Carolina corporation) 4720 Piedmont Row Drive

Commission file number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number and IRS Employer Identification Number
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

Charlotte, North Carolina 28210
704-364-3120
56-0556998

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

Registrant	Title of each class	Name of each exchange on which registered
Duke Energy Corporation (Duke Energy)	Common Stock, $0.001 par value	New York Stock Exchange LLC
Duke Energy	5.125% Junior Subordinated Debentures due January 15, 2073	New York Stock Exchange LLC
Duke Energy	5.625% Junior Subordinated Debentures due September 15, 2078	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 x	No ¨	Duke Energy Florida, LLC (Duke Energy Florida)	Yes x	No ¨
Duke Energy Carolinas, LLC (Duke Energy Carolinas)	Yes x	No ¨	Duke Energy Ohio, Inc. (Duke Energy Ohio)	Yes x	No ¨
Progress Energy, Inc. (Progress Energy)	Yes ¨	No x	Duke Energy Indiana, LLC (Duke Energy Indiana)	Yes ¨	No x
Duke Energy Progress, LLC (Duke Energy Progress)	Yes x	No ¨	Piedmont Natural Gas Company, Inc. (Piedmont)	Yes ¨	No x

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 x (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 x 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 x No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨ (Only applicable to Duke Energy)

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 x 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 x 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 x

Estimated aggregate market value of the common equity held by nonaffiliates of Duke Energy at June 30, 2018.	$56,283,598,357
Number of shares of Common Stock, $0.001 par value, outstanding at January 31, 2019.	727,010,882

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Duke Energy definitive proxy statement for the 2019 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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FORWARD LOOKING STATEMENTS

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" 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 Crystal River Unit 3 and other 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 U.S. 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;
Employee workforce factors, including the potential inability to attract and retain key personnel;

FORWARD LOOKING STATEMENTS

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 U.S. 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

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 OPC and other customer advocates
the 2015 Plan	Duke Energy Corporation 2015 Long-Term Incentive Plan
2017 Settlement	Second Revised and Restated Settlement Agreement in 2017 among Duke Energy Florida, the Florida OPC 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
the Agents	Wells Fargo Securities, LLC, Citigroup Global Market Inc., J.P. Morgan Securities, LLC
ALJ	Administrative Law Judge
AMI	Advanced Metering Infrastructure
AMT	Alternative Minimum Tax
AOCI	Accumulated Other Comprehensive Income (Loss)
ARO	Asset Retirement Obligation
ASR	Accelerated Stock Repurchase Program
ATM	At-the-market
Audit Committee	Audit Committee of the Board of Directors
Barclays	Barclays Capital Inc.
BCWF	Benton County Wind Farm, LLC
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
CAA	Clean Air Act
Cardinal	Cardinal Pipeline Company, LLC
Catawba	Catawba Nuclear Station
CC	Combined Cycle
CCR	Coal Combustion Residuals
CCS	Carbon Capture and Storage
CECPCN	Certificate of Environmental Compatibility and Public Convenience and Necessity
CEO	Chief Executive Officer
CertainTeed	CertainTeed Gypsum NC, Inc.
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
COL	Combined Operating License
the Company	Duke Energy Corporation and its subsidiaries

GLOSSARY OF TERMS

Constitution	Constitution Pipeline Company, LLC
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CPCN	Certificate of Public Convenience and Necessity
CPP	Clean Power Plan
CRC	Cinergy Receivables Company LLC
Crystal River Unit 3	Crystal River Unit 3 Nuclear Plant
CSA	Comprehensive Site Assessment
CSAPR	Cross-State Air Pollution Rule
CT	Combustion Turbine
CTG	China Three Gorges (Luxembourg) Energy S.à.r.l.
CWA	Clean Water Act
DATC	Duke-American Transmission Co.
D.C. Circuit Court	U.S. Court of Appeals for the District of Columbia
DCI	Distribution Capital Investment
DEFPF	Duke Energy Florida Project Finance, LLC
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
DHHS	North Carolina Department of Health and Human Services
Directors' Savings Plan	Duke Energy Corporation Directors' Savings Plan
DOE	U.S. Department of Energy

DOJ	Department of Justice
Dominion	Dominion Resources
DRIP	Dividend Reinvestment Program
DSM	Demand Side Management
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
the EDA	Equity Distribution Agreement
EE	Energy efficiency
EGU	Electric Generating Units
ELG	Effluent Limitations Guidelines
EPA	U.S. Environmental Protection Agency
EPC	Engineering, Procurement and Construction agreement
EPS	Earnings Per Share
ESP	Electric Security Plan

GLOSSARY OF TERMS

ETR	Effective tax rate
Exchange Act	Securities Exchange Act of 1934
Executive Savings Plan	Duke Energy Corporation Executive Savings Plan
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FES	FirstEnergy Solutions Corp.
Fitch	Fitch Ratings, Inc.
FirstEnergy	FirstEnergy Corp.
Florida OPC	Florida Office of Public Counsel
Form S-3	Registration statement
FP&L	Florida Power & Light Company
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 Earnings	Net Income Attributable to Duke Energy Corporation
GAAP Reported EPS	Diluted EPS Attributable to Duke Energy Corporation common stockholders
GHG	Greenhouse Gas
GWh	Gigawatt-hours
Hardy Storage	Hardy Storage Company, LLC
Harris	Shearon Harris Nuclear Plant
Hines	Hines Energy Complex

I Squared	ISQ Enerlam Aggregator, L.P. and Enerlam (UK) Holding Ltd.
IBNR	Incurred but not yet reported
ICPA	Inter-Company Power Agreement
IGCC	Integrated Gasification Combined Cycle
IMR	Integrity Management Rider
International Disposal Group	Duke Energy's international business, excluding National Methanol Company
IRP	Integrated Resource Plans
IRS	Internal Revenue Service
ISFSI	Independent Spent Fuel Storage Installation
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
JDA	Joint Dispatch Agreement
KO Transmission	KO Transmission Company
KPSC	Kentucky Public Service Commission
kV	Kilovolt
LDC	Local Distribution Company
Lee Nuclear Station	William States Lee III Nuclear Station
Levy	Duke Energy Florida’s proposed nuclear plant in Levy County, Florida

GLOSSARY OF TERMS

LIBOR	London Interbank Offered Rate
LLC	Limited Liability Company
Master Trust	Duke Energy Corporation Master Retirement Trust
McGuire	McGuire Nuclear Station
Merger Agreement	The Agreement and Plan of Merger between Duke Energy and Piedmont
MGP	Manufactured gas plant
Midwest Generation Disposal Group	Duke Energy Ohio’s nonregulated Midwest generation business and Duke Energy Retail Sales, LLC
MISO	Midcontinent Independent System Operator, Inc.
MMBtu	Million British Thermal Unit
MPP	Money Purchase Pension
Moody’s	Moody’s Investors Service, Inc.
MTBE	Methyl tertiary butyl ether
MTEP	MISO Transmission Expansion Planning
MW	Megawatt
MVP	Multi Value Projects
MWh	Megawatt-hour
NAAQS	National Ambient Air Quality Standards
NAV	Net asset value
NAW	North Allegheny Wind, LLC
NCDEQ	North Carolina Department of Environmental Quality (formerly the North Carolina Department of Environment and Natural Resources)
NCEMC	North Carolina Electric Membership Corporation
NCEMPA	North Carolina Eastern Municipal Power Agency

NCRS	Nuclear Power Plant Cost Recovery Statutes
NCUC	North Carolina Utilities Commission
NDTF	Nuclear decommissioning trust funds
NEIL	Nuclear Electric Insurance Limited
New Source Review	New Source Review (NSR) is a CAA program that requires industrial facilities to install modern pollution control equipment when they are built or when making a change that increases emissions significantly
NYSDEC	New York State Department of Environmental Conservation
NMC	National Methanol Company
NOL	Net operating loss
NOV	Notice of violation
NO_x	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPNS	Normal purchase/normal sale
NPRM	Notice of Proposed Rulemaking
NRC	U.S. Nuclear Regulatory Commission
NSR	New Source Review
NWPA	Nuclear Waste Policy Act of 1982 (as amended)
NYSE	New York Stock Exchange
Oconee	Oconee Nuclear Station
OMB	Office of Management and Budget

GLOSSARY OF TERMS

OPEB	Other Post-Retirement Benefit Obligations
ORS	Office of Regulatory Staff
Osprey acquisition	Duke Energy Florida's purchase of a Calpine Corporation's 599-MW combined-cycle natural gas plant in Auburndale, Florida
OTTI	Other-than-temporary impairment
OVEC	Ohio Valley Electric Corporation
the Parent	Duke Energy Corporation holding company
PCAOB	Public Company Accounting Oversight Board
PGA	Purchased Gas Adjustments
Philadelphia Utility Index	Philadelphia Sector Index
PHMSA	Pipeline and Hazardous Materials Safety Administration
Piedmont	Piedmont Natural Gas Company, Inc.
Piedmont Pension Assets	Qualified pension plan assets associated with the Retirement Plan of Piedmont
Piedmont Term Loan	Term loan facility with commitments totaling $350M entered in June 2017
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
PUCO Order	Order issued by PUCO approving a settlement of Duke Energy Ohio's natural gas base rate case and authorizing the recovery of certain MGP costs
PURPA	Public Utility Regulatory Policies Act of 1978
QF	Qualifying Facility
RCRA	Resource Conservation and Recovery Act
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
RRBA	Roanoke River Basin Association
RSU	Restricted Stock Unit
RTO	Regional Transmission Organization
SAB	Staff Accounting Bulletin
Sabal Trail	Sabal Trail Transmission, LLC
Sabal Trail pipeline	Sabal Trail Natural Gas Pipeline
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
SEIS	Supplemental Environmental Impact Statement
SELC	Southern Environmental Law Center
Segment Income	Income from continuing operations net of income attributable to noncontrolling interests

GLOSSARY OF TERMS

SO_2	Sulfur dioxide
SouthStar	SouthStar Energy Services, LLC
Spectra Capital	Spectra Energy Capital, LLC
S&P	Standard & Poor’s Rating Services
S&P 500	Standard & Poor's 500 Stock Index
SSO	Standard Service Offer
State utility commissions	NCUC, PSCSC, FPSC, PUCO, IURC, KPSC and TPUC (Collectively)
State electric utility commissions	NCUC, PSCSC, FPSC, PUCO, IURC and KPSC (Collectively)
State gas utility commissions	NCUC, PSCSC, PUCO, TPUC and KPSC (Collectively)
Subsidiary Registrants	Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont
Sutton	L.V. Sutton Combined Cycle Plant
the Tax Act	Tax Cuts and Jobs Act
TDSIC	Transmission, Distribution and Storage System Improvement Charge
Three Year Revolver	Duke Energy (Parent) $1.0 billion revolving credit facility
TPUC	Tennessee Public Utility Commission
TSCA	Toxic Substances Control Act
TSR	Total shareholder return
U.S.	United States
U.S. Court of Appeals	U.S. Court of Appeals for the Second Circuit
VEBA	Voluntary Employees' Beneficiary Association
VIE	Variable Interest Entity
WACC	Weighted Average Cost of Capital

Westinghouse	Westinghouse Electric Company
WNA	Weather normalization adjustment
W.S. Lee CC	William States Lee Combined Cycle Facility
WVPA	Wabash Valley Power Association, Inc.

BUSINESS

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.

Piedmont, a North Carolina corporation, is an energy services company whose principal business is 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 Piedmont's sales for resale customers. In October 2016, Duke Energy completed the acquisition of Piedmont. Piedmont's earnings and cash flows are only included in Duke Energy's consolidated results subsequent to the acquisition date. See Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions," for additional information regarding the acquisition.

In December 2016, Duke Energy completed an exit of the Latin American market to focus on its domestic regulated business, which was further bolstered by the acquisition of Piedmont. The sale of the International Energy business segment, excluding an equity method investment in NMC, was completed through two transactions including a sale of assets in Brazil to CTG and a sale of Duke Energy's remaining Latin American assets in Peru, Chile, Ecuador, Guatemala, El Salvador and Argentina to I Squared (collectively, the International Disposal Group). See Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions," for additional information on the sale of International Energy.

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 7.7 million customers within the Southeast and Midwest regions of the U.S. The service territory is approximately 95,000 square miles across six states with a total estimated population of 24 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 percent ownership interest in DATC, a partnership with American Transmission Company, formed to design, build and operate transmission infrastructure. DATC owns 72 percent of the transmission service rights to Path 15, an 84-mile transmission line in central California. Electric Utilities and Infrastructure also has a 50 percent ownership interest in Pioneer Transmission, LLC, 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, 2018.

BUSINESS

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, 2018.

	Duke Energy Carolinas		Duke Energy Progress		Duke Energy Florida		Duke Energy Ohio		Duke Energy Indiana	
Residential	32	%	27	%	50	%	37	%	28	%
General service	32	%	23	%	37	%	38	%	25	%
Industrial	24	%	15	%	7	%	23	%	31	%
Total retail sales	88	%	65	%	94	%	98	%	84	%
Wholesale and other sales	12	%	35	%	6	%	2	%	16	%
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 2018 compared to 2017 saw relatively strong growth despite the impact from increasing amounts of energy efficiency. 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.

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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 transmit, distribute and generate 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 50,880 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.

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Sources of Electricity

Electric Utilities and Infrastructure relies principally on coal, nuclear fuel and natural gas for its generation of electricity. The following table lists sources of electricity and fuel costs for the three years ended December 31, 2018.

	Generation by Source			Cost of Delivered Fuel per Net Kilowatt-hour Generated (Cents)		
	2018	2017	2016	2018	2017	2016
Coal[a]	24.4 %	27.4 %	27.1 %	2.82	2.72	3.07
Nuclear[a]	26.0 %	27.8 %	27.4 %	0.50	0.69	0.66
Natural gas and oil[a]	26.2 %	23.6 %	22.9 %	3.57	2.85	3.07
All fuels (cost-based on weighted average)[a]	76.6 %	78.8 %	77.4 %	2.29	2.04	2.22
Hydroelectric and solar[b]	1.3 %	0.7 %	0.7 %			
Total generation	77.9 %	79.5 %	78.1 %			
Purchased power and net interchange	22.1 %	20.5 %	21.9 %			
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.

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 2019 to 2021 for Duke Energy Carolinas, Duke Energy Progress and Duke Energy Ohio, 2019 to 2020 for Duke Energy Florida and 2019 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 percent and 2 percent for Duke Energy Carolinas and Duke Energy Progress, between 1 percent and 3 percent for Duke Energy Florida, between 3 percent and 3.5 percent for Duke Energy Ohio and between 2.5 percent and 3 percent for Duke Energy Indiana. Electric Utilities and Infrastructure's environmental controls, in combination with the use of SO_2 emission allowances, enable Electric Utilities and Infrastructure to satisfy current SO_2 emission limitations for its existing facilities.

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 percent of its uranium concentrates, conversion services and enrichment services requirements through at least 2019 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.

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.

BUSINESS

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 on future hedging with the FPSC.

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.

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:

	2018	2017	2016
Purchase obligations and leases (in millions of MWh)[(a)]	21.3	17.7	18.0
Purchase capacity under contract (in MW)[(b)]	4,025	4,028	4,588

(a) Represents approximately 7 percent of total system requirements for 2018, 2017 and 2016.

(b) 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, 2018, the inventory balance for Electric Utilities and Infrastructure was approximately $2.9 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 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, new and existing surface impoundments, structural fills and CCR piles, 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 independently 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. At other sites, preliminary planning and closure methods have been studied and factored into the estimated retirement and management costs. 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. Additionally, the RCRA required closure timing depends upon meeting or continuing to meet certain criteria.

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 asset retirement obligations 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 9 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 $14.1 billion. For additional information on nuclear insurance see Note 5 to the Consolidated Financial Statements, “Commitments and Contingencies.”

BUSINESS

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 balances and the most recent site-specific nuclear decommissioning cost study results for Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida. Decommissioning costs are stated in 2018 dollars for Duke Energy Carolinas, 2017 dollars for Duke Energy Florida and 2014 dollars for Duke Energy Progress, and include costs to decommission plant components not subject to radioactive contamination.

	NDTF[a]		Decommissioning	
(in millions)	December 31, 2018	December 31, 2017	Costs[a]	Year of Cost Study
Duke Energy	$6,720	$ 7,097	$ 8,737	2014 and 2018
Duke Energy Carolinas[b][c]	3,558	3,772	4,291	2018
Duke Energy Progress	2,503	2,588	3,550	2014
Duke Energy Florida[d]	659	736	896	2018

(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 is expected to be filed with the NCUC and PSCSC by the second quarter 2019. Duke Energy Carolinas will also complete a new funding study, which will be completed and filed with the NCUC and PSCSC in 2019.

(d) Duke Energy Florida's site-specific nuclear decommissioning cost study and a new funding study were completed and filed with the FPSC in 2018. For the years ended December 31, 2017 and December 31, 2018, Duke Energy Florida received reimbursements from the NDTF for costs related to ongoing decommissioning activity of Crystal River Unit 3.

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 9 to the Consolidated Financial Statements, “Asset Retirement Obligations.”

The NWPA 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. 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 ISFSI. 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.

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.

BUSINESS

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. Nuclear operating licenses are potentially subject to extension.

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 9 to the Consolidated Financial Statements, "Regulatory Matters" and "Asset Retirement Obligations," respectively.

On October 27, 2016, and December 15, 2016, the NRC issued combined operating licenses for Levy and Lee Nuclear Station, respectively. On August 29, 2017, Duke Energy announced the complete abandonment of the Levy project; the operating license was formally terminated on April 26, 2018. On August 25, 2017, as part of Duke Energy Carolinas rate case filing, Duke Energy Carolinas requested NCUC approval to cancel the development of the Lee Nuclear Station project with the intent to maintain the combined operating licenses. For additional information on the Lee Nuclear Station, see Note 4 to the Consolidated Financial Statements, "Regulatory Matters."

Regulation

State

The NCUC, PSCSC, FPSC, PUCO, IURC and KPSC (collectively, 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. CPCN 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.

BUSINESS

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 2017 North Carolina Rate Case	NCUC	$ (73)	9.9%	52%	8/1/2018
Duke Energy Progress 2017 North Carolina Rate Case	NCUC	151	9.9%	52%	3/16/2018
Duke Energy Ohio 2017 Ohio Electric Rate Case	PUCO	(19)	9.84%	50.75%	1/2/2019
Duke Energy Kentucky 2017 Kentucky Electric Rate Case	KPSC	8	9.725%	49%	5/1/2018
Duke Energy Progress 2016 South Carolina Rate Case	PSCSC	(a)	10.1%	53%	1/1/2017
Pending Rate Cases:					
Duke Energy Carolinas 2018 South Carolina Rate Case	PSCSC	$ 168	10.5%	53%	6/1/2019
Duke Energy Progress 2018 South Carolina Rate Case	PSCSC	59	10.5%	53%	6/1/2019

(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.

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.

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

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

Environmental. 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.

BUSINESS

GAS UTILITIES AND INFRASTRUCTURE

Gas Utilities and Infrastructure conducts natural gas operations primarily through the regulated public utilities of Piedmont and Duke Energy Ohio. 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 more than 1.1 million customers located in North Carolina, South Carolina and Tennessee, and an additional 531,000 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, 2018.

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. While total industrial and general service sales increased in 2018 when compared to 2017, the growth rate was modest when compared to historical periods.

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 2018, firm supply purchase commitment agreements provided 100 percent of the natural gas supply for both Piedmont and Duke Energy Ohio.

BUSINESS

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 and Tennessee, 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 and from October through April in Tennessee. 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. Kentucky, however, bills based on volumetric rates without weather protection.

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 percent 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 the ACP pipeline. ACP expects to achieve a late 2020 in-service date for key segments of the project, while it expects a remainder to extend into 2021. Abnormal weather, work delays (including delays due to judicial or regulatory action) and other conditions may result in cost or schedule modifications in the future. 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 percent equity ownership interest in Sabal Trail. Sabal Trail is a joint venture that owns the 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.

Gas Utilities and Infrastructure has a 24 percent 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 is slated to transport natural gas supplies from the Marcellus supply region in northern Pennsylvania to major northeastern markets. As a result of permitting delays and project uncertainty, Constitution is unable to approximate an in-service date.

Duke Energy, through its Gas Utilities and Infrastructure segment, has a 21.49 percent equity ownership interest in Cardinal, an intrastate pipeline located in North Carolina regulated by the NCUC, a 45 percent equity ownership in Pine Needle, an interstate liquefied natural gas storage facility located in North Carolina and a 50 percent 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, 12 and 17 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.

BUSINESS

Inventory

Gas Utilities and Infrastructure must maintain adequate natural gas inventory in order to provide reliable delivery to customers. As of December 31, 2018, the inventory balance for Gas Utilities and Infrastructure was $105 million. For more information on inventory, see Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies."

Regulation

State

The NCUC, PSCSC, PUCO, TPUC and KPSC (collectively, 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. CPCN or Certificates of Environmental Compatibility and Public Necessity 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 2016 South Carolina Rate Stabilization Adjustment Filing	$ 8	10.2%	53.0%	November 2016
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
Pending Rate Cases:				
Duke Energy Kentucky 2018 Kentucky Gas Rate Case	$ 11	9.9%	50.755%	April 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 Margin Revenues	Effective Date

Piedmont 2018 IMR Filing – North Carolina	$ 924	$ 81	December 2018
Pending Filing:			Proposed Effective Date
Piedmont 2018 IMR Filing – Tennessee	$ 259	$ 26	January 2019

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.

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- Regulations of the EPA relate to the environment including proposed air emissions regulations that would expand to include emissions of methane. For a discussion of environmental regulation, see “Environmental Matters” in this section. Refer to 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.

Regulations of 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. Commercial Renewables' renewable energy includes utility-scale wind and solar generation assets, distributed solar generation assets and a battery storage project, which total 2,991 MW across 19 states from 21 wind facilities, 100 solar facilities 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 commercial and industrial 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 service territory for Commercial Renewables as of December 31, 2018.

As eligible wind and solar 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 or wind project achieves commercial availability. ITCs are recognized over the useful life of the asset as a reduction to depreciation expense with the benefit of the tax basis adjustment due to the ITC being recognized in income in the year of commercial availability. The ITC is being phased down from the current 30 percent rate to a permanent 10 percent rate if construction begins in 2019 through 2022. The PTC is being phased out and wind turbines will earn 10 years of PTCs at phased-out rates if construction begins in 2017 through 2019.

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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 Corp., 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 solar generating assets that are held by LLCs whose members include a noncontrolling tax equity investor. The allocation of earnings, tax attributes and cash distributions to the tax equity investor are based on certain of the liquidation provisions pursuant to the LLC agreements. The 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 wind and solar 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 wind and solar 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 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 percent 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 percent of NMC's board of directors representation and voting rights.

Employees

On December 31, 2018, Duke Energy had a total of 30,083 employees on its payroll. The total includes 5,446 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.

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Executive Officers of the Registrants

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	59	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	60	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.
Douglas F Esamann	61	Executive Vice President, Energy Solutions and President, Midwest and Florida Regions. Mr. Esamann assumed his current position in 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.
Lloyd M. Yates	58	Executive Vice President, Customer and Delivery Operations and President, Carolinas Region. Mr. Yates assumed his current position in September 2016 and was Executive Vice President, Market Solutions and President, Carolinas Region since August 2014. He held the position of Executive Vice President, Regulated Utilities from November 2012 to August 2014, and prior to that, served as Executive Vice President, Customer Operations since July 2012, upon the merger of Duke Energy and Progress Energy.
Dhiaa M. Jamil	62	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.
Franklin H. Yoho	59	Executive Vice President and President, Natural Gas Business. Mr. Yoho assumed his current position in October 2016 upon the acquisition of Piedmont by Duke Energy. Prior to this appointment, he served as Senior Vice President and Chief Commercial Officer of Piedmont since August 2011.
Julia S. Janson	54	Executive Vice President, External Affairs and Chief Legal Officer. Ms. Janson has 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.
Melissa H. Anderson	54	Executive Vice President, Administration and Chief Human Resources Officer. Ms. Anderson assumed her position in May 2016 and had been Executive Vice President and Chief Human Resources Officer since January 2015. Prior to joining Duke Energy, she served as Senior Vice President of Human Resources at Domtar Inc. since 2010.
Dwight L. Jacobs	53	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.

(a) The ages of the officers provided are as of December 31, 2018.

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 CAA, 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.

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- 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 TSCA, 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 proposed ACE rule, which will require states to develop CO_2 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 2.6 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 32,000 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."

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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 860,000 residential, commercial and industrial customers and provides transmission and distribution services for natural gas to approximately 538,000 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 840,000 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, including transforming the customer experience, modernizing the energy grid, generating cleaner energy, expansion of natural gas infrastructure, modernizing the regulatory construct, digital transformation and engaging employees and stakeholders to accomplish these priorities, 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.

RISK FACTORS

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 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 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 energy efficiency 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 condition and cash flows. In addition, regulatory authorities also review whether natural gas costs are prudent 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' financial position, results of operations 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.

RISK FACTORS

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

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

The EPA has enacted or proposed federal regulations governing the management of cooling water intake structures, wastewater and CO_2 emissions. 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 United States 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;

RISK FACTORS

- 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, it 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. However, the potential exists for another CCR-related incident, such as the one that occurred during the 2014 Dan River Steam Station ash basin release, that could raise environmental or public health concerns. Such a CCR-related 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, new and existing surface impoundments, structural fills and CCR piles, 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 will continue to be independently regulated by existing state laws, regulations and permits, as well as additional legal requirements that may be imposed in the future. These federal and state laws, regulations and other legal requirements may require or result in additional expenditures, increased operating and maintenance costs and/or result in closure of certain power generating facilities, 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 recovery of such costs could have a material adverse impact on Duke Energy's cash flows.

The Duke Energy Registrants have recognized significant asset retirement obligations 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 large amounts 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. At other sites, preliminary planning and closure methods have been studied and factored into the estimated retirement and management costs. 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. Additionally, the RCRA required closure timing depends upon meeting or continuing to meet certain criteria. 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' financial position, results of operations 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 a number of factors outside the control of the Duke Energy Registrants, such as mandated energy efficiency 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 energy efficiency 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.

RISK FACTORS

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 energy efficiency riders in place to recover the cost of energy efficiency 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 a number of 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 and earnings negatively impacted.

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

RISK FACTORS

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 and employees, 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.

RISK FACTORS

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, 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 may evolve 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.

The costs of decommissioning Duke Energy Florida's Crystal River Unit 3 could prove to be more extensive than is currently identified.

Costs to decommission the plant could exceed estimates and, if not recoverable through the regulatory process, could adversely affect Duke Energy's, Progress Energy's and Duke Energy Florida's results of operations, financial position and cash flows.

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.

RISK FACTORS

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.

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.

RISK FACTORS

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.

PROPERTIES

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, 2018. The MW displayed in the table below are based on summer capacity. Ownership interest in all facilities is 100 percent 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
Buck CC	Fossil	Gas	NC	668
Dan River CC	Fossil	Gas	NC	662
Mill Creek CT	Fossil	Gas/Oil	SC	563
W.S. Lee CC[(b)]	Fossil	Gas	SC	686
W.S. Lee	Fossil	Gas	SC	170
W.S. Lee CT	Fossil	Gas/Oil	SC	84
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 (23 plants)	Hydro	Water	NC/SC	632
Distributed generation	Renewable	Solar	NC	31
Total Duke Energy Carolinas				20,209

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Progress				
Brunswick	Nuclear	Uranium	NC	1,870
Harris	Nuclear	Uranium	NC	932
Robinson	Nuclear	Uranium	SC	741
Roxboro	Fossil	Coal	NC	2,439
Smith CC	Fossil	Gas/Oil	NC	1,073
H.F. Lee CC	Fossil	Gas/Oil	NC	888
Wayne County CT	Fossil	Gas/Oil	NC	857
Smith CT	Fossil	Gas/Oil	NC	772
Darlington CT	Fossil	Gas/Oil	SC	613
Mayo	Fossil	Coal	NC	727
L.V. Sutton CC	Fossil	Gas/Oil	NC	607
Asheville	Fossil	Coal	NC	378
Asheville CT	Fossil	Gas/Oil	NC	320

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				12,747

PROPERTIES

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Florida				
Citrus County CC	Fossil	Gas	FL	1,632
Crystal River	Fossil	Coal	FL	1,422
Hines CC	Fossil	Gas/Oil	FL	2,045
Bartow CC	Fossil	Gas/Oil	FL	1,104
Anclote	Fossil	Gas	FL	1,003
Intercession City CT	Fossil	Gas/Oil	FL	951
Osprey CC	Fossil	Gas/Oil	FL	582
DeBary CT	Fossil	Gas/Oil	FL	561
Tiger Bay CC	Fossil	Gas/Oil	FL	200
Bartow CT	Fossil	Gas/Oil	FL	168
Bayboro CT	Fossil	Oil	FL	171
Suwannee River CT	Fossil	Gas	FL	149
Higgins CT	Fossil	Gas/Oil	FL	107
Avon Park CT	Fossil	Gas/Oil	FL	48
University of Florida CoGen CT	Fossil	Gas	FL	44
Hamilton	Renewable	Solar	FL	43
Distributed generation	Renewable	Solar	FL	8
Total Duke Energy Florida				10,238

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

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Indiana				
Gibson[c]	Fossil	Coal	IN	2,822
Cayuga[d]	Fossil	Coal/Oil	IN	1,005
Edwardsport	Fossil	Coal	IN	595
Madison CT	Fossil	Gas	OH	566
Vermillion CT[e]	Fossil	Gas	IN	360
Wheatland CT	Fossil	Gas	IN	450
Noblesville CC	Fossil	Gas/Oil	IN	264
Gallagher	Fossil	Coal	IN	280
Henry County CT	Fossil	Gas/Oil	IN	129
Cayuga CT	Fossil	Gas/Oil	IN	80
Markland	Hydro	Water	IN	45
Distributed generation	Renewable	Solar	IN	10
Total Duke Energy Indiana				6,606

PROPERTIES

Totals by Type	Owned MW Capacity
Total Electric Utilities	50,880
Totals By Plant Type	
Nuclear	8,858
Fossil	38,357
Hydro	3,520
Renewable	145
Total Electric Utilities	50,880

(a) Jointly owned with North Carolina Municipal Power Agency Number 1, NCEMC and PMPA. Duke Energy Carolinas' ownership is 19.25 percent of the facility.

(b) Jointly owned with NCEMC. Duke Energy Carolinas' ownership is 86.67 percent 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 Indiana Municipal Power Agency. Duke Energy Indiana operates unit 5 and owns 50.05 percent.

(d) Includes Cayuga Internal Combustion.

(e) Jointly owned with WVPA. Duke Energy Indiana's ownership is 62.50 percent of the facility.

The following table provides information related to Electric Utilities and Infrastructure's electric transmission and distribution properties as of December 31, 2018.

	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 kV	1,036	576	292	168	—	—
Miles of 345 kV	1,145	—	—	—	421	724
Miles of 230 kV	8,344	2,657	3,396	1,638	—	653
Miles of 100 to 161 kV	12,509	6,830	2,565	891	821	1,402
Miles of 13 to 69 kV	8,345	3,014	12	2,200	612	2,507
Total conductor miles of electric transmission lines	31,379	13,077	6,265	4,897	1,854	5,286
Electric Distribution Lines						
Miles of overhead lines	174,200	66,600	46,500	25,600	13,300	22,200
Miles of underground line	106,000	38,500	30,000	22,500	6,000	9,000
Total conductor miles of electric distribution lines	280,200	105,100	76,500	48,100	19,300	31,200
Number of electric transmission and distribution substations	3,291	1,476	512	493	310	500

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	33,300	7,200	26,100
Miles of natural gas service lines	27,700	7,000	20,700

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PROPERTIES

COMMERCIAL RENEWABLES

The following table provides information related to Commercial Renewables' electric generation facilities as of December 31, 2018. The MW displayed in the table below are based on nameplate capacity. Ownership interest in all facilities is 100 percent unless otherwise indicated.

Facility	Plant Type	Location	Owned MW Capacity
Commercial Renewables – Wind			
Los Vientos (five sites)	Renewable	TX	912
Top of the World	Renewable	WY	200
Frontier	Renewable	OK	201
Notrees	Renewable	TX	153
Campbell Hill	Renewable	WY	99
North Allegheny	Renewable	PA	70
Laurel Hill	Renewable	PA	69
Ocotillo	Renewable	TX	59
Kit Carson	Renewable	CO	51
Silver Sage	Renewable	WY	42
Happy Jack	Renewable	WY	29
Shirley	Renewable	WI	20
Sweetwater IV[(a)]	Renewable	TX	113
Sweetwater V[(a)]	Renewable	TX	38
Ironwood[(a)]	Renewable	KS	84
Cimarron II[(a)]	Renewable	KS	66
Mesquite Creek[(a)]	Renewable	TX	106
Total Renewables – Wind			2,312
Commercial Renewables – Solar			
Conetoe II	Renewable	NC	80
Seville I & II	Renewable	CA	50
Rio Bravo I & II	Renewable	CA	40
Wildwood I & II	Renewable	CA	35
Caprock	Renewable	NM	25
Shoreham[(b)]	Renewable	NY	25
Kelford	Renewable	NC	22
Highlander	Renewable	CA	21
Dogwood	Renewable	NC	20
Halifax Airport	Renewable	NC	20
Pasquotank	Renewable	NC	20
Pumpjack	Renewable	CA	20
Shawboro	Renewable	NC	20
Longboat	Renewable	CA	20
Bagdad	Renewable	AZ	15
TX Solar	Renewable	TX	14
Creswell Alligood	Renewable	NC	14
Victory	Renewable	CO	13
Washington White Post	Renewable	NC	12
Whitakers	Renewable	NC	12
Other small solar[(b)]	Renewable	Various	145

Total Renewables – Solar			643
Commercial Renewables – Energy Storage			
Notrees Battery Storage	Renewable	TX	36
Total Renewables – Energy Storage			36
Total Commercial Renewables			2,991

(a) Commercial Renewables owns 47 percent of Sweetwater IV and V and 50 percent of Ironwood, Cimarron II and Mesquite Creek.

(b) Shoreham and certain projects included in Other small solar are in tax-equity structures where investors have differing interests in the project's economic attributes. 100 percent of the tax-equity project's capacity is included in the table above.

PROPERTIES

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 June 19, 2014, the Commonwealth of Pennsylvania filed suit against, among others, Duke Energy Merchants, alleging contamination of waters of the state by MTBE from leaking gasoline storage tanks. MTBE is a gasoline additive intended to increase the oxygen level in gasoline and make it burn cleaner. The lawsuit was moved to federal court and consolidated into an existing multidistrict litigation docket of pending MTBE cases. This suit was settled for an immaterial amount in December 2017 and dismissed in January 2018.

In December 2017, the state of Maryland filed a lawsuit in Baltimore City Circuit Court against Duke Energy Merchants and other defendants alleging contamination of its water supplies from MTBE. The case was removed to the U.S. District Court in Baltimore. 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.

SECURITIES INFORMATION

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, 2019, there were 149,275 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 2018

There were no repurchases of equity securities during the fourth quarter of 2018.

Stock Performance Graph

The following performance graph compares the cumulative total shareholder return from Duke Energy Corporation common stock, as compared with the S&P 500 and the Philadelphia Utility Index for the past five years. The graph assumes an initial investment of $100 on December 31, 2013, 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, 2018.

SELECTED FINANCIAL DATA

ITEM 6. SELECTED FINANCIAL DATA

The following table provides selected financial data for the years of 2014 through 2018. See also Item 7.

(in millions, except per share amounts)	2018	2017	2016	2015	2014
Statements of Operations[a]					
Total operating revenues	$24,521	$23,565	$22,743	$22,371	$22,509
Operating income	4,685	5,625	5,202	4,974	4,795
Income from continuing operations	2,625	3,070	2,578	2,654	2,538
Income (Loss) from discontinued operations, net of tax	19	(6)	(408)	177	(649)
Net income	2,644	3,064	2,170	2,831	1,889
Net income attributable to Duke Energy Corporation	2,666	3,059	2,152	2,816	1,883
Common Stock Data					
Income from continuing operations attributable to Duke Energy Corporation common stockholders					
Basic	$3.73	$4.37	$3.71	$3.80	$3.58
Diluted	3.73	4.37	3.71	3.80	3.58
Income (Loss) from discontinued operations attributable to Duke Energy Corporation common stockholders					
Basic	$0.03	$(0.01)	$(0.60)	$0.25	$(0.92)
Diluted	0.03	(0.01)	(0.60)	0.25	(0.92)
Net income attributable to Duke Energy Corporation common stockholders					
Basic	$3.76	$4.36	$3.11	$4.05	$2.66
Diluted	3.76	4.36	3.11	4.05	2.66
Dividends declared per share of common stock	3.64	3.49	3.36	3.24	3.15
Balance Sheet					
Total assets	$145,392	$137,914	$132,761	$121,156	$120,557
Long-term debt including capital leases, less current maturities	51,123	49,035	45,576	36,842	36,075

(a) Significant transactions reflected in the results above include: (i) 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, 11 and 12 to the Consolidated Financial Statements, "Regulatory Matters," "Goodwill and Intangible Assets" and "Investments in Unconsolidated Affiliates"); (ii) the sale of the International Disposal Group in 2016, including a loss on sale recorded within discontinued operations (see Note 2 to the Consolidated Financial Statements, “Acquisitions and Dispositions”); (iii) the acquisition of Piedmont in 2016, including losses on interest rate swaps related to the acquisition financing (see Note 2); (iv) 2014 impairment related to the disposal of the Midwest Generation Disposal Group; (v) 2014 incremental tax expense resulting from the decision to repatriate all cumulative historical undistributed foreign earnings; (vi) 2014 increase in the litigation reserve related to a criminal investigation of the Dan River release.

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 earnings per share 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 (collectively with its subsidiaries, Duke Energy) and its subsidiaries Duke Energy Carolinas, LLC (Duke Energy Carolinas), Progress Energy, Inc. (Progress Energy), Duke Energy Progress, LLC (Duke Energy Progress), Duke Energy Florida, LLC (Duke Energy Florida), Duke Energy Ohio, Inc. (Duke Energy Ohio), Duke Energy Indiana, LLC (Duke Energy Indiana) and Piedmont Natural Gas Company, Inc. (Piedmont). 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. Subsequent to Duke Energy's acquisition of Piedmont on October 3, 2016, Piedmont is a wholly owned subsidiary of Duke Energy. The financial information for Duke Energy includes results of Piedmont subsequent to October 3, 2016. See Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions," for additional information regarding the acquisition.

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.

Management's Discussion and Analysis should be read in conjunction with the Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Executive Overview

At Duke Energy the fundamentals of our business are strong. In 2018, we met our near-term financial commitments and positioned the company for sustainable long-term growth. We are focused on a stable, predictable and regulated businesses portfolio to deliver a reliable dividend with 4 to 6 percent EPS growth through 2023. We have made progress advancing our long-term growth strategy that delivers value to our customers through investments in cleaner energy, grid modernization, natural gas infrastructure, and digital transformation, while also achieving constructive regulatory outcomes. The strength of our balance sheet is of vital importance to the cost-effective financing of our growth strategy, and in 2018 we took proactive steps to strengthen it by issuing $2 billion of equity.

Financial Results

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

Duke Energy's 2018 GAAP reported earnings were impacted by favorable weather, improved residential volumes and ongoing cost management efforts, offset by charges which management believes are not indicative of ongoing performance, including regulatory and legislative items, impairments, a loss on the sale of a retired plant, and severance. 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.

2018 Areas of Focus and Accomplishments

Operational Excellence and Reliability. The safety of our workforce is a core value. Our employees delivered strong safety results in 2018, and we maintained our industry-leading performance levels from 2016 and 2017. The reliable and safe operation of our power plants, electric distribution system and natural gas infrastructure is foundational to our customers, our financial results and our credibility with stakeholders. Our nuclear and fossil/hydro generation fleets demonstrated strong performance, exceeding their respective reliability targets. Five of our six nuclear sites have achieved INPO 1 status, the industry's highest distinction. Our electric distribution system performed well throughout the year, though we see opportunities to reduce outage durations.

Storm Response and System Restoration. 2018 was a year of intense storm activity, with Hurricane Florence and Hurricane Michael delivering a significant impact to our jurisdictions. Employees and utility partners worked tirelessly to restore 3 million outages during the hurricane season. Our team restored 93 percent of outages within five days during Hurricane Florence and 90 percent of outages within three days during Hurricane Michael. Our ability to effectively handle all facets of the 2018 storm response efforts is a testament to our team's extensive preparation and coordination in advance of the storm, applying lessons learned from previous storms, and on-the-ground management throughout the restoration efforts.

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 2018, we instituted more proactive communications, such as text alerts during outages, in response to customer expectations. Over time our work with data analytics will result in customer satisfaction improvement as measured through J.D. Power and other surveys.

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. We achieved constructive regulatory outcomes in 2018 in North Carolina for both Duke Energy Carolinas and Duke Energy Progress, including the recovery of coal ash basin closure costs. The Ohio Comprehensive Settlement Agreement in 2018, approved by PUCO, was a favorable outcome that will enable the creation of a new PowerForward rider to recover costs associated with projects to modernize the grid and transform the customer experience. We are making progress in addressing tax reform across our jurisdictions, targeting solutions that provide benefits to customers and support the long-term credit quality of our utilities.

Cost Management and Efficiencies. Duke Energy has a demonstrated track record of driving efficiencies and productivity into the business, including merger integration and continuous improvement efforts. We continue to leverage new technology and data analytics to drive additional efficiencies across the business in response to a transforming landscape. In 2018, we established a digital transformation initiative that is tasked with identifying the best ways to use digital capabilities throughout our business.

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. Grid improvements enable successful storm response; for example, in the Carolinas, self-healing grid technologies rerouted power from damaged lines and systems to minimize outages. In 2018, we deployed 1.6 million smart meters resulting in 4.3 million customers having access to this technology across our regulated footprint.

Generating Cleaner Energy. We advanced efforts to generate cleaner energy, including progress on several strategic investments during 2018. Overall, we have lowered our carbon emissions by over 30 percent since 2005, consistent with our goal to reduce carbon emissions by 40 percent by 2030. Two natural gas plants came online in 2018 and construction continues on a third one. In our Commercial Renewable business, our Shoreham solar facility came

online in 2018.

Expanding the Natural Gas Platform. We continue to pursue natural gas infrastructure investments. We are working diligently to construct the ACP pipeline to bring low-cost gas supply and economic development opportunities to the Mid-Atlantic. While we navigate the impacts of permitting delays and court rulings, we remain steadfast in our commitment to this backbone infrastructure for the southeast U.S. In 2018, Piedmont announced plans to construct a new liquefied natural gas facility in Robeson County North Carolina on property Piedmont already owns. This investment will help Piedmont provide a reliable gas supply to customers during peak usage periods. We expect to begin construction in the summer of 2019.

Dividend Growth. In 2018, Duke Energy continued to grow the dividend payment to shareholders by approximately 4 percent. 2018 represented the 92nd consecutive year Duke Energy paid a cash dividend on its common stock.

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Duke Energy Objectives – 2019 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 2019, our plans include:

- Continuing to place the customer at the center of all that we do.
- Advancing the achievement of modernized regulatory constructs across all jurisdictions, including consideration of cost recovery models that break the link between load growth and earnings.
- Improving and strengthening the energy grid to provide customers with more control, convenience and communications, and make the grid more resilient to severe weather and ever-evolving cyber threats.
- Investing in both natural gas generation and infrastructure to support our growing gas system, as we replace coal units and continue to expand our LDC customer base in the Carolinas and Midwest.
- Increasing renewables, energy storage and next-generation demand-side management into our supply/demand resource plans, in pursuit of a growth strategy that leverages these resources to provide choices that our customers value.
- Modernizing the way we plan and build our generation, transmission, distribution and customer systems in a fully integrated way through Integrated System and Operations Planning to accommodate increased distributed energy resources.
- Transforming the business using multiple levers, including digital tools, to increase productivity and reinvest the proceeds into new growth opportunities, improved customer service, and lower bills for customers.

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 attributable to Duke Energy, 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 GAAP Reported EPS, respectively.

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

- 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. For 2017, it represents charges related to the Levy nuclear project in Florida and the Mayo Zero Liquid Discharge and Sutton combustion turbine projects in North Carolina.
- Impairment Charges in 2018 represents an impairment at Citrus County CC, a goodwill impairment at Commercial Renewables and an other-than-temporary impairment of an investment in Constitution Pipeline Company, LLC. For 2017 and 2016, the charges represent goodwill and other-than-temporary asset impairments at Commercial Renewables.
- 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.

Adjusted earnings also include the operating results of the International Disposal Group, which has been classified as discontinued operations. Management believes inclusion of the operating results of the International Disposal Group within adjusted earnings and adjusted diluted EPS results in a better reflection of Duke Energy's financial performance during the period.

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.

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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.

	Years Ended December 31,					
	2018		2017		2016	
(in millions, except per share amounts)	Earnings	EPS	Earnings	EPS	Earnings	EPS
GAAP Reported Earnings/EPS	$2,666	$3.76	$3,059	$4.36	$2,152	$3.11
Adjustments to Reported:						
Costs to Achieve Mergers[(a)]	65	0.09	64	0.09	329	0.48
Regulatory and Legislative Impacts[(b)]	202	0.29	98	0.14	—	—
Impairment Charges[(c)]	179	0.25	74	0.11	45	0.07
Sale of Retired Plant[(d)]	82	0.12	—	—	—	—
Impacts of the Tax Act[(e)]	20	0.03	(102)	(0.14)	—	—
Severance Charges[(f)]	144	0.21	—	—	57	0.08
Discontinued Operations[(g)]	(19)	(0.03)	6	0.01	661	0.95
Adjusted Earnings/Adjusted Diluted EPS	$3,339	$4.72	$3,199	$4.57	$3,244	$4.69

(a) Net of tax benefit of $19 million in 2018, $39 million in 2017, and $194 million in 2016.

(b) Net of tax benefit of $63 million in 2018 and $60 million in 2017.

(c) Net of $27 million tax benefit and $2 million Noncontrolling Interests in 2018. Net of $28 million tax benefit in 2017 and $26 million in 2016.

(d) Net of $25 million tax benefit.

(e) The Tax Act reduced the corporate income tax rate from 35 to 21 percent, 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. For 2018, the amount represents a true up of existing regulatory liabilities related to the Tax Act. See Note 23 to the Consolidated Financial Statements, "Income Taxes" for more information.

(f) Net of tax benefit of $43 million in 2018 and $35 million in 2016.

(g) For 2016, includes a loss on sale of the International Disposal Group. Represents the GAAP reported Loss from Discontinued Operations, less the International Disposal Group operating results, which are included in adjusted earnings. For 2017 and 2018, amounts reflect adjustments related to the sale of the International Disposal Group, primarily related to estimated tax expense.

Year Ended December 31, 2018, as compared to 2017

Duke Energy’s full-year 2018 GAAP Reported EPS was $3.76 compared to $4.36 for full-year 2017. In addition to the adjusted diluted EPS drivers discussed below, GAAP Reported EPS in 2018 was lower primarily due to regulatory and legislative impacts, impairment charges, severance charges and a loss on sale of a retired plant.

As discussed, management also evaluates financial performance based on adjusted earnings. Duke Energy’s full-year 2018 adjusted diluted EPS was $4.72 compared to $4.57 for full-year 2017. The increase in adjusted diluted EPS was primarily due to:

- Higher regulated electric revenues due to favorable weather and higher retail sales volumes in the current year;
- Positive impacts from the North Carolina rate case orders; and
- Rider growth.

Partially offset by:

- Higher interest expense due to higher debt outstanding and higher interest rates;

- Higher depreciation and amortization expense at Electric Utilities and Infrastructure primarily due to rate base growth; and
- A reduced tax benefit on holding company interest as a result of the Tax Act.

Year Ended December 31, 2017, as compared to 2016

Duke Energy's full-year 2017 GAAP Reported EPS was $4.36 compared to $3.11 for full-year 2016. In addition to the adjusted diluted EPS drivers discussed below, GAAP Reported EPS in 2017 was higher primarily due to a $0.14 benefit per share related to the Tax Act in 2017, lower costs to achieve the Piedmont merger and a loss on sale and impairments associated with the sale of the International Disposal Group in 2016, partially offset by charges of $0.14 related to regulatory settlements in Electric Utilities and Infrastructure.

As discussed, management also evaluates financial performance based on adjusted earnings. Duke Energy's full-year 2017 adjusted diluted EPS was $4.57 compared to $4.69 for full-year 2016. The decrease in adjusted diluted EPS was primarily due to:

- Lower regulated electric revenues due to less favorable weather in the current year, including lost revenues related to Hurricane Irma;

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- The prior year operating results from the International Disposal Group, which was sold in December 2016. The 2016 operating results included a benefit from the valuation of deferred income taxes. See Note 23 to the Consolidated Financial Statements, "Income Taxes," for additional information;
- Higher financing costs, primarily due to the Piedmont acquisition; and
- Higher depreciation and amortization expense at Electric Utilities and Infrastructure primarily due to higher depreciable base.

Partially offset by:

- Higher regulated electric revenues from increased pricing and riders driven by new rates in Duke Energy Progress South Carolina, base rate adjustments in Florida and energy efficiency rider revenues in North Carolina, as well as growth in weather-normal retail volumes;
- Lower operations, maintenance and other expenses, net of amounts recoverable in rates, at Electric Utilities and Infrastructure resulting from ongoing cost efficiency efforts and lower year-to-date storm costs than the prior year; and
- Additional earnings from incremental investments in ACP and Sabal Trail natural gas pipelines.

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. 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.

The 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 percent, 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 percent 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.

As a result of the Tax Act, Duke Energy revalued its existing deferred tax assets and deferred tax liabilities as of December 31, 2017, to account for the estimated future impact of lower corporate tax rates on these deferred tax amounts. During the year ended December 31, 2018, Duke Energy recorded measurement period adjustments to the provisional estimate recorded as of December 31, 2017, in accordance with SAB 118. For Duke Energy's regulated operations, where the net 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. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information on the Tax Act's impact to the regulatory asset and liability accounts. The following table shows the expense (benefit) recorded on Duke Energy's Consolidated Statements of Operations.

	Years Ended December 31,

(in millions)	2018	2017
Electric Utilities and Infrastructure[c]	$24	$(231)
Gas Utilities and Infrastructure[d][e]	1	(26)
Commercial Renewables	(3)	(442)
Other[f]	(2)	597
Total impact of the Tax Act[a][b][d]	$20	$(102)

(a) Except where noted below, amounts are included within Income Tax Expense From Continuing Operations on the Consolidated Statements of Operations.

(b) See Notes 4 and 23 to the Consolidated Financial Statements, "Regulatory Matters" and "Income Taxes," respectively, for information about the Tax Act's impact on Duke Energy's Consolidated Balance Sheets.

(c) Amount primarily relates to the 2017 remeasurement, and true up of that remeasurement in 2018, of net deferred tax liabilities that are excluded for ratemaking purposes related to abandoned or impaired assets and certain wholesale fixed rate contracts.

(d) 2017 amount includes a $16 million expense recorded within Equity in earnings (losses) of unconsolidated affiliates on the Consolidated Statement of Operations.

(e) 2017 amount primarily relates to the remeasurement of net deferred tax liabilities related to equity method investments.

(f) 2017 amount primarily relates to the remeasurement of Foreign Tax Credits, federal NOLs and nonregulated deferred tax assets.

MD&A SEGMENT RESULTS - ELECTRIC UTILITIES AND INFRASTRUCTURE

Electric Utilities and Infrastructure

	Years Ended December 31,				
(in millions)	2018	2017	Variance 2018 vs. 2017	2016	Variance 2017 vs. 2016
Operating Revenues	$22,273	$21,331	$ 942	$21,366	$ (35)
Operating Expenses					
Fuel used in electric generation and purchased power	6,917	6,379	538	6,595	(216)
Operations, maintenance and other	5,631	5,360	271	5,433	(73)
Depreciation and amortization	3,523	3,010	513	2,897	113
Property and other taxes	1,134	1,079	55	1,021	58
Impairment charges	309	176	133	16	160
Total operating expenses	17,514	16,004	1,510	15,962	42
Gains on Sales of Other Assets and Other, net	8	6	2	—	6
Operating Income	4,767	5,333	(566)	5,404	(71)
Other Income and Expenses, net	378	472	(94)	444	28
Interest Expense	1,288	1,240	48	1,136	104
Income Before Income Taxes	3,857	4,565	(708)	4,712	(147)
Income Tax Expense	799	1,355	(556)	1,672	(317)
Segment Income	$3,058	$3,210	$ (152)	$3,040	$ 170
Duke Energy Carolinas Gigawatt-hours (GWh) sales	92,280	87,305	4,975	88,545	(1,240)
Duke Energy Progress GWh sales	69,331	66,822	2,509	69,049	(2,227)
Duke Energy Florida GWh sales	41,559	40,591	968	40,404	187
Duke Energy Ohio GWh sales	25,329	24,639	690	25,163	(524)
Duke Energy Indiana GWh sales	34,229	33,145	1,084	34,368	(1,223)
Total Electric Utilities and Infrastructure GWh sales	262,728	252,502	10,226	257,529	(5,027)
Net proportional MW capacity in operation	49,684	48,828	856	49,295	(467)

Year Ended December 31, 2018, as compared to 2017

Electric Utilities and Infrastructure's results were impacted by higher legislative and regulatory charges compared to the prior year and higher depreciation from a growing asset base, partially offset by favorable weather in the current year, improved retail volumes, lower income tax expense and a positive net contribution from the Duke Energy Progress and Duke Energy Carolinas North Carolina rate cases. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The variance was driven primarily by:

- a $577 million increase in fuel related revenues due to higher sales volumes driven primarily by favorable weather in the current year, and increases in fuel rates billed to customers, which reflects higher average fuel prices;
- a $331 million increase in retail sales, net of fuel revenues, due to favorable weather in the current year;
- a $236 million increase in retail pricing primarily due to the Duke Energy Progress and Duke Energy Carolinas North Carolina rate cases and Duke Energy Florida base rate adjustments related to generation assets being placed into service;
- a $109 million increase in wholesale power revenues, net of fuel, primarily due to higher recovery of coal ash costs at Duke Energy Progress and Duke Energy Carolinas, partially offset by contracts that expired in the prior year at Duke Energy Indiana and customer refunds in the current year at Duke Energy Carolinas related to a FERC order on a

complaint filed by PMPA;

- an $82 million increase in weather-normal retail sales volumes driven by residential growth;
- a $73 million net increase in retail rider revenues, primarily related to capital investment riders at Duke Energy Indiana and Duke Energy Ohio, partially offset by a net decrease in rider revenues related to the implementation of new base rates at Duke Energy Carolinas and Duke Energy Progress; and
- a $49 million increase in other revenues at Duke Energy Carolinas primarily due to the recognition of previously deferred revenues associated with storm restoration costs in South Carolina and favorable transmission revenues.

MD&A SEGMENT RESULTS - ELECTRIC UTILITIES AND INFRASTRUCTURE

Partially offset by:

- a $578 million decrease in retail and wholesale sales due to revenues subject to refund to customers associated with the lower statutory federal corporate tax rate under the Tax Act.

Operating Expenses. The variance was driven primarily by:

- a $538 million increase in fuel used in electric generation and purchased power due to higher sales and higher amortization of deferred fuel expenses;
- a $513 million increase in depreciation and amortization expense primarily due to higher amortization of deferred coal ash costs, additional plant in service and new depreciation rates associated with the Duke Energy Progress and Duke Energy Carolinas North Carolina rate cases;
- a $271 million increase in operation, maintenance and other expense primarily due to impacts associated with the Duke Energy Progress North Carolina rate case and higher storm costs, partially offset by a FERC approved settlement refund of certain transmission costs previously billed by PJM; and
- a $133 million increase in impairment charges primarily due to the impacts associated with the Duke Energy Carolinas and Duke Energy Progress North Carolina rates cases and the Duke Energy Florida Citrus County CC impairments in the current year, offset by the write-off of remaining unrecovered Levy Nuclear project costs at Duke Energy Florida in the prior year.

Other Income and Expenses, net. The decrease was primarily due to lower post in-service equity returns for projects that had been completed prior to being reflected in customer rates at Duke Energy Carolinas and lower income from non-service components of employee benefit costs in the current year at Duke Energy Progress and Duke Energy Florida. For additional information on employee benefit costs, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans."

Interest Expense. The variance was due to higher debt outstanding in the current year, partially offset by lower deferred debt costs on major projects.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act, a decrease in pretax income and the impact of the Tax Act in the prior year. The ETRs for the years ended December 31, 2018, and 2017 were 20.7 percent and 29.7 percent, respectively. The decrease in the ETR was primarily due to the lower statutory federal corporate tax rate under the Tax Act and the amortization of excess deferred taxes partially offset by the impact of the Tax Act in the prior year. See the Tax Act section above for additional information.

Year Ended December 31, 2017, as compared to 2016

Electric Utilities and Infrastructure's results were impacted by the Tax Act, growth from investments, lower operations and maintenance expense and higher weather-normal retail sales volumes, partially offset by less favorable weather, impairment charges due to regulatory settlements, increased depreciation and amortization, higher interest expense and higher property and other taxes. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The variance was driven primarily by:

- a $292 million decrease in retail sales, net of fuel revenue, due to less favorable weather in the current year; and
- a $235 million decrease in fuel revenues driven by lower retail sales volumes, lower fuel prices included in rates and changes in the generation mix.

Partially offset by:

- a $364 million increase in rider revenues including increased revenues related to energy efficiency programs, Duke Energy Florida’s nuclear asset securitization, Midwest transmission and distribution capital investments and Duke Energy Indiana’s Edwardsport IGCC plant, as well as an increase in retail pricing due to base rate adjustments for Duke Energy Florida’s Osprey acquisition and Hines Chillers and the Duke Energy Progress South Carolina rate case;
- an $86 million increase in weather-normal sales volumes to customers; and
- a $26 million increase in other revenues primarily due to favorable transmission revenues.

Operating Expenses. The variance was driven primarily by:

- a $160 million increase in impairment charges primarily due to the write-off of remaining unrecovered Levy Nuclear Project costs in the current year at Duke Energy Florida and the disallowance from rate base of certain projects at the Mayo and Sutton plants in the current year at Duke Energy Progress related to the partial settlement in the North Carolina rate case;
- a $113 million increase in depreciation and amortization expense primarily due to additional plant in service; and
- a $58 million increase in property and other taxes primarily due to higher property taxes.

Partially offset by:
- a $216 million decrease in fuel expense (including purchased power) primarily due to lower retail sales and changes in the generation mix; and
- a $73 million decrease in operation, maintenance and other expense primarily due to lower plant outage, storm restoration and labor and benefits costs partially offset by higher operational costs that are recoverable in rates.

Interest Expense. The variance was due to higher debt outstanding in the current year and Duke Energy Florida's Crystal River Unit 3 regulatory asset debt return ending in June 2016 upon securitization.

Income Tax Expense. The variance was primarily due to a decrease in pretax income and the impact of the Tax Act. The effective tax rates for the years ended December 31, 2017, and 2016 were 29.7 percent and 35.5 percent, respectively. The decrease in the effective tax rate was primarily due to the impact of the Tax Act. See the Tax Act section above for additional information.

Matters Impacting Future Electric Utilities and Infrastructure Results

On May 18, 2016, the NCDEQ issued proposed risk classifications for all coal ash surface impoundments in North Carolina. All ash impoundments not previously designated as high priority by the Coal Ash Act were designated as intermediate risk. Certain impoundments classified as intermediate risk, however, were eligible for reassessment as low risk pursuant to legislation enacted on July 14, 2016. On November 14, 2018, NCDEQ issued final low-risk classifications for these impoundments, indicating that Duke Energy Carolinas and Duke Energy Progress have satisfied the permanent replacement water supply and certain dam improvement requirements set out in the Coal Ash Management Act. As the final closure plans and corrective action measures are developed and approved for each site, the closure work progresses and the closure method scope and remedial action methods are determined, the complexity of work and the amount of coal combustion material could be different than originally estimated and, therefore, could materially impact Electric Utilities and Infrastructure's results of operations, financial position and cash flows. See Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations," for additional information.

Duke Energy is a party to multiple lawsuits and could be subject to fines and other penalties related to operations at certain North Carolina facilities with ash basins. In addition, the orders issued in the Duke Energy Carolinas and Duke Energy Progress North Carolinas rate cases supporting recovery of past coal ash remediation costs have been appealed by various parties. The outcome of these appeals, lawsuits and potential fines and penalties 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 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 may petition for deferral of grid modernization costs outside of a general rate case proceeding if it can show financial hardship or a stipulation that includes greater consensus among intervening parties on costs being classified as grid modernization. While Duke Energy Progress did not request recovery of these costs in its most recent case with the NCUC, Duke Energy Progress may request recovery of certain grid modernization costs in future regulatory proceedings. Electric Utilities and Infrastructure's results of operations, financial position and cash flows could be adversely impacted if grid modernization costs are not ultimately approved for recovery and/or deferral treatment. See Note 4 to the Consolidated Financial Statements, “Regulatory Matters,” for additional information.

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 4 hurricane and the most powerful storm to hit the Florida Panhandle in recorded history. A significant

portion of the incremental operation and maintenance expenses related to these storms have been deferred. On December 21, 2018, Duke Energy Carolinas and Duke Energy Progress filed with the NCUC petitions for approval to defer the incremental storm costs incurred to a regulatory asset for recovery in the next base rate case. Duke Energy Progress filed a similar request with the PSCSC on January 11, 2019, which also included a request for the continuation of prior deferrals requested for other storms, and on January 30, 2019, the PSCSC issued a directive approving the deferral request. Duke Energy Florida anticipates filing a petition in the first half of 2019 with the FPSC to recover incremental storm costs consistent with the provisions in its 2017 Settlement. 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.

Appeals of recently approved rate cases for Duke Energy Carolinas and Duke Energy Progress are pending at the North Carolina Supreme Court. The North Carolina Attorney General and various intervenors primarily dispute the allowance of recovery of coal ash costs from customers, which was approved by the NCUC. The outcome of these appeals could have an adverse impact to 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 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 for recovery of the storm costs. Storm costs are currently expected to be fully recovered by approximately mid-2021. The commission has scheduled the hearing to begin on May 21, 2019. An order disallowing recovery of these 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.

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

MD&A SEGMENT RESULTS - GAS UTILITIES AND INFRASTRUCTURE

Gas Utilities and Infrastructure

	Years Ended December 31,				
(in millions)	2018	2017	Variance 2018 vs. 2017	2016	Variance 2017 vs. 2016
Operating Revenues	$1,881	$ 1,836	$ 45	$ 901	$ 935
Operating Expenses					
Cost of natural gas	697	632	65	265	367
Operation, maintenance and other	421	383	38	184	199
Depreciation and amortization	245	231	14	115	116
Property and other taxes	107	106	1	70	36
Total operating expenses	1,470	1,352	118	634	718
(Loss) Gains on Sales of Other Assets and Other, net	—	—	—	(1)	1
Operating Income	411	484	(73)	266	218
Other Income and Expenses, net	47	56	(9)	22	34
Interest Expense	106	105	1	46	59
Income Before Income Taxes	352	435	(83)	242	193
Income Tax Expense	78	116	(38)	90	26
Segment Income	$274	$ 319	$ (45)	$ 152	$ 167
Piedmont LDC throughput (dekatherms)[a]	557,145,468	468,259,777	88,885,351	120,908,508	347,351,269
Duke Energy Midwest LDC throughput (MCF)	90,604,833	80,934,836	9,669,997	81,870,489	(935,653)

(a) Includes throughput subsequent to Duke Energy's acquisition of Piedmont on October 3, 2016.

Year Ended December 31, 2018, as compared to 2017

Gas Utilities and Infrastructure's results were primarily impacted by the OTTI recorded on the Constitution investment and higher operation, maintenance and other expenses, partially offset by favorable price adjustments, customer growth and other income. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The variance was driven primarily by:

- a $76 million increase primarily due to higher natural gas costs passed through to customers as a result of higher volumes sold driven primarily by weather and higher natural gas prices; and
- a $37 million increase primarily due to residential and commercial customer revenue, net of natural gas costs passed through to customers, due to customer growth and IMR rate adjustments and new power generation customers.

Partially offset by:

- a $69 million decrease primarily due to revenues subject to refund to customers associated with the lower statutory corporate tax rate under the Tax Act.

Operating Expenses. The variance was driven primarily by:

- a $65 million increase in natural gas costs primarily due to higher costs passed through to customers, as a result of a higher natural gas prices;
- a $38 million increase in operations, maintenance, and other expense primarily due to increased shared services, costs to achieve merger expenses and a pension settlement charge at Piedmont in 2017; and
- a $14 million increase in depreciation and amortization expense due to additional plant in service and higher amortization of software costs.

Other Income and Expenses, net. The variance was driven primarily by:

- a $55 million impairment recorded for the investment in Constitution in 2018.

Partially offset by:

- a $25 million increase in non-service components of employee benefit costs in 2018. For additional information on employee benefit costs, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans"; and

MD&A SEGMENT RESULTS - GAS UTILITIES AND INFRASTRUCTURE

- a $20 million increase in equity earnings from pipeline investments.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act, a decrease in pretax income and the impact of the Tax Act in the prior year. The ETRs for the years ended December 31, 2018, and 2017 were 22.2 percent and 26.7 percent, respectively. The decrease in the ETR was primarily due to the lower statutory federal corporate tax rate under the Tax Act partially offset by the impact of the Tax Act in the prior year. See the Tax Act section above for additional information.

Year Ended December 31, 2017, as compared to 2016

Gas Utilities and Infrastructure's higher results were primarily due to the inclusion of Piedmont's earnings in the current year as a result of Duke Energy's acquisition of Piedmont on October 3, 2016, as well as additional equity earnings from investments in the ACP and Sabal Trail pipelines.

Operating Revenues. The variance was driven primarily by:

- an $884 million increase in operating revenues due to the inclusion of Piedmont's operating revenues beginning in October 2016; and
- a $47 million increase in Piedmont's fourth quarter results due to colder weather, higher natural gas prices, IMR rate adjustments, customer growth and new power generation customers.

Operating Expenses. The variance was driven primarily by:

- a $686 million increase in operating expenses due to the inclusion of Piedmont's operating expenses beginning in October 2016; and
- a $34 million increase in Piedmont's fourth quarter results primarily due to higher natural gas costs passed through to customers due to the higher price per dekatherm of natural gas.

Other Income and Expenses, net. The increase was driven primarily by higher equity earnings from pipeline investments.

Interest Expense. The variance was primarily due to the inclusion of Piedmont's interest expense beginning in October 2016.

Income Tax Expense. The variance was primarily due to an increase in pretax income due to the inclusion of Piedmont's earnings beginning in October 2016, partially offset by prior period true ups. The effective tax rates for the years ended December 31, 2017, and 2016 were 26.7 percent and 37.2 percent, respectively. The decrease in the effective tax rate was primarily due to the prior period true ups and the impact of the Tax Act. See the Tax Act section above for additional information.

Matters Impacting Future Gas Utilities and Infrastructure Results

Gas Utilities and Infrastructure has a 47 percent 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. Project cost estimates are a range of $7.0 billion to $7.8 billion, excluding financing costs. ACP expects to achieve a late 2020 in-service date for key segments of the project, while it expects a remainder to extend into 2021. Project construction activities, schedule and final costs are subject to uncertainty due to abnormal weather, work delays (including delays due to judicial or regulatory action) and other conditions and risks that could result in potential higher project costs, a potential delay in the targeted in-service dates and potential impairment charges. ACP and Duke Energy will continue to consider their options with respect to the foregoing in light of their existing contractual and legal obligations. See Notes 4 and 12 to the Consolidated Financial Statements, "Regulatory Matters" and "Investments in Unconsolidated Affiliates," respectively, for additional information.

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

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MD&A SEGMENT RESULTS - COMMERCIAL RENEWABLES

Commercial Renewables

	Years Ended December 31,				
			Variance 2018 vs.		Variance 2017 vs.
(in millions)	2018	2017	2017	2016	2016
Operating Revenues	$477	$460	$ 17	$484	$ (24)
Operating Expenses					
Operation, maintenance and other	304	267	37	337	(70)
Depreciation and amortization	155	155	—	130	25
Property and other taxes	25	33	(8)	25	8
Impairment charges	93	99	(6)	—	99
Total operating expenses	577	554	23	492	62
(Loss) Gains on Sales of Other Assets and Other, net	(1)	1	(2)	5	(4)
Operating Loss	(101)	(93)	(8)	(3)	(90)
Other Income and Expenses, net	23	(12)	35	(83)	71
Interest Expense	88	87	1	53	34
Loss Before Income Taxes	(166)	(192)	26	(139)	(53)
Income Tax Benefit	(147)	(628)	481	(160)	(468)
Less: Loss Attributable to Noncontrolling Interests	(28)	(5)	(23)	(2)	(3)
Segment Income	$9	$441	$ (432)	$23	$ 418
Renewable plant production, GWh	8,522	8,260	262	7,446	814
Net proportional MW capacity in operation[(a)]	2,991	2,907	84	2,892	15

(a) Certain projects are included in tax-equity structures where investors have differing interests in the project's economic attributes. In 2018, 100 percent of the tax-equity project's capacity is included in the table above.

Year Ended December 31, 2018, as compared to 2017

Commercial Renewables' results were unfavorably impacted by the higher tax benefit in 2017 from the Tax Act. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The increase in revenues was primarily due to an increase in the number of EPC agreements at REC Solar, partially offset by unfavorable wind portfolio revenue.

Operating Expenses. The increase in operating expenses was primarily due to an increase in the number of EPC agreements at REC Solar, higher wind portfolio expenses and higher solar development costs, partially offset by lower property taxes due to non-recurring property tax payments made in the prior year and lower impairment charges.

Other Income and Expenses, net. The favorable variance in other income and expenses was primarily due to the bankruptcy court approved NAW and FES settlement agreement, which allowed retention of previously collected cash collateral under the PPAs, sale of the FES unsecured claim, impairment of certain cost investments in the prior year and lower equity losses in the current year.

Income Tax Benefit. The decrease in tax benefit in 2018 was primarily due to the one-time impact of the Tax Act in 2017 and lower statutory federal corporate tax rate under the Tax Act. See the Tax Act section above for additional information.

Loss Attributable to Noncontrolling Interests. The increase is primarily driven by the new tax-equity structures entered into during 2018.

Year Ended December 31, 2017, as compared to 2016

Commercial Renewables' higher earnings were primarily due to the Tax Act, partially offset by pretax impairment charges. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The decrease was primarily due to lower EPC revenues from REC Solar.

Operating Expenses. The increase was primarily due to a $99 million in pretax impairment charges in 2017 related to a wholly owned non-contracted wind project and other investments and higher expenses associated with new wind and solar projects, partially offset by lower operations and maintenance expense at REC Solar due to fewer projects under construction. See Notes 10 and 11 to the Consolidated Financial Statements, “Property, Plant and Equipment” and “Goodwill and Intangible Assets,” respectively, for additional information.

Other Income and Expenses, net. The variance was primarily due to a $71 million pretax impairment charge in 2016 related to certain equity method investments. For additional information, see Note 12 to the Consolidated Financial Statements, “Investments in Unconsolidated Affiliates.”

MD&A SEGMENT RESULTS - COMMERCIAL RENEWABLES

Interest Expense. The variance was primarily due to new project financings and less capitalized interest due to fewer projects under construction.

Income Tax Benefit. The variance was primarily due to the impact of the Tax Act and higher PTCs, partially offset by lower ITCs. See the Tax Act section above for additional information on the Tax Act and the impact on the effective tax rate.

Matters Impacting Future Commercial Renewables Results

Persistently low market pricing for wind resources, primarily in the Electric Reliability Council of Texas West and PJM West markets and the future expiration of tax incentives including ITCs and PTCs could result in adverse impacts to the future results of operations, financial position and cash flows of Commercial Renewables.

On September 26, 2018, Duke Energy announced it is seeking a minority investor for the commercial renewables business. Duke Energy will continue to develop projects, grow its portfolio and manage its renewables assets. Duke Energy Renewable Services, an operations and maintenance business for third-party customers, and REC Solar are not included in the potential transaction. A sale of a minority interest is dependent on a number of factors and cannot be predicted at this time.

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

Other

	Years Ended December 31,				
			Variance 2018 vs.		Variance 2017 vs.
(in millions)	2018	2017	2017	2016	2016
Operating Revenues	$89	$138	$ (49)	$117	$ 21
Operating Expenses					
Fuel used in electric generation and purchased power	—	58	(58)	51	7
Operation, maintenance and other	214	46	168	371	(325)
Depreciation and amortization	152	131	21	152	(21)
Property and other taxes	14	14	—	28	(14)
Impairment charges	—	7	(7)	2	5
Total operating expenses	380	256	124	604	(348)
(Losses) Gains on Sales of Other Assets and Other, net	(96)	21	(117)	23	(2)
Operating Loss	(387)	(97)	(290)	(464)	367
Other Income and Expenses, net	73	129	(56)	75	54
Interest Expense	657	574	83	693	(119)
Loss Before Income Taxes	(971)	(542)	(429)	(1,082)	540
Income Tax (Benefit) Expense	(282)	353	(635)	(446)	799
Less: Net Income Attributable to Noncontrolling Interests	5	10	(5)	9	1
Net Loss	$(694)	$(905)	$ 211	$(645)	$ (260)

Year Ended December 31, 2018, as compared to 2017

Other's lower net loss was driven by prior year impacts from the Tax Act, partially offset by severance charges, loss on the sale of the retired Beckjord station, higher interest expense and prior year proceeds resulting from the settlement of the shareholder litigation related to the Progress Energy merger. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The decrease was primarily due to prior year revenues related to Duke Energy Ohio's entitlement of capacity and energy from OVEC's power plants. For the year ended December 31, 2018, the revenues and related expenses for OVEC are reflected in the Electric Utilities and Infrastructure segment due to the PUCO Order that

approved Duke Energy to recover or credit amounts through Rider PSR. These amounts are deemed immaterial. Therefore, no prior period amounts were restated. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters" for additional information.

Operating Expenses. The increase was primarily due to severance charges related to a corporate initiative partially offset by prior year fuel expense related to OVEC, which is reflected in the Electric Utilities and Infrastructure segment for year ended December 31, 2018. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters" for additional information.

(Losses) Gains on Sales of Other Assets and Other, net. The variance was driven by the loss on sale of the retired Beckjord station, a nonregulated facility retired during 2014, 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 insurance proceeds received in the prior year resulting from settlement of the shareholder litigation related to the Progress Energy merger and lower returns on investments that fund certain employee benefit obligations.

MD&A SEGMENT RESULTS - OTHER

Interest Expense. The increase was primarily due to an increase in long-term debt as well as higher interest rates on short-term debt.

Income Tax (Benefit) Expense. The variance was primarily due to the prior year impact of the Tax Act and an increase in pretax loss. See the Tax Act section above for additional information on the Tax Act and the impact on the effective tax rate.

Year Ended December 31, 2017, as compared to 2016

Other's higher net loss was driven by the Tax Act, partially offset by prior year losses on forward-starting interest rate swaps and other costs related to the Piedmont acquisition, decreased severance charges, donations to the Duke Energy Foundation in 2016 and insurance proceeds resulting from settlement of the shareholder litigation related to the Progress Energy merger. The following is a detailed discussion of the variance drivers by line item.

Operating Revenues. The increase was primarily due to higher OVEC revenues and prior year customer credits related to Piedmont merger commitments. See Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions," for additional information.

Operating Expenses. The decrease was primarily due to lower transaction and integration costs associated with the Piedmont acquisition, prior year severance charges related to cost savings initiatives, donations to the Duke Energy Foundation in 2016 as well as prior year depreciation expense and other integration costs related to the Progress Energy merger. The Duke Energy Foundation is a nonprofit organization funded by Duke Energy shareholders that makes charitable contributions to selected nonprofits and government subdivisions.

Other Income and Expenses, net. The increase was primarily driven by insurance proceeds resulting from settlement of the shareholder litigation related to the Progress Energy merger, higher earnings from the equity method investment in NMC and increased returns on investments that fund certain employee benefit obligations.

Interest Expense. The decrease was primarily due to prior year losses on forward-starting interest rate swaps related to Piedmont pre-acquisition financing, partially offset by higher interest costs on $3.75 billion of debt issued in August 2016 to fund the acquisition. For additional information see Notes 2, 6 and 14 to the Consolidated Financial Statements, "Acquisitions and Dispositions," "Debt and Credit Facilities" and "Derivatives and Hedging," respectively.

Income Tax Benefit. The variance was primarily due to the impact of the Tax Act and a decrease in pretax loss. See the Tax Act section above for additional information on the Tax Act and the impact on the effective tax rate.

Matters Impacting Future Other Results

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

INCOME (LOSS) FROM DISCONTINUED OPERATIONS, NET OF TAX

	Years Ended December 31,				
			Variance 2018 vs.		Variance 2017 vs.
(in millions)	2018	2017	2017	2016	2016
Income (Loss) From Discontinued Operations, net of tax	$19	$(6)	$ 25	$(408)	$ 402

Year Ended December 31, 2018, as compared to 2017

The variance was primarily driven by tax adjustments related to the International Disposal Groups. See Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions," for additional information.

Year Ended December 31, 2017, as compared to 2016

The variance was primarily driven by the prior year loss on the disposal of Duke Energy's Latin American generation business and an impairment charge related to certain assets in Central America, partially offset by a tax benefit related to historic unremitted foreign earnings and immaterial out of period tax adjustments unrelated to the International Disposal Group. See Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions," for additional

information.

MD&A SUBSIDIARY REGISTRANTS

SUBSIDIARY REGISTRANTS

As a result of the Tax Act, the Subsidiary Registrants revalued their deferred tax assets and deferred tax liabilities, as of December 31, 2017, to account for the estimated future impact of lower corporate tax rates on these deferred tax amounts. During the year ended December 31, 2018, the Subsidiary Registrants recorded measurement period adjustments to the provisional estimate recorded as of December 31, 2017, in accordance with SAB 118. For the Subsidiary Registrants' regulated operations, where the net 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. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters" for additional information on the Tax Act's impact to the regulatory asset and liability accounts. The change in each Subsidiary Registrant's effective tax rate for the year ended December 31, 2018, was primarily due to the impact of the Tax Act, unless noted below. The following table shows the expense (benefit) recorded on the Subsidiary Registrant's Consolidated Statements of Operations and Comprehensive Income, and the effective tax rate for each Subsidiary Registrant.

	Impacts of the Tax Act[a][b]		Effective Tax Rate	
	Years Ended December 31,		Years Ended December 31,	
(in millions)	2018	2017	2018	2017
Duke Energy Carolinas	$ 1	$ 15	22.1 %	34.9 %
Progress Energy	25	(246)[c]	17.4 %	17.2 %
Duke Energy Progress	19	(40)[d]	19.3 %	29.0 %
Duke Energy Florida	—	(226)[c]	15.4 %	6.1 %
Duke Energy Ohio	2	(23)[e]	19.6 %	23.4 %
Duke Energy Indiana	—	55[f]	24.6 %	46.0 %
Piedmont	—	(2)[d][g]	22.3 %	30.8 %

(a) Except where noted below, amounts are included within Income Tax Expense From Continuing Operations or Income Tax Expense on the Consolidated Statements of Operations and Comprehensive Income.

(b) See Notes 4 and 23 to the Consolidated Financial Statements, "Regulatory Matters" and "Income Taxes," respectively, for information about the Tax Act's impact on Duke Energy's Consolidated Balance Sheets.

(c) 2017 amount primarily relates to the remeasurement of deferred tax liabilities that are excluded for ratemaking purposes related to abandoned assets and certain wholesale fixed rate contracts.

(d) 2017 amount primarily relates to the remeasurement of deferred tax liabilities of certain wholesale fixed rate contracts.

(e) 2017 amount primarily relates to the remeasurement of deferred tax assets that are excluded for ratemaking purposes related to a prior transfer of certain electric generating assets.

(f) 2017 amount primarily relates to the remeasurement of deferred tax liabilities that are excluded for ratemaking purposes related to impaired assets.

(g) 2017 amount includes a $16 million expense recorded within Equity in earnings (losses) of unconsolidated affiliates on the Consolidated Statements of Operations and Comprehensive Income.

DUKE ENERGY CAROLINAS

Introduction

Management's Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Basis of Presentation

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

MD&A DUKE ENERGY CAROLINAS

Results of Operations

	Years Ended December 31,		
(in millions)	2018	2017	Variance
Operating Revenues	$7,300	$7,302	$ (2)
Operating Expenses			
Fuel used in electric generation and purchased power	1,821	1,822	(1)
Operation, maintenance and other	2,130	2,021	109
Depreciation and amortization	1,201	1,090	111
Property and other taxes	295	281	14
Impairment charges	192	—	192
Total operating expenses	5,639	5,214	425
(Losses) Gains on Sales of Other Assets and Other, net	(1)	1	(2)
Operating Income	1,660	2,089	(429)
Other Income and Expenses, net	153	199	(46)
Interest Expense	439	422	17
Income Before Income Taxes	1,374	1,866	(492)
Income Tax Expense	303	652	(349)
Net Income	$1,071	$1,214	$ (143)

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 and to public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	2018	2017
Residential sales	11.7 %	(4.8)%
General service sales	4.5 %	(1.8)%
Industrial sales	(0.3)%	(0.8)%
Wholesale power sales	12.5 %	6.3 %
Joint dispatch sales	23.1 %	18.2 %
Total sales	5.7 %	(1.4)%
Average number of customers	1.5 %	1.5 %

Year Ended December 31, 2018, as compared to 2017

Operating Revenues. The variance was driven primarily by:

- a $263 million decrease in retail sales due to revenues subject to refund to customers associated with the lower statutory federal corporate tax rate under the Tax Act;
- a $68 million decrease in retail rider revenues primarily related to the implementation of new base rates; and
- an $8 million decrease in wholesale power revenues, net of sharing and fuel, primarily due to wholesale customer refunds in the current year related to a FERC order on a complaint filed by PMPA, partially offset by higher revenues related to recovery of coal ash costs.

Partially offset by:

- a $169 million increase in retail sales, net of fuel revenues, due to favorable weather in the current year;
- an $83 million increase in retail pricing from impacts of the North Carolina rate case;
- a $49 million increase in other revenues primarily due to the recognition of previously deferred revenues associated with storm restoration costs in South Carolina and favorable transmission revenues; and
- a $36 million increase in weather-normal retail sales volumes.

Operating Expenses. The variance was driven primarily by:

- a $192 million increase in impairment charges primarily due to the impacts of the North Carolina rate order and charges related to coal ash costs in South Carolina;
- a $111 million increase in depreciation and amortization expense primarily due to additional plant in service, new depreciation rates associated with the North Carolina rate case and higher amortization of deferred coal ash costs, partially offset by lower amortization of certain regulatory assets; and

MD&A DUKE ENERGY CAROLINAS

- a $109 million increase in operations, maintenance and other expense primarily due to severance charges.

Other Income and Expenses, net. The variance was primarily due to lower AFUDC equity related to the Lee Nuclear Project and W.S. Lee CC and a decrease in recognition of post in-service equity returns for projects that had been completed prior to being reflected in customer rates.

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

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act. The ETRs for the years ended December 31, 2018, and 2017 were 22.1 percent and 34.9 percent, respectively. The decrease in the ETR was primarily due to the lower statutory federal corporate tax rate under the Tax Act and the amortization of state excess deferred taxes.

Matters Impacting Future Results

On May 18, 2016, the NCDEQ issued proposed risk classifications for all coal ash surface impoundments in North Carolina. All ash impoundments not previously designated as high priority by the Coal Ash Act were designated as intermediate risk. Certain impoundments classified as intermediate risk, however, were eligible for reassessment as low-risk pursuant to legislation enacted on July 14, 2016. On November 14, 2018, NCDEQ issued final low risk classifications for these impoundments, indicating that Duke Energy Carolinas had satisfied the permanent replacement water supply and certain dam improvement requirements set out in the Coal Ash Management Act. As the final closure plans and corrective action measures are developed and approved for each site, the closure work progresses, and the closure method scope and remedial action methods are determined, the complexity of work and the amount of coal combustion material could be different than originally estimated and, therefore, could materially impact Duke Energy Carolinas' results of operations, financial position and cash flows. See Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations," for additional information.

Duke Energy Carolinas is a party to multiple lawsuits and subject to fines and other penalties related to operations at certain North Carolina facilities with ash basins. In addition, the order issued in the Duke Energy Carolinas North Carolinas rate case supporting recovery of past coal ash remediation costs has been appealed by various parties. The outcome of these appeals, lawsuits, fines and penalties 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.

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 may petition for deferral of grid modernization costs outside of a general rate case proceeding if it can show financial hardship or a stipulation that includes greater consensus among intervening parties on costs being classified as grid modernization. Duke Energy Carolinas' results of operations, financial position and cash flows could be adversely impacted if grid modernization costs are not ultimately approved for recovery and/or deferral treatment. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

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 have been deferred. On December 21, 2018, Duke Energy Carolinas filed with the NCUC a petition for approval to defer the incremental storm costs incurred to a regulatory asset for recovery in the next base rate case. 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.

Appeals of the recently approved rate case for Duke Energy Carolinas are pending at the North Carolina Supreme Court. The North Carolina Attorney General and various intervenors primarily dispute the allowance of recovery of coal ash costs from customers, which was approved by the NCUC. The outcome of these appeals could have an

adverse impact to 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.

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

PROGRESS ENERGY

Introduction

Management’s Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Basis of Presentation

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

MD&A PROGRESS ENERGY

Results of Operations

(in millions)	Years Ended December 31, 2018	2017	Variance
Operating Revenues	$10,728	$9,783	$ 945
Operating Expenses			
Fuel used in electric generation and purchased power	3,976	3,417	559
Operation, maintenance and other	2,613	2,301	312
Depreciation and amortization	1,619	1,285	334
Property and other taxes	529	503	26
Impairment charges	87	156	(69)
Total operating expenses	8,824	7,662	1,162
Gains on Sales of Other Assets and Other, net	24	26	(2)
Operating Income	1,928	2,147	(219)
Other Income and Expenses, net	165	209	(44)
Interest Expense	842	824	18
Income Before Income Taxes	1,251	1,532	(281)
Income Tax Expense	218	264	(46)
Net Income	1,033	1,268	(235)
Less: Net Income Attributable to Noncontrolling Interests	6	10	(4)
Net Income Attributable to Parent	$1,027	$1,258	$ (231)

Year Ended December 31, 2018, as compared to 2017

Operating Revenues. The variance was driven primarily by:

- a $614 million increase in fuel and capacity revenues primarily due to an increase in fuel and capacity rates billed to retail customers and increased demand;
- a $149 million increase in retail pricing due to the impacts of the Duke Energy Progress North Carolina and South Carolina rate cases and Duke Energy Florida base rate adjustments related to generation assets being placed into service;
- a $108 million increase in retail sales due to favorable weather in the current year, net of lost revenue impacts associated with Hurricane Irma in 2017 and Hurricane Florence in 2018;
- a $96 million increase in wholesale power revenues, net of fuel, primarily due to recovery of coal ash costs and higher peak demand at Duke Energy Progress;
- a $34 million net increase in retail rider revenues in conjunction with the implementation of new base rates at Duke Energy Progress; and
- a $47 million increase in weather-normal retail sales volumes.

Partially offset by:

- a $119 million decrease in retail sales due to revenues subject to refund to customers associated with the lower statutory federal corporate tax rate under the Tax Act at Duke Energy Progress.

Operating Expenses. The variance was driven primarily by:

- a $559 million increase in fuel used in electric generation and purchased power primarily due to higher amortization of deferred fuel and capacity expenses, increased demand and changes in generation mix;
- a $334 million increase in depreciation and amortization expense primarily due to higher amortization of deferred coal ash costs and new depreciation rates associated with the North Carolina rate case at Duke Energy Progress, and accelerated depreciation of Crystal River Units 4 and 5 at Duke Energy Florida;

- a $312 million increase in operation, maintenance and other expense primarily due to higher costs related to storms, vegetation management costs and severance charges; and
- a $26 million increase in property and other taxes primarily due to higher revenue related taxes at Duke Energy Florida.

Partially offset by:

- a $69 million decrease in impairment charges primarily due to the write-off of remaining unrecovered Levy Nuclear Project costs in the prior year, offset by the current year impairment of the Citrus County CC at Duke Energy Florida and the impacts associated with the North Carolina rate case at Duke Energy Progress.

Other Income and Expenses, net. The variance was primarily due to lower income from non-service components of employee benefit costs in the current year at Duke Energy Progress and Duke Energy Florida. For additional information on employee benefit costs, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans."

Interest Expense. The variance was primarily due to new debt issuances at Duke Energy Progress.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act partially offset by the favorable impact of the Tax Act in the prior year. The effective tax rate for the years ended December 31, 2018, and 2017 were 17.4 percent and 17.2 percent, respectively. The change in the effective tax rate was primarily due to the favorable impact of the Tax Act in the prior year mostly offset by the lower statutory federal corporate tax rate under the Tax Act and the amortization of federal and state excess deferred taxes in the current year.

Matters Impacting Future Results

On May 18, 2016, the NCDEQ issued proposed risk classifications for all coal ash surface impoundments in North Carolina. All ash impoundments not previously designated as high priority by the Coal Ash Act were designated as intermediate risk. Certain impoundments classified as intermediate risk, however, were eligible for reassessment as low-risk pursuant to legislation enacted on July 14, 2016. On November 14, 2018, NCDEQ issued final low risk classifications for these impoundments, indicating that Progress Energy had satisfied the permanent replacement water supply and certain dam improvement requirements set out in the Coal Ash Management Act. As the final closure plans and corrective action measures are developed and approved for each site, the closure work progresses, and the closure method scope and remedial action methods are determined, the complexity of work and the amount of coal combustion material could be different than originally estimated and, therefore, could materially impact Progress Energy's results of operations, financial position and cash flows. See Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations," for additional information.

Duke Energy Progress is a party to multiple lawsuits and subject to fines and other penalties related to operations at certain North Carolina facilities with ash basins. As noted above, the order issued in the Duke Energy Progress North Carolinas rate case supporting recovery of past coal ash remediation costs has been appealed by various parties. The outcome of these appeals, lawsuits, fines and penalties could have an adverse impact on Progress Energy’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.

Duke Energy Carolinas received an order from the NCUC, which denied the Grid Rider Stipulation and deferral treatment of grid improvement costs. The NCUC did allow Duke Energy Carolinas to petition for deferral of grid modernization costs outside of a general rate case proceeding if it can show financial hardship or a stipulation that includes greater consensus among intervening parties on costs being classified as grid modernization. While Duke Energy Progress did not request recovery of these costs in its most recent case with the NCUC, Duke Energy Progress may request recovery of certain grid modernization costs in future regulatory proceedings. If the NCUC were to rule similarly, Progress Energy's results of operations, financial position and cash flows could be adversely impacted if grid modernization costs are not ultimately approved for recovery and/or deferral treatment. See Note 4 to the Consolidated Financial Statements, “Regulatory Matters,” for additional information.

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 4 hurricane and the most powerful storm to hit the

Florida Panhandle in recorded history. A significant portion of the incremental operation and maintenance expenses related to these storms have been deferred. On December 21, 2018, Duke Energy Progress filed with the NCUC a petition for approval to defer the incremental storm costs incurred to a regulatory asset for recovery in the next base rate case. Duke Energy Progress filed a similar request with the PSCSC on January 11, 2019, which also included a request for the continuation of prior deferrals requested for other storms, and on January 30, 2019, the PSCSC issued a directive approving the deferral request. Duke Energy Florida anticipates filing a petition in the first half of 2019 with the FPSC to recover incremental storm costs consistent with the provisions in its 2017 Settlement. 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.

Appeals of the recently approved rate case for Duke Energy Progress are pending at the North Carolina Supreme Court. The North Carolina Attorney General and various intervenors primarily dispute the allowance of recovery of coal ash costs from customers, which was approved by the NCUC. The outcome of these appeals could have an adverse impact to 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 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 for recovery of the storm costs. Storm costs are currently expected to be fully recovered by approximately mid-2021. The commission has scheduled the hearing to begin on May 21, 2019. An order disallowing recovery of these 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 the Tax Act section above as well as Liquidity and Capital Resources below for discussion of risks associated with the Tax Act.

MD&A DUKE ENERGY PROGRESS

DUKE ENERGY PROGRESS

Introduction

Management's Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Basis of Presentation

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

Results of Operations

	Years Ended December 31,		
(in millions)	2018	2017	Variance
Operating Revenues	$5,699	$5,129	$ 570
Operating Expenses			
Fuel used in electric generation and purchased power	1,892	1,609	283
Operation, maintenance and other	1,578	1,439	139
Depreciation and amortization	991	725	266
Property and other taxes	155	156	(1)
Impairment charges	33	19	14
Total operating expenses	4,649	3,948	701
Gains on Sales of Other Assets and Other, net	9	4	5
Operating Income	1,059	1,185	(126)
Other Income and Expenses, net	87	115	(28)
Interest Expense	319	293	26
Income Before Income Taxes	827	1,007	(180)
Income Tax Expense	160	292	(132)
Net Income	$667	$715	$ (48)

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 and to public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	2018	2017
Residential sales	9.9 %	(2.6)%
General service sales	2.3 %	(1.3)%
Industrial sales	0.8 %	1.1 %
Wholesale power sales	4.6 %	(2.9)%
Joint dispatch sales	2.1 %	(17.1)%
Total sales	3.8 %	(3.2)%
Average number of customers	1.5 %	1.4 %

Year Ended December 31, 2018, as compared to 2017

Operating Revenues. The variance was driven primarily by:

- a $324 million increase in fuel revenues driven by higher retail sales and changes in generation mix;
- a $125 million increase in retail pricing due to the impacts from the North Carolina and South Carolina rate cases;
- a $96 million increase in wholesale power revenues, net of fuel, primarily due to recovery of coal ash costs and higher peak demand;
- a $34 million net increase in retail rider revenues in conjunction with the implementation of new base rates;

- a $61 million increase in retail sales due to favorable weather in the current year, net of the impact of lost revenues due to Hurricane Florence; and
- a $35 million increase in weather-normal retail sales volumes.

Partially offset by:

- a $119 million decrease in retail sales due to revenues subject to refund to customers associated with the lower statutory federal corporate tax rate under the Tax Act.

Operating Expenses. The variance was driven primarily by:

- a $283 million increase in fuel used in electric generation and purchased power primarily due to higher retail sales and changes in generation mix;
- a $266 million increase in depreciation and amortization expense primarily due to higher amortization of deferred coal ash costs and new depreciation rates associated with the North Carolina rate case;
- a $139 million increase in operation, maintenance and other expense primarily due to higher storm costs, impacts associated with the North Carolina rate case and severance charges; and
- a $14 million increase in impairment charges associated with the North Carolina rate case.

Other Income and Expenses, net. The variance was primarily driven by lower income from non-service components of employment benefit costs. For additional information on employee benefit costs, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans."

Interest Expense. The variance was primarily driven by new debt issuances.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act partially offset by the favorable impact of the Tax Act in the prior year. The effective tax rates for the years ended December 31, 2018, and 2017 were 19.3 percent and 29.0 percent, respectively. The decrease in the effective tax rate was primarily due to the lower statutory federal corporate tax rate under the Tax Act and the amortization of state excess deferred taxes partially offset by the impact of the Tax Act in the prior year.

Matters Impacting Future Results

On May 18, 2016, the NCDEQ issued proposed risk classifications for all coal ash surface impoundments in North Carolina. All ash impoundments not previously designated as high priority by the Coal Ash Act were designated as intermediate risk. Certain impoundments classified as intermediate risk, however, were eligible for reassessment as low-risk pursuant to legislation enacted on July 14, 2016. On November 14, 2018, NCDEQ issued final low risk classifications for these impoundments, indicating that Duke Energy Progress had satisfied the permanent replacement water supply and certain dam improvement requirements set out in the Coal Ash Management Act. As the final closure plans and corrective action measures are developed and approved for each site, the closure work progresses, and the closure method scope and remedial action methods are determined, the complexity of work and the amount of coal combustion material could be different than originally estimated and, therefore, could materially impact Duke Energy Progress' results of operations, financial position and cash flows. See Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations," for additional information.

Duke Energy Progress is a party to multiple lawsuits and subject to fines and other penalties related to operations at certain North Carolina facilities with ash basins. As noted above, the order issued in the Duke Energy Progress North Carolinas rate case supporting recovery of past coal ash remediation costs has been appealed by various parties. The outcome of these appeals, lawsuits, fines and penalties 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 Carolinas received an order from the NCUC, which denied the Grid Rider Stipulation and deferral treatment of grid improvement costs. The NCUC did allow Duke Energy Carolinas to petition for deferral of grid modernization costs outside of a general rate case proceeding if it can show financial hardship or a stipulation that includes greater consensus among intervening parties on costs being classified as grid modernization. While Duke Energy Progress did not request recovery of these costs in its most recent case with the NCUC, Duke Energy Progress may request recovery of certain grid modernization costs in future regulatory proceedings. If the NCUC were to rule similarly, Duke Energy Progress' results of operations, financial position and cash flows could be adversely impacted if grid modernization costs are not ultimately approved for recovery and/or deferral treatment. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

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. A significant portion of the incremental operation and maintenance expenses related to these storms have been deferred. On December 21, 2018, Duke Energy Progress filed with the NCUC a petition for approval to defer the incremental storm costs incurred to a regulatory asset for recovery in the next base rate case. Duke Energy Progress filed a similar request with the PSCSC on January 11, 2019, which also included a request for the continuation of prior deferrals requested for other storms, and on January 30, 2019, the PSCSC issued a directive approving the deferral request. 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.

Appeals of the recently approved rate case for Duke Energy Progress are pending at the North Carolina Supreme Court. The North Carolina Attorney General and various intervenors primarily dispute the allowance of recovery of coal ash costs from customers, which was approved by the NCUC. The outcome of these appeals could have an adverse impact to 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 the Tax Act section above as well as Liquidity and Capital Resources below for discussion of risks associated with the Tax Act.

MD&A DUKE ENERGY FLORIDA

DUKE ENERGY FLORIDA

Introduction

Management's Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Basis of Presentation

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

Results of Operations

	Years Ended December 31,		
(in millions)	2018	2017	Variance
Operating Revenues	$5,021	$4,646	$ 375
Operating Expenses			
Fuel used in electric generation and purchased power	2,085	1,808	277
Operation, maintenance and other	1,025	853	172
Depreciation and amortization	628	560	68
Property and other taxes	374	347	27
Impairment charges	54	138	(84)
Total operating expenses	4,166	3,706	460
Gains on Sales of Other Assets and Other, net	1	1	—
Operating Income	856	941	(85)
Other Income and Expenses, net	86	96	(10)
Interest Expense	287	279	8
Income Before Income Taxes	655	758	(103)
Income Tax Expense	101	46	55
Net Income	$554	$712	$ (158)

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 and to public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	2018	2017
Residential sales	4.3 %	(2.3)%
General service sales	1.9 %	(1.3)%
Industrial sales	(0.4)%	(2.4)%
Wholesale power sales	5.2 %	20.1 %
Total sales	2.4 %	0.5 %
Average number of customers	1.5 %	1.6 %

Year Ended December 31, 2018, as compared to 2017

Operating Revenues. The variance was driven primarily by:

- a $290 million increase in fuel and capacity revenues primarily due to an increase in fuel and capacity rates billed to retail customers and increased demand;
- a $47 million increase in retail sales, net of fuel revenues, due to favorable weather in the current year and impacts of lost revenue resulting from Hurricane Irma in the prior year;
- a $24 million increase in retail pricing due to base rate adjustments related to generation assets being placed into service; and

- a $12 million increase in weather-normal retail sales volumes.

Operating Expenses. The variance was driven primarily by:

- a $277 million increase in fuel used in electric generation and purchased power primarily due to higher amortization of deferred fuel and capacity expenses and increased purchased power and demand;
- a $172 million increase in operation, maintenance and other expense primarily due to higher storm cost amortization, vegetation management costs and severance charges, partially offset by lower storm restoration costs in the current year;

- a $68 million increase in depreciation and amortization expense primarily due to accelerated depreciation of Crystal River Units 4 and 5 and additional plant in service; and
- a $27 million increase in property and other taxes primarily due to higher revenue related taxes.

Partially offset by:

- an $84 million decrease in impairment charges primarily due to the write-off of remaining unrecovered Levy Nuclear Project costs in the prior year, offset by the current year impairment of the Citrus County CC.

Other Income and Expenses, net. The variance was driven primarily by lower income from non-service components of employee benefit costs in the current year. For additional information on employee benefit costs, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans."

Income Tax Expense. The variance was primarily due to the favorable impact of the Tax Act in the prior year partially offset by the lower statutory federal corporate tax rate under the Tax Act in the current year. The effective tax rates for the years ended December 31, 2018, and 2017 were 15.4 percent and 6.1 percent, respectively. The increase in the effective tax rate was primarily due to the favorable impact of the Tax Act in the prior year partially offset by the lower statutory federal corporate tax rate under the Tax Act and the amortization of federal excess deferred taxes in the current year.

Matters Impacting Future Results

On October 10, 2018, Hurricane Michael made landfall on Florida's Panhandle as a Category 4 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. Duke Energy Florida has not completed the final accumulation of total estimated storm restoration costs incurred. Given the magnitude of the storm, Duke Energy Florida anticipates filing a petition in the first half of 2019 with the FPSC to recover incremental storm costs consistent with the provisions in its 2017 Settlement. 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.

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 for recovery of the storm costs. Storm costs are currently expected to be fully recovered by approximately mid-2021. The commission has scheduled the hearing to begin on May 21, 2019. An order disallowing recovery of these costs could have an adverse impact on Duke Energy Florida'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 the Tax Act section above as well as Liquidity and Capital Resources below for discussion of risks associated with the Tax Act.

MD&A DUKE ENERGY OHIO

DUKE ENERGY OHIO

Introduction

Management's Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Basis of Presentation

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

Results of Operations

	Years Ended December 31,		
(in millions)	2018	2017	Variance
Operating Revenues			
Regulated electric	$1,450	$1,373	$ 77
Regulated natural gas	506	508	(2)
Nonregulated electric and other	1	42	(41)
Total operating revenues	1,957	1,923	34
Operating Expenses			
Fuel used in electric generation and purchased power – regulated	412	369	43
Fuel used in electric generation and purchased power – nonregulated	—	58	(58)
Cost of natural gas	113	107	6
Operation, maintenance and other	480	530	(50)
Depreciation and amortization	268	261	7
Property and other taxes	290	278	12
Impairment charges	—	1	(1)
Total operating expenses	1,563	1,604	(41)
(Losses) Gains on Sales of Other Assets and Other, net	(106)	1	(107)
Operating Income	288	320	(32)
Other Income and Expenses, net	23	23	—
Interest Expense	92	91	1
Income from Continuing Operations Before Income Taxes	219	252	(33)
Income Tax Expense from Continuing Operations	43	59	(16)
Income from Continuing Operations	176	193	(17)
(Loss) Income from Discontinued Operations, net of tax	—	(1)	1
Net Income	$176	$192	$ (16)

The following table shows the percent changes in GWh sales of electricity, dekatherms 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 and to public and private utilities and power marketers. Amounts are not weather-normalized.

	Electric		Natural Gas	
Increase (Decrease) over prior year	2018	2017	2018	2017
Residential sales	12.2 %	(4.0)%	18.0 %	(2.6)%
General service sales	3.3 %	(3.1)%	15.4 %	0.7 %
Industrial sales	1.0 %	(2.7)%	8.1 %	(2.8)%
Wholesale electric power sales	(46.6)%	65.7 %	n/a	n/a

Other natural gas sales	n/a	n/a	0.7 %	(0.3)%
Total sales	2.8 %	(2.1)%	11.9 %	(1.1)%
Average number of customers	0.8 %	0.8 %	0.9 %	0.7 %

MD&A DUKE ENERGY OHIO

Year Ended December 31, 2018, as compared to 2017

Operating Revenues. In 2018, the revenues and related expenses for OVEC are reflected in regulated electric due to the PUCO Order that approved Duke Energy Ohio to recover or credit amounts, through Rider PSR, that result from wholesale market transactions relating to Duke Energy Ohio's entitlement to capacity and energy from OVEC's power plants. In 2017, the revenues and related expenses for OVEC are reflected in nonregulated electric. See Note 4 to the Consolidated Financial Statements, "Regulatory Matters" for additional information.

The variance was driven primarily by:

- a $44 million increase in electric and natural gas retail sales, net of fuel revenues, due to favorable weather in the current year;
- a $17 million increase in rider revenue primarily related to capital investment riders;
- a $16 million increase in financial transmission rights revenues;
- a $7 million increase in point-to-point transmission revenues; and
- a $6 million increase in fuel revenues due to higher natural gas costs.

Partially offset by:

- a $48 million decrease in regulated revenues due to revenues subject to refund to customers associated with the lower statutory corporate tax rate under the Tax Act; and
- a $7 million decrease in bulk power marketing sales.

Operating Expenses. The variance was driven by:

- a $50 million decrease in operations, maintenance and other expense primarily due to the FERC approved settlement refund of certain transmission costs previously billed by PJM; and
- a $15 million decrease in fuel used in electric generation and purchased power related to the deferral of OVEC purchased power, which is reflected in regulated electric in 2018 and nonregulated electric in 2017, as noted above in the Operating Revenues section.

Partially offset by:

- a $12 million increase in property and other taxes primarily due to higher property taxes and kilowatt tax;
- a $7 million increase in depreciation and amortization expense primarily due to additional plant in service and increased amortization of regulatory assets; and
- a $6 million increase in cost of natural gas primarily due to an increase in natural gas sales volumes.

(Losses) Gains on Sales of Other Assets and Other, net. The decrease was driven by the loss on the sale of Beckjord, a nonregulated facility retired during 2014, including 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.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act and a decrease in pretax income. The effective tax rates for the years ended December 31, 2018, and 2017 were 19.6 percent and 23.4 percent, respectively. The decrease in the effective tax rate was primarily due to the lower statutory federal corporate tax rate under the Tax Act partially offset by the impact of the Tax Act in the prior year.

Matters Impacting Future Results

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

MD&A DUKE ENERGY INDIANA

DUKE ENERGY INDIANA

Introduction

Management's Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, 2017 and 2016.

Basis of Presentation

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

Results of Operations

	Years Ended December 31,		
(in millions)	2018	2017	Variance
Operating Revenues	$3,059	$3,047	$ 12
Operating Expenses			
Fuel used in electric generation and purchased power	1,000	966	34
Operation, maintenance and other	788	743	45
Depreciation and amortization	520	458	62
Property and other taxes	78	76	2
Impairment charges	30	18	12
Total operating expenses	2,416	2,261	155
Operating Income	643	786	(143)
Other Income and Expenses, net	45	47	(2)
Interest Expense	167	178	(11)
Income Before Income Taxes	521	655	(134)
Income Tax Expense	128	301	(173)
Net Income	$393	$354	$ 39

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 and to public and private utilities and power marketers. Amounts are not weather-normalized.

Increase (Decrease) over prior year	2018	2017
Residential sales	12.5 %	(3.8)%
General service sales	2.8 %	(2.4)%
Industrial sales	0.5 %	0.3 %
Wholesale power sales	(0.9)%	(10.5)%
Total sales	3.3 %	(3.6)%
Average number of customers	1.3 %	0.8 %

Year Ended December 31, 2018, as compared to 2017

Operating Revenues. The variance was driven primarily by:

- a $65 million increase in rate rider revenues primarily related to the Edwardsport IGCC plant and the TDSIC rider;
- a $50 million increase in fuel and other revenues primarily due to higher base fuel, non-native fuel and Midwest Independent System Operator rider revenues;
- a $13 million increase in retail sales, net of fuel revenues, due to favorable weather in the current year; and
- a $13 million increase in weather-normal retail sales volumes.

Partially offset by:

-

- a $105 million decrease due to revenues subject to refund to customers associated with the lower statutory federal corporate tax rate under the Tax Act; and
- a $27 million decrease in wholesale power revenues, net of fuel, primarily due to contracts that expired in the prior year.

Operating Expenses. The variance was driven primarily by:

- a $62 million increase in depreciation and amortization expense primarily due to additional plant in service and the deferral of certain asset retirement obligations in the prior year;

- a $45 million increase in operation, maintenance and other expense primarily due to amortization of previously deferred expenses, and higher transmission, storm and customer related costs;
- a $34 million increase in fuel used in electric generation and purchased power primarily due to higher natural gas costs; and
- a $12 million increase in impairment charges primarily due to the reduction of a regulatory asset pertaining to the Edwardsport IGCC settlement agreement in the current year, partially offset by the impairment of certain metering equipment in the prior year.

Interest Expense. The variance was primarily due to lower post in-service carrying costs due to three coal ash projects placed in service in December 2017, partially offset by higher intercompany money pool interest expense, higher AFUDC debt balances and higher floating rate debt interest expense.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act. The effective tax rates for the years ended December 31, 2018, and 2017 were 24.6 percent and 46.0 percent, respectively. The decrease in the effective tax rate was primarily due to the lower statutory federal corporate tax rate under the Tax Act and by the impact of the Tax Act in the prior year.

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. See Note 4 to the Consolidated Financial Statements, “Regulatory Matters,” for additional information.

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

PIEDMONT

Introduction

Management’s Discussion and Analysis should be read in conjunction with the accompanying Consolidated Financial Statements and Notes for the years ended December 31, 2018, and 2017, Piedmont's Annual Report on Form 10-K for the year ended October 31, 2016, and the Form 10-QT as of December 31, 2016, for the transition period from November 1, 2016, to December 31, 2016. The unaudited results of operations for the year ended December 31, 2016, were derived from data previously reported in the reports noted above.

Basis of Presentation

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

MD&A PIEDMONT

Results of Operations

	Years Ended December 31,		
(in millions)	2018	2017	Variance
Operating Revenues			
Regulated natural gas	$1,365	$1,319	$ 46
Nonregulated natural gas and other	10	9	1
Total operating revenues	1,375	1,328	47
Operating Expenses			
Cost of natural gas	584	524	60
Operation, maintenance and other	357	304	53
Depreciation and amortization	159	148	11
Property and other taxes	49	48	1
Impairment charges	—	7	(7)
Total operating expenses	1,149	1,031	118
Operating Income	226	297	(71)
Equity in earnings (losses) of unconsolidated affiliates	7	(6)	13
Other income and expenses, net	14	(11)	25
Total other income and expenses	21	(17)	38
Interest Expense	81	79	2
Income Before Income Taxes	166	201	(35)
Income Tax Expense	37	62	(25)
Net Income	$129	$139	$ (10)

The following table shows the percent changes in dekatherms 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	2018	2017
Residential deliveries	23.6 %	(8.1)%
Commercial deliveries	14.9 %	(4.3)%
Industrial deliveries	4.2 %	(2.2)%
Power generation deliveries	23.6 %	(5.8)%
For resale	17.0 %	(20.9)%
Total throughput deliveries	19.0 %	(5.4)%
Secondary market volumes	(8.1)%	(4.2)%
Average number of customers	1.6 %	1.7 %

Piedmont's throughput was 557,145,128 dekatherms and 468,259,777 dekatherms for the years ended December 31, 2018, and 2017, respectively. Due to the margin decoupling mechanism in North Carolina and WNA mechanisms in South Carolina and Tennessee, 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, 2018, as compared to 2017

Operating Revenues. The variance was driven primarily by:

- a $60 million increase primarily due to higher natural gas costs passed through to customers due to higher volumes sold and higher natural gas prices; and

- a $37 million increase primarily due to residential and commercial customer revenue, net of natural gas costs passed through to customers, due to customer growth and IMR rate adjustments and new power generation customers.

Partially offset by:

- a $51 million decrease primarily due to revenues subject to refund to customers associated with the lower statutory corporate tax rate under the Tax Act.

MD&A PIEDMONT

Operating Expenses. The variance was driven by:
- a $60 million increase in cost of natural gas primarily due to higher volumes sold and higher natural gas costs passed through to customers due to the higher price per dekatherm of natural gas;
- a $53 million increase in operations, maintenance and other expense primarily due to increased shared services, cost to achieve merger expenses and pension settlement charge; and
- an $11 million increase in depreciation and amortization expense due to additional plant in service.

Partially offset by:
- a $7 million decrease in impairment charges due to an impairment of software recorded in the prior year.

Other Income and Expenses. The variance was driven by:
- a $25 million increase in other income and expenses, net primarily due to higher income from non-service components of employee benefit costs in the current year. For additional information on employee benefit costs, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans"; and
- a $13 million increase in equity earnings of unconsolidated affiliates from pipeline investments primarily due to favorable earnings partially offset by unfavorable impacts of the Tax Act in the prior year.

Income Tax Expense. The variance was primarily due to the lower statutory federal corporate tax rate under the Tax Act. The effective tax rates for the years ended December 31, 2018, and 2017 were 22.3 percent and 30.8 percent, respectively. The decrease in the effective tax rate was primarily due to the lower statutory federal corporate tax rate under the Tax Act.

Matters Impacting Future Results

Within this Item 7, see the Tax Act section above as well as Liquidity and Capital Resources below 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.

MD&A CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Goodwill Impairment Assessments

Duke Energy performed its annual goodwill impairment tests for all reporting units as of August 31, 2018, and all of the reporting units' estimated fair value of equity substantially exceeded the carrying value of equity, except for the Commercial Renewables reporting units, which recorded impairment charges of $93 million. 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 2018 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, 2018, for each of Duke Energy’s reporting units ranged from 5.5 percent to 6.9 percent. 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 11 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. Duke Energy Florida assumes Crystal River Unit 3 will be placed into a safe storage configuration until eventual dismantlement is completed by 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, 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.

For further information, see Note 9 to the Consolidated Financial Statements, "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.

For further information, see Note 10 to the Consolidated Financial Statements, "Property, Plant and Equipment."

MD&A CRITICAL ACCOUNTING POLICIES AND ESTIMATES

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, 2018, the carrying value of the equity method investment in ACP is $0.8 billion, and Duke Energy's maximum exposure to loss for its guarantee of the ACP revolving credit facility is $0.7 billion. During the fourth quarter of 2018, 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. Most of the scenarios reflect phased in-service date assumptions. Certain scenarios within the analysis also included growth expectations from additional compression or other expansion opportunities and reopeners for pricing. A discount rate of 6.1 percent was used in the analysis. Higher probabilities were generally assigned to those scenarios where court approvals were received and the project moves forward under reasonable timelines reflecting interim rates and either current contracted pricing provisions, or prices subject to the reopeners. A very 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. The use of alternate judgments and assumptions could result in a different calculation of fair value, which could ultimately result in the recognition of an impairment charge in the consolidated financial statements.

For further information, see Note 12 to the Consolidated Financial Statements, “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 heath care cost trend rate.

Duke Energy elects to amortize net actuarial gain or loss amounts that are in excess of 10 percent 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.

MD&A CRITICAL ACCOUNTING POLICIES AND ESTIMATES

As of December 31, 2018, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.85 percent. 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 4.3 percent as of December 31, 2018. 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, 2018, 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 2018 pretax pension expense, pretax other post-retirement expense, pension obligation and other post-retirement benefit obligation if a 0.25 percent change in rates were to occur.

	Qualified and Non-Qualified Pension Plans		Other Post-Retirement Plans	
(in millions)	0.25 %	(0.25)%	0.25 %	(0.25)%
Effect on 2018 pretax pension and other post-retirement expense				
Expected long-term rate of return	$(22)	$22	$ (1)	$ 1
Discount rate	(12)	12	1	(1)
Effect on pension and other post-retirement benefit obligation at December 31, 2018				
Discount rate	(183)	188	(13)	13

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, 2018, the health care cost trend rate was 6.5 percent, trending down to 4.75 percent by 2024. The following table presents the approximate effect on Duke Energy's 2018 pretax other post-retirement expense and other post-retirement benefit obligation if a 1 percentage point change in the health care cost trend rate were to occur. These plans are closed to new employees.

	Other Post-Retirement Plans	
(in millions)	1 %	(1)%
Effect on 2018 other post-retirement expense	$ 1	$ (1)
Effect on other post-retirement benefit obligation at December 31, 2018	22	(20)

For further information, see Note 22 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 lowers the corporate federal income tax rate from 35 to 21 percent and eliminates bonus depreciation for regulated utilities. For Duke Energy’s regulated operations, the reduction in federal income taxes is expected to 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 2022. 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 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 (Parent), 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 6 to the Consolidated Financial Statements, “Debt and Credit Facilities,” for additional discussion of the money pool arrangement.

MD&ALIQUIDITY AND CAPITAL RESOURCES

Duke Energy and the Subsidiary Registrants, excluding Progress Energy (Parent), 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, Duke Energy plans to issue $500 million of common stock equity per year through 2023 through the DRIP and ATM programs. See Note 19 to the Consolidated Financial Statements, "Common Stock," for further information regarding Duke Energy's equity issuances in 2018.

Credit Facilities and Registration Statements

See Note 6 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 debt AFUDC and capitalized interest, for the next three fiscal years are included in the table below.

(in millions)	2019	2020	2021
New generation	$375	$125	$220
Regulated renewables	415	410	710
Environmental	240	125	35
Nuclear fuel	430	505	390
Major nuclear	305	315	250
Customer additions	505	480	475
Grid modernization and other transmission and distribution projects	2,835	3,160	2,980
Maintenance and other	3,395	2,605	2,390
Total Electric Utilities and Infrastructure	8,500	7,725	7,450
Gas Utilities and Infrastructure	1,675	2,000	1,600
Commercial Renewables and Other	925	825	625
Total projected capital and investment expenditures	$11,100	$10,550	$9,675

DEBT MATURITIES

See Note 6 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 2018, Duke Energy paid quarterly cash dividends for the 92nd 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 percent, based upon adjusted diluted EPS, and expects this trend to continue through 2023. In 2017 and 2018, Duke Energy increased the dividend by approximately 4 percent annually, 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, 2018, 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.

MD&A LIQUIDITY AND CAPITAL RESOURCES

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, 2018, Duke Energy had cash and cash equivalents and short-term investments of $442 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 2019, Duke Energy anticipates issuing additional debt of $7.5 billion, primarily for the purpose of funding capital expenditures and debt maturities. See to Note 6 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding significant debt issuances in 2018.

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

	Projected 2019	Actual 2018	Actual 2017
Equity	44 %	43 %	43 %
Debt	56 %	57 %	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 percent for each borrower, excluding Piedmont, and 70 percent 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, 2018, 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.

MD&ALIQUIDITY AND CAPITAL RESOURCES

Credit Ratings

Moody's, S&P and Fitch Ratings, Inc. provide credit ratings for various Duke Energy Registrants. The following table includes Duke Energy and certain subsidiaries' credit ratings and ratings outlook as of February 2019.

	Moody's	S&P	Fitch
Duke Energy Corporation	Stable	Stable	Stable
Issuer Credit Rating	Baa1	A-	BBB+
Senior Unsecured Debt	Baa1	BBB+	BBB+
Commercial Paper	P-2	A-2	F-2
Duke Energy Carolinas	Stable	Stable	N/A
Senior Secured Debt	Aa2	A	N/A
Senior Unsecured Debt	A1	A-	N/A
Progress Energy	Stable	Stable	N/A
Senior Unsecured Debt	Baa1	BBB+	N/A
Duke Energy Progress	Stable	Stable	N/A
Senior Secured Debt	Aa3	A	N/A
Duke Energy Florida	Stable	Stable	N/A
Senior Secured Debt	A1	A	N/A
Senior Unsecured Debt	A3	A-	N/A
Duke Energy Ohio	Stable	Stable	N/A
Senior Secured Debt	A2	A	N/A
Senior Unsecured Debt	Baa1	A-	N/A
Duke Energy Indiana	Stable	Stable	N/A
Senior Secured Debt	Aa3	A	N/A
Senior Unsecured Debt	A2	A-	N/A
Duke Energy Kentucky	Stable	Stable	N/A
Senior Unsecured Debt	Baa1	A-	N/A
Piedmont Natural Gas	Stable	Stable	N/A
Senior Unsecured	A3	A-	N/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 three most recently completed fiscal years.

	Years Ended December 31,		
(in millions)	2018	2017	2016
Cash flows provided by (used in):			
Operating activities	$7,186	$6,624	$6,863
Investing activities	(10,060)	(8,442)	(11,528)
Financing activities	2,960	1,782	4,251
Changes in cash and cash equivalents included in assets held for sale	—	—	474
Net increase (decrease) in cash, cash equivalents and restricted cash	86	(36)	60
Cash, cash equivalents and restricted cash at beginning of period	505	541	481

Cash, cash equivalents and restricted cash at end of period	$591	$505	$541

MD&ALIQUIDITY AND CAPITAL RESOURCES

OPERATING CASH FLOWS

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

	Years Ended December 31,				
(in millions)	2018	2017	Variance 2018 vs. 2017	2016	Variance 2017 vs. 2016
Net income	$2,644	$3,064	$ (420)	$2,170	$ 894
Non-cash adjustments to net income	6,484	5,380	1,104	5,305	75
Contributions to qualified pension plans	(141)	(19)	(122)	(155)	136
Payments for AROs	(533)	(571)	38	(608)	37
Payment for disposal of other assets	(105)	—	(105)	—	—
Working capital	(1,163)	(1,230)	67	151	(1,381)
Net cash provided by operating activities	$7,186	$6,624	$ 562	$6,863	$ (239)

For the year ended December 31, 2018, compared to 2017, the variance was driven primarily by:

- a $684 million increase in net income after adjustment for non-cash items primarily due to favorable weather and increased pricing and volumes in the current period; and
- a $38 million decrease in payments to AROs.

Offset by:

- a $122 million increase in contributions to qualified pension plans; and
- a $105 million payment for disposal of Beckjord.

For the year ended December 31, 2017, compared to 2016, the variance was driven primarily by:

- a $1,381 million decrease in working capital due to weather, payment of merger transaction and integration related costs and increased property tax payments in 2017.

Offset by:

- a $969 million increase in net income after non-cash adjustments primarily due to the inclusion of Piedmont's earnings for a full year, favorable pricing and weather-normal retail volumes driven by the residential class in the Electric Utilities and Infrastructure segment combined with continued strong cost control;
- a $136 million decrease in contributions to qualified pension plans; and
- a $37 million decrease in payments to AROs.

INVESTING CASH FLOWS

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

	Years Ended December 31,				
(in millions)	2018	2017	Variance 2018 vs. 2017	2016	Variance 2017 vs. 2016
Capital, investment and acquisition expenditures	$(9,668)	$(8,198)	$ (1,470)	$(13,215)	$ 5,017
Debt and equity securities, net	(15)	27	(42)	83	(56)
Net proceeds from the sales of discontinued operations and other assets, net of cash divested	41	—	41	1,418	(1,418)
Other investing items	(418)	(271)	(147)	186	(457)
Net cash used in investing activities	$(10,060)	$(8,442)	$ (1,618)	$(11,528)	$ 3,086

MD&ALIQUIDITY AND CAPITAL RESOURCES

The primary use of cash related to investing activities is capital, investment and acquisition expenditures, detailed by reportable business segment in the following table.

	Years Ended December 31,		
(in millions)	2018	2017	2016
Electric Utilities and Infrastructure	$8,086	$7,024	$6,649
Gas Utilities and Infrastructure	1,133	907	5,519
Commercial Renewables	193	92	857
Other	256	175	190
Total capital, investment and acquisition expenditures	$9,668	$8,198	$13,215

For the year ended December 31, 2018, compared to 2017, the variance was driven primarily by:

- a $1,470 million increase in capital, investment and acquisition expenditures in all reportable business segments, including expenditures related to W.S. Lee CC, Asheville and Citrus County CC at Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, respectively.

For the year ended December 31, 2017, compared to 2016, the variance was driven primarily by:

- a $5,017 million decrease in capital, investment and acquisition expenditures mainly due to the Piedmont acquisition in the prior year.

Partially offset by:

- a $1,418 million decrease in net proceeds from sales of discontinued operations due to the prior year sale of the International business.

FINANCING CASH FLOWS

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

	Years Ended December 31,				
			Variance 2018 vs.		Variance 2017 vs.
(in millions)	2018	2017	2017	2016	2016
Issuance of common stock	$1,838	$—	$ 1,838	$731	$ (731)
Issuances of long-term debt, net	2,393	4,593	(2,200)	7,315	(2,722)
Notes payable and commercial paper	1,171	(362)	1,533	(1,447)	1,085
Dividends paid	(2,471)	(2,450)	(21)	(2,332)	(118)
Other financing items	29	1	28	(16)	17
Net cash provided by financing activities	$2,960	$1,782	$ 1,178	$4,251	$ (2,469)

For the year ended December 31, 2018, compared to 2017, the variance was driven primarily by:

- a $1,838 million increase in proceeds from the issuance of common stock; and
- a $1,533 million increase in net borrowings from notes payable and commercial paper primarily due to increased funding requirements for capital expenditures and storm costs.

Partially offset by:

- a $2,200 million net decrease in proceeds from issuances of long-term debt primarily due to timing related to refinancing of existing maturities, fund growth and general corporate needs.

For the year ended December 31, 2017, compared to 2016, the variance was driven primarily by:

- a $2,722 million net decrease in proceeds from issuances of long-term debt driven principally by the prior year $3,750 million of senior unsecured notes used to fund a portion of the Piedmont acquisition, offset primarily by $900 million of first mortgage bonds issued by Duke Energy Florida in the current year to fund capital expenditures for ongoing construction and capital maintenance and for general corporate purposes;

- a $731 million decrease in proceeds from stock issuances used to fund a portion of the Piedmont acquisition in 2016; and
- a $118 million current year increase in dividends paid.

Partially offset by:

- a $1,085 million decrease in net borrowings from notes payable and commercial paper primarily due to the use of proceeds from $1,294 million nuclear asset-recovery bonds issued at Duke Energy Florida in 2016 to pay down outstanding commercial paper.

MD&A OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

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 Energy Capital, LLC (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 7 to the Consolidated Financial Statements, “Guarantees and Indemnifications,” for further details of the guarantee arrangements. Issuance of these guarantee arrangements is not required for the majority of Duke Energy’s operations. Thus, if Duke Energy discontinued issuing these guarantees, there would not be a material impact to the consolidated results of operations, cash flows or financial position.

Other than the guarantee arrangements discussed above, normal operating lease arrangements 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 Notes 5 and 17 to the Consolidated Financial Statements, “Commitments and Contingencies" and "Variable Interest Entities," respectively.

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, 2018.

	Payments Due By Period				
(in millions)	Total	Less than 1 year (2019)	2-3 years (2020 & 2021)	4-5 years (2022 & 2023)	More than 5 years (2024 & beyond)
Long-term debt[a]	$52,446	$3,291	$8,311	$5,861	$34,983
Interest payments on long-term debt[b]	32,834	2,121	3,823	3,329	23,561
Capital leases[c]	1,428	170	351	330	577
Operating leases[c]	1,991	239	405	330	1,017
Purchase obligations:[d]					
Fuel and purchased power[e][f]	20,496	4,329	5,315	3,153	7,699
Other purchase obligations[g]	12,436	4,617	1,178	775	5,866
Nuclear decommissioning trust annual funding[h]	482	24	48	48	362
Land easements[i]	234	10	20	20	184
Total contractual cash obligations[j][k]	$122,347	$14,801	$19,451	$13,846	$74,249

(a) See Note 6 to the Consolidated Financial Statements, “Debt and Credit Facilities.”

(b) Interest payments on variable rate debt instruments were calculated using December 31, 2018, interest rates and holding them constant for the life of the instruments.

(c) See Note 5 to the Consolidated Financial Statements, “Commitments and Contingencies.” Amounts in the table above include the interest component of capital 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, 2018, 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 purchase power agreement. See Note 17 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 9 to the Consolidated Financial Statements, "Asset Retirement Obligations."

(i) Related to Commercial Renewables wind and solar facilities.

MD&A OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

(j) Unrecognized tax benefits of $24 million are not reflected in this table as Duke Energy cannot predict when open income tax years will close with completed examinations. See Note 23 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 22 to the Consolidated Financial Statements, "Employee Benefit Plans"), AROs, including ash management expenditures (see Note 9 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 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.

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 14 to the

Consolidated Financial Statements, “Derivatives and Hedging.”

The inputs and methodologies used to determine the fair value of contracts are validated by an internal group separate from Duke Energy’s deal origination function. While Duke Energy uses common industry practices to develop its valuation techniques, changes in its pricing methodologies or the underlying assumptions could result in significantly different fair values and income recognition.

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.

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.

MD&A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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, 6, 14 and 16 to the Consolidated Financial Statements, “Summary of Significant Accounting Policies,” “Debt and Credit Facilities,” “Derivatives and Hedging,” and “Fair Value Measurements.”

At December 31, 2018, Duke Energy had $1.2 billion of U.S. treasury lock agreements, $644 million notional amount of floating-to-fixed swaps outstanding, $500 million notional amount of fixed-to-floating swaps outstanding and $300 million forward-starting swaps outstanding. Duke Energy had $8.0 billion of unhedged long- and short-term floating interest rate exposure at December 31, 2018. The impact of a 100 basis point change in interest rates on pretax income is approximately $80 million at December 31, 2018. 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, 2018.

See Note 14, "Derivatives and Hedging," to the Consolidated Financial Statements for additional information about the forward-starting interest rate swaps related to the Piedmont acquisition.

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 inability to post collateral is sufficient cause to terminate contracts and liquidate all positions.

The Duke Energy Registrants also obtain cash or letters of credit 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 14 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 regional transmission organizations, distribution companies, municipalities, electric cooperatives and utilities located throughout the U.S. The Duke Energy Registrants have concentrations of receivables from such entities throughout these regions. These concentrations of receivables may affect the Duke Energy Registrants' overall credit risk in that risk factors can negatively impact the credit quality of the entire sector.

The Duke Energy Registrants are also subject to credit risk from transactions with their suppliers that involve prepayments 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 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 variable interest entity. 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 17 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.

MD&A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Duke Energy's Commercial Renewables business 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, and is therefore exposed to market price risk and credit risk related to these agreements. Credit concentration exists to certain counterparties on 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 7 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 15 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 22 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, 2018, 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 9 to the Consolidated Financial Statements, “Asset Retirement Obligations,” for additional information regarding nuclear decommissioning costs. See Note 15 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 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.

MD&A OTHER MATTERS

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 that are no longer receiving CCR but contain liquid located at stations currently generating electricity (regardless of fuel source). 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 have 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 a CCR litigation settlement, as well as changes that the agency considers warranted due to the passage of the Water Infrastructure Improvements for the Nation Act, which provides statutory authority for state and federal 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. Briefing in the case concluded in February 2019.

In addition to the requirements of the federal CCR regulation, CCR landfills and surface impoundments will continue to be independently 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 9 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, 2018, and December 31, 2017, 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 has submitted comprehensive site assessments and groundwater corrective plans to NCDEQ and will submit to NCDEQ site-specific coal ash impoundment closure plans in advance of closure. In support of these closure plans, on November 15, 2018, Duke Energy submitted options

analyses, groundwater modeling and net environmental benefits analyses for six sites potentially eligible for closure by cap in place. Separately, on November 16, 2018, Duke Energy submitted a variance application requesting that NCDEQ grant a six-month extension to the closure deadline applicable to the CCR surface impoundments at the Sutton Plant. NCDEQ held a public meeting on January 14, 2019 at which it announced that an extension would be appropriate. A final decision on the variance application is expected by April 15, 2019.

MD&A OTHER MATTERS

The current plans for each site are listed in the table below.

NCDEQ Risk Classification	Plants/Current Closure Date	Expected Closure Method
Low	Allen – December 31, 2029[a] Belews Creek – December 31, 2029[a] Buck – December 31, 2029[a][b] Rogers – December 31, 2029[a] Marshall – December 31, 2029[a] Mayo – December 31, 2029[a] Roxboro – December 31, 2029[a]	Combination of a cap system and a groundwater monitoring system, or for selected sites, conversion for beneficial use.
Medium	H.F. Lee – December 31, 2029[b] Cape Fear – December 31, 2029[b] Weatherspoon – August 1, 2028 Sutton – August 1, 2019	Excavation, which may include conversion of the basin to a lined industrial landfill, transferring coal ash to an engineered landfill, or for selected sites, conversion for beneficial use.
High	Riverbend – August 1, 2019 Dan River – August 1, 2019 Asheville – August 1, 2022	Excavation, which may include a combination of transferring coal ash to an engineered landfill or for selected sites, conversion for beneficial use.

(a) In November 2018, the closure deadline for these basins was extended to December 31, 2029 as a result of the completion of certain dam improvement projects and alternative drinking water source projects by October 15, 2018.

(b) The Coal Ash Act requires the installation and operation of three large-scale coal ash beneficiation projects to produce reprocessed ash for use in the concrete industry. Duke Energy has selected the Buck, H.F. Lee and Cape Fear plants for these projects. Closure at these sites is required to be completed no later than December 31, 2029.

For further information on ash basins and recovery, see Notes 4 and 9 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, 2018, 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 ELGs through December 31, 2023. 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 9 to the Consolidated Financial Statements.

(in millions)	Five-Year Estimated Costs
Duke Energy	$ 420
Duke Energy Carolinas	185
Progress Energy	200
Duke Energy Progress	80
Duke Energy Florida	120
Duke Energy Ohio	15
Duke Energy Indiana	20

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 regulations 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
- Carbon Pollution Standards for New, Modified and Reconstructed Power Plants
- Clean Power Plan/ACE Rule

Duke Energy continues to comply with enacted environmental laws and regulations even as certain of these regulations are in various stages of clarification, revision or legal challenges. The Duke Energy Registrants cannot predict the outcome of these matters.

MD&A OTHER 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 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 four 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 seek 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 published a final rule denying the Maryland petition. That same day, Maryland appealed EPA's denial of their Section 126 petition to 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

The Duke Energy Registrants' GHG emissions consist primarily of CO_2 and result primarily from operating a fleet of coal-fired and natural gas-fired power plants. In 2018, the Duke Energy Registrants' power plants emitted approximately 105 million tons of CO_2. Future levels of CO_2 emissions will be influenced by variables that include fuel 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 CO_2 emissions over time. Actions have included the retirement of 47 coal-fired EGUs 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 CO_2 emissions per unit of electricity generated. Duke Energy also has made investments to expand its portfolio of wind and solar projects, increase energy efficiency offerings and invest in its zero-CO_2 emissions hydropower and nuclear plants. These efforts have diversified its system and significantly reduced CO_2 emissions. Between 2005 and 2018, the Duke Energy Registrants have collectively lowered the CO_2 emissions from their electricity generation by 31 percent, which potentially lowers the exposure to any future mandatory CO_2 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 CO_2 emissions, including energy efficiency, 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 CO_2 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, biannually 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, energy efficiency and demand response initiatives. The IRP process also helps evaluate potential environmental and regulatory scenarios to better mitigate policy and economic risks. The IRPs we file with regulators look out 10 to 20 years depending on the jurisdiction.

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

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 enacted 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. The law stipulated certain deadlines for Duke Energy to file for NCUC approval of programs required under the law. Duke Energy has made some regulatory filings since the passage of the law and will continue to implement the requirements of House Bill 589.

In July 2018, Duke Energy issued an RFP for the first tranche of 680 MW. In accordance with the provisions of HB 589, total procurement will be 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.

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.

MD&A OTHER MATTERS

Liquefied Natural Gas Facility

Piedmont Natural Gas plans to build a liquefied natural gas facility in Robeson County, North Carolina. The project is expected to be completed in the summer of 2021 at a cost of $250 million. Construction will begin in the summer of 2019.

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.”

FINANCIAL STATEMENTS

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORTS

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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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, 2018, 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 28, 2019, 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.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina

February 28, 2019

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

FINANCIAL STATEMENTS

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
(in millions, except per share amounts)	2018	2017	2016
Operating Revenues			
Regulated electric	$22,097	$21,177	$21,221
Regulated natural gas	1,773	1,734	863
Nonregulated electric and other	651	654	659
Total operating revenues	24,521	23,565	22,743
Operating Expenses			
Fuel used in electric generation and purchased power	6,831	6,350	6,625
Cost of natural gas	697	632	265
Operation, maintenance and other	6,463	5,944	6,224
Depreciation and amortization	4,074	3,527	3,294
Property and other taxes	1,280	1,233	1,142
Impairment charges	402	282	18
Total operating expenses	19,747	17,968	17,568
(Losses) Gains on Sales of Other Assets and Other, net	(89)	28	27
Operating Income	4,685	5,625	5,202
Other Income and Expenses			
Equity in earnings (losses) of unconsolidated affiliates	83	119	(15)
Other income and expenses, net	399	508	463
Total other income and expenses	482	627	448
Interest Expense	2,094	1,986	1,916
Income From Continuing Operations Before Income Taxes	3,073	4,266	3,734
Income Tax Expense From Continuing Operations	448	1,196	1,156
Income From Continuing Operations	2,625	3,070	2,578
Income (Loss) From Discontinued Operations, net of tax	19	(6)	(408)
Net Income	2,644	3,064	2,170
Less: Net (Loss) Income Attributable to Noncontrolling Interests	(22)	5	18
Net Income Attributable to Duke Energy Corporation	$2,666	$3,059	$2,152
Earnings Per Share – Basic and Diluted			
Income from continuing operations attributable to Duke Energy Corporation common stockholders			
Basic	$3.73	$4.37	$3.71
Diluted	$3.73	$4.37	$3.71
Income (Loss) from discontinued operations attributable to Duke Energy Corporation common stockholders			
Basic	$0.03	$(0.01)	$(0.60)
Diluted	$0.03	$(0.01)	$(0.60)
Net income attributable to Duke Energy Corporation common stockholders			
Basic	$3.76	$4.36	$3.11
Diluted	$3.76	$4.36	$3.11
Weighted average shares outstanding			

Basic	708	700	691
Diluted	708	700	691

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	2018	2017	2016
Net Income	$2,644	$3,064	$2,170
Other Comprehensive (Loss) Income, net of tax			
Foreign currency translation adjustments	—	—	694
Pension and OPEB adjustments	(6)	3	(11)
Net unrealized (losses) gains on cash flow hedges	(10)	2	17
Reclassification into earnings from cash flow hedges	6	8	13
Unrealized (losses) gains on available-for-sale securities	(3)	13	2
Other Comprehensive (Loss) Income, net of tax	(13)	26	715
Comprehensive Income	2,631	3,090	2,885
Less: Comprehensive (Loss) Income Attributable to Noncontrolling Interests	(22)	5	20
Comprehensive Income Attributable to Duke Energy Corporation	$2,653	$3,085	$2,865

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CORPORATION
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents	$442	$358
Receivables (net of allowance for doubtful accounts of $16 at 2018 and $14 at 2017)	962	779
Receivables of VIEs (net of allowance for doubtful accounts of $55 at 2018 and $54 at 2017)	2,172	1,995
Inventory	3,084	3,250
Regulatory assets (includes $52 at 2018 and $51 at 2017 related to VIEs)	2,005	1,437
Other (includes $162 at 2018 and $214 at 2017 related to VIEs)	1,049	634
Total current assets	9,714	8,453
Property, Plant and Equipment		
Cost	134,458	127,507
Accumulated depreciation and amortization	(43,126)	(41,537)
Generation facilities to be retired, net	362	421
Net property, plant and equipment	91,694	86,391
Other Noncurrent Assets		
Goodwill	19,303	19,396
Regulatory assets (includes $1,041 at 2018 and $1,091 at 2017 related to VIEs)	13,617	12,442
Nuclear decommissioning trust funds	6,720	7,097
Investments in equity method unconsolidated affiliates	1,409	1,175
Other	2,935	2,960
Total other noncurrent assets	43,984	43,070
Total Assets	$145,392	$137,914
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$3,487	$3,043
Notes payable and commercial paper	3,410	2,163
Taxes accrued	577	551
Interest accrued	559	525
Current maturities of long-term debt (includes $227 at 2018 and $225 at 2017 related to VIEs)	3,406	3,244
Asset retirement obligations	919	689
Regulatory liabilities	598	402
Other	2,085	1,865
Total current liabilities	15,041	12,482
Long-Term Debt (includes $3,998 at 2018 and $4,306 at 2017 related to VIEs)	51,123	49,035
Other Noncurrent Liabilities		
Deferred income taxes	7,806	6,621
Asset retirement obligations	9,548	9,486
Regulatory liabilities	14,834	15,330
Accrued pension and other post-retirement benefit costs	988	1,103
Investment tax credits	568	539
Other (includes $212 at 2018 and $241 at 2017 related to VIEs)	1,650	1,581
Total other noncurrent liabilities	35,394	34,660
Commitments and Contingencies		
Equity		

Common stock, $0.001 par value, 2 billion shares authorized; 727 million shares outstanding at 2018 and 700 million shares outstanding at 2017	1	1
Additional paid-in capital	40,795	38,792
Retained earnings	3,113	3,013
Accumulated other comprehensive loss	(92)	(67)
Total Duke Energy Corporation stockholders' equity	43,817	41,739
Noncontrolling interests	17	(2)
Total equity	43,834	41,737
Total Liabilities and Equity	$145,392	$137,914

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$2,644	$3,064	$2,170
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	4,696	4,046	3,880
Equity component of AFUDC	(221)	(237)	(200)
Losses (Gains) on sales of other assets	88	(33)	477
Impairment charges	402	282	212
Deferred income taxes	1,079	1,433	900
Equity in (earnings) losses of unconsolidated affiliates	(83)	(119)	15
Accrued pension and other post-retirement benefit costs	61	8	21
Contributions to qualified pension plans	(141)	(19)	(155)
Payments for asset retirement obligations	(533)	(571)	(608)
Payment for the disposal of other assets	(105)	—	—
Other rate case adjustments	37	—	—
Provision for rate refunds	425	—	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	22	18	34
Receivables	(345)	(83)	(372)
Inventory	156	268	272
Other current assets	(721)	(400)	(174)
Increase (decrease) in			
Accounts payable	479	(204)	296
Taxes accrued	23	149	236
Other current liabilities	270	(482)	182
Other assets	(1,008)	(436)	(186)
Other liabilities	(39)	(60)	(137)
Net cash provided by operating activities	7,186	6,624	6,863
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(9,389)	(8,052)	(7,901)
Contributions to equity method investments	(416)	(414)	(307)
Acquisitions, net of cash acquired	—	(13)	(4,778)
Return of investment capital	137	281	1
Purchases of debt and equity securities	(3,762)	(4,071)	(5,153)
Proceeds from sales and maturities of debt and equity securities	3,747	4,098	5,236
Proceeds from the sales of discontinued operations and other assets, net of cash divested	41	—	1,418
Other	(418)	(271)	(44)
Net cash used in investing activities	(10,060)	(8,442)	(11,528)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the:			
Issuance of long-term debt	5,299	6,909	9,238
Issuance of common stock	1,838	—	731
Payments for the redemption of long-term debt	(2,906)	(2,316)	(1,923)
Proceeds from the issuance of short-term debt with original maturities greater than 90 days	472	319	2,081

Payments for the redemption of short-term debt with original maturities greater than 90 days	(282)	(272)	(2,166)
Notes payable and commercial paper	981	(409)	(1,362)
Dividends paid	(2,471)	(2,450)	(2,332)
Other	29	1	(16)
Net cash provided by financing activities	2,960	1,782	4,251
Changes in cash and cash equivalents included in assets held for sale	—	—	474
Net increase (decrease) in cash, cash equivalents, and restricted cash	86	(36)	60
Cash, cash equivalents, and restricted cash at beginning of period	505	541	481
Cash, cash equivalents, and restricted cash at end of period	$591	$505	$541
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	$2,086	$1,963	$1,794
Cash (received from) paid for income taxes	(266)	4	229
Significant non-cash transactions:			
Accrued capital expenditures	1,112	1,032	1,000
Non-cash dividends	107	—	—

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

				Duke Energy Corporation Stockholders'						
				Accumulated Other Comprehensive Loss						
(in millions)	Common Stock Shares	Common Stock	Additional Paid-in Capital	Retained Earnings	Foreign Currency Translation Adjustments	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, 2015	688	$ 1	$ 37,968	$ 2,564	$ (692)	$ (50)	$ (3)	$ (61)	$ 39,727	$ 44	$ 39,771
Net income	—	—	—	2,152	—	—	—	—	2,152	18	2,170
Other comprehensive income (loss)[a]	—	—	—	—	692	30	2	(11)	713	2	715
Common stock issuances, including dividend reinvestment and employee benefits	12	—	773	—	—	—	—	—	773	—	773
Common stock dividends	—	—	—	(2,332)	—	—	—	—	(2,332)	—	(2,332)
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(6)	(6)
Other[b]	—	—	—	—	—	—	—	—	—	(50)	(50)
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	—	—	—	—	—	—	—	—	—	(2)	(2)

interest in subsidiaries												
Other[c]	—	—	—	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) income	—	—	—	—	—	(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 interests in subsidiaries	—	—	—	—	—	—	—	—	—	(1)	(1)	
Other[d]	—	—	—	12	—	—	(12)	—	—	42	42	
Balance at December 31, 2018	727	$ 1	$40,795	$3,113	$—	$(14)	$ (3)	$ (75)	$43,817	$ 17	$43,834	

(a) Foreign Currency Translation Adjustments amount includes $620 million of cumulative adjustment realized as a result of the sale of the Latin American generation business. See Note 2 to the Consolidated Financial Statements.

(b) Noncontrolling Interests amount is primarily related to the sale of the Latin American generation business. See Note 2 to the Consolidated Financial Statements.

(c) 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.

(d) Amounts in Retained Earnings and Accumulated Other Comprehensive Loss 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.

See Notes to Consolidated Financial Statements

REPORTS

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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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 28, 2019

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

FINANCIAL STATEMENTS

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

	Years Ended December 31,		
(in millions)	2018	2017	2016
Operating Revenues	$7,300	$7,302	$7,322
Operating Expenses			
Fuel used in electric generation and purchased power	1,821	1,822	1,797
Operation, maintenance and other	2,130	2,021	2,158
Depreciation and amortization	1,201	1,090	1,075
Property and other taxes	295	281	276
Impairment charges	192	—	1
Total operating expenses	5,639	5,214	5,307
(Losses) Gains on Sales of Other Assets and Other, net	(1)	1	(5)
Operating Income	1,660	2,089	2,010
Other Income and Expenses, net	153	199	214
Interest Expense	439	422	424
Income Before Income Taxes	1,374	1,866	1,800
Income Tax Expense	303	652	634
Net Income	$1,071	$1,214	$1,166
Other Comprehensive Income, net of tax			
Reclassification into earnings from cash flow hedges	1	2	2
Other Comprehensive Income, net of tax	1	2	2
Comprehensive Income	$1,072	$1,216	$1,168

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents	$33	$16
Receivables (net of allowance for doubtful accounts of $2 at 2018 and 2017)	219	200
Receivables of VIEs (net of allowance for doubtful accounts of $7 at 2018 and 2017)	699	640
Receivables from affiliated companies	182	95
Inventory	948	971
Regulatory assets	520	299
Other	72	19
Total current assets	2,673	2,240
Property, Plant and Equipment		
Cost	44,741	42,939
Accumulated depreciation and amortization	(15,496)	(15,063)
Net property, plant and equipment	29,245	27,876
Other Noncurrent Assets		
Regulatory assets	3,457	2,853
Nuclear decommissioning trust funds	3,558	3,772
Other	1,027	979
Total other noncurrent assets	8,042	7,604
Total Assets	$39,960	$37,720
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$988	$842
Accounts payable to affiliated companies	230	209
Notes payable to affiliated companies	439	104
Taxes accrued	171	234
Interest accrued	102	108
Current maturities of long-term debt	6	1,205
Asset retirement obligations	290	337
Regulatory liabilities	199	126
Other	571	486
Total current liabilities	2,996	3,651
Long-Term Debt	10,633	8,598
Long-Term Debt Payable to Affiliated Companies	300	300
Other Noncurrent Liabilities		
Deferred income taxes	3,689	3,413
Asset retirement obligations	3,659	3,273
Regulatory liabilities	5,999	6,231
Accrued pension and other post-retirement benefit costs	99	95
Investment tax credits	231	232
Other	671	566

Total other noncurrent liabilities	14,348	13,810
Commitments and Contingencies		
Equity		
Member's equity	11,689	11,368
Accumulated other comprehensive loss	(6)	(7)
Total equity	11,683	11,361
Total Liabilities and Equity	$39,960	$37,720

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$1,071	$1,214	$1,166
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	1,487	1,409	1,382
Equity component of AFUDC	(73)	(106)	(102)
Losses (Gains) on sales of other assets	1	(1)	5
Impairment charges	192	—	1
Deferred income taxes	305	410	470
Accrued pension and other post-retirement benefit costs	4	(4)	4
Contributions to qualified pension plans	(46)	—	(43)
Payments for asset retirement obligations	(230)	(271)	(287)
Provision for rate refunds	182	—	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	2	9	5
Receivables	(86)	(9)	(76)
Receivables from affiliated companies	(87)	68	(56)
Inventory	25	78	215
Other current assets	(161)	7	67
Increase (decrease) in			
Accounts payable	168	23	(69)
Accounts payable to affiliated companies	21	(38)	18
Taxes accrued	(65)	86	187
Other current liabilities	89	(161)	63
Other assets	(179)	(49)	20
Other liabilities	(90)	(31)	6
Net cash provided by operating activities	2,530	2,634	2,976
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(2,706)	(2,524)	(2,220)
Purchases of debt and equity securities	(1,810)	(2,124)	(2,832)
Proceeds from sales and maturities of debt and equity securities	1,810	2,128	2,832
Notes receivable from affiliated companies	—	66	97
Other	(147)	(109)	(83)
Net cash used in investing activities	(2,853)	(2,563)	(2,206)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	1,983	569	1,587
Payments for the redemption of long-term debt	(1,205)	(116)	(356)
Notes payable to affiliated companies	335	104	—
Distributions to parent	(750)	(625)	(2,000)
Other	(23)	(1)	—
Net cash provided by (used in) financing activities	340	(69)	(769)

Net increase in cash and cash equivalents	17	2	1
Cash and cash equivalents at beginning of period	16	14	13
Cash and cash equivalents at end of period	$33	$16	$14
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	$452	$398	$393
Cash paid for (received from) income taxes	89	193	(60)
Significant non-cash transactions:			
Accrued capital expenditures	302	315	347

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY CAROLINAS, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity	Accumulated Other Comprehensive Loss Net Losses on Cash Flow Hedges	Total Equity
Balance at December 31, 2015	$11,617	$ (11)	$11,606
Net income	1,166	—	1,166
Other comprehensive income	—	2	2
Distributions to parent	(2,000)	—	(2,000)
Other	(2)	—	(2)
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

See Notes to Consolidated Financial Statements

REPORTS

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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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 28, 2019

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

FINANCIAL STATEMENTS

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

	Years Ended December 31,		
(in millions)	2018	2017	2016
Operating Revenues	$10,728	$9,783	$9,853
Operating Expenses			
Fuel used in electric generation and purchased power	3,976	3,417	3,644
Operation, maintenance and other	2,613	2,301	2,458
Depreciation and amortization	1,619	1,285	1,213
Property and other taxes	529	503	487
Impairment charges	87	156	7
Total operating expenses	8,824	7,662	7,809
Gains on Sales of Other Assets and Other, net	24	26	25
Operating Income	1,928	2,147	2,069
Other Income and Expenses, net	165	209	186
Interest Expense	842	824	689
Income From Continuing Operations Before Income Taxes	1,251	1,532	1,566
Income Tax Expense From Continuing Operations	218	264	527
Income From Continuing Operations	1,033	1,268	1,039
Income From Discontinued Operations, net of tax	—	—	2
Net Income	1,033	1,268	1,041
Less: Net Income Attributable to Noncontrolling Interests	6	10	10
Net Income Attributable to Parent	$1,027	$1,258	$1,031
Net Income	$1,033	$1,268	$1,041
Other Comprehensive Income, net of tax			
Pension and OPEB adjustments	5	4	1
Net unrealized gain on cash flow hedges	6	5	—
Reclassification into earnings from cash flow hedges	—	—	8
Unrealized (losses) gains on available-for-sale securities	(1)	4	1
Other Comprehensive Income, net of tax	10	13	10
Comprehensive Income	1,043	1,281	1,051
Less: Comprehensive Income Attributable to Noncontrolling Interests	6	10	10
Comprehensive Income Attributable to Parent	$1,037	$1,271	$1,041

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

PROGRESS ENERGY, INC.
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents	$ 67	$ 40
Receivables (net of allowance for doubtful accounts of $5 at 2018 and $4 at 2017)	220	123
Receivables of VIEs (net of allowance for doubtful accounts of $8 at 2018 and $7 at 2017)	909	780
Receivables from affiliated companies	168	31
Notes receivable from affiliated companies	—	240
Inventory	1,459	1,592
Regulatory assets (includes $52 at 2018 and $51 at 2017 related to VIEs)	1,137	741
Other (includes $39 at 2018 and $44 at 2017 related to VIEs)	125	334
Total current assets	4,085	3,881
Property, Plant and Equipment		
Cost	50,260	47,323
Accumulated depreciation and amortization	(16,398)	(15,857)
Generation facilities to be retired, net	362	421
Net property, plant and equipment	34,224	31,887
Other Noncurrent Assets		
Goodwill	3,655	3,655
Regulatory assets (includes $1,041 at 2018 and $1,091 at 2017 related to VIEs)	6,564	6,010
Nuclear decommissioning trust funds	3,162	3,324
Other	974	931
Total other noncurrent assets	14,355	13,920
Total Assets	$ 52,664	$ 49,688

LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 1,172	$ 1,006
Accounts payable to affiliated companies	360	251
Notes payable to affiliated companies	1,235	805
Taxes accrued	109	101
Interest accrued	246	212
Current maturities of long-term debt (includes $53 at 2018 and 2017 related to VIEs)	1,672	771
Asset retirement obligations	514	295
Regulatory liabilities	280	213
Other	821	729
Total current liabilities	6,409	4,383
Long-Term Debt (includes $1,636 at 2018 and $1,689 at 2017 related to VIEs)	17,089	16,916
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	3,941	3,502
Asset retirement obligations	4,897	5,119
Regulatory liabilities	5,049	5,306
Accrued pension and other post-retirement benefit costs	521	545
Other	351	302
Total other noncurrent liabilities	14,759	14,774
Commitments and Contingencies		
Equity		
Common stock, $0.01 par value, 100 shares authorized and outstanding at 2018 and 2017	—	—
Additional paid-in capital	9,143	9,143
Retained earnings	5,131	4,350
Accumulated other comprehensive loss	(20)	(25)
Total Progress Energy, Inc. stockholder's equity	14,254	13,468
Noncontrolling interests	3	(3)
Total equity	14,257	13,465

Total Liabilities and Equity	$ 52,664	$ 49,688

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

PROGRESS ENERGY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$1,033	$1,268	$1,041
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	1,987	1,516	1,435
Equity component of AFUDC	(104)	(92)	(76)
Gains on sales of other assets	(24)	(28)	(34)
Impairment charges	87	156	7
Deferred income taxes	358	703	532
Accrued pension and other post-retirement benefit costs	24	(28)	(24)
Contributions to qualified pension plans	(45)	—	(43)
Payments for asset retirement obligations	(230)	(248)	(270)
Other rate case adjustments	37	—	—
Provision for rate refunds	122	—	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	18	—	42
Receivables	(207)	(89)	7
Receivables from affiliated companies	(137)	71	211
Inventory	121	125	35
Other current assets	(12)	(397)	50
Increase (decrease) in			
Accounts payable	217	(260)	252
Accounts payable to affiliated companies	109	(97)	37
Taxes accrued	8	17	15
Other current liabilities	129	(166)	(42)
Other assets	(913)	(300)	(248)
Other liabilities	(34)	(98)	(36)
Net cash provided by operating activities	2,544	2,053	2,891
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(3,854)	(3,152)	(3,306)
Asset Acquisitions	—	—	(10)
Purchases of debt and equity securities	(1,753)	(1,806)	(2,143)
Proceeds from sales and maturities of debt and equity securities	1,769	1,824	2,187
Net proceeds from sales of other assets	20	—	—
Proceeds from insurance	—	7	58
Proceeds from the sale of nuclear fuel	—	20	20
Notes receivable from affiliated companies	240	(160)	(80)
Other	(182)	(86)	47
Net cash used in investing activities	(3,760)	(3,353)	(3,227)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	1,833	2,118	2,375

Payments for the redemption of long-term debt	(771)	(813)	(327)
Notes payable to affiliated companies	430	100	444
Dividends to parent	(250)	(124)	(2,098)
Other	(1)	(4)	(3)
Net cash provided by financing activities	1,241	1,277	391
Net increase (decrease) in cash, cash equivalents, and restricted cash	25	(23)	55
Cash, cash equivalents, and restricted cash at beginning of period	87	110	55
Cash, cash equivalents, and restricted cash at end of period	$112	$87	$110
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	$798	$773	$673
Cash received from income taxes	(348)	(146)	(187)
Significant non-cash transactions:			
Accrued capital expenditures	478	391	317
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

FINANCIAL STATEMENTS

PROGRESS ENERGY, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss: Net Losses on Cash Flow Hedges	Net Unrealized Gains (Losses) on Available-for-Sale Securities	Pension and OPEB Adjustments	Total Progress Energy, Inc. Stockholder's Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2015	$ 8,092	$ 4,831	$ (31)	$ —	$ (17)	$ 12,875	$ (22)	$ 12,853
Net income	—	1,031	—	—	—	1,031	10	1,041
Other comprehensive income	—	—	8	1	1	10	—	10
Distributions to noncontrolling interests	—	—	—	—	—	—	(1)	(1)
Dividends to parent	—	(2,098)	—	—	—	(2,098)	—	(2,098)
Other	2	—	—	—	—	2	—	2
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

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

(b) Amounts in Retained Earnings and Accumulated Other Comprehensive Loss 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

REPORTS

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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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 28, 2019

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

FINANCIAL STATEMENTS

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

	Years Ended December 31,		
(in millions)	2018	2017	2016
Operating Revenues	$5,699	$5,129	$5,277
Operating Expenses			
Fuel used in electric generation and purchased power	1,892	1,609	1,830
Operation, maintenance and other	1,578	1,439	1,565
Depreciation and amortization	991	725	703
Property and other taxes	155	156	156
Impairment charges	33	19	1
Total operating expenses	4,649	3,948	4,255
Gains on Sales of Other Assets and Other, net	9	4	3
Operating Income	1,059	1,185	1,025
Other Income and Expenses, net	87	115	132
Interest Expense	319	293	257
Income Before Income Taxes	827	1,007	900
Income Tax Expense	160	292	301
Net Income and Comprehensive Income	$667	$715	$599

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents	$23	$20
Receivables (net of allowance for doubtful accounts of $2 at 2018 and $1 at 2017)	75	56
Receivables of VIEs (net of allowance for doubtful accounts of $5 at 2018 and 2017)	547	459
Receivables from affiliated companies	23	3
Inventory	954	1,017
Regulatory assets	703	352
Other	62	97
Total current assets	2,387	2,004
Property, Plant and Equipment		
Cost	31,459	29,583
Accumulated depreciation and amortization	(11,423)	(10,903)
Generation facilities to be retired, net	362	421
Net property, plant and equipment	20,398	19,101
Other Noncurrent Assets		
Regulatory assets	4,111	3,507
Nuclear decommissioning trust funds	2,503	2,588
Other	612	599
Total other noncurrent assets	7,226	6,694
Total Assets	$30,011	$27,799
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$660	$402
Accounts payable to affiliated companies	278	179
Notes payable to affiliated companies	294	240
Taxes accrued	53	64
Interest accrued	116	102
Current maturities of long-term debt	603	3
Asset retirement obligations	509	295
Regulatory liabilities	178	139
Other	408	376
Total current liabilities	3,099	1,800
Long-Term Debt	7,451	7,204
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	2,119	1,883
Asset retirement obligations	4,311	4,378
Regulatory liabilities	3,955	3,999
Accrued pension and other post-retirement benefit costs	237	248
Investment tax credits	142	143
Other	106	45
Total other noncurrent liabilities	10,870	10,696
Commitments and Contingencies		

Equity		
Member's Equity	8,441	7,949
Total Liabilities and Equity	$30,011	$27,799

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$667	$715	$599
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	1,183	936	907
Equity component of AFUDC	(57)	(47)	(50)
Gains on sales of other assets	(9)	(5)	(6)
Impairment charges	33	19	1
Deferred income taxes	236	384	384
Accrued pension and other post-retirement benefit costs	15	(20)	(32)
Contributions to qualified pension plans	(25)	—	(24)
Payments for asset retirement obligations	(195)	(192)	(212)
Other rate case adjustments	37	—	—
Provisions for rate refunds	122	—	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	5	(4)	4
Receivables	(107)	(58)	(17)
Receivables from affiliated companies	(20)	2	11
Inventory	63	59	12
Other current assets	(201)	(75)	84
Increase (decrease) in			
Accounts payable	219	(230)	181
Accounts payable to affiliated companies	99	(48)	37
Taxes accrued	(11)	(39)	90
Other current liabilities	46	(131)	114
Other assets	(484)	(53)	(163)
Other liabilities	12	(18)	12
Net cash provided by operating activities	1,628	1,195	1,932
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(2,220)	(1,715)	(1,733)
Purchases of debt and equity securities	(1,236)	(1,249)	(1,658)
Proceeds from sales and maturities of debt and equity securities	1,206	1,207	1,615
Net proceeds from the sales of other assets	20	—	—
Proceeds from insurance	—	4	—
Notes receivable from affiliated companies	—	165	(165)
Other	(115)	(55)	26
Net cash used in investing activities	(2,345)	(1,643)	(1,915)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	845	812	505
Payments for the redemption of long-term debt	(3)	(470)	(15)
Notes payable to affiliated companies	54	240	(209)
Distributions to parent	(175)	(124)	(300)
Other	(1)	(1)	(2)
Net cash provided by (used in) financing activities	720	457	(21)

Net increase (decrease) in cash and cash equivalents	3	9	(4)
Cash and cash equivalents at beginning of period	20	11	15
Cash and cash equivalents at end of period	$23	$20	$11
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	$303	$291	$248
Cash (received from) paid for income taxes	(112)	59	(287)
Significant non-cash transactions:			
Accrued capital expenditures	220	191	147

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY PROGRESS, LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity
Balance at December 31, 2015	$ 7,059
Net income	599
Distribution to parent	(300)
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

See Notes to Consolidated Financial Statements

REPORTS

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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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 28, 2019

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

FINANCIAL STATEMENTS

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

	Years Ended December 31,		
(in millions)	2018	2017	2016
Operating Revenues	$5,021	$4,646	$4,568
Operating Expenses			
Fuel used in electric generation and purchased power	2,085	1,808	1,814
Operation, maintenance and other	1,025	853	884
Depreciation and amortization	628	560	509
Property and other taxes	374	347	333
Impairment charges	54	138	6
Total operating expenses	4,166	3,706	3,546
Gains on Sales of Other Assets and Other, net	1	1	—
Operating Income	856	941	1,022
Other Income and Expenses, net	86	96	63
Interest Expense	287	279	212
Income Before Income Taxes	655	758	873
Income Tax Expense	101	46	322
Net Income	$554	$712	$551
Other Comprehensive (Loss) Income, net of tax			
Unrealized (losses) gains on available-for-sale securities	(1)	3	1
Other Comprehensive (Loss) Income, net of tax	(1)	3	1
Comprehensive Income	$553	$715	$552

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED BALANCE SHEETS

(in millions)	December 31, 2018	2017
ASSETS		
Current Assets		
Cash and cash equivalents	$ 36	$ 13
Receivables (net of allowance for doubtful accounts of $3 at 2018 and 2017)	143	65
Receivables of VIEs (net of allowance for doubtful accounts of $3 at 2018 and $2 at 2017)	362	321
Receivables from affiliated companies	28	2
Notes receivable from affiliated companies	—	313
Inventory	504	574
Regulatory assets (includes $52 at 2018 and $51 at 2017 related to VIEs)	434	389
Other (includes $39 at 2018 and $40 at 2017 related to VIEs)	46	86
Total current assets	1,553	1,763
Property, Plant and Equipment		
Cost	18,792	17,730
Accumulated depreciation and amortization	(4,968)	(4,947)
Net property, plant and equipment	13,824	12,783
Other Noncurrent Assets		
Regulatory assets (includes $1,041 at 2018 and $1,091 at 2017 related to VIEs)	2,454	2,503
Nuclear decommissioning trust funds	659	736
Other	311	284
Total other noncurrent assets	3,424	3,523
Total Assets	$ 18,801	$ 18,069

LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 511	$ 602
Accounts payable to affiliated companies	91	74
Notes payable to affiliated companies	108	—
Taxes accrued	74	34
Interest accrued	75	56
Current maturities of long-term debt (includes $53 at 2018 and 2017 related to VIEs)	270	768
Asset retirement obligations	5	—
Regulatory liabilities	102	74
Other	406	334
Total current liabilities	1,642	1,942
Long-Term Debt (includes $1,336 at 2018 and $1,389 at 2017 related to VIEs)	7,051	6,327
Other Noncurrent Liabilities		
Deferred income taxes	1,986	1,761
Asset retirement obligations	586	742
Regulatory liabilities	1,094	1,307
Accrued pension and other post-retirement benefit costs	254	264
Other	93	108
Total other noncurrent liabilities	4,013	4,182
Commitments and Contingencies		
Equity		
Member's equity	6,097	5,614
Accumulated other comprehensive income	(2)	4
Total equity	6,095	5,618
Total Liabilities and Equity	$ 18,801	$ 18,069

See Notes to Consolidated Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY FLORIDA, LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$554	$712	$551
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	793	570	516
Equity component of AFUDC	(47)	(45)	(26)
Gains on sales of other assets	(1)	(1)	—
Impairment charges	54	138	6
Deferred income taxes	159	245	224
Accrued pension and other post-retirement benefit costs	5	(13)	2
Contributions to qualified pension plans	(20)	—	(20)
Payments for asset retirement obligations	(35)	(56)	(58)
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	7	5	38
Receivables	(100)	(38)	23
Receivables from affiliated companies	(26)	—	21
Inventory	58	66	23
Other current assets	59	(138)	(86)
Increase (decrease) in			
Accounts payable	(1)	(32)	71
Accounts payable to affiliated companies	17	(51)	9
Taxes accrued	40	1	(117)
Other current liabilities	82	(37)	(149)
Other assets	(428)	(229)	(84)
Other liabilities	(61)	(82)	(53)
Net cash provided by operating activities	1,109	1,015	891
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(1,634)	(1,437)	(1,583)
Purchases of debt and equity securities	(517)	(557)	(485)
Proceeds from sales and maturities of debt and equity securities	563	617	572
Proceeds from insurance	—	4	58
Proceeds from the sale of nuclear fuel	—	20	20
Notes receivable from affiliated companies	313	(313)	—
Other	(65)	(31)	21
Net cash used in investing activities	(1,340)	(1,697)	(1,397)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	988	1,306	1,870
Payments for the redemption of long-term debt	(769		